

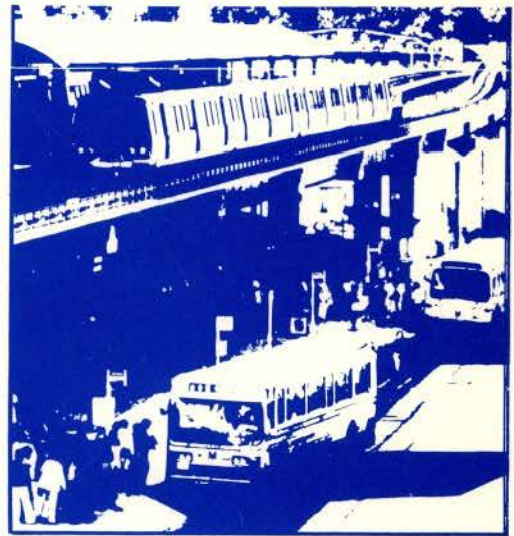


U.S. Department  
of Transportation  
**Urban Mass  
Transportation  
Administration**

# UMTA Technical Assistance *A Guide for Users*

Spring 1984

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UMTA Technical Assistance Program

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**UMTA TECHNICAL ASSISTANCE**

**A GUIDE FOR USERS**

Spring 1984

U.S. Department of Transportation  
Urban Mass Transportation Administration

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# Table of Contents

	Page
INTRODUCTION TO THE TECHNICAL ASSISTANCE PROGRAM .....	1
GENERAL INFORMATION .....	3
UMTA Organization	
UMTA Regional Offices	
Finding Documented Research Information (UMTRIS)	
Abstracts of UMTA Reports	
Directory of Active Technical Assistance Projects	
Technical Assistance Briefs	
Technical Reports	
Productivity Initiatives for Transit Operations	
National Data Base of Transit Statistics	
PLANNING AND OPERATIONS ANALYSIS .....	6
Technical Approaches to Conducting Major Transit Investment Studies (Alternatives Analysis)	
Small Urban and Rural Transit Operators (Section 18 Eligible)	
Scheduling and Operating a Paratransit System	
A Quick Response to Questions about Computer Use for Transportation Planning	
A Clearinghouse for Documents on Transportation Planning and Transit Operations Analysis	
Help in Selecting and Using a Microcomputer for Transportation Planning or Transit Management Support	
Special Studies on Transportation Planning	
MANAGEMENT AND SERVICE .....	8
Fare and Pricing Policies	
Transportation Services for the Elderly and Handicapped	
Marketing	
Paratransit Brokerage, Ridesharing, Rider Information, and User Subsidies	
Conventional Transit Service Innovations	
Rural Transportation	
Technical Assistance Briefs	
Service and Methods Reports	
Host Program	

TABLE OF CONTENTS (Continued)

	Page
BUS AND PARATRANSIT .....	10
Information about Improved Subsystems	
Workshops	
Bus Technology Liaison Board	
New Bus Equipment and Innovation Introduction	
Maintenance Facilities and Equipment	
New and Improved Propulsion Systems	
An Elderly and Handicapped Technology Clearinghouse	
RAIL AND CONSTRUCTION .....	11
Specification Guidelines for Railcars	
Noise Abatement Information and Advice	
Wheel/Rail Wear Solutions	
Fare Collection Workshops	
Electromagnetic Interference/Electromagnetic Compatibility	
(EMI/EMC)	
Help with Problems of Electromagnetic Interference and	
Compatibility	
Standardized Guideline Documents for Testing Intrasystem Electro-	
magnetic Compatibility Between Vehicular Power and Signaling	
Subsystems	
Specifications on AC Propulsion System Design	
Urban Construction Project	
Cost Reduction Methods in Urban Construction	
Hardwares in Track, Structure, Elevated and Tunnel Rail Systems	
and Testing Devices for Structural Integrity	
Industry Contacts for Specific Questions on Rail Systems Design,	
Construction, and Maintenance	
RESEARCH .....	14
National Cooperative Transit Research and Development Program	
(NCTRP)	
Proposed Research Topics for NCTRP	
Conducting NCTRP Research	
University Research	
SAFETY AND SECURITY .....	15
Safety and Security Education and Training	
Safety Peer Review (for Rail Authorities)	

TABLE OF CONTENTS (Continued)

