

TRANSIT PLANNING AND RESEARCH PROGRAMS

FISCAL YEAR 1995 PROJECT DIRECTORY March 1996



Office of Research, Demonstration and Innovation

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A Message from the Federal Transit Administrator:

Transit plays a key role in linking Americans with jobs, education, health care, and cultural activities. The Federal Transit Administration (FTA) recognizes the need to expand the role of transit in serving people and the diverse communities they call home, as well as to develop transit systems which share information with others, and take people from where they are to where they want to go, when they want to go, at a price they can afford, and do so safely and securely. These principles are the basis for FTA policies and programs.

FTA will maintain and improve its efforts to ensure that all transit riders have secure and safe rides. In partnership with customers and manufacturers, we will continue to expand initiatives to develop and demonstrate new and innovative security and safety technologies, to improve operational safety, and to enhance emergency management planning.

The FTA Strategic Plan supports a heightened Federal interest in transit research and development. This renewed commitment will support production of better transit vehicles and components and will foster transit industry adaptability to customer demands for high quality yet affordable service. This adaptability will enable the industry to respond to changes in transportation patterns and needs by providing needed new technologies that will improve global communications and competitiveness.

To exemplify FTA's renewed commitment in transit research and development, the research team will soon demonstrate its first prototype Advanced Technology Transit Bus (ATTB). The ATTB makes use of advanced aerospace type materials and manufacturing technology that will result in light-weight vehicles, fuel-efficiency gains, less brake and tire wear and longer service live.

Recognizing the global importance of electronic information networks, the FTA is now on the Internet--the road that is leading us into the Information Age of the 21st century. We have established a Home Page on the World Wide Web of the Internet. The Home Page provides the transportation community rapid access to large quantities of electronic data and information, and direct communication links with others. The FTA Internet Home Page address is: http://www.fta.dot.gov/.

I am proud to share with you this report on how the FTA is translating its commitment to a new vision and a new philosophy for public transportation in America into specific transportation planning and research projects.

Gordon J. Linton

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Administration

TRANSIT PLANNING AND RESEARCH **PROGRAMS**

FISCAL YEAR 1995 PROJECT DIRECTORY

March 1996

Prepared by Marina Drancsak Office of Research, Demonstration and Innovation

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Transit Planning and Research Programs: FY 1995 Project Directory

FOREWORD

This annual directory contains brief descriptions of the transit planning, research and safety projects initiated during fiscal year 1995 by the Federal Transit Administration (FTA) of the U.S. Department of Transportation. Its purpose is to inform the transit community and the general public of the nature and scope of work underway to assist state and local agencies in improving services and reducing the cost of public transit.

The projects listed in the directory reflect the implementation of FTA's Strategic Plan, which includes a mission statement that brings a new vision to public transportation in America..."high quality public transportation that ensures personal mobility and livable communities".

In this report, each project entry is profiled separately and consists of the following information: project title and number; grantee/contractor name and address; principal investigator name and telephone number; FTA project manager name and telephone number; funding source and funding dollar amount; start and completion dates; and a summary description of the project.

The 143 projects recorded in this FY 1995 directory are organized within the following transit subject areas: Intelligent Transportation Systems: Advanced Public Transportation Systems; New Bus Vehicles and Infrastructure; Advanced Bus Propulsion Systems; New Rail Vehicles and Infrastructure; Transit Service and Management Innovation; Rural and Specialized Transportation; Metropolitan/Rural Policy Development; Planning and Project Development; Safety and Security; Human Resources; National Transit Database; Transit Cooperative Research Program; National Transit Institute; Rural Transit Assistance Program; and University Transportation Centers Program. The Regional Offices of the Federal Transit Administration are listed in the final section along with their street address, telephone and FAX numbers.

Recognizing that electronic information networks are contemporary and important ways of sharing information with the community, we intend to continue making this type of reference material available to our customers through the FTA Home Page on the World Wide Web (http://www.fta.dot.gov.).

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Project Title: APTS Program Support - Outreach

Project Number: VA-26-7005 Funding: \$69,000

Start Date: September 1995 Estimated Completion: November 1996

Grantee/Contractor: MathCraft, Inc.

12110 Sunset Hills Road, Suite 450

Reston, Virginia 22090

Principal Investigator: Susan Sharp **Phone:** 301/424-6133 **FAX:** 301/340-1754 **FTA Project Manager:** Ronald E. Boenau, TRI-11 **Phone:** 202/366-0195 **FAX:** 202/366-3765

Description: This project enables the Federal Transit Administration (FTA) to implement its Advanced Public Transportation Systems (APTS) Outreach Program. The program is designed to disseminate program information to the transportation community and the general public, as well as to foster transit industry's understanding, adaptability and deployment of advanced technologies for public transportation. The project effort includes the professional writing and delivery of conference/seminar materials and presentations, videos, fact sheets, brochures and other informative materials that promote a better understanding of the APTS intelligent transportation systems program. The project also provides support for the planning and conduct of town meetings and community workshops that bring together state and local government officials, community groups, representatives of federal agencies, metropolitan planning organizations, transit agencies, and private sector organizations.

Project Title: Atlanta Intelligent Transportation Systems Olympic Transit Project

Project Number: GA-03-0053 Funding: \$13,000,000

Start Date: July 1995 Estimated Completion: June 1999

Grantee/Contractor: Metropolitan Atlanta Rapid Transit Authority

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Description: This Intelligent Transportation System (ITS) design/build project will assist the Metropolitan Atlanta Rapid Transit Authority (MARTA) in efficiently transporting the volumes of people visiting Atlanta, Georgia, during the 1996 Summer Olympic Games, as well as provide a permanent legacy for public transit in America. The ITS MARTA '96 project consists of two primary systems which are to be integrated to a real-time Transit Information System for the public:

1) the Base System and 2) the Real-Time Information System. The ITS MARTA '96 Base System is comprised of a Geographic Information System (GIS) which will contain a map of all streets and text information attached to features on the map, and other pertinent information. The GIS is the foundation upon which the customer information system, integrated with the Georgia Department of Transportation's Advanced Traffic Management System and Automatic Vehicle Locator (AVL) will be built. The customer information system includes a computerized telephone response system that will enable customers to be prompted by a computer to quickly and easily reach the needed information. A computerized trip itinerary planning program will also be available. Kiosks,

personal communication devices, interactive cable television and other devices will receive and disseminate MARTA information as well as traffic information. The second component of the ITS MARTA '96 project is the Real-Time Information System. The Automatic Vehicle Locator is the centerpiece of this system. Approximately 250 buses will be equipped with AVL. AVL utilizes a Global Positioning System (GPS) which automatically locates buses and informs the control center of a bus's location, schedule adherence, and status. In addition, the system will include in-vehicle voice annunciators and in-vehicle automated passenger counters. Approximately 15 wayside signs, which will be integrated with the Base System, will be installed at high volume bus locations so that MARTA customers will know the location and actual arrival time of buses.

Project Title: Atlanta Olympic Showcase Technical Assistance

Project Number: MA-26-7017&7017-01 Funding: \$300,000

Start Date: March 1995 Estimated Completion: March 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

 Principal Investigator:
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 FTA Project Manager:
 Denis J. Symes, TRI-11
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Description: The FTA, the Federal Highway Administration (FHWA), and the Metropolitan Atlanta Rapid Transit Authority (MARTA) are developing an Intelligent Transportation System (ITS) to enhance the delivery of public transportation services in Atlanta, Georgia, during the 1996 Summer Olympic Games. APTS technologies will be demonstrated and showcased as part of the ITS display. This project provides the necessary technical support for MARTA to evaluate proposals for the Atlanta Olympic Showcase Project and to install the ITS in time for the 1996 Summer Olympic Games. The Atlanta project will make transit easier to use and more reliable for the customer while simultaneously showcasing APTS intelligent technologies. Specific activities that will be demonstrated during the Summer Olympics include: real-time transit fleet management, smart interactive passenger information, and advanced communication and navigation technologies. Under this effort, the Volpe National Transportation Systems Center (Volpe Center) will provide technical services to assist MARTA in the development and deployment of the ITS. The 1996 Olympic transportation system will remain with MARTA and form the nucleus of a state-of-the-art communications, command and control, and passenger information system.

Project Title: Automated Passenger Information System - Miami

Project Number: FL-26-7001 Funding: \$400,000

Start Date: July 1995 Estimated Completion: September 1997

Grantee/Contractor: Metro-Dade Transit Agency

111 NW. First Street

Miami, Florida 33128-2199

Principal Investigator: Pamela J. Levin Phone: 305/375-3204 FAX: 305/375-4605

FTA Project Manager: Ronald E. Boenau, TRI-11 Phone: 202/366-0195 FAX: 202/366-3765

Description: Metropolitan-Dade County is unique in that a multimodal transportation service exists consisting of Metrorail, Metromover, Metrobus, and demand-responsive service. The County has equipped its vehicle fleet with automatic vehicle location and monitoring equipment and can offer real-time passenger information to their customers using the existing infrastructure. This project supports the efforts of the Metro-Dade Transit Agency to provide customers with an automated trip planning capability, including real-time, online route and schedule information. For this purpose, information kiosks will be established at major rail and bus transfer points.

Project Title: Automated Passenger Information System - New Jersey

Project Number: NJ-26-0002-01 **Funding:** \$250,000

Start Date: May 1995 Estimated Completion: September 1996

Grantee/Contractor: New Jersey Transit Corporation

One Penn Plaza East

Newark, New Jersey 07105

 Principal Investigator:
 James Kemp
 Phone: 201/491-7861
 FAX: 201/491-7767

 FTA Project Manager:
 Jeffrey Mora, TRI-20
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 FAX: 202/366-3765

Description: This project supports the efforts of New Jersey Transit to test and evaluate a real-time passenger information system at a commuter rail station. Phase 1 of the project designed and engineered the necessary software to link train location information with information display screens. This amendment enables New Jersey Transit to test a working system with multicolor information display screens at the Summit Station on the Morris and Essex Division. Passenger reaction to the real-time information system will be assessed and a final report on the project will be published and made available to the transit industry and the general public.

Project Title: Global Positioning System Support

Project Number: DC-26-7027 Funding: \$48,000

Start Date: February 1995 Estimated Completion: September 1995

Grantee/Contractor: Office of the Secretary of Transportation

United States Department of Transportation

400 7th Street, SW Washington, DC 20590

FTA Project Manager: Denis J. Symes, TRI-11 Phone: 202/366-0232 FAX: 202/366-3765

Description: The purpose of this agreement is to support the Navigation and Positioning Coordination and Planning and to provide a coordination function supporting the radionavigation and positioning programs of all the United States Department of Transportation (US DOT) operating administrations.

Project Title: Intelligent Transportation Systems Implementation/Technical

Assistance

Project Number: MA-26-7007-01 **Funding:** \$425,000

Start Date: March 1995 Estimated Completion: March 1996

Grantee/Contractor: Volpe National Transportation Systems Center

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Description: There is a transit industry need to develop systems architecture standards that will assist transit agencies in selecting advanced technologies. This project enables the transit industry to respond to changes in transportation technologies and needs by examining systems architecture development and systems integration activities for APTS technologies, and to assess computer dispatch technologies. Deliverable products from this research project will include: research reports, technical documents necessary for the development of the public transportation element of the National ITS Program Plan, and a report describing the state-of-the-art in computer dispatch technology. This project is based upon the US DOT-ITS initiative which requires the development of systems architecture standards and the definition of systems integration activities.

Project Title: Customer Information, Ridesharing, and Advanced Fare Systems

Evaluations

Project Number: MA-26-7007-01 Funding: \$160,000

Start Date: May 1995 Estimated Completion: March 1996

Grantee/Contractor: Volpe National Transportation Systems Center

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Description: The transit industry is continually procuring equipment and facilities for the provision of user-friendly transit information to the public. Rapid developments in advanced technologies have opened-up a range of options for the industry. This project will increase public transportation and ridesharing effectiveness through standardized evaluations and cross-cutting studies for transit operators procuring Smart Traveler and Smart Intermodal advanced technology systems. Documentation resulting from this project will be provided to the transportation community and will be used in the development of specifications for advanced electronic fare collection; interactive and real-time customer information systems, multimodal and multi-operator seamless fare systems, and real-time dynamic ridesharing systems. Evaluation reports and fact sheets will be developed and made available to the transit community and the general public.

Project Title: International Border Electronic Clearance

Project Number: CA-26-0021-03 **Funding:** \$916,000

Start Date: September 1995 Estimated Completion: October 1998

Grantee/Contractor: CALSTART, Inc.

3601 Empire Avenue

Burbank, California 91505

Principal Investigator: Michael J. Gage Phone: 818/565-5600 FAX: 818/565-5610

FTA Project Manager: Shang Q. Hsiung, TRI-20 Phone: 202/366-0241 FAX: 202/366-3765

Description: This project was undertaken with the FHWA to support CALSTART and the Southern California Partnership (SCP) efforts to develop and demonstrate Intelligent Transportation System (ITS) technologies that improve commercial vehicle and transit operations. The ITS technologies to be developed and demonstrated will include onboard and roadside data communications systems, vehicle tracking, and information processing. When fully developed and commercially available, these systems will provide significant improvements to transit system operations, as well as to commercial vehicle operations. A full evaluation of these systems will be documented and made available to the transit community. The objective of this project is to provide an accredited service, to both border officials/agencies and commercial fleet users, that allows selected vehicles to pass international border check points without stopping or with expedited CALSTART and SCP will develop, integrate and install a commercial vehicle demonstration system at the Mexican border which will ensure that Federal and State law enforcement and regulatory requirements are met. The system will provide for the use of electronic credentials and vehicle onboard monitoring to facilitate preclearance by the Immigration and Naturalization Service, Customs, and safety and environmental personnel. The proposed approach will be fully compatible with the existing Interstate system to permit truck, auto, and bus traffic to flow smoothly across the international border and on the Interstate system. The ITS technology will benefit bus transit systems by demonstrating a cost-effective automatic vehicle identification technology.

Project Title: Orlando Bus Stop Displays for Passenger Travel Planning

Project Number: FL-26-7002 Funding: \$240,000

Start Date: May 1995 Estimated Completion: November 1996

Grantee/Contractor: Central Florida Regional Transportation Authority

1200 West South Street Orlando, Florida 32805

Principal Investigator: Linda Ballieras **Phone:** 407/841-2279 **FAX:** 407/244-3398 **FTA Project Manager:** Ronald E. Boenau, TRI-11 **Phone:** 202/366-0195 **FAX:** 202/366-3765

Description: This project supports the efforts of the Central Florida Regional Transportation Authority (Lynx) to develop a transit component for their passenger travel planning system. It will operationally test "next bus" arrival information integrated with traffic information. The project aims to prove the concept of using an existing signal preemption system to provide the infrastructure for a customer information and fleet management system. Synergistic benefits of the intermodal integration of traffic management and transit operations will also be demonstrated. The project will install electronic bus stop displays and a vehicle location system integrated with an existing signal preemption system. Electronic emitters will be installed in transit buses and will be read by existing electronic detectors at signalized intersections. Vehicle data will then be relayed from the signalized intersection to the Transportation Management Center and then to the transit operator, who will provide next-bus information to customers through bus stop displays. Vehicle data will also be used to monitor transit fleet performance and improve service.

Project Title: Transit Applications of Geographic Information Systems

Project Number: NY-26-7004 Funding: \$100,000

Start Date: July 1995 Estimated Completion: July 1997

Grantee/Contractor: Capital District Transportation Authority

110 Watervliet Avenue Albany, New York 12206

Principal Investigator: Dr. Jack M. Reilly **Phone:** 518/482-4199 **FAX:** 518/482-9039 **FTA Project Manager:** Joseph Goodman, TRI-12 **Phone:** 202/366-0240 **FAX:** 202/366-3765

Description: Geographic information systems (GIS) can be used to provide insights into a number of transit planning and policy issues. Such geographic systems can assist planners in displaying data spatially, which was once displayed in tables and graphs, and in performing analyses which were previously too difficult to perform. The Capital District Transportation Authority will test the application of GIS to practical problems of transit management. Project results will demonstrate the most promising applications of GIS to the transit industry. The three areas to be explored are: Transit Operations Analysis - display of passenger boarding and other business performance on maps; Transit Market Research - develop mobility performance measures such as the proportion of households without automobiles that can access a grocery store within 30 minutes on public transit; and Development of Transit Policies - display transit mode share from regional traffic zones to allow for analysis of effectiveness of transit service.

Project Title: Transit Geographic Information System - Bus Route Database

Collection

Project Number: MA-26-7020 Funding: \$299,900

Start Date: February 1995 Estimated Completion: September 1995

Grantee/Contractor: Bridgewater State College

Bridgewater, Massachusetts 02325

Principal Investigators: Larry Harman Phone: 508/697-4958 FAX: 508/697-0383

Dr. Mahdu Rao *Phone:* 508/697-1200 *FAX:* 508/697-1785

FTA Project Manager: William E. Wiggins, TRI-11 Phone: 202/366-0255 FAX: 202/366-3765

Description: An electronic-based Transit GIS is needed to analyze and depict transit system inventories, fixed-guideway networks, public transit systems and FTA program information, according to geographic location, in a quick and easy manner. This project supports the FTA Action Plan to develop a National Transit GIS that will be useful to the transit industry and the FTA staff. The objective is to build and complete a GIS database of the Nation's fixed-route bus systems. Bridgewater State College will continue to collect and review fixed-route bus data from transit agencies with GIS-based route data for inclusion in the National fixed-route bus database. Other types of route description data files (new and existing) will be constructed for transit agencies without GIS-based data. Prototype applications of the fixed-route bus GIS database will be developed for use by transit agencies and the FTA. The information developed for this system will also be a key component of the National Transportation System database being created by the U.S. Department of Transportation.

Project Title: Transit Geographic Information System

Project Number: MA-26-7006-01 **Funding:** \$350,000

Start Date: March 1995 Estimated Completion: October 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square, DTS-49

Cambridge, Massachusetts 02142

Principal Investigator: Jackson Royal Phone: 617/494-3409 FAX: 617/494-3260 FTA Project Manager: William E.Wiggins, TRI-11 Phone: 202/366-0255 FAX: 202/366-3765

Description: An electronic-based transit spatial data system is needed to analyze and depict transit system inventory and FTA program information according to geographic location. The Transit GIS will enable more comprehensive retrieval and analysis of existing transit inventory data, as well as project and program information. It will enable managers in local public agencies to make more informed decisions based on the latest GIS technology and to more effectively coordinate with their state counterparts. The transit spatial data, created to support the Transit GIS, will also be a component of the National Spatial Data Infrastructure currently being developed in all sectors of the Federal government to provide a National network of geospacial data. This project provides continuing technical support for the development of a prototype Transit GIS. The Transit GIS prototype will contain a variety of databases such as county and state boundaries, congressional districts, metropolitan statistical areas, railroads, and highway databases. Technical support includes cost-benefit analysis and requirements for the Transit GIS, purchase of software and hardware technology, and installation of the Transit GIS prototype at FTA Regional Offices as "demonstration sites" for addressing regional applications and issues. The newly developed National Transit GIS will be available for use by the transit industry and the FTA.

Project Title: Advanced Technology Transit Bus

Project Number: CA-26-7002-01 **Funding:** \$6,400,000

Start Date: January 1995 Estimated Completion: September 1997

Grantee/Contractor: Los Angeles County Metropolitan Transportation Authority

818 West Seventh Street, 11th Floor

Los Angeles, California 90017

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The FTA initiated the Advanced Technology Transit Bus (ATTB) program in 1992 to develop, prototype and demonstrate an advanced space-age bus. Through FTA grants to the Los Angeles County Metropolitan Transportation Authority and the Metropolitan Transit Authority of Harris County, Texas, this 7-year project will integrate and demonstrate the following in a single vehicle: advanced lightweight body and frame materials; advanced hybrid-electric propulsion, energy storage, power management and regenerative braking subsystems designed to significantly increase fuel efficiency and meet ultra-low emission air quality standards; and intelligent location, navigation and control combined with public information systems. The ATTB makes use of advanced aerospace type materials and manufacturing technology to reduce the bus curb weight by one-third, while maintaining or improving structural strength and crashworthiness. This will result in fuel-efficiency gains, less brake and tire wear and longer service life. The ATTB body shell is made of fiberglass/epoxy skins molded around a foam core, with graphite added to reinforce high stress areas. Northrop-Grumman Corporation is the prime contractor developing the body shell design, materials, tooling, manufacturing and assembly technology. Several other companies are contributing to this cutting-edge bus design. This project enables the Los Angeles County Metropolitan Transportation Authority to continue the development of the new design ATTB. The first prototype is due in October 1996.