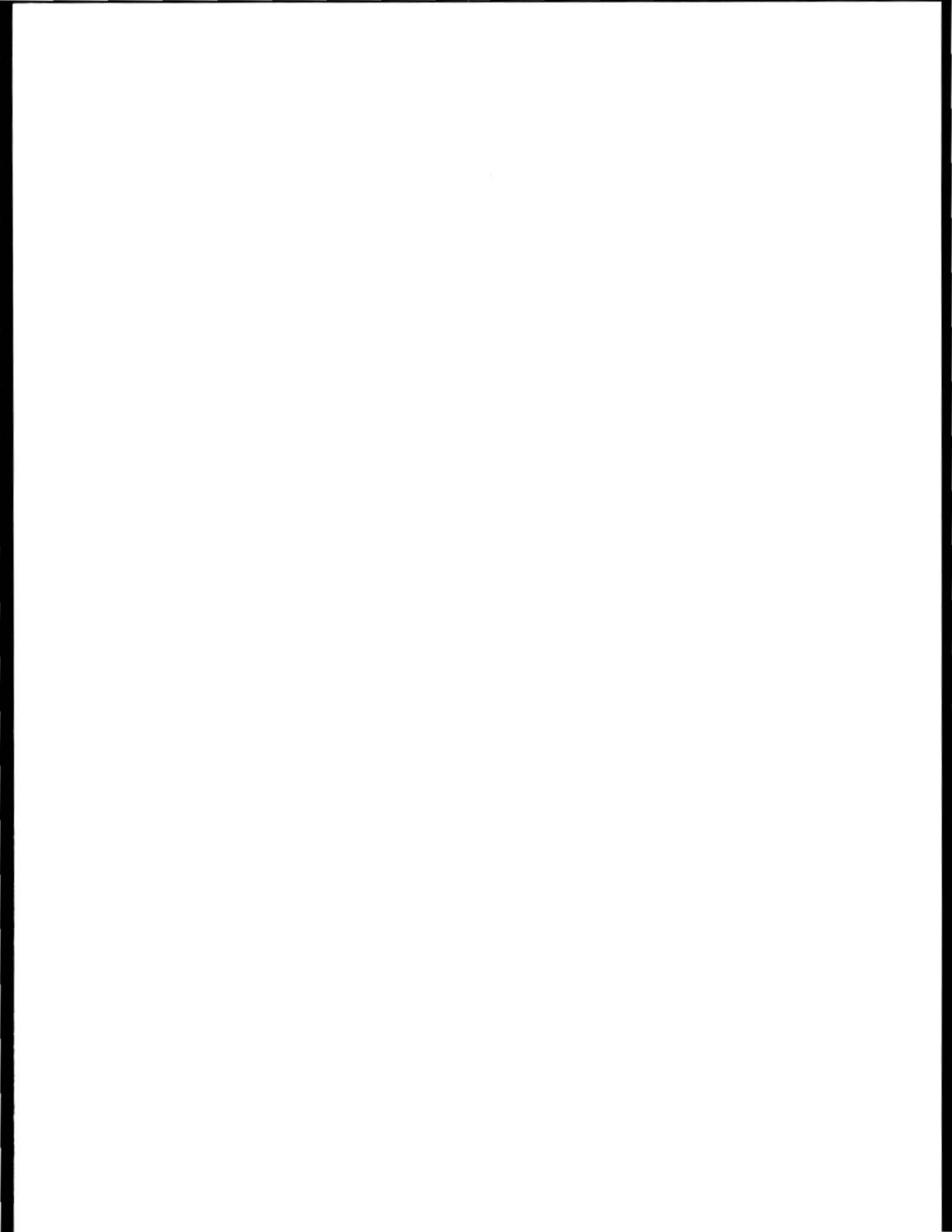
Page

Safety and Security Education and Training  
Safety Peer Review (for Rail Authorities)

TRAINING ..... 16

University Centers for Transit Research and Management Development  
Management Training Course Providers  
Bus Operator Instructor Training  
Training Courses on Transportation or Transit Operations  
    Planning  
Training Courses on Various Transit Topics (Including Planning)  
Call for Training Program

- Appendix A      Office of Technical Assistance--Staff Directory
- Appendix B      UMTA Regional Office Staff Responsible for Technical  
                         Assistance
- Appendix C      Urban Mass Transportation Administration Endorsed  
                         Short Courses
- Appendix D      List of Abbreviations





## Introduction to the Technical Assistance Program

The Urban Mass Transportation Administration (UMTA) technical assistance program is a resource for transit operators, State and local governments, and private industry for improving transit productivity, reliability, safety, and operations; for reducing costs, particularly in operations and maintenance; for enhancing the use of information, such as Section 15 National Urban Mass Transportation Statistics and local management information systems; for better planning techniques for assessing impacts of fare, route, and schedule changes; and for more reliable and efficient equipment. The program encompasses UMTA's research, development, deployment, demonstration, engineering applications, safety, information and statistics collection, management techniques, planning and analytical methods, university research, and external training efforts. The program is authorized under Sections 6, 10, 11, 320, 3(a)(1)(C), 4(i), 22, and 15 of the Urban Mass Transportation Act of 1964, as amended.

Under Section 6, the Department undertakes research, development, and demonstration projects to improve mass transportation service, to contribute toward meeting total urban transportation needs at minimum cost, or to assist in the reduction of urban transportation needs.

Under Section 10, the Department provides managerial training to increase the performance capabilities of managerial, technical, professional, and supervisory personnel in the mass transit industry and related public sector areas.

Under Section 11, the Department undertakes a university research and training program to utilize and strengthen the capabilities of the academic community and make a significant contribution to meeting the transit industry's current and future professional and managerial personnel needs. A substantial portion of this research is now carried out by the newly designated Centers for Transit Research and Management Development.

Section 3(a)(1)(C) is a subsection of the Section 3 discretionary grant program and was enacted to encourage the transit industry to introduce new technology; a parallel program, Section 4(i), also using Section 3 funds, provides opportunities for the adoption of innovative operating and management techniques. The departmentally initiated New Bus Equipment Introduction (NBEI) program uses Section 3 resources to enhance bus equipment and subsystems through demonstrations of proven technology.