Project Title: Baseline Advanced Design Transit Coach Specifications: Update

Project Number: DC-26-7017-01 **Funding:** \$300,000

Start Date: March 1995 Estimated Completion: August 1996

Grantee/Contractor: American Public Transit Association

1201 New York Avenue, NW Washington, DC 20005

Principal Investigator: Karol Popkin **Phone:** 202/898-44052 **FAX:** 202/898-4070 **FTA Project Manager:** Bart W. Mancini, TRI-20 **Phone:** 202/366-8063 **FAX:** 202/366-3765

Description: The process currently in place for the purchase of transit buses has created an adversarial relationship between transit operators and manufacturers resulting in higher cost vehicles. The consensus among the industry and the FTA is that something needs to be done. It is anticipated that a standard purchase specification could significantly reduce and simplify the time required and the complexity of the procurement process which could result in lower cost vehicles. This project will enable the transit industry, operators and suppliers to continue their efforts to develop an industry-wide purchase standards, consisting of technical specifications and procurement guidelines, for transit buses similar to the "White Book" developed in the late 1970s. The White Book has

become obsolete and needs to be updated. This project will develop a single standard purchase document agreed to by the transit industry which will result in lower cost vehicles and a streamlined procurement process.

Project Title: New Bus Model Testing Facility Expansion

Project Number: PA-31-0002 Funding: \$1,466,136

Start Date: July 1995 Estimated Completion: September 1997

Grantee/Contractor: Pennsylvania Transportation Institute

Pennsylvania State University 248 Calder Way, Suite 300

University Park, Pennsylvania 16801

Principal Investigator: Bohdan T. Kulakowski **Phone:** 814/863-1893 **FAX:** 814/865-3039 **FTA Project Manager:** Bart W. Mancini, TRI-20 **Phone:** 202/366-8063 **FAX:** 202/366-3765

Description: The Pennsylvania Transportation Institute (PTI) established and currently operates the Altoona Bus Testing Center in Altoona, Pennsylvania, and the Penn State Bus Research and Testing Facility which functions to ensure that FTA customers purchase vehicles that are safe and able to withstand the rigors of transit service. The Altoona Center is an office and general laboratory facility owned by the Altoona Area Vocational/Technical School; the Penn State Facility is a test track and proving ground facility owned and operated by Penn State University. This project will enable PTI to modify and adapt the Altoona and Penn State testing facilities and procedures to accommodate the fueling, maintenance, repair, and testing of vehicles using the following fuels: diesel, gasoline, liquefied petroleum gas, compressed natural gas, liquefied natural gas, methanol, ethanol, and battery-powered electric. In addition, the project will develop brake testing and emissions testing facilities and procedures for each type of vehicle.

Project Title: New Bus Model Testing: Fee Supplement

Project Number: PA-03-0238-03/04 Funding: \$2,600,000

Start Date: March 1995 Estimated Completion: March 1999

Grantee/Contractor: Pennsylvania Transportation Institute

248 Calder Way, Suite 300

University Park, Pennsylvania 16801

Principal Investigator: Bohdan T. Kulakowski Phone: 814/863-1893 FAX: 814/865-3039 FTA Project Manager: Bart W. Mancini, TRI-20 Phone: 202/366-8063 FAX: 202/366-3765

Description: The Bus Testing Program is designed to promote the production of better transit vehicles and components and to ensure that FTA customers purchase safe vehicles able to withstand the rigors of transit service. This project enables FTA to pay 80 percent of the fee for bus testing directly to the Pennsylvania Transportation Institute, the operator of the Bus Testing Center in Altoona, Pennsylvania, on a reimbursable basis for tests performed. The remaining 20 percent is paid by the bus manufacturer or entity having the vehicle tested. Payment is made to the Center at the time of vehicle delivery. The 80 percent subsidy applies only to standard fee schedule which includes the normal costs for testing, inspecting, vehicle servicing, routine maintenance, and fuel. The Federal share payment of the bus testing fee was authorized under ISTEA. This project lessens the financial

burden on those transit systems required to have their vehicles tested at the Center. It also provides the Center's users with information on vehicle durability, performance, handling, fuel economy, noise and other elements.

Project Title: New Bus Model Testing: Technical Support
Project Number: TX-26-7001-01 Funding: \$148,237

Start Date: September 1995 Estimated Completion: September 1996

Grantee/Contractor: Global Integrated Systems, Inc.

500 North Central Expressway, Suite 475

Plano, Texas 75074

Principal Investigator: Duke Hamilton, Jr. **Phone:** 214/422-2131 **FAX:** 214/424-7832 **FTA Project Manager:** Frank S. Borris, TRI-20 **Phone:** 202/366-8089 **FAX:** 202/366-3765

Description: The Pennsylvania Transportation Institute is the operator of the FTA Bus Testing Center at Altoona, Pennsylvania. Technical support is needed to assist the FTA in implementing the program. This project enhances the implementation of the FTA Bus Testing Program which is designed to ensure that FTA customers purchase vehicles that are safe and able to withstand the rigors of transit service. The project addresses and responds to requests for bus testing determinations and provides technical support in all areas of the bus testing program including the following: development of finding reports, finalizing testing guidelines, conducting surveys, and performing studies and analyses. In addition, technical expertise will be provided to address specific technical bus testing issues.

Project Title: Advanced Lead Acid Battery Consortium: Electric Vehicle Consortia

Program

Project Number: NC-26-0003-01 **Funding:** \$250,000

Start Date: May 1995 Estimated Completion: September 1996

Grantee/Contractor: International Lead Zinc Research Organization, Inc.

PO Box 12036

Research Triangle Park, North Carolina 27709

Principal Investigator: Dr. Patrick T. Moseley **Phone:** 919/361-4647 **FAX:** 919/361-1957 **FTA Project Manager:** Shang Q. Hsiung, TRI-20 **Phone:** 202/366-0241 **FAX:** 202/366-3765

Description: The utility of electric vehicles is limited severely by the batteries currently available, particularly in terms of range and lifetime. This project supports the International Lead Zinc Research Organization's continuing assistance to the Advanced Lead Acid Battery Consortium (ALABC) to develop supporting technology and hardware in the areas of rapid recharging of batteries and battery management as they apply specifically to lead-acid battery systems. The systems developed will be generic and can be applied with modifications to other battery technologies. The project results will be in the form of a charging/cable/coupling unit and a functional, simple, inexpensive battery management system including an electronic fuel gauge. This project will also evaluate the performance of cells in long strings and the impact of rapid recharge/discharge cycling on cell/battery life. Supporting technology for the battery management system will include the effectiveness of various types of sensors in lead acid batteries and a useful algorithm for monitoring and controlling an electric vehicle battery system. Project deliverables will be prototype batteries, developed by U.S. companies, with improved performance suitable for use in transit buses being built by other consortia.

Project Title: CALSTART Consortium Electric Vehicle Program

Project Number: CA-26-0021-02 **Funding:** \$1,500,000

Start Date: April 1995 Estimated Completion: October 1997

Grantee/Contractor: CALSTART, Inc.

3601 Empire Avenue Burbank, California 91505

Description: This project supports CALSTART efforts to develop advanced transportation systems and electric vehicle technologies. The program includes a clean-fuel vehicle testing program and other components to support electric vehicle technology. A comprehensive clean-fuel vehicle technology and system assessment program will be conducted to disseminate, to transit districts and fleet managers, information on the reliability and capabilities of various vehicles and components, as well as the capital and operating costs and market prospects for these vehicles. This program also includes the development of a low-cost, purpose-built, lightweight, safety-certified and highway capable electric vehicle that could be used in a Station Car concept. The project will demonstrate and evaluate 10 of these electric vehicles in Station Car applications at two transit districts in

California. In addition, an electric bus training program will be developed in conjunction with the Santa Barbara Metropolitan Transit District.

Project Title: Demonstration of Agile Manufacturing for Electric Vehicles

Project Number: CA-26-0021-04 **Funding:** \$2,480,000

Start Date: September 1995 Estimated Completion: September 1998

G+rantee/Contractor: CALSTART, Inc.

3601 Empire Avenue Burbank, California 91505

Principal Investigator: Michael J. Gage Phone: 818/565-5600 FAX: 818/565-5610 FTA Project Manager: Shang O. Hsiung, TRI-20 Phone: 202/366-0241 FAX: 202/366-3765

Description: This project provides continuing support to the CALSTART Consortium Electric Vehicle Program which is involved in transit applications of electric vehicle technology. CALSTART will establish a demonstration of an advanced agile assembly line for the production of commercial, military, and transit electric vehicles at the CALSTART Advanced Transportation Cluster, Alameda Naval Air Station. The electric vehicles to be produced on this advanced agile production line will be based on the CALSTART Running Chassis bonded aluminum technology that was developed under a previous FTA project. The Running Chassis Program enables a variety of electric vehicles to share a common platform to enhance cost-effective electric vehicles at low production volumes. Coupling this common platform with an advanced agile production line will further enhance the cost competitiveness of electric vehicles produced in low volumes. This project is funded by the Department of Defense's Office of Economic Adjustment.

Project Title: CALSTART Consortium Electric Vehicle Program

Project Number: CA-03-7006 Funding: \$700,000

Start Date: May 1995 Estimated Completion: September 1997

Grantee/Contractor: Omnitrans

1700 West Fifth Street

San Bernardino, California 92411-2499

 Principal Investigator:
 Paul Helliker
 Phone:
 818/565-5602
 FAX:
 818/565-5610

 FTA Project Manager:
 Shang Q. Hsiung, TRI-20
 Phone:
 202/366-0241
 FAX:
 202/366-3765

Description: The purpose of this project is to conduct a showcase electric vehicle program, to define and develop the necessary electric vehicle infrastructure support systems and to foster full-scale manufacturing of advanced electric transit buses. Basically, the Electric Station Car project will use electric vehicles to demonstrate and evaluate the Station Car concept. This electric shuttle bus and Station Car program includes the purchase of two 22-passenger electric buses; a minimum of five 2-passenger electric station cars; six 4-passenger electric station cars; and support equipment. The electric buses will be used in community shuttle fixed-route service. The 4-passenger electric station cars will be used by commuters traveling to and from Metrolink stations during peak periods and will be available for use by Omnitrans as driver shuttle vehicles during off-peak periods. The 2-passenger electric station cars will be leased to the City of Lancaster for commuters traveling to and from Metrolink stations during peak periods and by City staff during off-peak periods.

Project Title: Domestic Fuel Cell Transit Bus Development Program

Project Number: DC-26-7002-01/02/03 Funding: \$15,400,000

Start Date: May 1995 Estimated Completion: September 1999

Grantee/Contractor: Georgetown University

3700 "O" Street, NW Washington, DC 20057

Principal Investigator: James Larkins **Phone:** 202/687-7361 **FAX:** 202/687-4507 **FTA Project Manager:** Shang Q. Hsiung, TRI-20 **Phone:** 202/366-0241 **FAX:** 202/366-3765

Description: This project provides continuing support to Georgetown University to conduct a program for the development of a U.S. produced fuel cell system for transit buses. The program will provide the preliminary engineering and development activities necessary for the domestic and commercial production of a 40-foot fuel cell bus with a domestically produced fuel cell. Georgetown University currently provides the technical and program management for the ongoing medium-sized fuel cell bus development program directed by the Department of Energy and co-sponsored by the FTA. One prototype medium-sized fuel cell bus has been completed and two others are being built for demonstration and evaluation. This project supports the development of a domestic industry for the production of these fuel efficient and environmentally acceptable vehicles. Both the phosphoric acid fuel cell (PAFC) and the proton exchange membrane fuel cell (PEMFC) technologies will be developed for bus propulsion systems operating on liquid fuels. Ultimately, the PAFC and PEMFC technologies will be applied to the Advanced Technology Transit Bus prototype. The project is a continuation of the first phase of the multi-year fuel cell program and includes support from the Advanced Research Projects Agency (ARPA) of the Department of Defense.

Project Title: Demonstration of Universal Electric Transportation Subsystems

Project Number: NM-26-7000-01 **Funding:** \$192,500

Start Date: September 1995 Estimated Completion: July 1996

Grantee/Contractor: DUETS Consortium

Nova Bus Incorporated PO Box #5670 (R.I.A.C.)

Roswell, New Mexico 88202-5670

 Principal Investigator:
 David Reddy
 Phone: 505/347-7288
 FAX: 505/547-7508

 FTA Project Manager:
 Bart W. Mancini, TRI-20
 Phone: 202/366-8063
 FAX: 202/366-3765

Description: Existing transit buses are overweight, expensive to operate, and will not be able to comply with future clean air requirements. The Demonstration of Universal Electric Transportation Subsystems (DUETS) Program will develop and commercialize technologies to address these concerns. The objective of this cooperative agreement is to provide additional support to the efforts of the DUETS Consortium to develop and test an advanced alternatively fueled electric-hybrid drive system, advanced suspension components, and advanced vehicle control networks for transit bus applications. The resultant technologies will provide ultra-low emissions along with improved vehicle handling, reduced highway damage, and interfaces with intelligent transportation systems. Davis Technologies International, a DUETS Consortium member, is tasked to develop and test the

advanced suspension system and components that will enable improved vehicle handling, reduced structural load inputs to the bus and reduced highway damage. This project is sponsored by ARPA.

Project Title: Demonstration of Universal Electric Transportation Subsystems:

Monitoring and Oversight

Project Number: MA-26-7014-01 Funding: \$85,000

Start Date: March 1995 Estimated Completion: March 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

Principal Investigator: Michael Dinning, DTS-38 Phone: 617/494-2422 FAX: 617/494-2684 FTA Project Manager: Bart W. Mancini, TRI-20 Phone: 202/366-8063 FAX: 202/366-3765

Description: This project provides the FTA with resources for monitoring and oversight of the advanced heavy duty bus (DUETS) project being sponsored by ARPA. The Volpe Center will provide FTA with technical support as well as assist in assuring full transit industry representation.

Project Title: Electric Transit Vehicle Institute Challenge Grant

Project Number: TN-26-0002-02 **Funding:** \$70,000

Start Date: May 1995 Estimated Completion: January 1997

Grantee/Contractor: Chattanooga Area Regional Transportation Authority

1616 Wilcox Boulevard

Chattanooga, Tennessee 37406

 Principal Investigator:
 John Powell
 Phone: 615/622-3884
 FAX: 423/622-0744

 FTA Project Manager:
 Shang Q. Hsiung, TRI-20
 Phone: 202/366-0241
 FAX: 202/366-3765

Description: The objective of this grant is to assist the Chattanooga Area Regional Transportation Authority (CARTA) to continue supporting the efforts of the Electric Transit Vehicle Institute which promotes the design, production and use of electric vehicles in transit. The Institute will continue to serve as the facilitator and resource center for electric vehicle development for the transit industry. The Institute will also continue to coordinate the transit industry's efforts in electric vehicles through the establishment of a technical coordinating committee, conferences, and information dissemination activities. The Institute's new activity is to serve as the coordinator for electric transit vehicle participation in the 1996 Summer Olympic Games in Atlanta, Georgia.

Project Title: New York State Consortium Electric Vehicle Program

Project Number: NY-26-0006-01 Funding: \$750,000

Start Date: April 1995 Estimated Completion: December 1996

Grantee/Contractor: New York Metropolitan Transportation Authority

347 Madison Avenue

New York, New York 10017

Principal Investigator: William Parsley Phone: 718/927-7707 FAX: 718/240-8094 FTA Project Manager: Shang Q. Hsiung, TRI-20 Phone: 202/366-024 FAX: 202/366-3765

Description: This project provides continuing support to the New York Metropolitan Transportation Authority (MTA), on behalf of the New York State Consortium, to develop and demonstrate a low-floor hybrid electric transit bus. The Hybrid Electric Bus Development Program is a two phase, two year program. In Phase 1, a mule vehicle will be designed, fabricated, and tested to demonstrate the hybrid electric bus concept and to establish the capability of the low-floor design. In Phase 2, a pre-production prototype will be designed, fabricated, and tested to demonstrate a true low-floor full-sized transit bus with low emissions and high energy efficiency. The drive system will include a state-of-the-art vehicle system controller and an innovative, compact, fully integrated wheel motor. Estimates of the production cost of the hybrid electric transit bus will be determined in the business study planned for Phase 3 of this program.

Project Title: Clean Air Program Technical Briefs

Project Number: DC-26-0021-02 **Funding:** \$45,000

Start Date: June 1995 Estimated Completion: September 1996

Grantee/Contractor: National League of Cities Institute

1301 Pennsylvania Avenue, NW

Washington, DC 20004

Principal Investigator: Antoinette Samuel Phone: 202/626-3000 FAX: 202/626-3043 FTA Project Manager: Shang Q. Hsiung, TRI-20 Phone: 202/366-0241 FAX: 202/366-3765

Description: The FTA Clean Air Program was created in response to the transit industry's growing involvement in the development and application of new technologies for reducing vehicle emissions. This involvement generated the need to provide current and accurate information, as well as to broadly distribute information regarding alternative fuel engine technology, health and safety impacts, facility impacts, operations and maintenance impacts, regulatory constraints, and current as well as pending legislation. The Clean Air Program Technical Briefs are designed to help transit officials and decisionmakers keep abreast of current issues in the alternative fuels area. The National League of Cities will continue to provide outreach activities for the FTA Clean Air Program, namely, the development and preparation of printed materials in the form of newsletters, technical briefs, bulletins, fact sheets, etc. on the Clean Air Program; implementation of the Clean Air Act Amendments of 1990; and related state and local legislation.

Project Title: Clean Air Program Technical Guidelines

Project Number: MA-26-7021 Funding: \$150,000

Start Date: January 1995 Estimated Completion: September 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

 Principal Investigator:
 William Hathaway
 Phone:
 617/494-2081
 FAX:
 617/494-2959

 FTA Project Manager:
 Jeffrey Mora, TRI-20
 Phone:
 202/366-0215
 FAX:
 202/366-3765

Description: Alternative fuel usage in the transit industry is rapidly increasing. This project reflects the industry's need to have the capability to quickly identify and respond to technical and safety issues related to the operation, fueling and maintenance of alternative fuel vehicles. The Volpe Center will provide technical support for the FTA Clean Air Program. The support will include

identifying and investigating safety issues associated with the use of alternative fuels; developing guidelines to assist transit agencies in providing adequate levels of safety during operations, maintenance, storage and refueling of alternative fuel vehicles; completing the alternative fuels facilities guidelines handbook; and conducting information dissemination activities related to technical and safety issues associated with alternative fuel vehicle operations including supporting a conference on alternative fuels facilities issues. Other project activities will include providing analyses of specific technical and safety problem areas.

Project Title: Advanced Automatic Train Control Project
Project Number: NM-26-7002 Funding: \$317,000

Start Date: September 1995 Estimated Completion: March 1996

Grantee/Contractor: Sandia National Laboratories

Science & Technology Transfer Division Albuquerque, New Mexico 87185-5400

Principal Investigator: William S. Rorke, Jr. Phone: 510/294-2173 FAX: 510/294-1015 FTA Project Manager: Venkat Pindiprolu, TRI-20 Phone: 202/366-8061 FAX: 202/366-3765

Description: The Advanced Automatic Train Control Project (AATC) is a state-of-the-art project that utilizes military communications technology, including complex computer software systems, to improve rail passenger-carrying capacity and to improve train safety and train throughput without adding to the existing infrastructure. Proven military communications technology will be used to provide extremely reliable communications between the train, wayside and control stations, and to precisely locate trains to achieve closer headways at increased safety. This project provides support for the development and testing of an advanced AATC system at the San Francisco Bay Area Rapid Transit District (BART). Sandia National Laboratories will assist BART with a Safety Study Review and the development of enhanced control algorithms to optimize the performance of the AATC. The AATC system will be developed and tested at BART under an FTA cooperative agreement using funds from the Advanced Research Project Agency of the Department of Defense.