Under Section 320, authority is given for a demonstration project using high-speed waterborne transportation equipment and facilities operating in the vicinity of New York City to determine the feasibility of utilizing this technology in providing certain public mass transportation service.

Section 22 authorizes the Secretary of Transportation to investigate conditions in any facility or any equipment or manner of operation financed under the Act which the Secretary believes creates a serious hazard of death or injury.

## INTRODUCTION TO THE TECHNICAL ASSISTANCE PROGRAM (Continued)

Section 15 provides for the establishment by the Department of a uniform system of transit accounts and records and of a reporting system for the collection and dissemination of public mass transportation financial and operating data by uniform categories. Section 15 prohibits the Secretary from making any grants under Sections 5 and 9 unless the applicant for the grant and any beneficiary thereof are subject to the reporting system and the uniform system of accounts and records.

## **General Information**

### **UMTA Organization**

The UMTA technical assistance program is administered by the Associate Administrator for Technical Assistance. A current directory of the management staff is provided in Appendix A of this document.

### **UMTA Regional Offices**

An important entry point for assistance in locating sources of information and in obtaining technical assistance is the UMTA regional offices. A directory of the regional offices' staff responsible for technical assistance is provided in Appendix B.

### **Finding Documented Research**

The Urban Mass Transportation Information Service (UMTRIS) can retrieve abstracts on any transit-related subject from its extensive computer data base. UMTRIS, which is part of TRIS (Transportation Research Information Service), includes articles, reports, statistical sources, and software produced worldwide. UMTRIS went on line in 1982 and is accessible through Lockheed's DIALOG. It is administered by the Transportation Research Board (TRB) at the National Academy of Sciences-National Research Council. Contact Fred Houser, (202) 334-3263.

### **Abstracts of UMTA Reports**

Abstracts are available from the Transit Research Information Center (TRIC) at UMTA's Office of Technical Assistance. UMTA Abstracts, printed bimonthly, can also be obtained from TRIC, as can 6-month cumulative editions and other specialized bibliographies. Contact Marina Drancsak or Winnie Muse, (202) 426-9157.

### **Directory of Active Technical Assistance Projects**

Innovation in Public Transportation is published each fiscal year and contains about 200 pages. Charts give all projects approved, with number, date, funding, schedule, contractor, and contact person. Bibliographies list recent technical reports on the projects with information on where each may be obtained, including the National Technical Information Service (NTIS) number if available at time of publication. While the supply lasts, single copies of Innovation may be obtained by sending a self-addressed label to: U.S. DOT/TSC, Office of Technology Sharing (DTS-31), Kendall Square, Cambridge, MA 01923.

## GENERAL INFORMATION (Continued)

### Technical Assistance Briefs

Bulletins which report recent results of UMTA technical assistance projects in planning, management, service and methods, and technology are available from Public Technology Inc. (PTI). PTI maintains a subscriber list for each of the subject areas. These are not periodicals but are prepared as useful information is obtained from ongoing projects. Contact Peter Bine, (202) 626-2400.

### Technical Reports

Hard copies of UMTA-sponsored project reports are available from NTIS. For regular orders, call (703) 487-4560; for rush orders, call (703) 487-4700. To order by mail, write: U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22161.

### Productivity Initiatives for Transit Operations

If you are seeking opportunities or insights about how to improve productivity within your transit operation, join the Productivity Initiatives program sponsored by UMTA and the American Public Transit Association (APTA). The program provides several "quick response" approaches to identifying, assessing, and improving maintenance management, strategic planning, human resources development, and service planning. Call Brian McCollom, UMTA, (202) 426-9271 or Bob Stanley, APTA, (202) 828-2872.

### National Data Base of Transit Statistics

Section 15 of the Urban Mass Transportation Act as amended, establishes a reporting system to assist in meeting the needs for information on which to base planning for public transportation services and to make public sector investment decisions at all levels of government. Grantees are required to submit complete Section 15 financial and operating data reports within 120 days of the end of their fiscal year. The data are collected, reviewed, maintained, and disseminated in an annual report, National Urban Mass Transportation Statistics, Section 15 Annual Report, and on computer tapes by the Office of Information Services. With the passage of the Surface Transportation Assistance Act of 1982, apportionment by UMTA of Section 9 funds for urbanized areas of 200,000 or more inhabitants is based in part on data contained in the Section 15 annual report. The Office of Information Services works closely with transit agencies reporting under Section 15 and with the myriad of Section 15 data users to reduce the reporting burden and to develop, improve, and promote applications of the data. The Section 15 Reporting System Advisory Committee is UMTA's first and only

GENERAL INFORMATION (Continued)

advisory committee. It is an important new element in the continuing process to make these national statistics more useful. The committee charter meeting was held in June 1983. Members represent a cross section of Section 15 data users charged with investigating the quality and usefulness of the Section 15 reporting system. Contact Rhoda Shorter, (202) 426-9157.

## **Planning and Operations Analysis**

### **Technical Approaches to Conducting Major Transit Investment Studies (Alternatives Analysis)**

Familiar with the variety of manual and computer-aided methods and associated training available to accomplish such studies? For technical guidance documents to organize the preparation of such studies, contact Granville Paules, (202) 426-9271.

### **Small Urban or Rural Transit Operator (Section 18 Eligible)**

For information on computers useful in managing your operation, call Tom Hillegrass, (202) 426-9271.

### **Scheduling and Operating a Paratransit System**

For information on computer-aided approaches to scheduling and operating paratransit systems, including tracking of clients for financial management, call Ed Neigut, (202) 426-9271.

### **A Quick Response to Questions about Computer Use for Transportation Planning**

The Urban Transportation Planning System (UTPS) Support Center is a coordinated clearinghouse for software, technical manuals, and training materials; it provides a toll-free hotline, (800) 638-8747. Also, 5-day training courses teach the latest computerized and manual analysis procedures. Contact David Levinsohn, (301) 933-9211.

### **A Clearinghouse for Documents on Transportation Planning and Transit Operations Analysis**

Many manuals and user's guides developed as part of UMTA's program are available through Price, Williams and Associates. Contact Paget Donnelly, (202) 587-3939.

### **Help in Selecting and Using a Microcomputer for Transportation Planning or Transit Management Support**

The Microcomputer in Transportation Planning (MTP) User Group and Support Center focuses on professionals in transportation planning; with 500 member organizations, it is based at the Transportation Systems Center (TSC). It provides user group bulletins, review and distribution of public-domain software, software product directories, and a telephone advisory service. Contact Mike Couture, (617) 494-2247.

**PLANNING AND OPERATIONS ANALYSIS (Continued)**

**Special Studies on Transportation Planning**

Special Studies on Transportation Planning's (SSTP) subjects include financing, service, management, energy, environmental impact, and more. Contact Richard Steinmann, (202) 426-6385.

## **Management and Service**

### **Fare and Pricing Policies**

UMTA sponsors a Resource Center on Transit Pricing which provides service and methods evaluation reports, policy studies, and telephone consultation. The Center can also arrange for expert onsite technical assistance in pricing and fare policies, fare structures, and fare collection techniques. Contact Sue Knapp at Econometrics Inc., (301) 652-2414. For information about participating in UMTA projects, contact Bert Arrillaga or Stewart McKeown at UMTA, (202) 426-4984.

### **Transportation Services for the Elderly and Handicapped**

A full complement of fixed-route and special service alternatives has been documented under the Service and Methods Program. Information about current projects may be obtained from Patricia Cass at UMTA, (202) 426-4984. For reports, see Service and Methods Reports below.

### **Marketing**

Information on current demonstration projects and on an UMTA-sponsored clearinghouse for interchange of marketing materials may be obtained from Bert Arrillaga at UMTA, (202) 426-4984.

### **Paratransit Brokerage, Ridersharing, Rider Information, and User Subsidies**

Information on service and methods project evaluations and ongoing demonstrations may be obtained by contacting Larry Bruno or Mary Martha Churchman at UMTA, (202) 426-4984.

### **Conventional Transit Service Innovations**

Priority techniques, auto restricted zones, busways, and other service and service reliability improvements are continually being demonstrated and evaluated as service and methods projects. Information on findings and ongoing projects may be obtained by contacting Joseph Goodman at UMTA, (202) 426-4984.

### **Rural Transportation**

A newsletter and access to information networks on rural transportation may be obtained from "Rural America." Contact Barbara Price, (202) 659-2800. Information on current UMTA rural transportation planning and service evaluation projects may be obtained from Roger Tate at UMTA, (202) 426-4984.



## **MANAGEMENT AND SERVICE (Continued)**

### **Technical Assistance Briefs**

Current findings of UMTA projects in service and methods innovations are reported frequently in a series of 1-page bulletins. Contact Peter Bine at Public Technology Inc. to obtain copies, (202) 626-2400. Another series of briefs summarizes the results of UMTA-sponsored projects in management and human resources. Peggy Schwarz at Public Technology Inc. is the contact for a subscription to this series, (202) 626-2465.

### **Service and Methods Reports**

UMTA maintains a quantity of hard copies of recent technical reports in this field for distribution to public agencies. While supplies last, copies may be obtained free of charge by sending a self-addressed mailing label to: U.S. DOT/TSC, Service Assessment Division (DTS-64), Kendall Square, Cambridge, MA 02142. A current bibliography is also available. For information on report availability, contact Terry McTague, (617) 494-2377.

### **Host Program**

Arrangements have been made for transit and local government officials to conduct site visits of several successful service innovations. This program is administered by Public Technology Inc. Contact Peter Bine, (202) 626-2400.

## **Bus and Paratransit**

### **Information about Improved Subsystems**

For technical documents describing improved subsystems that can increase efficiency and reduce cost, contact Vincent DeMarco, (202) 426-4035.

### **Workshops**

The twice-yearly Bus Workshops create awareness of problems, current studies, and projects and enable participants to obtain technical assistance. Contact Ray Lopez, (202) 426-8483, or Vincent DeMarco, (202) 426-4035.

### **Bus Technology Liaison Board**

A group of transit members meets annually to advise on work in progress and on technical assistance methods and priorities and to discuss problems and projects. The board is sponsored by APTA. Contact Thomas Norman, (202) 426-4035.

### **New Bus Equipment and Innovation Introduction**

The New Bus Equipment Introduction and 3(a)(1)(C), 4(i) programs solicitation annually requests letters of interest from operators and manufacturers as to what new technologies are needed in transit buses. Contact John E. Ridgley, (202) 426-8483.