Project Title: Advanced Automatic Train Control Project: Management Oversight

Project Number: MD-26-7018-01 Funding: \$140,000

Start Date: July 1995 Estimated Completion: January 1996

Grantee/Contractor: Computer Communications & Graphics Associates

8484 Georgia Avenue, Suite 880 Silver Spring, Maryland 20910

Description: BART, Hughes and Morrison Knudsen (HMK) are developing a state-of-the-art Advanced Automatic Train Control system (AATC). The FTA is administering the project on behalf of the Advanced Research Projects Agency of the Department of Defense. Proven military communications technology will be used to provide extremely reliable communications between the train, wayside and control stations, and to precisely locate trains to achieve closer headway at increased safety. This project will provide the technical support and expertise in advanced technologies required to monitor and direct the AATC project. The project plan calls for the testing of modified military radios on BART's test track during Phase 1 as a precursor to finalizing design and building prototypes for testing on revenue tracks during Phase 2, the last phase of the project. This project will involve leading edge computer and communication technologies and safety issues relevant to software-based realtime control systems.

Project Title: Development of a Railroad Duty Traction Power Circuit Breaker

Project Number: PA-26-7002 Funding: \$750,000

Start Date: April 1995 Estimated Completion: October 1996

Grantee/Contractor: Southeastern Pennsylvania Transportation Authority

1234 Market Street

Philadelphia, Pennsylvania 19107

Principal Investigator: Wasif Naqvi **Phone:** 215/580-7507 **FAX:** 215/580-3780 **FTA Project Manager:** Jeffrey Mora, TRI-20 **Phone:** 202/366-0215 **FAX:** 202/366-3765

Description: This project will enable the Southeastern Pennsylvania Transportation Authority (SEPTA) to modernize its regional rail division substations which are over 65 years old and have non-standard electrical equipment that is easily prone to failure. Manufacturers are unwilling to develop equipment to meet the specialized needs of one transit agency. This project supports the SEPTA effort to develop and test a railroad duty traction power circuit breaker and related switchgear. The equipment operates at 25 cycles, 11,000 volts alternating current. In the Phase 1 effort, the SEPTA contractor will perform the necessary equipment designs, including constructability/manufacturability analyses, as well as prepare detailed drawings meeting SEPTA specifications. Project activities will be documented in a Phase 1 report.

Project Title: Inertial Navigation Tracking and Control Systems in Urban and Rural

Areas

Project Number: PA-26-0007-02 **Funding:** \$500,000

Start Date: February 1995 Estimated Completion: March 1996

Grantee/Contractor: Transit Safety Research Alliance

2100 Wharton Street

Pittsburgh, Pennsylvania 15203

Principal Investigator: Dr. Ted C. Giras **Phone:** 412/431-5112 **FAX:** 412/431-5113 **FTA Project Manager:** Irving Chambers, TRI-20 **Phone:** 202/366-0238 **FAX:** 202/366-3765

Description: This project supports the efforts of the Transit Safety Research Alliance to produce an onboard transit vehicle positioning system that will identify and automatically locate rail and rubber tire vehicles. The project will demonstrate through studies and experimental testing the safety, economic and environmental benefits of deploying inertial navigation tracking and control systems in urban and rural environments. This year's development program will entail demonstration of an integrated onboard transit intermodal positioning system (TIPS) with bi-directional communication capabilities operating in real-world bus and rail transit environments. The TIPS system technology will be demonstrated on a single vehicle working with a bi-directional communication system to a wayside central control facility. Project activities will be documented in a final report and will be available to the transit community and the public.

Project Title: Light Rail Crossing Gates for Left Turn Lanes
Project Number: CA-26-7010 Funding: \$200,000

Start Date: February 1995 Estimated Completion: March 1997

Grantee/Contractor: Los Angeles Metropolitan Transportation Authority

818 West Seventh Street

Los Angeles, California 90017

Principal Investigator: Linda Meadow **Phone:** 213/244-6419 **FAX:** 213/244-6003 **FTA Project Manager:** Rhonda M. Crawley, TRI-20 **Phone:** 202/366-0196 **FAX:** 202/366-3765

Description: Accident records for the Los Angeles Metro Blue Line indicate that numerous train-vehicle collisions take place at grade crossings where streets run parallel to light rail transit tracks and motorists make left turns across the tracks. Where crossings are controlled by traffic signals only, Metro Blue Line has experienced numerous train-vehicle collisions. The use of four quadrant gate systems at grade crossings offers an approach for eliminating or minimizing accidents without the high costs and community impacts of grade separation. This project will investigate the application of railroad gates and other types of "pop-up" barriers for left turns made from streets running parallel to the tracks at light rail crossings. In addition, the research also supports the efforts of the Los Angeles County Metropolitan Transportation Authority to evaluate the use of a video-imaging vehicle detection system in conjunction with full closure crossing gates at a highway-railroad grade crossing.

Project Title: Rail Transit Energy Management Program
Project Number: PA-26-0008-01 Funding: \$250,000

Start Date: February 1995 Estimated Completion: May 1996

Grantee/Contractor: Carnegie Mellon Research Institute

700 Technology Drive, POB 2950 Pittsburgh, Pennsylvania 15230

Principal Investigator: Dr. Richard Uher **Phone:** 412/268-2960 **FAX:** 412/268-7592 **FTA Project Manager:** Jeffrey Mora, TRI-20 **Phone:** 202/366-0215 **FAX:** 202/366-3765

Description: The objective of this project is to support the activities of the Rail Systems Center (RSC) at Carnegie Mellon University to reduce rail transit system energy cost by 10 percent. This figure will be achieved as transit agencies implement energy conservation strategies developed by the RSC Energy Management (EM) Program sponsored by FTA. The thrust of this portion of the EM Program is to develop a usable Train Operations Model to assess and evaluate rail transit advanced train control systems with emphasis on energy consumption optimization. The model, which will be utilized in the Energy Management Computer Program, will determine schedule, capacity and energy performance of advanced train control technologies. Overall, the Energy Management Model is used by electrified rail transit agencies to optimize energy consumption. The uniqueness of the RSC program is its working partnership arrangement with transit agencies, electric utilities, power system suppliers, and the Electric Power Research Institute.

Project Title: Subway Environment Simulation Model: Update Funding: \$200,000 **Project Number:** MA-26-7022

Start Date: March 1995 Estimated Completion: March 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

Principal Investigator: William Hathaway **Phone:** 617/494-2081 **FAX:** 617/494-2869 FTA Project Manager: Jeffrey Mora, TRI-20 **Phone:** 202/366-0215 **FAX:** 202/366-3765

Description: The objective of this project is to initiate a program that will upgrade the Subway Environment Simulation Computer Model (SES) developed in the 1970s (sponsored by FTA) and will prepare companion safety materials. The project will enhance the safety of subway passengers in tunnels and underground stations. The 1976 SES model computer program was designed to assist in the planning, design, and construction of subway ventilation systems. The SES model is used by transit systems and consultants worldwide and has been validated through full-scale testing at the San Francisco BART system and the Montreal Metro System. Later the SES Fire module was added to the SES program to address the elimination of heat and smoke during fire conditions. Overall, this project will modernize the SES model software and documentation, as well as validate the SES Fire Model.

Technology Development Program: Technical Briefs and Fact Sheets Project Title:

Project Number: VA-26-0005-04 Funding: \$50,000

Start Date: January 1995 Estimated Completion: September 1995

Grantee/Contractor: Kuo & Associates, Inc

1420 K Street, NW, Suite 400

Washington, DC 20005

FTA Project Manager: Helen M. Tann, TRI-1 **Phone:** 202/366-0207 **FAX:** 202/366-3765

Professional skills in the design, layout and production of attractive printed Description: materials are not available within the FTA. Such skills are essential to the communication of the research activities sponsored by the agency. This project will provide for graphic design and layout services to assist the FTA in producing a series of Technical Briefs and Fact Sheets about the activities of the National Planning and Research Program. These documents will provide up-to-date information regarding FTA's ongoing and completed project activities in the transit area of technology development and deployment including new bus model testing. The Technical Briefs are widely distributed and used to inform a variety of customers in the transit industry. The documents are also used by the FTA and other Federal government officials in briefing sessions, program reviews, and decisionmaking.

Transit Service and Management Innovation

Project Title: Charter Bus Demonstration Program Extension

Project Number: VA-26-0002-08 **Funding:** \$150,000

Start Date: July 1995 Estimated Completion: July 1996

Grantee/Contractor: KPMG Peat Marwick

8150 Leesburg Pike, Suite 800

Vienna, Virginia 22182

Principal Investigator: Marta Jewell Phone: 703/442-0030 FAX: 703/442-8155 FTA Project Manager: Stewart McKeown, TRI-12 Phone: 202/366-0244 FAX: 202/366-3765

Description: The Charter Bus Demonstration program was initiated in 1993 as a response to a requirement in the ISTEA of 1991 which directs the FTA to conduct a demonstration to revise charter bus regulations. It also requires FTA to prepare and submit a report to Congress documenting the results of the demonstration, the effectiveness of the regulations, and any proposed recommendations to improve current charter service regulations. This project will develop and temporarily implement revised charter bus regulations at demonstration sites in four states. It will permit transit operators to provide charter services for the purpose of meeting the needs of governmental, civic, charitable, and other community activities which otherwise would not be served in a cost-effective and efficient manner. Data collected at the demonstration sites, regarding the effectiveness of the revised charter bus regulations, will be evaluated. A final report documenting the results and assessing the need to revise existing Federal charter regulations will be prepared and made available to the transit community.

Project Title: Excellence in Transportation Design Awards Program

Project Number: DC-26-7026 Funding: \$13,000

Start Date: December 1994 Estimated Completion: September 1995

Grantee/Contractor: Office of the Secretary of Transportation

United States Department of Transportation

Washington, DC 20590

FTA Project Manager: Jackie Hathaway, TRI-1 Phone: 202/366-0187 FAX: 202/366-3765

Description: This project supports the U.S. Department of Transportation Office of the Secretary's *Transportation Design National Awards Program*. The program promotes excellence in transportation design.

Project Title: Evaluation of Congestion Pricing Demonstration in Orange County

Project Number: CA-26-7005 Funding: \$200,000

Start Date: March 1995 Estimated Completion: May 1997

Grantee/Contractor: California Department of Transportation

1120 N Street

Sacramento, California 95814

Principal Investigator: Phil Jang **Phone:** 916/654-7138 **FAX:** 916/653-3053 **FTA Project Manager:** Bert Arrillaga, TRI-12 **Phone:** 202/366-0231 **FAX:** 202/366-3765

Transit Service and Management Innovation

Description: Congestion pricing holds the promise of significantly reducing gridlock on specific facilities while generating large revenue streams. This project will evaluate the operational impacts of a variable-toll express lane facility being constructed in the median of State Route 91 in Orange County, California. The privately funded and operated facility, located between State Route 55 and Riverside County Line, is an important component of the extensive system of freeways, high occupancy vehicle (HOV) lanes, and public transit services being planned and deployed throughout the greater Southern California metropolitan area. Demographic, economic and traffic operational data will be collected to help assess the travel impacts of the State Route 91 project and to account for the long term changing nature of the area. Overall, evaluating this project provides a unique opportunity to collect information and operational experience on congestion pricing that will stimulate broader implementation of the concept, and will help determine the feasibility of using pricing as a means to control traffic congestion and alleviate local air pollution

Project Title: Public/Private Ventures: Mobility-to-Work Project Project Number: DC-26-7024 Funding: \$125,000

Start Date: March 1995 Estimated Completion: March 1996

Grantee/Contractor: Department of Housing and Urban Development

453 Seventh Street, SW

Washington, DC 20410-6000

Principal Investigator: Mark Hughes **Phone:** 215/557-4400 **FAX:** 215/557-4469 **FTA Project Manager:** Joseph M. Goodman, TRI-12**Phone:** 202/366-0240 **FAX:** 202/366-3765

Description: In 1994 Public/Private Ventures, located in Philadelphia, Pennsylvania, completed a study of innercity poverty and suburban employment decentralization in ten major metropolitan areas. The study resulted in a proposed anti-poverty strategy known as Mobility-to-Work. It provides poor innercity households with another opportunity for self-sufficiency through work. This project will help develop a workplan and study design to demonstrate strategies for connecting innercity residents to outside job opportunities. The workplan and study design is part of the first phase of a proposed three-phase demonstration. Demonstration activities will include developing, testing, documenting, and evaluating ten separate projects, each in different locations. The demonstration projects aim to bring together key institutions in a metropolitan area including the metropolitan planning organization, social service agencies, transit operators and others to develop a comprehensive approach to tying innercity workers to outside job sites. Products of the study design will include a detailed workplan, site selection approach and criteria, and a plan for data collection, evaluation, and documentation. The study design will also incorporate relevant programs of other Federal agencies.

Transit Service and Management Innovation

Project Title: Small Business Innovation Research Program
Project Number: MA-26-7016 Funding: \$353,000

Start Date: March 1995 Estimated Completion: June 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

Principal Investigator: George Kovatch Phone: 617/494-2051 FAX: 617/494-2370 FTA Project Manager: Stewart McKeown, TRI-12 Phone: 202/366-0244 FAX: 202/366-3765

Description: This project supports transit research projects through the Small Business Innovation Research (SBIR) Program. The SBIR is an annual program, coordinated by the Small Business Administration, that promotes the growth and development of small businesses and technology firms. It offers an opportunity for these firms to participate in developing more effective and innovative transit systems, as well as to enhance the innovative capacity of small businesses in the United States.

Project Title: Team Transit Demonstration

Project Number: MN-26-0002-01/02 Funding: \$500,000

Start Date: March 1995 Estimated Completion: September 1996

Grantee/Contractor: Metropolitan Transit Commission

560 Sixth Avenue North

Minneapolis, Minnesota 55411-4398

Ultimately, the Team Transit Program is expected to serve as a National model for Description: addressing congestion problems that adversely affect transit and ridesharing vehicles in urban and suburban areas across the country. This project provides continued support for the development of the Metropolitan Transit Commission's Team Transit Program. Team Transit is an intergovernmental partnership initially established in 1993 to implement solutions to transit mobility and congestion problems in the urban and suburban areas of Minneapolis and St. Paul, Minnesota, as well as to develop innovative intergovernmental partnerships that improve transit services. This means, developing innovative intergovernmental partnerships that lessen red tape and quickly implement road improvement projects that speed transit and ridesharing vehicles through congested areas/bottlenecks. The program emphasizes innovation, minimal bureaucracy and quick implementation of road improvement projects, such as bus lanes or ramp meter bypasses that give an advantage to transit vehicles. Most local government jurisdictions are team members and work together to coordinate the planning and design of road improvements needed to facilitate the flow of transit and ridesharing vehicles through congested areas. A major objective of the program is to dramatically reduce the time that it normally takes to implement these interjurisdictional projects. Partners in Team Transit include the Metropolitan Transit Commission, Minnesota Department of Transportation, Metropolitan Council, Regional Transit Board, local government units, transit operators, and universities. Basically, Team Transit is designed to tear down traditional barriers to interagency cooperation.

Transit Service and Management Innovation

Project Title: Team Transit Demonstration: Evaluation
Project Number: VA-26-7005-02 Funding: \$50,000

Start Date: September 1995 Estimated Completion: July 1996

Grantee/Contractor: MathCraft, Inc.

12110 Sunset Hills Road, Suite 450

Reston, Virginia 22090

Principal Investigator: Imo Etuk **Phone:** 703/742-9377 **FAX:** 703/742-9377 **FTA Project Manager:** Stewart McKeown, TRI-12 **Phone:** 202/366-0244 **FAX:** 202/366-3765

Description: This project supports the effort to evaluate the operational history of the Team Transit demonstration, since its inception in 1993, being conducted by the Metropolitan Council in St. Paul/Minneapolis, Minnesota. The Team Transit program is designed, basically, to quickly implement solution to transit mobility and congestion problems in the urban and suburban areas of Minneapolis and St. Paul, Minnesota. Overall, the program has been successful due to the close working relationship between the various members. This evaluation will cover the historical background of the project, how and why Team Transit was developed, member organizations, and the project approval process. The evaluation will determine what elements of the program are unique in the area of planning and implementing interjurisdictional road improvements and what may be transferable to other metropolitan areas.

Information

Project Title: Technical Assistance and Research Dissemination Through the

National Academy of Sciences

Project Number: DC-26-7035 Funding: \$250,000

Start Date: June 1995 Estimated Completion: June 1996

Grantee/Contractor: National Academy of Sciences

2101 Constitution Avenue, NW

Washington, DC 20418

 Principal Investigator:
 Peter Shaw
 Phone:
 202/334-2966
 FAX:
 202/334-2003

 FTA Project Manager:
 Gwendolyn Cooper,
 TRI-30
 Phone:
 202/366-0198
 FAX:
 202/366-3765

Description: The Transportation Research Board (TRB) of the National Academy of Sciences is a unique source of independent, highly regarded expertise which develops and disseminates new information addressing transit issues. TRB is the major catalyst stimulating transit research by individuals and organizations outside of the Federal government. The efforts of TRB to focus on transit problems and get them resolved on a cooperative basis are unique and have been of long-standing value to the transit industry. This project will enable the Transportation Research Board to maintain an extensive network of transit experts to resolve commonly held transit needs through the conduct and application of appropriate research; to maintain and operate the computerized Urban Mass Transportation Research Information Services database; to support the TRB Annual Meeting; and to support the study of Sustainable Transportation.

Transit Service and Management Innovation

Project Title: Printing and Distribution of Technical Reports
Project Number: DC-26-0011-04 Funding: \$45,000

Start Date: March 1995 Estimated Completion: September 1995

Grantee/Contractor: Office of the Secretary

United States Department of Transportation

Washington, DC 20590

FTA Project Manager: Helen M. Tann, TRI-1 Phone: 202/366-0207 FAX: 202/366-3765

Description: The FTA Office of Research, Demonstration and Innovation (formerly the Office of Technical Assistance and Safety) provides technical assistance to projects that explore new technologies, new techniques and analytical tools for operating and managing transit. To make this project information available to the transit community and other interested parties, it is necessary to disseminate the information throughout the country, usually in the form of printed reports. This interagency agreement with the Office of the Secretary provides for the printing and dissemination of these reports.

Project Title: Transportation Technology Fair

Project Number: DC-26-7033 Funding: \$42,000

Start Date: February 1995 Estimated Completion: March 1996

Grantee/Contractor: Federal Highway Administration

U.S. Department of Transportation

Washington, DC 20590

FTA Project Manager: Jackie Hathaway, TRI-1 Phone: 202/366-0187 FAX: 202/366-3765

Description: This project reimburses the Federal Highway Administration for the cost of exhibit services required for the 1994 Transportation Technology Fair on the Mall in Washington, DC. The Fair demonstrated how the Department of Transportation is building intelligent and advance transportation systems for public use simultaneously with improving the domestic economic base and international competitiveness.