### **Maintenance Facilities and Equipment**

For technical documents about cost-reducing approaches for maintenance facilities and equipment, contact Ray Lopez, (202) 426-8487, or Vincent DeMarco, (202) 426-4035.

### **New and Improved Propulsion Systems**

For technical documents about new and improved propulsion systems, contact Pat Sullivan, (202) 426-8483.

### **An Elderly and Handicapped (E&H) Technology Clearinghouse**

The Technology Information Clearinghouse for E&H Local Transportation Options, at the Transportation Systems Center, offers telephone and onsite assistance, peer-matching referrals, brochures, document distribution, training courses, and workshops. Contact Robert Berk, (617) 494-2347, or Ross Adams, (202) 426-9267.

## **Rail and Construction**

### **Specification Guidelines for Railcars**

The Light Rail Transit Car Specification Guide, developed through the transit industry and sponsored by UMTA, is available through NTIS. The NTIS number is PB 82-190737. (See General Information.)

### **Noise Abatement Information and Advice**

An Urban Rail Noise Information Center, sponsored by UMTA, has been established at TSC. Available from this center are two publications, the Handbook of Urban Rail Noise and Vibration Control and the Acoustical Materials Compendium. Also available are telephone consultation, peer-matching referral, and, on occasion, onsite assistance. Contact Michael G. Dinning, (617) 494-2506, or Paul Spencer, (202) 426-0090.

### **Wheel/Rail Wear Solutions**

The Wheel/Rail Wear Investigations programs offer onsite support. Contact Paul Spencer, (202) 426-0090, or Charles Phillips, (617) 494-2791.

### **Fare Collection Workshops**

State-of-the-art needs and problems are addressed at the Fare Collection Workshops given periodically. Contact Walter Kulyk, (202) 426-9264.

### **Electromagnetic Interference/Electromagnetic Compatibility (EMI/EMC)**

Workshops and site visits are held several times yearly. Contact Ronald Kangas, (202) 426-9264.

### **Help with Problems of Electromagnetic Interference and Compatibility**

Technical reports, bulletins, telephone consultations, peer-matching referrals, onsite assistance, workshops, and training courses are available through the Rail Transit and Electromagnetic Interference and Compatibility program. Contact Lennart E. Long, (617) 494-2891 or 2070, or Ronald Kangas, (202) 426-9264.

### **Standardized Guideline Documents for Testing Intrasystem Electromagnetic Compatibility Between Vehicular Power and Signaling Subsystems**

UMTA and APTA have made progress in this field. Guidelines can be requested from the Land Transportation Committee of the Institute of Electrical and

## **RAIL AND CONSTRUCTION (Continued)**

Electronics Engineers (IEEE). For information, call Rudy Von Eck at Garrett AiResearch, (213) 512-4137; the mailing address is 2525 West 190th Street, Torrance, CA 90509.

### **Specifications on AC Propulsion System Design**

Telephone consultations on propulsion system design specifications for AC propulsion are available. Contact Raymond Wlodyka, (617) 494-2604.

### **Urban Construction Project**

The National Academy of Sciences issued a study, Management of Urban Construction Programs, which was sponsored by UMTA. This study emphasizes sound management plans and identifies decisionmaking roles at all levels, presenting criteria for authority and responsibility. UMTA has conducted three seminars based on this report. Contact Raymond Williams, (202) 426-0090.

### **Cost Reduction Methods in Urban Construction**

UMTA has been sponsoring several activities in the areas of construction management, value engineering, cost estimation models, and industry-based design practices. Useful products in these areas which can be obtained from UMTA and TSC include reports and technical briefs for UMTA grantees and others interested in construction. Typical studies of rail systems which may be of benefit to the metropolitan planning and grantee organizations are analyses of wrap-up insurance programs, management plans, and tunnel and station cost-estimating software. Contact Howard Evoy and Ray Williams, (202) 426-0090.

### **Hardware in Track, Structures, Elevated and Tunnel Rail Systems, and Testing Devices for Structural Integrity**

Research and development projects are undertaken to improve the performance, reliability, and safety of tracks, to reduce overall costs, and to optimize the use of rail transit track. Underground, at-grade, and elevated-structure track is considered. Contact Howard Evoy and Paul Spencer, (202) 426-0090.

### **Industry Contacts for Specific Questions on Rail Systems Design, Construction, and Maintenance**

UMTA over the years has formed special rail systems advisory groups and industry liaison boards. For example, in cooperation with APTA and TRB, industry participation from transit authority engineers, managers, and transit consultants has

**RAIL AND CONSTRUCTION (Continued)**

resulted in several conferences and seminars. Much useful information is disseminated through Elevated Structures Liaison Boards (APTA), the Committee on Construction Management (TRB), and APTA's Ways and Structure Committee. Contact Howard Evoy, (202) 426-9264.

## Research

### National Cooperative Transit Research and Development Program (NCTRP)

NCTRP was developed to enable the transit industry to participate in identifying and resolving near-term transit research and development problems. The program is conducted by the Transportation Research Board of the National Academy of Sciences, APTA, the Urban Consortium for Technology Initiatives/Public Technology, Inc., and UMTA. Each year from January through March the NCTRP solicits new research ideas from the industry. A technical steering group then identifies priority topics, and the TRB defines the specific research projects and subcontracts for the work. An annual NCTRP Research Results Digest with synopses of results and of works in progress is put out by the TRB, which also issues approximately six NCTRP Reports a year. For information on NCTRP, call John Durham, (202) 426-9267.

### Proposed Research Topics for NCTRP

See above. Either organizations or individuals may propose topics. Only a brief problem statement is necessary. For information on submitting topics for NCTRP research, contact Frank Cihak at APTA, (202) 838-2800.

### Conducting NCTRP Research

See above. Again, either individuals or organizations may apply. The subjects of research are defined by the TRB, as was explained above. For information on submitting research proposals, contact Kreiger Henderson at the TRB, (202) 344-3227.

### University Research

A portion of UMTA's Section 11 grants is awarded through an annual competitive process. Projects funded under this program include research on planning, design, construction, operation, and evaluation of transportation systems, as well as on the training of professionals in the transportation field. For information about submitting a research proposal, contact Judy Meade, (202) 426-0080.

## **Safety and Security**

### **Safety and Security Education and Training**

Courses are usually held quarterly at the Transportation Safety Institute (TSI) in Oklahoma City. Contact Gwendolyn R. Cooper, (202) 426-2896.

### **Safety Peer Review (for Rail Authorities)**

Representatives from other transit systems will review your safety requirements, programs, and land analysis methodology. Contact Lloyd G. Murphy, (202) 426-2896.

### **Data on Accidents/Incidents (for Rail)**

The results of the Safety Information Reporting and Analysis System (SIRAS) are published annually. There is currently no parallel collection of safety data for buses. Contact Lloyd Murphy, (202) 426-2896.

### **Safety Guidelines (for Rail)**

Guidelines are developed to assist transit agencies to assess, develop, document, and improve the safety of transit systems. Contact Roy Field, (202) 426-2896.

# Training

## University Centers for Transit Research and Management Development

The University Research and Training Grant Program currently has nine Centers for Transit Research and Management Development that provide training in urban transportation management for practicing professionals. A summer workshop to expand the participation of faculty from minority institutions in transit training and research is conducted annually. Listed below are the centers and the contact person for each center. For additional information concerning UMTA's University Research and Management Training Program, contact Judy Meade, (202) 426-0080.

### The Centers

University of California at  
Irvine  
Irvine, CA 92717

New York Institute of Technology  
Old Westbury, NY 11568

Portland State University  
Portland, OR 97202

The Wharton School  
University of Pennsylvania  
Philadelphia, PA 19104

Texas Southern University  
Houston, TX 77004

Florida A&M University  
Tallahassee, FL 32307

University of Michigan  
Ann Arbor, MI 98109

Indiana University  
Bloomington, IN 47405

University of Wisconsin  
Milwaukee, WI 53201

### The Principals

Dr. James Perry  
(714) 833-5448

Dr. Richard Dibble  
(516) 686-7722

Dr. Kenneth Dueker  
(503) 229-4043

Dr. Howard Mitchell  
(215) 898-7818

Dr. Naomi Lede  
(713) 527-7282

Dr. Addis Taylor  
(904) 599-3600

Dr. George Gamota  
(313) 764-6200

Dr. George Smerk  
(812) 335-8143

Dr. Edward Beimborn  
(414) 963-4978

## Management Training Course Providers

A list of UMTA-endorsed management training course providers is located in Appendix C. Individual employees interested in furthering their professional



## TRAINING (Continued)

development should contact the providers for detailed information on specific courses offered, fellowship eligibility, and Section 10 grant application forms. Upon the applicant's acceptance into a course, the agency by which he or she is employed submits the grant application to UMTA. Grant awards may cover up to 75 percent of course-related costs.

### **Bus Operator Instructor Training**

Four times yearly such instructors receive Bus Operator Instructor Training to enhance their skills through the use of three training modules. Contact Charles T. Morison, Jr., (202) 426-0080.

### **Training Courses on Transportation or Transit Operations Planning**

Inquire about Urban Transportation Planning System (UTPS) courses from Granville Paules, (202) 426-9271.

### **Training Courses on Various Transit Topics (Including Planning)**

There will be over 30 courses on a wide range of topics given this year by UMTA's technical assistance program. For a list of topics, contact Granville Paules, (202) 426-9271.

### **Call for Training Program**

The Call for Training Program prepares an annual announcement of potential training courses to be offered by the UMTA technical assistance program. Courses, sites, and dates are selected on the basis of responses to the announcement. In addition, the transportation community may call at any time to determine the availability of courses. For information, contact Granville Paules, (202) 426-9271.