Project Title: **ADA External Speakers on Transit Vehicles**

Project Number: MD-26-0001-08 Funding: \$100,000

Start Date: February 1995 Estimated Completion: September 1995

Booz-Allen & Hamilton, Inc. Grantee/Contractor:

4330 East West Highway Bethesda, Maryland 20814-4455

Phone: 703/917-2957 Principal Investigator: Timothy Peck FAX: 703/902-3369 FTA Project Manager: Irving Chambers, TRI-20 **Phone:** 202/366-0238 FAX: 202/366-3765

The Americans With Disabilities Act (ADA) regulations require that transit buses be equipped with an information system capable of providing the same or equivalent information to all persons with disabilities. Transit systems have been encouraged to use whatever service, signage. or alternative system that is capable of providing equivalent access. This project will evaluate the practicality and feasibility of installing external/outside speaker systems on transit vehicles to communicate with visually impaired as one solution to providing equivalent information. The research will explore issues related to outside speaker systems, such as the effects of frequency, loudness, and boarding location, as well as community concerns. Technical information will be collected from sound system manufacturers and auditory experts. Human factors testing in a controlled environment will be conducted to obtain data relating to speaker volumes, clarity, and projection patterns. A handbook will be developed to assist transit systems in developing auditory communication protocols for persons with visual impairments. The handbook will include guidelines and technical specifications for outside speakers, systems currently available and advanced systems that may be available in the future.

Project Title: **ADA Key Station Assessments**

Project Number: VA-90-9001 Funding: \$442,336

Start Date: Estimated Completion: December 1996 May 1995

Grantee/Contractor: KRW, Incorporated

> 1008 Pendleton Street Alexandria, Virginia 22314

Principal Investigator: George Earnhart **Phone:** 703/836-4691 **FAX:** 703/836-0691 FTA Project Manager: Roberta Root, TCR-20 **Phone:** 202/366-2285 **FAX:** 202/366-3475

Description: The FTA is responsible for ensuring that providers of public transportation comply with the ADA. A major provision of the ADA applies to accessibility for persons with disabilities at key rail stations. This project will provide technical support in terms of assessing rail transit agencies across the country for compliance with the key station requirements of the ADA.

Project Title:

ADA Management Compliance Reviews

Project Number:

DC-90-7710-02/03 Funding: \$1,100,000

Start Date:

January 1995 Estimated Completion: March 1997

Grantee/Contractor:

Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

 Principal Investigator:
 David Spillar
 Phone:
 617/494-2252
 FAX:
 617/494-2370

 FTA Project Manager:
 Gary DeLorme, TPM-30
 Phone:
 202/366-1652
 FAX:
 202/366-7951

Description: The FTA is responsible for the National implementation of the transportation provisions of the ADA, namely, the financial and management compliance reviews. The workload in conducting these compliance reviews and providing program assistance for more than 650 transit agencies is enormous. From 1992-1995, FTA received more than 500 ADA paratransit plans for review and determination of compliance or noncompliance with ADA requirements. The 500 plus paratransit plans detail the capital and operating costs of providing the required paratransit service to all ADA eligible persons across the Nation, as well as plans to purchase lift-equipped buses and vans. This project will enable FTA to continue in its responsibility to implement the ADA compliance reviews by providing continued contractor support for the processing of the annual ADA paratransit plan submissions through FY 1997.

Project Title:

Destination Jobs Reverse Commute Employment Program

Project Number:

MN-26-7001

Funding: \$63,000

Start Date:

January 1995

Estimated Completion: December 1995

Grantee/Contractor:

Hennepin County Training and Employment Assistance

300 South Sixth Street

Minneapolis, Minnesota 55487-0012

Principal Investigator: Larry Blackstad Phone: 612/348-5859 FAX: 612/348-3932 FTA Project Manager: Stewart McKeown, TRI-12 Phone: 202/366-0244 FAX: 202/366-3765

Description: This project will document the successful "Destination Jobs" reverse commute employment program in a way that will facilitate the transfer of this model program to other metropolitan areas with similar structural unemployment problems. The project will develop a practitioner's manual, and information/motivational video, and a "Destination Jobs" reverse commute employment program brochure. "Destination Jobs" is a reverse commute employment program funded as a pilot project by the Hennepin County Board of Commissioners in Minneapolis and nearby suburbs. The project's success is due in large part to the collaborative efforts of three main partners jointly supporting the program: business, community, and government.

Project Title: DOT/DHHS Joint Coordinating Council: Administrative Support

Project Number: VA-26-0005-06 **Funding:** \$12,000

Start Date: June 1995 Estimated Completion: December 1996

Grantee/Contractor: Kuo & Associates, Inc

1420 K Street, NW, Suite 400

Washington, DC 20005

Principal Investigator: Moyette Parker-Phillips
Phone: 202/371-1625 FAX: 202/789-0335
FTA Project Manager: Roger F. Tate, TRI-30
Phone: 202/366-0235 FAX: 202/366-3765

Description: This project provides administrative assistance to the DOT/DHHS Joint Coordinating Council on Human Services Transportation. The Council meetings produced information on transportation-related issues of concern to both the US DOT and the Department of Health and Human Services (DHHS). The information is intended to help both agencies achieve better coordination of transportation services. This project provides for the recording, editing, printing and distributing of Council activities to the regional offices of both departments, the US DOT and Human Service providers, state transit associations, and others.

Project Title: Estimate for Key Station Investigation

Project Number: MA-90-8002-01 Funding: \$6,000

Start Date: November 1994 Estimated Completion: December 1994

Grantee/Contractor: Technology and Management Systems

99 South Bedford Street, #211

Burlington, Massachusetts 01803-5128

 Principal Investigator:
 Dr. Phani K. Raj
 Phone: 617/272-3033
 FAX: 617/272-5038

 FTA Project Manager:
 Roberta Root, TCR-20
 Phone: 202/366-2285
 FAX: 202/366-3475

Description: This project will assist the FTA in conducting key rail station ADA compliance audits. It will provide the FTA with a cost estimate and the steps required to conduct the compliance reviews. The research will determine the steps required to conduct the ADA investigations of 102 key rail stations spread over 32 rail systems. Data will be collected on the costs for labor, travel, materials and time required to conduct each investigation. A final report will be developed and delivered to the FTA regarding the compliance reviews.

Project Title: Joblinks Employment Transportation Initiative

Project Number: DC-26-7039 Funding: \$1,000,000

Start Date: March 1995 Estimated Completion: March 1997

Grantee/Contractor: Community Transportation Association of America

1440 New York Avenue, NW, Suite 440

Washington, DC 20005

Principal Investigator: Charles Dickson **Phone:** 202/6281480 **FAX:** 202/737-9197 **FTA Project Manager:** Roger F. Tate, TRI-30 **Phone:** 202/366-0235 **FAX:** 202/366-3765

Description: The Joblinks Employment Transportation Initiative is sponsored by the DOT/DHHS Joint Coordinating Council on Human Services Transportation. The project objective is to demonstrate innovative and effective approaches to improve transportation services for job training/employment opportunities for unemployed and underemployed individuals. The project will focus on developing and implementing model projects that demonstrate innovative approaches to improving employment-related transportation services and overcoming critical mobility barriers to job training and employment for residents in urban and rural areas. Innovative models will be demonstrated for improving employment-related transportation for urban and rural residents in the following six states: Kansas, Maryland, Mississippi, New Mexico, New York and West Virginia.

Project Title: Medicaid Transportation Brokerage Demonstration

Project Number: CA-26-7013 Funding: \$100,000

Start Date: May 1995 Estimated Completion: March 1997

Grantee/Contractor: Metropolitan Transportation Commission

101 Eighth Street

Oakland, California 94607-4700

Non-emergency Medicaid transportation costs have been rising at the rate of ten percent per year throughout the 1990s. It has been estimated that over \$1.2 billion a year is spent by the Department of Health and Human Services (DHHS) for non-emergency medical transportation, a significant portion of which is spent on transporting persons considered eligible for complementary paratransit under the Americans With Disabilities Act of 1991 (ADA). This project is a cooperative attempt by the FTA, DHHS, Metropolitan Transportation Commission (MTC), Los Angeles County Metropolitan Transportation Authority (LACMTA), and the California State Medicaid Authority to broaden the coordination of public transit and human service transportation. The project will demonstrate that, with minor modifications, the existing public transportation services could provide significant numbers of Medicaid funded non-emergency medical trips at a lower cost per trip than the existing Medicaid system. LACMTA and MTC of the Bay Area will use the service structures developed by public transit operators to provide cost effective services for elderly persons and persons with disabilities to improve the cost-effectiveness of the Medicaid non-emergency transportation program, and will use the savings achieved to provide more service to meet demand. Ultimately, this project will successfully demonstrate the combining of Federal US DOT and Medicaid funds with state and local funds to establish an integrated brokered transportation service for elderly persons and persons with disabilities in order to establish a model for other DHHS-funded programs.

Project Title: Project ACTION (Accessible Community Transportation in Our

Nation)

Project Number: DC-26-7031 Funding: \$2,000,000

Start Date: June 1995 Estimated Completion: December 1996

Grantee/Contractor: National Easter Seal Society, Inc.

1350 New York Avenue, NW, Suite 915

Washington, DC 20005

 Principal Investigator:
 Roslyn M. Simon
 Phone:
 202/347-3066
 FAX:
 202/737-7914

 FTA Project Manager:
 Roger F. Tate, TRI-30
 Phone:
 202/366-0235
 FAX:
 202/366-3765

Description: The National Easter Seal Society/Project ACTION will continue to develop transit accessibility demonstration projects that will (1) identify persons with disabilities and their transportation needs; (2) develop outreach and marketing activities to encourage public transportation use by persons with disabilities; (3) provide training for transportation providers to increase their sensitivity to the needs of persons with disabilities; (4) provide training for persons with disabilities regarding the use of public transportation; and (5) encourage elimination of barriers to accessible services and facilities. In addition, the project enables Project ACTION to enhance the national resource center and clearinghouse capability to disseminate their products on both the National and local levels, and to develop a system for evaluating various types of accessible transportation technologies.

Project Title: Region 10 Transportation Consortium

Project Number: WA-26-8001 Funding: \$50,000

Start Date: August 1995 Estimated Completion: March 1996

Grantee/Contractor: Washington State Department of Transportation

PO Box 47300

Olympia, Washington 98504-7370

Principal Investigator: Gordon Kirkemo **Phone:** 360/705-7914 **FAX:** 360/705-6820 **FTA Project Manager:** Elizabeth J. Solomon, TRI-30 **Phone:** 202/366-0242 **FAX:** 202/366-3765

Description: The State of Washington along with the States of Oregon and Idaho will develop a Region 10 Transportation Consortium to assess and improve transportation services in the area. These states will identify public, private and human service transportation activities within each State and develop a methodology to enhance transportation services in the region. Project activities will include a survey of the Region 10 State DOTs and State Human Service Agencies to determine the level of transportation coordination taking place between the various public and human service providers.

Project Title: Texas Statewide Client Transportation Coordination

Project Number: TX-26-7003 Funding: \$50,000

Start Date: May 1995 Estimated Completion: July 1996

Grantee/Contractor: Texas Health and Human Services Commission

PO Box 132247

Austin, Texas 78711

 Principal Investigator: Tina Janek
 Phone: 512/502-3277
 FAX: 512/502-3294

 FTA Project Manager: Roger F. Tate, TRI-30
 Phone: 202/366-0235
 FAX: 202/366-3765

Description: This projects supports the Office of Client Transportation Services' (OCTS) statewide client transportation action plan which has been approved and endorsed by state and local officials, consumers and service providers. OCTS affirms that regional coordination is critical to institutionalizing improvements in community transportation planning, and that meetings with stakeholders are vital to the success of community transportation in Texas. The statewide action plan consists of three fundamental recommendations: formation of planning/service regions for public and client transportation; establishment of a consolidated planning process; and the implementation of nine specific action plans designed to improve state agency administration and coordination of public and client transportation programs. This includes the development of four local transportation coordination models. In addition, the project will enable the State of Texas to conduct focus group meetings that bring together transportation community planning officials, consumers and service providers for the purpose of discussing issues relating to local planning, local coordination barriers, and local transportation coordination models.

Project Title: Transit Ambassadors Program

Project Number: DC-26-7019-01 **Funding:** \$153,000

Start Date: September 1995 Estimated Completion: December 1996

Grantee/Contractor: District of Columbia Service Corps

1511 K Street, NW, Suite 949

Washington, DC 20005

Principal Investigator: Brenda Strong
Phone: 202/483-9424
FAX: 202/667-5299
FTA Project Manager: Pauline D'Antignac, TRI-30
Phone: 202/366-0234
FAX: 202/366-3765

Description: The FTA manages the Department of Transportation's Transit Ambassadors Program-one of the five program areas of the National and Community Service Trust Act of 1993 that is being administered by AmeriCorps National Service Corporation. The purpose of the Transit Ambassadors Program is to establish a relationship between transit providers and community service organizations to help train and accompany the elderly and persons with disabilities to safely use the public transportation system in their community. This project supports the District of Columbia Service Corps (DCSC) efforts to implement AmeriCorps's Transit Ambassadors Program. The program addresses the needs of the homebound elderly, persons with disabilities or AIDS, persons at eldercare centers and others by training and escorting them, via transit, to and from their appointments at medical centers, hospitals, etc. DCSC will train and employ 20 innercity youths, 17 years of age or older, to provide these services to this target group. In addition, Transit Ambassadors will go out into the community, identify obstacles that prevent elderly persons and

persons with disabilities from safely and easily using public transportation and will work with local transit authorities to remove these obstacles.

Project Title: Trenton, New Jersey Reverse Commute (Weed and Seed) Project

Project Number: NJ-26-0003 Funding: \$35,000

Start Date: April 1995 Estimated Completion: March 1997

Grantee/Contractor: City of Trenton

319 E. State Street, City Hall Trenton, New Jersey 08608

Principal Investigator: Salem Reiner Phone: 609/989-3509 FAX: 609/989-4243 FTA Project Manager: Stewart McKeown, TRI-12 Phone: 202/366-0244 FAX: 202/366-3765

Description: This project will enable the City of Trenton to undertake a study to develop a reverse commute system that will serve the Safe Haven Centers. The project goal is to design the most efficient means of transporting unemployed Weed and Seed participants from the Safe Haven Centers to employment centers.

Project Title: Benefit-Cost Analysis for Transit Investment Requirement Assessment

Project Number: VA-26-6003 Funding: \$249,000

Start Date: December 1994 Estimated Completion: November 1995

Grantee/Contractor: Booz Allen and Hamilton

8251 Greensboro Drive McLean, Virginia 22102

Principal Investigator: Donald Schneck Phone: 215/496-8403 FAX: 215/496-6801 FTA Project Manager: Richard Steinmann, TBP-10 Phone: 202/366-4060 FAX: 202/366-7116

Description: The purpose of this project is to develop and test a model to assess transit investment requirements using benefit-cost principles. The research team will develop a work plan and a conceptual framework, as well as collect data on current transit conditions and performance.

Project Title: Benefit-Cost Methods to Incorporate Transit Benefits

Project Number: MD-26-6001-04 Funding: \$35,000

Start Date: September 1995 Estimated Completion: December 1996

Grantee/Contractor: Hickling-Lewis-Brod, Inc.

8720 Georgia Avenue, Suite 1005 Silver Spring, Maryland 20910

Principal Investigator: David Lewis **Phone:** 301/565-0391 **FAX:** 301/565-0394 **FTA Project Manager:** Fred L. Williams, TBP-10 **Phone:** 202/366-1696 **FAX:** 202/366-7116

Description: This project will enable the research team to develop methods that will incorporate the benefits of transit-oriented development, the benefits of congestion management, and the benefits of low cost mobility. The methods being developed are within the FTA Benefit-Cost project and program assessment framework. It is an effort to provide decisionmakers with a complete accounting of transit benefits beyond those readily measurable in traditional benefit-cost design.

Project Title: Benefits of Congestion Management in Strategic Urban Corridors:

Mogridge-Lewis Corridor Studies

Project Number: MD-26-6001-02 Funding: \$301,000

Start Date: December 1994 Estimated Completion: July 1996

Grantee/Contractor: Hickling-Lewis-Brod, Inc.

8720 Georgia Avenue, Suite 1005 Silver Spring, Maryland 20910

Principal Investigator: Steve Lewis-Workman **Phone:** 301/565-0391 **FAX:** 301/565-0394 **FTA Project Manager:** Fred L. Williams, TBP-10 **Phone:** 202/366-1696 **FAX:** 202/366-7116

Description: In severely congested urban corridors served by high-speed transit, travel times between the principal modes tend to converge at the time established by the mode least constrained by congestion, i.e., transit traveling on a separate right-of-way allowing commuters to bypass congested highways. The research team conducted door-to-door multimodal travel time surveys in 17 severely congested urban transit corridors and identified several convergent corridors.

The purpose of this project is to identify conditions under which investments to reduce transit travel times for passengers will produce the most travel time benefits for motorists in the same urban travel corridor.

Project Title: Benefits of Low-Cost Mobility

Project Number: MD-26-6001-03 **Funding:** \$94,000

Start Date: September 1995 Estimated Completion: July 1996

Grantee/Contractor: Hickling-Lewis-Brod, Inc.

8720 Georgia Avenue, Suite 1005 Silver Spring, Maryland 20910

Principal Investigator: Daniel Brod Phone: 301/565-0391 FAX: 301/565-0394 FTA Project Manager: Matthew J. Welbes, TBP-10 Phone: 202/366-1668 FAX: 202/366-7116

Description: By providing economic mobility at low cost to passengers, transit services reduce the private and public costs associated with personal mobility for millions of Americans. This research focuses on identifying public sector, private sector, and household budgets that are lower than they would be in the absence of public transit access services.

Project Title: Commuter Choice Initiative

Project Number: DC-26-6029 Funding: \$150,000

Start Date: February 1995 Estimated Completion: March 1996

Grantee/Contractor: Association for Commuter Transportation (ACT)

1518 K Street, NW, Suite 503 Washington, DC 20005

Principal Investigator: Thomas Bulger Phone: 202/775-0079 FAX: 202/785-0477 FTA Project Manager: William B. Menczer, TBP-10 Phone: 202/366-4060 FAX: 202/366-7116

Description: This project is jointly sponsored by FTA, FHWA, and the Environmental Protection Agency. It focuses on broadening the "Cash Out" initiative to "Commuter Choice" to include ways that allow employers to provide employees with financial incentives to choose an alternative to driving to work alone. The "Cash Out" element of the President's Global Climate Change Action Plan was not voted on in the last session of Congress. ACT will perform a study of the administration of employee benefits, including commute benefits that are currently available for employers to offer to employees. The study team will conduct an analysis of employer provided parking and develop a methodology for parking valuation. The last phase of the project will involve the development of a series of scenarios that would maximize transportation commute options and solicit private sector employer and employee reaction. The study team will conduct symposia to provide a forum for discussion of the Commuter Choice options. ACT will develop the concepts and present options for the development of a cost-effective program that has the potential to reduce the use of single occupancy vehicles for commuting purposes and to encourage the use of alternate commute options.

Project Title:

Data Analysis Support on Transit Conditions

Project Number:

VA-26-6003-02

Funding: \$119,000

Start Date:

December 1994

Estimated Completion: October 1995

Grantee/Contractor:

Booz Allen and Hamilton 8251 Greensboro Drive McLean, Virginia 22102

Principal Investigator: Donald Schneck Phone: 215/496-8403 FAX: 215/496-6801 FTA Project Manager: Richard Steinmann, TBP-10 Phone: 202/366-4060 FAX: 202/366-7116

Description: The purpose of this project is to develop information on current transit conditions to improve the data available for the next Report to Congress on the *Status of the Nation's Surface Transportation Systems: Conditions, Performance and Investment Requirements*, and to develop ongoing methods to collect this information. Data will be collected from local studies of transit conditions and public transportation management systems.

Project Title:

Data Management and Analysis Support

Project Number:

MD-26-6002/01

Funding: \$74,000

Start Date:

December 1994

Estimated Completion: May 1996

Grantee/Contractor:

COMSIS Corporation

8737 Colesville Road, Suite 1100 Silver Spring, Maryland 20910

 Principal Investigator:
 Dieter Klinger
 Phone:
 301/588-0800
 FAX:
 301/588-5922

 FTA Project Manager:
 John Day,
 TBP-10
 Phone:
 202/366-4060
 FAX:
 202/366-7116

Description: This project provides data management support to the FTA Office of Policy Development. The support includes: organizing and formatting transit industry data from Section 15 Report Years 1992 and 1993 into a unified database, as well as managing and analyzing data in transit and urban transportation systems. In addition, this effort will include the following five subtasks: Collect and Present Information on New Starts; Format Section 15 Data; Develop a Unified Database; Collect Information for the Report to Congress; and other Data Analysis.

Project Title: Economical Transit Subsidies in the Absence of Road Pricing: The

Second Best Approach

Project Number:

MD-26-6001-05

Funding: \$25,000

Start Date:

September 1995

Estimated Completion: July 1996

Grantee/Contractor:

Hickling-Lewis-Brod, Inc.

8720 Georgia Avenue, Suite 1005 Silver Spring, Maryland 20910

Principal Investigator: David Lewis **Phone:** 301/565-0391 **FAX:** 301/565-0394 **FTA Project Manager:** Fred L. Williams, TBP-10 **Phone:** 202/366-1696 **FAX:** 202/366-7116

Description: By all evidence, economical pricing of congested urban highway facilities has yet to earn public acceptance. The second best solution to pricing, according to economic theory and practice, is to subsidize more economically desirable travel decisions, including transit services that demonstrably benefit motorists affected by traffic delays. This project will develop a method for

determining the most economical transit subsidy level as a substitute for congestion pricing. The method will be applied to corridors and to the national aggregate urban traffic congestion problem.

Federal Transit Administration Home Page on the World Wide Web Project Title:

Project Number: Funding: \$100,000 DC-26-6032

Estimated Completion: December 1996 Start Date: December 1995

Grantee/Contractor: **Bureau of Transportation Statistics**

U.S. Department of Transportation

Washington, DC 20590

Principal Investigator: Brian Long **Phone:** 202/776-0400 **FAX:** 202/452-0699 FTA Project Manager: Robert Owens, TBP-10 **Phone:** 202/366-4060 **FAX:** 202/366-7116

This project supports the establishment of an FTA Home Page on the World Wide Description: Web. The project effort will include establishing the necessary systems architecture including page layout and structuring, maintenance of the site, development of links to the Bureau of Transportation Statistics and the Volpe Transportation Systems Center sites. Basically, the World Wide Web is an electronic communication and information network that allows the user, namely the transit user, to communicate with other people and access vast quantities of electronic data and information. The FTA Internet address is: http://www.fta.dot.gov.

Flexible and Innovative Funding Workshops Project Title: Project Number: DC-26-6018-01 Funding: \$88,000

Estimated Completion: December 1996 Start Date: July 1993

Grantee/Contractor: American Public Transit Association

> 1201 New York Avenue, NW Washington, DC 20005

Government Finance Officers Association

1750 K Street, NW Washington, DC 20006

Principal Investigator: Richard Weaver **Phone:** 202/898-4109 **FAX:** 202/429-2750 FTA Project Manager: Richard Steinmann, TBP-10 Phone: 202/366-4060 FAX: 202/366-7116

Transit operators and local officials need training in the planning, project Description: development, and project delivery process to be better able to take advantage of the new flexible funding opportunities offered by ISTEA. This project provides third year support to develop and conduct a series of workshops on flexible and innovative funding under ISTEA. In the first year of the project, the American Public Transit Association (APTA) and the Government Finance Officers Association (GFOA) developed the design for the workshop. The second year funding covered a series of eight workshops--three in concert with APTA meetings, three with GFOA meetings, and two in stand-alone locations. The workshops were designed to assist and inform state and local agencies, metropolitan planning organizations, transit operator officials and staff, and others of the flexible funding opportunities available in ISTEA. This third year funding covers a series of training workshops on innovative financing, such as certificates of participation, cross-border leases, and infrastructure banks.

Project Title: Innovative Finance Services

Project Number: MD-26-6003 Funding: \$170,000

Start Date: October 1995 Estimated Completion: September 1997

Grantee/Contractor: Marlaw Systems Technology, Inc.

8121 Georgia Avenue, Suite 801 Silver Spring, Maryland 20910

Principal Investigator: Gloria Lawlah-Walker **Phone:** 301/588-9781 **FAX:** 301/588-9785 **FTA Project Manager:** Paul F. Marx, TBP-10 **Phone:** 202/366-1675 **FAX:** 202/366-7116

Description: This project will support the FTA Innovative Financing Initiative. The contractor will develop analyses of the implications of alternative financing techniques for transit investments. This will include an assessment of how usable the technique would be for various transit systems by size, type of organization, or type of transit investment. The investment may involve new fixed guideway systems, rail modernization, rolling stock acquisitions, or facilities to serve multiple transportation modes. Tasks will include application of investment criteria, evaluation of local and Federal legal issues, or assisting cities and transit systems in the development of appropriate financing techniques.

Project Title: Location Efficient Mortgage Market Tests

Project Number: IL-26-6001 Funding: \$300,000

Start Date: September 1995 Estimated Completion: September 1996

Grantee/Contractor: Center for Neighborhood Technology

2125 West North Avenue Chicago, Illinois 60647

Principal Investigator: Scott Bernstein Phone: 312/278-4800 FAX: 312/278-3840 FTA Project Manager: Fred L. Williams, TBP-10 Phone: 202/366-1696 FAX: 202/366-7116

Description: This project is jointly sponsored by FTA, the Environmental Protection Agency. and private organizations interested in mortgage markets. The purpose is to develop and promote the adoption by the private mortgage lending industry of Location Efficient Mortgages (LEM) as a means of capitalizing in mortgages the transportation savings achieved by residential and business location in pedestrian-oriented, mixed use developments. Such forms of development are known in transportation as livable communities or transit oriented development (TOD). Data will be gathered on monthly household transportation costs. On the basis of these data, the project will work with local mortgage bankers in the targeted areas to operationalize the LEM concept in their respective underwriting practices. Finally, a prototype policy will be developed for LEMs that will serve the needs of the local, national, and international mortgage banking sectors. LEM's offer the potential to profoundly improve the ability of households and businesses to buy real estate as a result of foregoing an automobile-dependent lifestyle. The adoption of LEMs would reduce the tendency in existing mortgage practice to inadvertently encourage sprawl development. Overall, LEMs would reinforce existing TODs served by intensive transit services and would increase the appeal of TODs for new development served by transit.

Project Title: National Benefits of Transit Oriented Development
Project Number: MD-26-6001 Funding: \$217,520

Start Date: September 1994 Estimated Completion: June 1996

Grantee/Contractor: Hickling-Lewis-Brod, Inc.

8720 Georgia Avenue, Suite 1005 Silver Spring, Maryland 20910

Principal Investigator: Steve Lewis-Workman Phone: 301/565-0391 FAX: 301/565-0394 FTA Project Manager: Fred L. Williams, TBP-10 Phone: 202/366-1696 FAX: 202/366-7116

Description: Earlier research developed methods for measuring the direct and indirect benefits of transit oriented developments. This was done mainly by identifying transportation cost savings for households and businesses in relation to proximity to high-speed transit facilities. Although many benefits are captured in commercial and residential property values, other benefits accrue to the wider community beyond the immediate neighborhood. This project will enable the research team to develop methods for aggregating the benefits of livable communities at the national level.

Project Title: Quick-Response Policy Analysis

Project Number: MD-26-6001 Funding: \$115,000

Start Date: October 1995 Estimated Completion: July 1996

Grantee/Contractor: Hickling-Lewis-Brod, Inc.

8720 Georgia Avenue, Suite 1005 Silver Spring, Maryland 20910

Principal Investigator: David Lewis **Phone:** 301/565-0391 **FAX:** 301/565-0394 **FTA Project Manager:** Fred L. Williams, TBP-10 **Phone:** 202/366-1696 **FAX:** 202/366-7116

Description: The purpose of this project is to assist the research team in its efforts to develop policy analytical materials for use by the FTA and the U.S. Department of Transportation policymakers in the budgetary and reauthorization processes. These materials will incorporate research findings on the benefits of livable communities, the benefits of congestion management, and the benefits of low-cost mobility. The products will be suitable for publication and for sharing with the Congress and other principal policymaking agencies.

Project Title: Transit Performance Monitoring System

Project Number: DC-26-6022 Funding: \$307,000

Start Date: May 1995 Estimated Completion: December 1996

Grantee/Contractor: American Public Transit Association

1201 New York Avenue, NW Washington, DC 20005

Principal Investigator: Richard Weaver Phone: 202/898-4109 FAX: 202/898-4070 FTA Project Manager: Matthew J. Welbes, TBP-10 Phone: 202/366-1668 FAX: 202/366-7116

Description: This project will develop an objective and reliable approach to measuring transit's performance from the customers' perspective and to reporting transit performance in terms of the functions it serves. These functions are 1) Livable Communities: transit makes communities more pedestrian-friendly and less dependent on automobiles, 2) Low-Cost Basic Mobility: transit provides

motorized mobility for people who cannot afford automobiles or people, who because of disabilities or age cannot operate automobiles, and 3) Congestion Management: transit relieves congestion on major arterials and thereby increases the average speed on the intermodal urban transportation system (i.e., in many corridors, a transit investment will yield greater benefits than a highway expenditure). To fully assess the characteristics and extent of these functions, onboard surveys and related research will be conducted on 12 transit systems. The results will be used to establish an ongoing process for reporting Transit Performance Monitoring System data.

Project Title: Transportation Impacts of the Los Angeles Earthquake of 1994

Project Number: CA-26-0009-05 Funding: \$50,000

Start Date: December 1994 Estimated Completion: July 1995

Grantee/Contractor: Gardner Consulting Planners

1005 Del Amo Street

Redondo Beach, California 90277

Principal Investigator: Bedros Enfidjian Phone: 310/374-0164 FAX: 310/372-4067 FTA Project Manager: Joseph Goodman, TRI-12 Phone: 202/366-0240 FAX: 202/366-3765

Description: The Los Angeles Earthquake of January 17, 1994, resulted in the destruction of many key freeway links causing massive auto congestion. Former auto commuters became new riders on the Santa Clarita Valley and Moorpark lines of the Los Angeles area commuter rail system, Metrolink. As the freeway system was repaired, most new Metrolink riders returned to former auto habits, but some pre-earthquake auto commuters remained as Metrolink users. Metrolink ridership is now higher than pre-earthquake levels. This situation provides a natural laboratory to study ridership responses to service changes. The objective of this project is to collect data through surveys of current and former Metrolink riders and other corridor commuters who never switched to Metrolink, and analyze the reasons for mode choice under various pre- and post-earthquake conditions. A final report will be delivered to the FTA and made available to the general public.

Project Title: Benchmarking Public Involvement

Project Number: DC-08-9201 Funding: \$80,000

Start Date: January 1995 Estimated Completion: September 1996

Grantee/Contractor: Program for Community Problem Solving (National Civic League)

915 15th St. NW, Suite 600 Washington, DC 20005

Principal Investigator: Bill Potapchuk Phone: 202/783-2961 FAX: 202-347-2161 FTA Project Manager: Edward L. Thomas, TPL-20 Phone: 202/366-0096 FAX: 202/493-2478

Description: This project will support the efforts of the National Civic League to develop benchmarks and a model benchmarking process for the purposes of evaluating and refining public involvement programs which were implemented to support the transportation planning and programming process. The project will provide transportation agencies with benchmarks against which their own public involvement programs may be compared and evaluated, and through emulation, improved. These benchmarks are approaches to public involvement that have actually been used with success by other public agencies or by utility companies.

Project Title: Develop MPO Financial Management System and Finance Plan Model

Project Number: DC-26-7041 Funding: \$125,000

Start Date: June 1995 Estimated Completion: July 1996

Grantee/Contractor: National Association of Regional Councils

1700 K Street, NW, 13th Floor

Washington, DC 20006

 Principal Investigator:
 Richard Hartman
 Phone: 2202/457-0710
 FAX: 202/296-9352

 FTA Project Manager:
 Nancy S. Strine, TPL-20
 Phone: 202/366-8051
 FAX: 202/493-2470

Description: The objective of this research project is to support the efforts of the National Association of Regional Councils (NARC) to continue the development and testing of the Finance Plan Model which provides metropolitan planning organizations (MPOs) with a technical tool in conducting financial capacity assessments. In addition, NARC will conduct a comprehensive search and review of current innovative funding strategies across the country to enhance the financial planning capabilities of MPOs. NARC, in cooperation with the Bay Area Metropolitan Transportation Commission (MTC), will identify problems and make recommendations for improving the Finance Plan database management capability, and examine how MPOs are adapting their organizational structures to prepare financially constrained Long Range Plans and Transportation Improvement Programs mandated by the ISTEA of 1991. The Finance Plan software, developed by the MTC, will be tested as a tool for financial planning and programming for MPOs, State DOTs, and transit agencies.

Project Title: Innovative Finance: Technical Assistance

Project Number: VA-26-0002-07 **Funding:** \$125,000

Start Date: May 1995 Estimated Completion: October 1996

Grantee/Contractor: KPMG Peat Marwick

8200 Greensboro Drive McLean, Virginia 22102

 Principal Investigator:
 Ray H. Ellis
 Phone: 703/442-0030
 FAX: 703/556-0195

 FTA Project Manager:
 Paul Marx, TBP-10
 Phone: 202/366-1675
 FAX: 202/366-7116

Description: This project will provide technical assistance in innovative finance to metropolitan planning organizations, state transportation agencies, and transit agencies. Project activities include identifying innovative financial practices, creative financing techniques, and financial state-of-the-art strategies that can be implemented by transit agencies, state transportation agencies, and metropolitan planning organizations. Specifically, this project will provide direct financial and advisory assistance to transit projects selected in response to the FTA's Federal Register Notice on Innovative Financing Initiative. New financing techniques will be examined, as well as how these techniques could be used to finance transit and to assist transit providers in the implementation of such techniques. The project will also develop and generate cash management guidelines, Fact Sheets and Technical Briefs on the best practices and innovations in transit finance.

Project Title: Innovative Financing Demonstration

Project Number: MO-26-0003 Funding: \$100,000

Start Date: May 1995 Estimated Completion: May 1996

Grantee/Contractor: Bi-State Development Agency

707 North First Street

St. Louis, Missouri 63102

Principal Investigator: Eugene K. Lleung **Phone:** 314/982-1537 **FAX:** 314/982-1559 **FTA Project Manager:** Nancy S. Strine, TPL-20 **Phone:** 202/366-8051 **FAX:** 202/493-2470

Description: The objective of this demonstration project is to develop a vendor financing/leasing strategy that would serve as a national model to other metropolitan areas facing similar financing problems. The project will hire and retain a financial planning consultant to Bi-State for the Compressed Natural Gas Innovative Financing project. The results of the project will furnish answers to key questions concerning what can be vendor financed, who is willing and able to provide vendor financing, and what is the most economical method of vendor financing. The reports generated from this project will serve as a guide or model for other transit agencies and will help to provide stable and reliable sources of funds for improved services through the demonstration of new financing techniques.

Project Title: ISTEA Implementation Support

Project Number: MD-26-9003 Funding: \$3,740

Start Date: December 1995 Estimated Completion: December 1996

Grantee/Contractor: Scriptsmith

11617 Cherry Grove Drive Gaithersburg, Maryland 20879

 Principal Investigator: Richard Smith
 Phone: 301/670-9499
 FAX: 301/670-9499

 FTA Project Manager: Deborah Burns, TPL-12
 Phone: 202/366-1637
 FAX: 202/493-2478

Description: The purpose of this project is to develop scripts for two video tapes. The first tape will focus on the metropolitan transportation planning process, the joint FTA/FHWA planning requirements, and decisionmaking responsibilities as they relate to the planning process. The script will focus on key changes in transportation planning and explain the new roles and responsibilities of MPOs, states, and transit operators resulting from these changes. The target audience for the video tape is the MPO staff responsible for developing and implementing transportation plans and programs. The second script will focus on public involvement in the planning process with the intent to encourage individuals to become participants in transportation planning. The target audience is the general public, namely, those affected by transportation planning issues, as well as those intending to have their concerns addressed in the planning process.

Project Title: ISTEA Management Oversight

Project Number: MA-26-9003 Funding: \$450,000

Start Date: September 1994 Estimated Completion: September 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

 Principal Investigator:
 William Lyons
 Phone: 617/494-2579
 FAX: 617/494-3260

 FTA Project Manager:
 Deborah Burns, TPL-12
 Phone: 202/366-1637
 FAX: 202/493-2478

Description: This project will enable the Volpe Center to continue providing broad support to the FTA and the FHWA in the implementation of the joint planning regulations of the ISTEA. The Volpe Center plays a major role in assisting the FTA and the FHWA in conducting comprehensive technical reviews of transportation planning in major metropolitan areas and in drafting reports. The reviews examine the urban transportation planning processes including those which develop regional transportation plans and transportation improvement programs for compliance with the requirements of ISTEA and related Federal laws, such as the Clean Air Act Amendments. The project will also provide information on the extent the evolving ISTEA processes influence metropolitan area decisions on transportation investments and strategies.

Project Title: Joint Development Project Evaluations

Project Number: VA-90-7001-02 **Funding:** \$75,000

Start Date: March 1995 Estimated Completion: August 1995

Grantee/Contractor: KPMG Peat Marwick

8200 Greensboro Drive, Suite 400 McLean, Virginia 21202-3803

Principal Investigator: Raymond Ellis Phone: 703/442-0030 FAX: 703/442-8155 FTA Project Manager: Salvator S. Caruso, TPL-21 Phone: 202/366-0217 FAX: 202/493-2478

Description: This project will assist the FTA in conducting evaluations of selected joint development projects. The project will monitor and oversee the development of certain joint development projects through the use of compliance reviews of safety, procurement and financial aspects. The intent is to develop success stories that can be replicated. The evaluation will include identification of potential cases, development of the research design, and the analysis of the various arrangements for these projects. A list of candidate projects will be developed and screened down for the compliance review. The projects selected will represent different types of joint development opportunities and arrangements which include a variety of transit characteristics, such as: bus only terminal project; a rail project; a project featuring special assessments; a project generating air rights or ground lease revenues; and projects located in small and large cities. The results of this research will have a direct impact on the Livable Communities Initiatives.

Project Title: Joint Development Project Monitoring and Oversight

Project Number: CA-90-7001-01 Funding: \$125,000

Start Date: January 1995 Estimated Completion: December 1996

Grantee/Contractor: Gardner Consulting Planners, Inc.

22010 South Wilmington Avenue, Suite 300

Carson, California 90745

Principal Investigator: Emile Gardner Phone: 310/522-9584 FAX: 310/522-9587 FTA Project Manager: Salvator S. Caruso, TPL-21 Phone: 202/366-0217 FAX: 202/493-2478

Description: This project will monitor selected joint development projects for their program effectiveness as a basis for determining how joint development activities can be used to fashion a Livable Communities Program with a broader focus. That focus is to improve accessibility to neighborhood services, such as daycare and health services; to incorporate transit into the urban design of neighborhoods; to involve the community in the planning and design of transit; and to serve as a linkage to community economic empowerment. The results of this monitoring effort of joint development projects will have a direct impact on the Livable Communities Initiative.

Project Title: Livable Communities Initiative - Conference by Local Government

Commission

Project Number: CA-26-7012 Funding: \$15,000

Start Date: May 1995 Estimated Completion: May 1995

Grantee/Contractor: Local Government Commission

1414 K Street, Suite 250 Sacramento, California 95814

Principal Investigator: Sharon Sprowls Phone: 916/448-1198 FAX: 916/448-8246 FTA Project Manager: Effie S. Stallsmith, TPL-20 Phone: 202/366-5653 FAX: 202/493-2478

Description: This project supports the second annual land use planning conference activities of the Local Government Commission of California. The conference, Putting Our Communities Back on Their Feet: The Next Step, was held in Los Angeles on May 4-5, 1995, and attended by local planners, developers, bankers, and community decisionmakers who decide "what gets built" in Western United States and British Columbia. The conference provided an indepth look at innovative land use strategies and emphasized success stories and practical solutions for building and revitalizing our communities through more resource efficient land use planning. The advantages of compact, mixed-use, pedestrian- and transit-oriented development were discussed, as well as the strategies for implementing such projects and the barriers to this type of planning. A final conference report will be prepared and made available to the transit community and the general public.