## Appendix A

### OFFICE OF TECHNICAL ASSISTANCE--STAFF DIRECTORY

Organization Code		Telephone (Area Code 202)
URT-1	Associate Administrator for Technical Assistance, Peter Benjamin	426-4052
	Secretary, Brenda Williams	426-4052
URT-5	Administrative Support Staff, Diane Pisano, Director	426-9261
URT-6	Safety and Security Staff, Lloyd G. Murphy, Chief	426-2896
URT-2	Deputy Associate Administrator for Engineering and Applications, Frank K. Gimmler	426-4047
URT-10	Office of Systems Engineering (Fixed Guideway Programs), Steven Barsony, Director	426-0090
URT-11	Urban Rail Division, Walter Kulyk, Chief	426-0090
URT-12	Technology Development Division, Ronald Kangas, Chief	426-9264
URT-20	Office of Bus and Paratransit Systems, Tom Norman, Director	426-4035
URT-21	Vehicle Systems Division, Ramon Lopez, Chief	426-8483
URT-22	Subsystems Technology Division, Vincent DeMarco, Chief	426-4035
URT-3	Deputy Associate Administrator for Management and Demonstrations, Harold B. Williams	426-4047
URT-7	Information Services, Ronald Fisher, Director	426-9157
URT-30	Office of Management Research and Transit Services, W. H. (Ray) Lytle, Director	426-4995
URT-31	Service and Methods, James Bautz, Chief	426-4984
URT-32	Transit Management Division, Philip Hughes, Chief	426-9274
URT-33	Research and Training Division, Frank Enty, Chief	426-9274
URT-40	Office of Methods and Support, Samuel Zimmerman, Director	426-4991
URT-41	Methods Division, Granville Paules, Chief	426-9271
URT-42	Analysis Division, Ross Adams, Chief	426-9267

The mailing address for all of the above is: Department of Transportation,  
Urban Mass Transportation Administration, 400 Seventh Street, S.W., Washington,  
D.C. 20590.

## Appendix B

### UMTA REGIONAL STAFF RESPONSIBLE FOR TECHNICAL ASSISTANCE

Donald M. Bell (617-494-2729)  
Director, Office of Planning  
Assistance  
UMTA Region I  
55 Broadway, Kendall Square  
Cambridge, MA 02142

Ken Vought (212-264-8162)  
Manager, Engineering and Construction  
Management  
UMTA Region II  
26 Federal Plaza, Suite 14-110  
New York, NY 10278

Michael McCollum (215-597-8098)  
General Engineer  
Office of Management and Technical  
Assistance  
UMTA Region III  
434 Walnut St., Suite 1010  
Philadelphia, PA 19106

Gene Carroll (404-257-7850)  
Director, Office of Management and  
Technical Assistance  
UMTA Region IV  
1720 Peachtree Rd., N.W., Suite 400  
Atlanta, GA 30309

P. Douglas Gerleman (312-353-2820)  
Technical Assistance Coordinator  
UMTA Region V  
300 South Wacker Dr., Suite 120  
Chicago, IL 60606

Blas Uribe (817-334-3836)  
Director, Office of  
Planning and Technical  
Assistance  
UMTA Region VI  
819 Taylor St., Suite 9A32  
Fort Worth, TX 76102

Charles Donald (816-926-5053)  
Director, Office of Planning  
Assistance  
UMTA Region VII  
6301 Rockhill Rd., Suite 100  
Kansas City, MO 64131

Donald D. Cover (303-327-3242)  
Director, Office of Transit  
Assistance  
UMTA Region VIII  
Prudential Plaza, Suite 1822  
1050 17th Street  
Denver, CO 80265

Ervin Poka (415-974-7543)  
Director, Office of Program  
Management  
UMTA Region IX  
211 Main St., Suite 1160  
San Francisco, CA 94105

Ricardo Ramon (206-442-4210)  
Regional Engineer  
UMTA Region X  
3142 Federal Building  
915 Second Ave.  
Seattle, WA 98174

## Appendix C

### URBAN MASS TRANSPORTATION ADMINISTRATION ENDORSED SHORT COURSES

The following programs have been endorsed by the Urban Mass Transportation Administration for support through fellowship grants under Section 10 of the Urban Mass Transportation Act of 1964, as amended. Information on course participation and fellowship eligibility can be obtained by contacting the organizations and individuals listed.

#### Participating Organizations

Institution: Indiana University  
Center for Transit Research and  
Management Development  
809 E. Ninth St.  
Bloomington, IN 47405

Course: Financial Management for Transit

Contact: Dr. George Smerk, (812) 335-8143  
Jeanne Gunning, (812) 335-8143

Description A 2-week course in financial fundamentals,  
planning, strategy, analysis, performance  
evaluation, risk management, cash and grant  
management for middle-to-upper-level transit  
managers.

Institution: The Wharton School  
University Center for Transit Research  
and Management Development  
3100 Steinberg Hall-Dietrich Hall  
3620 Locust Walk/CC  
Philadelphia, PA 19104

Course: Urban Mass Transportation Management Seminars  
in Human Resource Development

Contact: Dr. Howard Mitchell, (215) 898-7818

Description: A 1-week seminar introducing managers to  
innovative concepts in information management  
relevant to the planning, design, and operation  
of an efficient transit organization.

URBAN MASS TRANSPORTATION ADMINISTRATION  
ENDORSED SHORT COURSES (Continued)

Participating Organizations

Institution: University of California, Irvine  
Center for Transit Research and  
Management Development  
University Extension  
P.O. Box AZ  
Irvine, CA 92716

Course: Developing Effective Middle Managers

Contact: Dr. G. J. (Pete) Fielding, (714) 856-5448  
Peter Ring, (714) 856-6220

Description: A 2-week seminar designed for middle managers  
in the western States combining general manage-  
ment principles with practical application to  
the transit industry.