Project Title: Livable Communities Initiative - Program Support, Town Meetings

and Technical Assistance

Project Number: MA-26-7027-01 Funding: \$150,000

Start Date: April 1995 Estimated Completion: April 1996

Grantee/Contractor: Planners Collaborative, Inc.

273 Summer Street

Boston, Massachusetts 02210

Principal Investigator: Joseph Brevard Phone: 617/338-0018 FAX: 617/338-4228 FTA Project Manager: Effie S. Stallsmith, TPL-20 Phone: 202/366-5653 FAX: 202/493-2478

Description: This project is designed to provide the necessary support services to the FTA staff and local agencies in achieving the widest possible public participation in the implementation of the Livable Communities Initiative. The project will include the development and delivery of presentations and other related materials that help articulate and create a clearer understanding of the project's concepts, implementation, and evaluation process. In addition, the project team will assist in the planning and conduct of town meetings and community workshops that will bring together FTA staff, state and local government officials, transit agencies, community groups, and others. Basically, the project will assist communities in refining concepts and providing information on exemplary practices, planning procedures, and design standards.

Project Title: Livable Communities Initiative - Program Support, Town Meetings

and Technical Assistance

Project Number: CA-26-0009-06 Funding: \$91,000

Start Date: July 1995 Estimated Completion: July 1996

Grantee/Contractor: Gardner Consulting Planners

22010 South Wilmington Avenue, Suite 300

Carson, California 90745

Principal Investigator: Adrienne Sasser-Gardner Phone: 310/522-9584 FAX: 310/522-9587 FTA Project Manager: Effie S. Stallsmith, TPL-20 Phone: 202/366-5653 FAX: 202/493-2478

Description: The Livable Communities Initiative supports transit capital projects that strengthen the relationship between transit and community development, stimulate greater community involvement in the development process, and increase access to community services and jobs. This project is designed to provide the necessary professional support services to the FTA staff and local agencies in achieving the widest possible public participation in the implementation of the Livable Communities Initiative. Town meetings and community workshops will be planned and conducted in the Western portion of the country for the purpose of bringing together FTA staff, state and local government officials, community groups, other Federal agencies, metropolitan planning organizations, transit agencies, and private organizations, to exchange ideas and to advance the implementation of the concept.

Project Title: Livable Communities Initiative - Program Support, Town Meetings

and Technical Assistance

Project Number: VA-26-0005-03 Funding: \$100,000

Start Date: December 1994 Estimated Completion: December 1995

Grantee/Contractor: Kuo & Associates, Inc

1420 K Street, NW, Suite 400

Washington, DC 20005

Principal Investigator: Moyette Parker-Phillips Phone: 202/371-1625 FAX: 202/789-0335 FTA Project Manager: Effie S. Stallsmith, TPL-20 Phone: 202/366-5653 FAX: 202/493-2478

Description: The FTA Livable Communities Initiative is promoting a strong link between transit and community needs. The Initiative supports transit capital projects that strengthen the relationship between transit and community development, stimulate greater community involvement in the development process, and increase access to community services and jobs. This project is designed to provide the necessary professional support services to the FTA staff and local agencies in achieving the widest possible public participation in the implementation of the Livable Communities Initiative. Town meetings and community workshops will be planned and conducted for the purpose of bringing together FTA staff, state and local government officials, community groups and other Federal agencies, metropolitan planning organizations, transit agencies, and private organizations, to exchange ideas and to advance the implementation of the concept.

Project Title: Livable Communities Initiative - Rural Access Model

Project Number: DC-26-7015-01 Funding: \$50,000

Start Date: February 1995 Estimated Completion: February 1996

Grantee/Contractor: National Council of Negro Women

1001 G Street, NW Washington, DC 20001

Principal Investigator: Fannie M. Munlin

Phone: 202/687-5870 FAX: 202/687-1735

FTA Project Manager: Roger F. Tate, TRI-30 Phone: 202/366-0235 FAX: 202/366-3765

Description: The objective of this project is to support the efforts of the National Council of Negro Women (NCNW) to study/assess the transportation needs of poor and low-income families in selected non-urbanized areas in the States of West Virginia and Kentucky and the way they impact upon the delivery of health care services. The research will assess the effectiveness of public and specialized transportation in providing access services to health care facilities in the two States. A final report will be published and made available to the transit community and the general public.

Project Title: Livable Communities Initiative - Public Participation and Outreach

Project Number: DC-26-7049 Funding: \$158,000

Start Date: June 1995 Estimated Completion: September 1996

Grantee/Contractor: Conference of Minority Transportation Officials

777 North Capitol Street, NE Washington, DC 20002

Principal Investigator: Carolyn Closs Phone: 202-289-1214 FAX: 202/289-1214 FTA Project Manager: Effie S. Stallsmith, TPL-20 Phone: 202/366-5653 FAX: 202/493-2478

Description: ISTEA directs metropolitan planning organizations (MPO) to solicit more public involvement and input on transportation issues than ever before, both from a wider range of the citizenry and at more points in the planning process. This project focuses on strengthening the linkages between transit and community planning and generating input on planning issues directly from the local community. The research will examine and identify public involvement programs that provide a wider range of participatory opportunities for community interest and ethnic groups, namely, those groups that have had limited involvement in the planning and design of transit facilities and services that directly affect the environment and quality of life in their communities. The research will be conducted in three phases. Phase 1 will review literature on the state-of-the-practice and identify case studies that offer the most promising public involvement practices. Based on the literature review and case study reports, a Public Participation Best Practices Manual will be developed in Phase 2. Phase 3 activities include the management of educational forums and workshops, as well as the use of the resource materials in the Best Practices Manual developed in Phase 2 of this project. The manual is intended for use by MPOs, transit agencies, and local governments to help them broaden the public participation base and outreach to all members and groups in their communities.

Project Title: Mission Corridor Transit Renaissance Project
Project Number: CA-26-0029 Funding: \$164,000

Start Date: June 1995 Estimated Completion: September 1996

Grantee/Contractor: San Francisco Municipal Railway

1155 Market Street, 5th Floor San Francisco, California 94103

Principal Investigator: Tim Nelson **Phone:** 415/554-0880 **FAX:** 415/554-0866 **FTA Project Manager:** Nancy S. Strine, TPL-20 **Phone:** 202/366-8051 **FAX:** 202/493-2470

Description: This project will assist the City and County of the San Francisco Board of Supervisors, and the San Francisco Municipal Railway (MUNI) in organizing a community planning and design workshop with residents, community organizations, businesses and local agencies involved in the Mission Corridor Transit Renaissance Project. The project will enable the community to identify the most critical elements that enhance transit, bring about a collaboration of city agencies and mission organizations, and define the project proposal to meet the transit needs of the Mission District. Overall, this project will help facilitate the generation of economic activity in the San Francisco Mission District. The neighborhood will experience improved and safe access to jobs, community services, and educational opportunities, as well as increased transit ridership.

Project Title: National Transportation System

Project Number: DC-26-6030 Funding: \$139,000

Start Date: February 1995 Estimated Completion: February 1996

Grantee/Contractor: Office of the Secretary

United States Department of Transportation

Washington, DC 20590

FTA Project Manager: Robert Owens, TBP-10 Phone: 202/366-4060 FAX: 202/366-7116

Description: The National Transportation System provides an economically efficient and environmentally sound system that establishes the foundation for the Nation to compete in the global economy and moves people and goods in an energy efficient manner. This interagency agreement with Office of the Secretary of Transportation for the development of the National Transportation System will include the following activities: public outreach, data analysis, mapping and delivering a report that describes the National Transportation System.

Project Title: North-South Station Rail Link Feasibility Study
Project Number: VA-26-9004-01 Funding: \$100,000

Start Date: January 1995 Estimated Completion: March 1996

Grantee/Contractor: KPMG Peat Marwick

8150 Leesburg Pike, Suite 800 Vienna, Virginia 22182-2721

 Principal Investigator:
 Raymond Ellis
 Phone: 703/442-0030
 FAX: 703/556-0195

 FTA Project Manager:
 Sheila Cohen, TPL-22
 Phone: 202/366-6220
 FAX: 202/493-2478

Description: This project will continue the study to analyze the feasibility of a rail connection between the North and South Stations in Boston, Massachusetts. Connecting these two stations will

better serve commuters to Boston and AMTRAK riders traveling through the city. Two Tunnel alignments are being studied: one, following Congress Street, and the other along the Central Artery alignment.

Project Title: Portland Rail-Volution Conference Video
Project Number: OR-26-7002 Funding: \$20,000

Start Date: August 1995 Estimated Completion: October 1995

Grantee/Contractor: Tri-County Metropolitan Transportation District of Oregon

4012 SE 17th Avenue

Portland, Oregon

Principal Investigator: Kim Manley Phone: 503-238-5849 FAX:

FTA Project Manager: Effie S. Stallsmith, TPL-20 Phone: 202/366-5653 FAX: 202/493-2478

Description: The objective of this project is to support the efforts of the Tri-County Metropolitan Transportation District (TRI-MET) to produce a 12-15 minute video depicting the success of light rail and the transit mall in the Portland metropolitan area. The video will also highlight the overall benefits that Oregon has experienced in terms of extensive land use planning and urban growth strategies. The professionally produced video will be used in the opening session of the *Rail-Volution Conference*.

Project Title: Technical Advisory Services: Livable Communities Consortium

Project Number: DC-26-7043 Funding: \$156,500

Start Date: August 1995 Estimated Completion: March 1997

Grantee/Contractor: American Institute of Architects

1735 New York Avenue, NW

Washington, DC 20006

Principal Investigator: Deane Evans **Phone:** 202/626-7300 **FAX:** 202/626-7425 **FTA Project Manager:** Effie S. Stallsmith, TPL-20 **Phone:** 202/366-5653 **FAX:** 202/493-2478

Description: This project enables a consortium of transit professional organizations, namely: The American Institute of Architects, The American Planning Association, The Institute of Transportation Engineers, and The International Downtown Association, to provide assistance through marketing strategies, technical advisory services, and input at National conferences for the Livable Communities Initiative. The consortium will market the initiative through newsletters, conference materials, and various media sources, as well as provide experts at national conferences, and serve as an information clearinghouse. This project will help implement the FTA Strategic Plan mainly by promoting a stronger link between transit and community development.

Project Title: Techniques for Comparing Alternative Transportation Modes

Project Number: TX-08-9005 Funding: \$200,000

Start Date: May 1995 Estimated Completion: December 1996

Grantee/Contractor: Texas Transportation Institute

University Drive at Wellborn Road

Box 3578

College Station, Texas 77843

 Principal Investigator:
 Gordon Shunk
 Phone:
 817/277-5503
 FAX:
 817/277-5439

 FTA Project Manager:
 Ronald J. Fisher, TPL-20
 Phone:
 202/366-6257
 FAX:
 202/493-2478

Description: Although ISTEA is entering its third year of implementation, many of the analytical tools needed to carry out the intermodal intent of the law have not yet been developed. The objective of this research is to provide information that will help local transportation staffs and decisionmakers to enhance their decisionmaking process by comparing the economic efficiency (worth) of alternative transportation systems. Approaches for analyzing different transportation strategies, technologies, and investments will be developed to evaluate what impacts they have on congestion, air quality, the regional transportation system, the environment, and the neighborhoods impacted. In addition, the economics and costs vs. benefits of different technologies, strategies, and investments will be tested. Finally, best practices of evaluation will be collected. Six one-day seminars will be conducted nationally presenting the results of this research.

Project Title: Turnkey Demonstration Program Support
Project Number: CA-26-7011-01 Funding: \$96,000

Start Date: September 1995 Estimated Completion: April 1996

Grantee/Contractor: Gardner Consulting Planners

22010 South Wilmington Avenue, Suite 300

Carson, California 90745

Principal Investigator: Adrienne Sasser-Gardner Phone: 310/522-9584 FAX: 310/522-9587 FTA Project Manager: Salvador S. Caruso, TPL-20 Phone: 202/366-0217 FAX: 202/493-2478

Description: This project provides continuing support for the implementation and management of the Turnkey Demonstration Program. The project is part of an effort to assist the FTA in evaluating the efficiencies of the turnkey procurement method compared with traditional procurement methods in terms of cost effectiveness, risk management, project management and other factors. The project tasks include conducting conferences and seminars with the transit industry, evaluation support and providing expert technical assistance to the following four turnkey demonstration sites: Baltimore Light Rail Extension; San Juan Tren Urbano; El Segundo del Norte (Green Line) Station in Los Angeles; and the San Francisco BART Airport Extension. All project reports and summations will be made available to the transit community as part of the program effort to advance new technologies and to lower the cost of constructing new transit systems

Livable Communities Initiative - Demonstration Projects

Project Title: Atlanta University Station Access Improvements for Summer Olympics

1996

Project Number: GA-03-0050 Funding: \$3,700,000

Start Date: April 1995 Estimated Completion: April 1996

Grantee/Contractor: Metropolitan Atlanta Rapid Transit Authority

2424 Piedmont Road, NE Atlanta, Georgia 30324-3330

Principal Investigator: Yolanda Brown
Phone: 404/651-3245 FAX: 404/651-4934
FTA Project Manager: FTA Region IV Office
Phone: 404/347-3948 FAX: 404/347-7849

Description: The FTA is promoting customer-friendly, community-oriented and well designed transit facilities and services resulting from a planning and design process with active community involvement. The purpose of this demonstration project is to assist the Metropolitan Atlanta Rapid Transit Authority (MARTA) in cooperation with the Atlanta University Center (AUC) and the Corporation for Olympic Development in Atlanta in their efforts to improve transit customers access, safety, and security around the Vine City, West End and Ashby Street transit stations. Implementing station enhancements will increase transit ridership by improving safe access to jobs, community services and educational opportunities. Pedestrian improvements, such as streetscape and safety lighting, will be made throughout the campus and adjoining residential neighborhoods and commercial districts. This project is part of a larger effort to enhance the West Side Corridor and provide a unique environment for staging three 1996 Olympic venues.

Project Title:Baltimore Reistertown Metro Station EnhancementsProject Number:MD-03-0068Funding: \$1,520,000

Start Date: May 1995 Estimated Completion: November 1996

Grantee/Contractor: Mass Transit Administration of Maryland

6 St. Paul Street

Baltimore, Maryland 21202

 Principal Investigator:
 Denis Cournoyer
 Phone: 410/767-3812
 FAX: 410/333-0378

 FTA Project Manager:
 FTA Region II Office
 Phone: 215/656-6900
 FAX: 215/656-7260

Description: This project will enable the Maryland Mass Transit Administration (MTA) to build a 10,500 square foot structure on the Reistertown Road Metro Station Park-and-Ride lot to house a child care center and a police substation. Other site amenities to be developed by this effort include security lighting, site and landscape renovations, kiss-and-ride lot modifications, customer information, and covered connecting walkways. The station will serve both as a trip origin and destination center. Ultimately, the MTA will lease the building to the city or a private child care provider.

Project Title: Chester Transportation Center Enhancements
Project Number: PA-03-0254 Funding: \$6,000,000
Start Date: July 1995 Estimated Completion:
Grantee/Contractor: Southeastern Pennsylvania Transportation Authority

1234 Market Street

Philadelphia, Pennsylvania 19107

 Principal Investigator:
 Tony Mazza
 Phone:
 215/580-7063
 FAX:
 215/580-3780

 FTA Project Manager:
 FTA Region III Office
 Phone:
 215/656-6900
 FAX:
 215/656-7260

Description: This project supports the Southeastern Pennsylvania Transportation Authority's (SEPTA) work with the Chester community to plan, design and incorporate community services within a rehabilitated Chester Transportation Center (CTC). In addition to the community service component, the rehabilitated center will improve pedestrian and bus access, and enhance safety. Station enhancements will include site amenities (new sidewalks, customer waiting areas, etc.), safety and security improvements (new elevators, improved lighting and surveillance equipment), and bus and rail interface upgrades. Overall, the CTC is a multimodal station, serving one commuter rail line and eight suburban bus routes with a combined weekday ridership of 4,500 riders. Ridership increase will result from easier transfer between bus and rail modes, the availability of onsite services, and improved customer safety.

Project Title: Chicago Green Line 35th Street Station Enhancements

Project Number: IL-03-0188 **Funding:** \$2,800,000

Start Date: May 1995 Estimated Completion: January 1997

Grantee/Contractor: Chicago Transit Authority

Merchandise Mart PO. Box 3555

Chicago, Illinois 60654

 Principal Investigator:
 Bruce Nelson
 Phone:
 708/366-1261
 FAX:
 708/366-8398

 FTA Project Manager:
 FTA Region V Office
 Phone:
 312/353-2789
 FAX:
 315/886-0351

Description: This project supports the efforts of the Chicago Transit Authority to rehabilitate and improve access to the Green Line 35th Street Station which is located within a National Empowerment Zone under the U.S. Department of Housing and Urban Development Empowerment Zones and Enterprise Communities Program. The project improvement activities will include functional designs that provide for better bus connections, safety and security features, pedestrian walkways, ADA and other accessibility features and amenities that make the station more customer-friendly. The access improvements have demonstrated an increase in transit system use by six percent. Overall, the project will increase ridership on the Green Line and add to the quality of life and economic development of the community.

Project Title: Clackamas County Sunnyside Village Transit Plaza
Project Number: OR-03-0054 Funding: \$1,600,000

Start Date: May 1995 Estimated Completion: December 1998

Grantee/Contractor: Tri-County Metropolitan Transportation District of Oregon

4012 SE 17th Avenue Portland, Oregon 97202

 Principal Investigator:
 John Rift
 Phone:
 503/650-3763
 FAX:
 503/650-3351

 FTA Project Manager:
 FTA Region X Office
 Phone:
 206/220-7954
 FAX:
 202/493-2478

Description: Tri-County Metropolitan Transit District of Oregon (Tri-Met) and Clackamas County Department of Transportation and Development (DOTD) will purchase land to develop a Bus Transit Plaza as a major component of the Sunnyside Village development in Clackamas County. Sunnyside Village is located about 10 miles from downtown Portland and is a planned transit-oriented development. The Land Use Plan and Design Guidelines for this "Neotraditional" neighborhood establish a mix of land uses within a compact, walkable setting. Apartments, townhouses, small lot single family residences, and professional offices surround a core of complementary retail and public services including the proposed transit plaza, library, community center, and daycare facility. It has been proven that a 10-18 percent reduction of automobile trips can be achieved from transit-oriented development. Private developers played an active role in deciding upon the transit-oriented development. The Sunnyside Village plan establishes a system of pedestrian ways for increased pedestrian access.

Project Title: Columbus Engineering for Transit Service Center
Project Number: OH-03-0149 Funding: \$400,000

Start Date: May 1995 Estimated Completion: December 1997

Grantee/Contractor: Central Ohio Transit Authority

1600 McKinley Avenue Columbus, Ohio 43222-5800

 Principal Investigator:
 Michael Green
 Phone:
 614/275-5878
 FAX:
 614/275-5933

 FTA Project Manager:
 FTA Region V Office
 Phone:
 312/353-2789
 FAX:
 312/886-0351

Description: This project will assist the Central Ohio Transit Authority (COTA) in the engineering and architectural design of a bus transit center which will be located in a large new mixed-use development. The site, engineering and architectural designs of the transit center will include: a daycare facility and bus shelters, state-of-the-art customer information services, improved pedestrian movements and safety features, a park-and-ride facility linking surrounding neighborhoods, transit-friendly design, and small alternatively fueled vehicles to provide internal circulation. Ridership increases will result from new express and local bus routes and the transit-friendly nature of the planned development. The project will link the Columbus Enterprise Zone and the COTA service area to the employment and shopping opportunities in a major new community. The community is estimated to provide 43,000 jobs.

Project Title: Corpus Christi Transit Centers Access Improvements - Livable

Communities Initiative

Project Number: TX-03-0176 Funding: \$1,600,000

Start Date: May 1995 Estimated Completion: December 1996

Grantee/Contractor: Corpus Christi Regional Transit Authority

1812 South Alameda

Corpus Christi, Texas 78404

 Principal Investigator:
 Carol Haley
 Phone:
 512/883-2287
 FAX:
 512/883-9938

 FTA Project Manager:
 FTA Region VI Office
 Phone:
 817/860-9663
 FAX:
 817/860-9437

Description: The objective of the Livable Communities Initiative in Corpus Christi is to develop community supported transit improvements in the neighborhoods surrounding two transit facilities in the Corpus Christi area, namely, the Six Points Bus Transfer Center and the Staples Street Bus Transfer Center. This project will enhance the amenities and pedestrian access to both Centers. Enhancements will include improved sidewalks, lighting, and landscaping around the Transfer Centers and adjacent neighbors, as well as an automated bus dispatching system. The Transit Centers will be interconnected to nearby medical facilities, retail markets, a community college, and a full service hospital. Sidewalks and other passenger amenities have resulted in a 4 percent to 6 percent increase in transit ridership. More reliable bus service will result from improved schedule adherence. The project will also include production and dissemination of videos, photographs, and related literature which will demonstrate the process involved in the development of the project.

Project Title: East Cleveland Windermere Station Enhancements

Project Number: OH-03-0150 Funding: \$3,200,000

Start Date: May 1995 Estimated Completion: December 1996

Grantee/Contractor: The Greater Cleveland Regional Transit Authority

615 West Superior Street Cleveland, Ohio 44113

Principal Investigator: Donald Yuratovac
FTA Project Manager: FTA Region V Office
Phone: 216/566-5085
FAX: 216/781-4726
Phone: 312/353-2789
FAX: 312/886-0351

Description: This project will enable the Greater Cleveland Regional Transit Authority to acquire property and prepare a site for a Head Start facility for 250 children in conjunction with the Windermere Station Rehabilitation Project and the Hayden Bus Garage Rehabilitation. The project is located in East Cleveland area which was recently designated as a National Empowerment Zone. The Windermere Station is the terminus of the RTA's most heavily used rapid transit line, currently providing 4,000 trips daily and is expected to increase with the onsite Head Start facility. The Head Start facility will provide a limited number of new jobs for the area, and prospects will also be derived from the business incentives in the Empowerment Zone. The Windermere Station and Child Care Center are scheduled for completion in the latter part of 1997.

Project Title: Los Angeles Neighborhood Initiatives Transit Enhancements

Project Number: CA-03-0424 **Funding:** \$2,300,000

Start Date: July 1995 Estimated Completion: November 1996

Grantee/Contractor: Los Angeles County Metropolitan Transportation Authority

PO Box 194

Los Angeles, California 90053

Principal Investigator: Dennis Newjahr Phone: 213/922-2461 FAX: 213/922-2562 FTA Project Manager: FTA Region IX Office Phone: 415/744-3133 FAX: 415/744-2726

Description: This project supports the efforts of the Los Angeles Neighborhood Initiative to enhance transit amenities in eight neighborhoods that will improve mobility and increase transit ridership, as well as stimulate jobs and foster an improved economic base. Transit enhancements and amenities improvements are designed to make transit friendly to commuters and communities. Amenity enhancements will include new bus shelters and rehabilitating existing ones, street furniture, landscaping, street lighting, and other improvements that enhance local service, reduce the harm to the environment and the economy, and enable transit to make the community more livable and more competitive. The project improvements will also include the development and use of ITS technologies such as transit information directory kiosks.

Project Title: Louisville Neighborhood Travel and Jobs Center Project Number: KY-03-0027 Funding: \$2,400,000

Start Date: July 1995 Estimated Completion: March 1999

Grantee/Contractor: Transit Authority of River City

1000 West Broadway Louisville, Kentucky 40203

Principal Investigator: Dwight Maddox Phone: 502/561-5108 FAX: 502/561-5244 FTA Project Manager: FTA Region IV Office Phone: 404/347-3948 FAX: 404/347-7849

Description: This project will enable the City of Louisville and the Transit Authority of River City (TARC) to convert an existing office building into a Neighborhood Travel Center in the West End - a National Enterprise Community. The Neighborhood Travel Center will serve as a terminal for two or more reverse-commute bus lines to employment opportunities in outlying industrial areas. The Travel Center will be the central element of an economic development "campus" of buildings which will collectively provide support services for neighborhood economic development. TARC will purchase ten small accessible buses and will provide a variety of transit and paratransit services in addition to job training, child care and other services. Transit ridership will increase because of the reverse commute routes and the community services at the travel center.

Project Title: New York City Harlem 110th Street Station Security Enhancements

Project Number: NY-03-0310 Funding: \$2,240,000

Start Date: May 1995 Estimated Completion: May 1997

Grantee/Contractor: New York Metropolitan Transportation Authority

347 Madison Avenue

New York, New York 10017-3706

Principal Investigator: Ann Marie Romano
Phone: 718/694-3034 FAX: 718/722-4388
FTA Project Manager: FTA Region II Office
Phone: 212/264-8162 FAX: 212/264-8973

Description: This project will enable the Metropolitan Transportation Authority (MTA) and the New York City Transit Authority (NYCTA) to implement passenger security and customer service improvements at the Harlem 110th Street subway station on the IRT-Lexington Avenue line. The station is located within a National Empowerment Zone. Site design improvements and multi-lingual information aids will add to the customer service and the livability of the community. Other improvements, such as station lighting, emergency call boxes, elimination of under-used entrances, and other measures will increase station safety and security.

Project Title: Oakland BART Fruitvale Station Enhancements
Project Number: CA-03-0442 Funding: \$2,300,000

Start Date: June 1995 Estimated Completion: December 1996

Grantee/Contractor: Metropolitan Transportation Commission

Metro Center 101 Eighth Street

Oakland, California 94607

Principal Investigator: Arabella Martinez
Phone: 510/535-6900 FAX: 510/534-7771
FTA Project Manager: FTA Region IX Office
Phone: 415/744-3133 FAX: 415/744-2726

Description: The San Francisco Bay Area Rapid Transit District (BART) is working with the Metropolitan Transportation Commission, and the Spanish Speaking Unity Council to develop the BART Fruitvale Station into a transit village. The central goal of the Fruitvale BART mixed-use development project is to transform the commercial and transportation core of the Fruitvale neighborhood into a vital, convenient and healthy place to live, work and shop. Improvements will include a new pedestrian plaza, relocation of the station bus turnaround facility, child care center, health care clinic, public library, senior citizen housing, police substation and other public and commercial facilities. The incorporation of community services and commercial facilities into the site will provide entrepreneurial and employment opportunities within the community. This project will develop a bus/rail interface connection terminal.

Project Title: Rosslyn Metro Station Bus Bay: Pedestrian Access and Safety

Project Number: VA-03-0057 **Funding:** \$800,000 \$

Start Date: May 1995 Estimated Completion: December 1996

Grantee/Contractor: Washington Metropolitan Area Transit Authority

600 Fifth Street, NW Washington, DC 20001

Principal Investigator: Robert Klute **Phone:** 703/358-3525 **FAX:** 703/358-3574 **FTA Project Manager:** Effie S. Stallsmith, TPL-20 **Phone:** 202/366-5653 **FAX:** 202/493-2478

Description: This project will enable the Washington Metropolitan Area Transit Authority (WMATA) and Arlington County to make transit improvements to the Rosslyn Metro Station and the Metrobus facility. The station facility enhancements will include improvements in streetscape, station lobby and entrances, and bus access provisions. Metro Station building facade improvements and directional signage will provide greater emphasis on the location of the entrance. Metrobus facility improvements will include new bus bays, better bus shelter amenities, and improved directional signage and schedules. The Rosslyn Metro Rail Station attracts 22,700 passengers daily. The access, aesthetic and safety enhancements will spur additional use of the station and improve intermodal transfer.

Project Title: St. Louis Metrolink Wellston Station Enhancements

Project Number: MO-03-0048 Funding: \$764,800

Start Date: May 1995 Estimated Completion: December 1996

Grantee/Contractor: Bi-State Development Agency

707 North First Street St. Louis, Missouri 63102

Principal Investigator: Sarah Smith Phone: 314/9822-1412 FAX: 314/982-1470 FTA Project Manager: FTA Region VII Office Phone: 816/523-0204 FAX: 816/523-0927

Description: This project supports the efforts of the Bi-State Development Agency and the East West Gateway Coordinating Council to establish a center at the Metrolink Wellston Station that enhances mobility, provides child care services and a police substation, as well as education and employment opportunities. Site specific improvements include sidewalk and lighting improvements, resurfacing of roads serving the park-and-ride lot, new signage, bicycle lockers, and information provisions at the Cornerstone Partnership complex. This redevelopment project has brought together a collaborative effort on the part of government, non-profits, community residents, and businesses to develop and sustain the vocational training center and business incubator.

Project Title:

Tucson South Park Avenue Transit Improvements

Project Number:

AZ-03--0025

Funding: \$1,000,000

Start Date:

September 1995

Estimated Completion: June 1996

Grantee/Contractor:

City of Tucson Department of Transportation

Office of Planning

201 North Stone Avenue Tucson, Arizona 85701

Principal Investigator: Jill Merrick **Phone:** 520/791-4372 **FAX:** 520/791-4608 FTA Project Manager: FTA Region VIII Office

Phone: 303/844-4217 **FAX:** 202/493-2470

This project will enable the City of Tucson to improve transit facilities along a two Description: mile transportation corridor located southeast of downtown Tucson. The improvements will consists of the design and construction of passenger amenities, landscaping, safety and security features, as well as sidewalk and crosswalk upgrades. These improvements will not only increase transit ridership but will also provide access to a new Youth Center, retail shopping center, and job training and business center. The project will improve pedestrian and bus access as well as increase pedestrian, bicycle, and transit accessibility to mixed uses within the project boundaries. The project development phase will be supported by a HUD Community Development Grant and donated services from the University of Arizona Architectural Program.

Safety and Security

Project Title:

Child Safety Day

Project Number:

MD-26-7020

Funding: \$15,000

Start Date:

May 1995

Estimated Completion: June 1995

Grantee/Contractor:

B.C. Jefferson, Inc.

8042 Sandy Spring Road

Laurel, Maryland 20707

Principal Investigator: Brenda Campbell Phone: 301/369-0577 FAX: 301/449-1847 FTA Project Manager: Carole A. Ferguson, TPM-30Phone: 202/366-0219 FAX: 202/366-7951

Description: This project supports the U.S. Department of Transportation initiative to promote a safe transportation environment for the Nation's youth. *Child Safety Day* was held on May 15, 1995, at the U.S. Department of Transportation, Washington DC. This event included safety demonstrations and interactive activities for the children. Safety awareness materials were distributed to the children along with educational literature, such as coloring books and flyers, that illustrated useful hints on transit safety issues.

Project Title:

Child Safety Summit

Project Number:

DC-26-7028

Funding: \$21,150

Start Date:

May 1995

Estimated Completion: June 1995

Grantee/Contractor:

U.S. Department of Transportation

Office of the Secretary Washington, DC 20590

FTA Project Manager: Carole A. Ferguson, TPM-30 Phone: 202/366-0219 FAX: 202/366-7951

Description: The purpose of this summit was to promote child safety in transportation by linking together national, state, and local communities and organizations, private sector organizations, and corporations to create a safer transportation environment for our Nation's youth. The summit intent was to identify transportation safety issues affecting young Americans, highlight existing programs addressing these problems, develop new partnerships, and to gain participant commitment to build national, state, and local programs and coalitions to reduce childhood injuries and fatalities resulting from transportation incidents. Participants in the conference included representatives from Federal, state, and local government, law enforcement, health care and other professional and safety-related organizations. The summit conference was held in May 1995, Arlington, Virginia.

Project Title:

Drug and Alcohol Compliance Audits

Project Number:

MA-90-7014-01

Funding: \$1,000,000

Start Date:

March 1995

Estimated Completion:

Grantee/Contractor:

Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

Principal Investigator: William Hathaway **Phone:** 617/494-2081 **FAX:** 617/494-2684 **FTA Project Manager:** Judy Meade, TPM-30 **Phone:** 202/366-2896 **FAX:** 202/366-7951

Description: FTA has a statutory mandate to withhold funds from grantees who fail to comply with drug and alcohol rules. This project assists grantees in their implementation of drug and alcohol

testing and helps meet the FTA's oversight responsibilities. The project will conduct extensive onsite compliance audits of grantees to determine local drug and alcohol program deficiencies.

Project Title: Drug and Alcohol Compliance Monitoring

Project Number: MA-90-7013-01 Funding: \$450,000
Start Date: March 1995 Estimated Completion:

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

 Principal Investigator:
 William Hathaway
 Phone:
 617/494-2081
 FAX:
 617/494-2684

 FTA Project Manager:
 Judy Meade,
 TPM-30
 Phone:
 202/366-2896
 FAX:
 202/366-7951

Description: Grant recipients of Federal funds are required to implement drug and alcohol testing programs for safety-sensitive employees. The FTA drug and alcohol rules also require grantees to submit annual reports on their testing programs through a management information system. These annual reports serve as a primary tool to evaluate the effectiveness of the regulations and to support future modifications. This project provides for the analysis of the grantees' annual reports to determine the effectiveness of the industry's implementation of drug and alcohol rules.

Project Title: Drug and Alcohol Regulatory Support

Project Number: MA-26-7015-01 Funding: \$100,000

Start Date: January 1995 Estimated Completion: January 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

 Principal Investigator:
 William Hathaway
 Phone:
 617/494-2081
 FAX:
 617/494-2684

 FTA Project Manager:
 Judy Meade,
 TPM-30
 Phone:
 202/366-2896
 FAX:
 202/366-7951

Description: The complexity of the drug and alcohol rules, as well as their costs and operation impacts, necessitate the preparation of numerous support documents including updates to the drug and alcohol implementation guidelines. The purpose of this research is to develop documents necessary to ensure full understanding of the drug and alcohol testing rules.

Project Title: National Transit Security Conference

Project Number: MA-26-9009 Funding: \$80,000

Start Date: September 1995 Estimated Completion: September 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

Principal Investigator: William T. Hathaway **Phone:** 617/494-2081 **FAX:** 617/494-2684 **FTA Project Manager:** Edith Rodano, TPM-30 **Phone:** 202/366-2896 **FAX:** 202/366-7951

Description: This project will enable the Volpe Center to plan, coordinate and conduct a National Transit Security Conference. The conference is designed to increase the awareness of transit security personnel to possible threats to transit from foreign and domestic terrorism and to

better prepare them to handle such incidents, should they occur. The conference activities will include instructional discussions on how terrorists operate and what precautions to use to minimize the threat of such attacks, as well as what to do should such an attack occur. Attendance at this conference is expected to be by heads of security and/or chiefs of police from the largest transit agencies in the U.S. The conference will serve as a forum for experts in transit terrorism to share their real life experiences and the lessons learned from them.

Project Title: Reasonable Suspicion Training Module for Supervisors

Project Number: VA-26-0005-02/03 Funding: \$163,000

Start Date: December 1994 Estimated Completion: June 1996

Grantee/Contractor: Kuo and Associates, Inc.

1420 K Street, NW, Suite 400

Washington, DC 20590

Principal Investigator: Moyette Parker **Phone:** 202/371-1625 **FAX:** 202/789-0335 **FTA Project Manager:** Edith M. Rodano, TPM-30 **Phone:** 202/366-2896 **FAX:** 202/366-7951

Description: FTA is responsible for the development and implementation of drug and alcohol programs in the Nation's transit industry. FTA is also responsible for assisting the industry in developing their programs, measuring the performance of these programs, and for training members of the transit industry in the management of their drug and alcohol programs. The purpose of this project is to develop a training module for supervisors who must make reasonable suspicion drug and alcohol testing referrals. Reasonable suspicion testing for drug use or alcohol misuse must be initially determined by a trained supervisor. This training module will educate the observation and intervention skills of supervisors who are required to determine whether or not an employee's behavior warrants reasonable suspicion referral for testing.

Project Title: Safety and Security Training Program

Project Number: OK-26-7001 Funding: \$750,000

Start Date: March 1995 Estimated Completion: January 1996

Grantee/Contractor: Transportation Safety Institute

PO Box 25082

Oklahoma City, Oklahoma 73125-5050

Principal Investigator: Robert F. Lower Phone: 405/954-3682 FAX:

FTA Project Manager: Judy Meade, TPM-30 Phone: 202/366-2896 FAX: 202/366-7951

Description: The Transportation Safety Institute is one of the Nation's outstanding training organizations. It was created to support the U.S. Department of Transportation's operating Administrations and other Federal agencies having similar training needs. This project provides continuing support to the Transportation Safety Institute. The Institute disseminates the most modern safety and security techniques available to the transit industry through training. Overall, the Institute conducts more than 20 courses in various transit-related areas, namely: Bus and Rail System Safety, System Security, Emergency Management, Industrial Safety, Explosives Incident Management, Substance Abuse, Rail and Bus Accident Investigation, Train-the-Trainer, Alternative Fuels Safety, and Alternative Fuels Facility Inspection. Training at the Institute is performance oriented. Since its founding in 1971, the Institute has graduated about 300,000 students. Current

student training load is about 30,000 students annually. The Transit Division trains 6,000 people annually.

Project Title: Safety Assistance Clearinghouse

Project Number: MA-26-0011-02 **Funding:** \$75,000

Start Date: January 1995 Estimated Completion: January 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

 Principal Investigator:
 William Hathaway
 Phone:
 617/494-2081
 FAX:
 617/494-2684

 FTA Project Manager:
 Judy Meade,
 TPM-30
 Phone:
 202/366-2896
 FAX:
 202/366-7951

Description: Transit planners, managers, Federal officials and others are continually faced with safety and security issues or problems on which there is much information, but the information is often scattered or not readily available. This project is an attempt to establish a Safety Assistance Clearinghouse that will serve as a focal point for customer requests for information, namely, requests for published or unpublished materials and resources relating to transit safety and security. The clearinghouse function will enable FTA to have a better rapport with the transit safety customer and to better understand their needs, as well as to respond to the customer's information need in a timely manner.

Project Title: Safety Management Information Statistics (SAMIS)

Project Number: MA-26-0009-03 Funding: \$75,000

Start Date: March 1995 Estimated Completion: March 1996

Grantee/Contractor: Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

Principal Investigator: William Hathaway Phone: 617/494-2081 FAX: 617/494-2684 FTA Project Manager: Carole A. Ferguson, TPM-30 Phone: 202/366-0219 FAX: 202/366-7951

Description: This project provides for the continuance of SAMIS, a mandatory reporting system containing the mass transit safety data reported by the Nation's transit systems under the FTA Section 15 reporting system. Transit safety data are collected in four basic categories: Collisions, Derailments/Left Roadway, Personal Casualties, and Fires. The project will expand the Section 15 reporting requirement and the companion SAMIS report to include causal data, grade-crossing data and cost data. The SAMIS report is prepared separately from the Section 15 report and consists of the mass transit accident and casualty statistics reported by transit systems in the U.S. Normalized and trend data are presented along with basic transit accident and casualty statistics.

Project Title:

Transit Safety and Security Bulletin Board

Project Number:

MA-26-0012-03

Funding: \$75,000

Start Date:

March 1995

Estimated Completion: March 1996

Grantee/Contractor:

Volpe National Transportation Systems Center

Kendall Square

Cambridge, Massachusetts 02142

 Principal Investigator:
 William Hathaway
 Phone:
 617/494-2081
 FAX:
 617/494-2684

 FTA Project Manager:
 Judy Meade,
 TPM-30
 Phone:
 202/366-2896
 FAX:
 202/366-7951

Description: This project enables the Volpe Center to continue the maintenance and operations of the FTA Transit Safety and Security Bulletin Board. The bulletin board ensures the timeliness and accuracy of the information provided to the user. The bulletin board is a user-friendly, menu-driven system with information accessible to users seven days a week, 24 hours a day. It is located at Volpe Center and can be accessed by any person with a computer and modem at telephone number 1-800-231-2061. The bulletin board has been developed to provide a central communication point for information on transit safety. It includes current items of interest such as training opportunities, FTA events of interest, FTA regulations, available safety and security publications, and other files for downloading.