Institution: Consult, Ltd.  
Suite 1518  
307 N. Michigan Ave.  
Chicago, IL 60601

Course: The Teaching Manager

Contact: Ms. Barbara Shomaker, (312) 346-1567

Description: A course designed to improve the communication  
skills of transit managers and supervisors, with  
a concentration on the ability to relay technical  
information as well as overall direction to  
employees.

Institution: Florida A&M University  
Center for Transit Research and  
Management Development  
Tallahassee, FL 32307

Course: Skill-Building Course in Leadership and Management  
Skills

URBAN MASS TRANSPORTATION ADMINISTRATION  
ENDORSED SHORT COURSES (Continued)

Participating Organizations

Contact: Dr. Addis Taylor, (904) 599-3600

Description: A 5-day course designed to enhance abilities to perform supervisory tasks with efficiency and confidence.

Institution: University of Michigan  
Institute of Science and Technology  
Center for Transit Research and  
Management Development  
2200 Bonisteel Blvd.  
Ann Arbor, MI 98109

Course: The Essentials of Traffic Engineering for  
Transit Managers

Contact: Dr. George Gamota, (313) 764-6200  
James O'Day, (313) 764-0248

Description: A major emphasis of the course will be to acquaint transit managers with, or update them on, traffic engineering actions which will improve transit operations.

Institution: New York Institute of Technology  
Center for Transit Research and  
Management Development  
Office of Transportation Programs  
Old Westbury, NY 11568

Course: Labor Relations Training Workshop for Transit  
Management

Contact: Dr. Richard Dibble, (516) 686-7722  
Dr. Vincenzo Milione, (516) 686-7776

Description: Legal framework of labor relations at the transit agency. Contract, grievance, arbitration, and job actions are topics of the course.

URBAN MASS TRANSPORTATION ADMINISTRATION  
ENDORSED SHORT COURSES (Continued)

Participating Organizations

Institution: Polytechnic Institute of New York  
333 Jay St.  
Brooklyn, NY 11201

Course: Training Program for Transit Middle Managers

Contact: Dr. Roger P. Roess, (212) 643-5526

Description: A hands-on, practical training seminar aimed at the level of supervisors and assistant supervisors, using a case-study approach. Topics include labor relations, disciplinary and grievance procedures and their use, work planning and control, budget control, inventory control, and productivity. Cases are taken from actual operating experiences.

Institution: National Mass Transit Institute  
Clark Building, Suite 1904  
717 Liberty Ave.  
Pittsburgh, PA 15222

Course: The Art of Schedule Development and Design

Contact: Dr. William Montgomery, (412) 562-9668

Description: A 1-week seminar on techniques that will assist in developing knowledge and skills in schedule writing that can be translated into results.

Institution: Northeastern University  
National Center for Transit Research  
and Management Development  
370 Common St.  
Dedham, MA 02026

Course: 32nd National Urban Mass Transportation Management Seminar

Contact: Dr. Malcolm Campbell, (617) 329-8000

**URBAN MASS TRANSPORTATION ADMINISTRATION  
ENDORSED SHORT COURSES (Continued)**

Participating Organizations

Description: This seminar is broken equally into three areas of study: transit management, human relations, and management skills; it consists of lectures, workshops, and small group sessions.

Institution: Portland State University  
Center for Transit Research and  
Management Development  
P.O. Box 752  
Portland, OR 97202

Course: Labor Relations

Contact: Dr. Kenneth J. Dueker, (503) 229-4042  
Dr. Sheldon Edner, (503) 229-4020

Description: Three-day course on alternative techniques for the improvement of labor-management relations in transit.

Institution: Texas Southern University  
Center for Transit Research and  
Management Development  
Urban Resource Center  
Houston, TX 77004

Course: Microcomputer Training for Transit Managers

Contact: Dr. Naomi Lede, (713) 527-7282  
Larry Cooper, (713) 527-7925

Description: A 1-week workshop in hands-on computer training.

Institution: University of Wisconsin, Milwaukee  
Center for Transit Research and  
Management Development  
Division of Urban Outreach  
P.O. Box 413  
Milwaukee, WI 53201



URBAN MASS TRANSPORTATION ADMINISTRATION  
ENDORSED SHORT COURSES (Continued)

Participating Organizations

Course: Transit Management Workshop

Contact: Dr. Edward Beimborn, (414) 963-4981

Description: This workshop is designed to develop managerial skills through action-oriented situations promoting innovation, skill development, and interpersonal communications. Topics dealing with operations/planning, management, and technical aspects will be covered in approximately 96 hours of intense instruction.

## Appendix D

### LIST OF ABBREVIATIONS

APTA	American Public Transit Association
DOT	Department of Transportation
E&H	Elderly and Handicapped
EMI/EMC	Electromagnetic interference/electromagnetic compatibility
IEEE	Institute of Electrical and Electronics Engineers
MTP	Microcomputer in Transportation Planning
NBEI	New Bus Equipment Introduction
NCTRP	National Cooperative Research and Development Program
NTIS	National Technical Information Service
PTI	Public Technology Inc.
SIRAS	Safety Information Reporting and Analysis System
SSTP	Special Studies on Transportation Planning
TRB	Transportation Research Board
TRIC	Transit Research Information Center
TRIS	Transportation Research Information Service
TSC	Transportation Systems Center
UMTA	Urban Mass Transportation Administration
UMTRIS	Urban Mass Transportation Information System
UTPS	Urban Transportation Planning System