Project Title: Cardozo High School TransTech Academy
Project Number: DC-26-2009-01 Funding: \$40,000

Start Date: January 1995 Estimated Completion: December 1995

Grantee/Contractor: District of Columbia Public Schools

415 12th Street

Washington, DC 20044

Principal Investigator: Shirley McCall Phone: 202/673-7753 FAX: 202/673-7753 FTA Project Manager: Eugene Jenkins, TCR-10 Phone: 202/366-0816 FAX: 202/366-3475

Description: This project exposes innercity students at Cardozo Senior High School to careers in the transit industry. The project activities include developing and offering a transit course, placing students as summer interns, conducting recruitment activities, arranging field trips, and providing counseling and information to students about career and educational opportunities in transit.

Project Title: Civil Rights Complaint Investigation Support
Project Number: IL-90-8001 Funding: \$490,118

Start Date: October 1995 Estimated Completion: March 1997

Grantee/Contractor: Ralph G. Moore & Associates, Inc.

211 West Wacker Street Chicago, Illinois 60606

Principal Investigator: Lancert A. Foster **Phone:** 312/419-1911 **FAX:** 312/419-1918 **FTA Project Manager:** Beverly E. Sligh, TCR-20 **Phone:** 202/366-0816 **FAX:** 202/366-3475

Description: Over the past few years, the number of discrimination complaints filed with the US DOT has steadily increased, creating a backlog for all areas applicable to the FTA programs of financial assistance. The majority of complaints concern issues related to the implementation of the ADA. The objective of this project is to provide technical assistance to the FTA staff in conducting the review and investigation of civil rights related complaints for all compliance areas within purview of the US DOT/FTA. This project will include the conduct of presentations and workshops to train FTA recipient staffs on how to facilitate the complaint review and investigation process.

Project Title: Cooperative Education Program and In-House Training Program

Project Number: NJ-26-2001-01 **Funding:** \$400,000

Start Date: September 1994 Estimated Completion: October 1997

Grantee/Contractor: New Jersey Transit Corporation

One Penn Plaza East

Newark, New Jersey 07105-2246

 Principal Investigator:
 Prim LaCapra
 Phone: 201/491-8047
 FAX: 201/491-8031

 FTA Project Manager:
 Cylinda Queen, TCR-30
 Phone: 202/366-0816
 FAX: 202/366-3475

Description: Job opportunities for innercity youth are limited and the pool of potential skilled craft transit employees is small. This project trains innercity high school students for job opportunities in skilled craft areas of the local transit agency. The project also trains women employees of New Jersey Transit Corporation for better positions and job opportunities in the skilled craft areas of the transit industry.

Project Title: High School/High Tech Program

Project Number: MD-26-2001 Funding: \$25,000

Start Date: July 1995 Estimated Completion: October 1995
Grantee/Contractor: United Cerebral Palsy of Prince Georges and Montgomery Counties, Inc.

3901 Woodhaven Lane

Bowie, Maryland 20715-1299

Principal Investigator: Dr. Charles McNelly
FTA Project Manager: Eugene Jenkins, TCR-10
Phone: 301/262-4993
FAX: 301/262-4982
Phone: 202/366-0816
FAX: 202/366-3475

Description: This project provided a learning experience for 15 students with disabilities attending high schools in Prince Georges and Montgomery Counties. The students were exposed to various professions in the US DOT.

Project Title: Transit Career Center for Hispanic Students
Project Number: TX-26-2002 Funding: \$294,828

Start Date: June 1995 Estimated Completion: July 1996

Grantee/Contractor: Hispanic Association of Colleges and Universities

4204 Gardendal Street, Suite 216

San Antonio, Texas 78229

Principal Investigator: Gloria Zamora

Phone: 210/692-3805

 Principal Investigator:
 Gloria Zamora
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 FTA Project Manager:
 Cylinda Queen, TCR-10
 Phone:
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 FAX:
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Description: This project will develop a Transfer Advisement Center model for Hispanic serving institutions to encourage and assist community colleges and four-year institutions to accelerate and promote opportunities for Hispanic students who are preparing for careers in the transit industry.

Project Title: Introduction to PublicTransit Training Course
Project Number: MD-08-9010 Funding: \$125,000

Start Date: March 1995 Estimated Completion: March 1997

Grantee/Contractor: Morgan State University

School of Engineering

Cold Spring Lane and Hillen Road

Baltimore, Maryland 21239

 Principal Investigator:
 Dr. Louis Clopton
 Phone: 410/319-3098
 FAX: 410/319-3843

 FTA Project Manager:
 Tim Boerner, TPL-20
 Phone: 202/366-6782
 FAX: 202/366-3765

Description: This project will enable Morgan State University School of Engineering to develop an introductory level transit course applicable to persons with varying degrees of experience and backgrounds. The course will cover such topics as the history of the transit industry, structure and operation of transit agencies, transit technologies, operations management, the role of labor unions in the transit industry, system planning and implementation, history and development of the Federal transit programs and the FTA, and financial issues.

Project Title: National Transportation Consortium

Project Number: DC-26-2008 Funding: \$300,000

Start Date: September 1994 Estimated Completion: September 1997

Grantee/Contractor: National Transportation Consortium of

Minority Colleges and Universities, Inc.

601 Pennsylvania Avenue, NW North Building, Suite 700 Washington, DC 20004

Principal Investigator: Lee Davis **Phone:** 202/508-3672 **FAX:** 202/347-6757 **FTA Project Manager:** Linda W. King, TCR-10 **Phone:** 202/366-0816 **FAX:** 202/366-3475

Description: The National Transportation Consortium will develop an Introduction to Transit course that focuses on four Historically Black Colleges and Universities. The course provides information and training to students in transit and transit/transportation-related issues.

Project Title: Performance of Civil Rights Related Compliance Reviews of DOT/FTA

Grant Recipients in Regions 5, 6, and 7. Technical Support

Project Number: TX-90-8001 Funding: \$415,135

Start Date: January 1996 Estimated Completion: January 1998

Grantee/Contractor: John D. Gonzalez Associates, Inc.

PO Box 69044

San Antonio, Texas 78269-0444

 Principal Investigator:
 John D. Gonzalez
 Phone: 210/981-8980
 FAX: 210/755-4743

 FTA Project Manager:
 Beverly E. Sligh, TCR-20
 Phone: 202/366-0816
 FAX: 202/366-3475

Description: The FTA Office of Civil Rights is responsible for monitoring and enforcing the compliance requirements of the civil rights-related laws and affirmative action initiatives subject to the financial assistance programs of the FTA. Compliance reviews, which focus on civil rights-related activities, are performed to monitor and enforce grantee compliance with the laws and authorities which apply to the financial assistance provided by US DOT/FTA programs. The objective of this project is to acquire technical assistance and advisory services in the performance of civil rights-related compliance reviews of the US DOT/FTA grant recipients in Regions 5, 6, and 7. This project will enable the Office of Civil Rights, the Regional Civil Rights Officers and the FTA Program Oversight staff to improve coordination and management of the oversight reviews identified in the FTA Risk Assessment Program.

Project Title: Performance of Civil Rights Related Compliance Reviews of DOT/FTA

Grant Recipients in Regions 8, 9, and 10. Technical Support

Project Number: CA-90-8001 Funding: \$410,000

Start Date: January 1996 Estimated Completion: January 1998

Grantee/Contractor: Gardner Consulting Planners

22010 South Wilmington Avenue, Suite 300

Carson, California 90745

Principal Investigator: Adrienne Sasser-Gardner Phone: 310/522-9584 FAX: 310/522-9587 FTA Project Manager: Beverly E. Sligh, TCR-20 Phone: 202/366-0816 FAX: 202/366-3475

Description: The FTA Office of Civil Rights is responsible for monitoring and enforcing the compliance requirements of the civil rights-related laws and affirmative action initiatives subject to the financial assistance programs of the FTA. Compliance reviews, which focus on civil rights-related activities, are performed to monitor and enforce grantee compliance with the laws and authorities which apply to the financial assistance provided by US DOT/FTA programs. The objective of this project is to acquire technical assistance and advisory services in the performance of civil rights-related compliance reviews of the US DOT/FTA grant recipients in Regions 8, 9, and 10. This project will enable the Office of Civil Rights, the Regional Civil Rights Officers and the FTA Program Oversight staff to improve coordination and management of the oversight reviews identified in the FTA Risk Assessment Program.

Project Title: Step-By-Step Diversity Training

Project Number: DC-26-2010 Funding: \$225,300

Start Date: January 1995 Estimated Completion: January 1996

Grantee/Contractor: Conference of Minority Transportation Officials

777 North Capital Street, NE, Suite 305

Washington, DC 20002

Principal Investigator: Carolyn Closs Phone: 202/289-0567 FAX: 202/287-1214 FTA Project Manager: Eugene Jenkins, TCR-10 Phone: 202/366-0816 FAX: 202/366-3475

Description: This is a three-phase project that will enable FTA grantees and others in the transit industry to successfully carry out a diversity program. The first phase of this effort includes examining the workforce, contracting opportunities, and diversity programs. The second phase of the program will develop a step-by-step manual that will be used to conduct a series of training workshop in the third phase of the program

Project Title: Summer Transportation Internship Program for Diverse Groups

Project Number: DC-26-2011 Funding: \$50,000

Start Date: April 1995 Estimated Completion: October 1995

Grantee/Contractor: Federal Highway Administration

Personnel Operations Division, HPT-22

Washington, DC 20590

Description: This project is designed to draw a larger pool of trained personnel from diverse groups (African-American, Hispanic, etc.) into the Nation's transit industry. It will provide summer internships for a number of students in the field of transportation. A 10-week agenda of research, work experience, and travel will introduce students from diverse groups to the transportation industry.

Project Title:

Transit Needs Study of the National Congress of American Indians

Project Number:

DC-26-7022

Funding: \$99,700

Start Date:

January 1995

Estimated Completion: January 1996

Grantee/Contractor:

National Congress of American Indians

900 Pennsylvania Avenue, SE

Washington, DC 20003

Principal Investigator: Georgette Horse FTA Project Manager: Roger F. Tate, TRI-30 **Phone:** 202/546-9404 **FAX:** 202/546-3741 **Phone:** 202/366-0235 **FAX:** 202/366-3765

Indian tribes are entering a new era in bringing new vitality to their communities Description: through diverse value-added ventures, both private and public, including manufacturing, construction, natural resource development, tourism and others. Tribal needs for financial capital and employment-creating opportunities are hampered by poor transportation and transit systems. namely, those that transport people and goods both intra- and inter-community. This project will assist in the planning, development and implementation of tribal transit systems that will expedite the development process, increase access to employment opportunities, and help establish more stable and livable communities. The project will enable the National Congress of American Indians to begin the process by conducting a comprehensive transit needs study of 547 Federally recognized tribes. The study will address transportation needs as they impact access to health care, job training, job opportunities, and other life enhancement activities.

Project Title:

Transportation Career Academies

Project Number:

CA-26-2001-01

Funding: \$125,000

Start Date:

June 1995

Estimated Completion: June 1996

Grantee/Contractor:

Los Angeles County Metropolitan Transit Authority 818 West 7th Street. Suite 300

Los Angeles, California 90017

Principal Investigator: Michelle Caldwell

Phone: 213/224--2658 FAX: 213/244-1702

FTA Project Manager: Carolyn Drummond, TCR-10 Phone: 202/366-0816 FAX: 202/366-3475

Description: Transportation Career Academies will continue to develop transportation related education courses at three innercity high schools in Los Angeles, Locke, North Hollywood, and Wilson High Schools. The academies will help prepare students for transportation-related occupations and technical careers.

National Transit Database

Project Title: Section 15 Data Collection and Technical Support

Project Number: MD-26-9002-02 Funding: \$2,000,000

Start Date: March 1995 Estimated Completion: December 1995

Grantee/Contractor: DIGICON Corporation

6707 Democracy Boulevard, Suite 402

Bethesda, Maryland 20817-1129

FTA Project Manager: Linda Barnes, TPM-10 Phone: 202/366-6161 FAX: 202/366-7951

Description: The objective of the National Transit Database is to provide detailed transit financial and operational data to FTA by the Nation's transit industry. This project provides major technical and administrative support to the management and operations of the Section 15 program in terms of data collection and validation, database management and maintenance, software development, and annual report production. The project effort includes: 1) improving data access and applications for public and private sectors analysis; 2) reviewing changes to the Reporting Manual for compatibility and consistency with changes resulting from rulemaking; and 3) providing guidance for implementing changes to the Section 15 program. Under the Section 15 program, transit systems submit detailed summaries of their financial and operating data to the FTA. This data is used in planning for public transit services and making investment decisions at the Federal, State, and local levels. It is also used as a management tool in the planning, design, and evaluation of transit related projects. For additional information, see the FTA Home Page on the World Wide Web (http://www.fta.dot.gov).

Transit Cooperative Research Program

Project Title:

Transit Cooperative Research Program

Project Number:

DC-26-7034

Funding: \$8,500,000

Start Date:

June 1995

Estimated Completion: June 1999

Grantee/Contractor:

National Academy of Sciences Transportation Research Board 2101 Constitution Avenue, NW

Washington, DC 20418

Principal Investigator: Robert Reiley Phone: 202/334-3225 FAX: 202/334-2006 FTA Project Manager: Gwendolyn Cooper, TRI-30 Phone: 202/366-0198 FAX: 202/366-3765

Description: This project provides for the selection and conduct of projects under the fourth annual agenda of the Transit Cooperative Research Program (TCRP). The TCRP focuses on issues significant to the transit industry, with emphasis on developing near-term research solutions to a variety of transit problems involving facilities, service concepts, operations, planning, policy, human resources, maintenance, and administrative practices. The TCRP was authorized in the ISTEA of 1991. The program was established on May 13, 1992, by a Memorandum Agreement between three participants: the Transit Development Corporation, educational and research arm of the American Public Transit Association; the FTA; and the Transportation Research Board of the National Academy of Sciences. Research problem statements are solicited periodically, but may be submitted to the Transportation Research Board by anyone at anytime.

National Transit Institute

Project Title: National Transit Institute Program

Project Number: NJ-26--2901-04 Funding: \$3,000,000

Start Date: May 1992 Estimated Completion: September 1997

Grantee/Contractor: Rutgers, The State University

National Transit Institute 120 Albany Street, Suite 705

New Brunswick, New Jersey 08901

Principal Investigator: Alan J. Gibbs **Phone:** 908/932-1700 **FAX:** 908/932-1700 **FTA Project Manager:** Charles T. Morison, TRI-30 **Phone:** 2202/366-0245 **FAX:** 202/366-3765

Description: This is the fourth year of Federal support for the National Transit Institute (NTI), a project established under the Intermodal Surface Transportation Efficiency Act of 1991 with a mission to promote, develop, and deliver high quality education and training for persons engaged in Federal-aid transit work in order to improve public transit in the United States. Rutgers University established the NTI to serve the training and development needs of the transit industry. NTI, in cooperation with the FTA, develops and conducts training for state and local transit employees on a variety of topics relevant to the industry.

The fourth year effort continues activities in three broad areas of service: Federal Program Training, Clearinghouse, and Industry Defined Training. NTI will hold its third annual Transit Trainers Workshop bringing together transit training personnel from throughout the industry to learn the latest techniques in training and share training experiences on the job. 1996 marks the first year of the Transit Fellows Program. This competitive program identifies technical experts in the industry and supports presentation of their expertise at industry meetings and conferences.

The Transit Academy, first started in 1995, will be conducted for a second year in cooperation with the New Jersey Transit Corporation. The academy is designed to give new transit professionals a first hand look at all elements of transit service from the perspective of the provider. This is a residential program and is presented in a lecture study tour format.

Finally, NTI and FTA are working together to develop and present a variety of workshops and seminars designed to assist the transit industry in understanding and implementing Advanced Public Transportation Systems (APTS). Programs on GIS, AVL, Smart Card technology and Innovative technologies are just a few of the topics under development for future presentation

Rural Transit Assistance Program

Project Title: Printing and Distribution of Rural and Specialized Transit Directories

Project Number: DC-26-7032 Funding: \$20,000
Start Date: February 1995 Estimated Completion:

Grantee/Contractor: Office of The Secretary

United States Department of Transportation

Washington, DC 20590

FTA Project Manager: Roger F. Tate, TRI-30 Phone: 202/366-0235 FAX: 202/366-3765

Description: This project reflects FTA's commitment to the collection and dissemination of research information to the transit community. The project will assist the states, transit operators, and others in identifying and locating individual specialized transit and rural transit providers, and in reviewing the transportation activities within a community, including rural public transit. This project provides for the printing and dissemination of the following three reference documents produced by the FTA's RTAP National Program: 1) Directory of Rural Public Transportation Providers Funded by FTA's Section 18 Program, December 1994; 2) Directory of Specialized Transportation Providers Funded by FTA's Section 16 Program, December 1994; and 3) Status Report on Public Transportation in Rural America, 1994, December 1994. The directories provide a comprehensive listing of agencies providing transportation to the elders and persons with disabilities through the FTA Section 16 capital assistance program; and agencies providing transportation in areas with less than 50,000 population under the FTA Section 18 rural program.

Project Title: Rural Transit Assistance Program National Program

Project Number: MD-26-7000 Funding: \$765,000

Start Date: February 1995 Estimated Completion: March 1997

Grantee/Contractor: American Public Works Association

1301 Pennsylvania Avenue, NW

Washington, DC 20004

 Principal Investigator:
 Beth Denniston
 Phone: 202/393-2792
 FAX: 202/737-9153

 FTA Project Manager:
 Roger F. Tate, TRI-30
 Phone: 202/366-0235
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Description: The American Public Works Association (APWA) will continue to provide technical support to the FTA National Rural Transit Assistance Program (RTAP), the RTAP Review Board, and the State RTAP Program. The RTAP National Program provides a variety of quality technical assistance products and training services. The project supports the FTA goal of promoting the development of intermodal transportation resources at Federal, state, and local levels. This project continues to pursue this goal by expanding the training, technical assistance, and research to improve the delivery of transit services in rural areas. APWA will continue to administer the program's outreach activities, namely: the RTAP National Resource Center, preparation of training materials, and peer-to-peer technical assistance to state, local, and rural transit operators.

University Transportation Centers Program

Project Title: University Transportation Centers Program

Project Number: DC-11-1105 Funding: \$6,000,000

Start Date: May 1995 Estimated Completion: June 1998

Grantee/Contractor: United States Department of Transportation

Research and Special Programs Administration

Office of University Research and Education, Room 10309

Washington, DC 20590

Principal Investigator: Patricia Cass, DUR-1 Phone: 202/366-5442 FAX: 202/366-3671 FTA Project Manager: Charles T. Morison, TRI-30 Phone: 202/366-0245 FAX: 202/366-3765

Description: This is an interagency agreement with the Research and Special Programs Administration (RSPA) of the U.S. Department of Transportation to continue administering the University Transportation Center Program (UTCP). There are thirteen Centers in the UTCP, one in each of the ten standard Federal regions and three National Centers (Mack-Blackwell National Rural Transportation Study Center, University of Arkansas in Fayetteville; National Center for Management, Research, and Development, Morgan State University in Baltimore; and National Center for Transportation and Industrial Productivity, New Jersey Institute of Technology in Newark). This US Department of Transportation sponsored program contributes to transportation education, research, and technology transfer. To reach its goal of attracting the best students to the transportation field, the UTCP promotes transportation study among groups underrepresented in the field. The UTCP's strong education component reflects the needs of the transportation industry for more inter- and multi-disciplinary professionals in the field.

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