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0 pages | | PAPERBACK ISBN 978-0-309-42814-9 | DOI 10.17226/23373

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TRANSIT COOPERATIVE RESEARCH PROGRAM

TCRP REPORT 86

Public Transportation Security Volume 5 Security-Related Customer Communications and Training for Public Transportation Providers

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SUBJECT AREAS
Public Transit • Planning and Administration

Research Sponsored by the Federal Transit Administration in Cooperation with the Transit Development Corporation

TRANSPORTATION RESEARCH BOARD

WASHINGTON, D.C. 2004 www.TRB.org

TRANSIT COOPERATIVE RESEARCH PROGRAM

The nation's growth and the need to meet mobility, environmental, and energy objectives place demands on public transit systems. Current systems, some of which are old and in need of upgrading, must expand service area, increase service frequency, and improve efficiency to serve these demands. Research is necessary to solve operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the transit industry. The Transit Cooperative Research Program (TCRP) serves as one of the principal means by which the transit industry can develop innovative near-term solutions to meet demands placed on it.

The need for TCRP was originally identified in *TRB Special Report 213—Research for Public Transit: New Directions*, published in 1987 and based on a study sponsored by the Urban Mass Transportation Administration—now the Federal Transit Administration (FTA). A report by the American Public Transportation Association (APTA), *Transportation 2000*, also recognized the need for local, problem-solving research. TCRP, modeled after the longstanding and successful National Cooperative Highway Research Program, undertakes research and other technical activities in response to the needs of transit service providers. The scope of TCRP includes a variety of transit research fields including planning, service configuration, equipment, facilities, operations, human resources, maintenance, policy, and administrative practices.

TCRP was established under FTA sponsorship in July 1992. Proposed by the U.S. Department of Transportation, TCRP was authorized as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). On May 13, 1992, a memorandum agreement outlining TCRP operating procedures was executed by the three cooperating organizations: FTA, The National Academies, acting through the Transportation Research Board (TRB); and the Transit Development Corporation, Inc. (TDC), a nonprofit educational and research organization established by APTA. TDC is responsible for forming the independent governing board, designated as the TCRP Oversight and Project Selection (TOPS) Committee.

Research problem statements for TCRP are solicited periodically but may be submitted to TRB by anyone at any time. It is the responsibility of the TOPS Committee to formulate the research program by identifying the highest priority projects. As part of the evaluation, the TOPS Committee defines funding levels and expected products.

Once selected, each project is assigned to an expert panel, appointed by the Transportation Research Board. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, TCRP project panels serve voluntarily without compensation.

Because research cannot have the desired impact if products fail to reach the intended audience, special emphasis is placed on disseminating TCRP results to the intended end users of the research: transit agencies, service providers, and suppliers. TRB provides a series of research reports, syntheses of transit practice, and other supporting material developed by TCRP research. APTA will arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by urban and rural transit industry practitioners.

The TCRP provides a forum where transit agencies can cooperatively address common operational problems. The TCRP results support and complement other ongoing transit research and training programs.

TCRP REPORT 86: Volume 5

Project J-10A(2) FY'02 ISSN 1073-4872 ISBN 0-309-06760-X Library of Congress Control Number 2002109708

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Price \$40.00

NOTICE

The project that is the subject of this report was a part of the Transit Cooperative Research Program conducted by the Transportation Research Board with the approval of the Governing Board of the National Research Council. Such approval reflects the Governing Board's judgment that the project concerned is appropriate with respect to both the purposes and resources of the National Research Council.

The members of the technical advisory panel selected to monitor this project and to review this report were chosen for recognized scholarly competence and with due consideration for the balance of disciplines appropriate to the project. The opinions and conclusions expressed or implied are those of the research agency that performed the research, and while they have been accepted as appropriate by the technical panel, they are not necessarily those of the Transportation Research Board, the National Research Council, the Transit Development Corporation, or the Federal Transit Administration of the U.S. Department of Transportation.

Each report is reviewed and accepted for publication by the technical panel according to procedures established and monitored by the Transportation Research Board Executive Committee and the Governing Board of the National Research Council.

To save time and money in disseminating the research findings, the report is essentially the original text as submitted by the research agency. This report has not been edited by TRB.

Special Notice

The Transportation Research Board of The National Academies, the National Research Council, the Transit Development Corporation, and the Federal Transit Administration (sponsor of the Transit Cooperative Research Program) do not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the clarity and completeness of the project reporting.

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are available from:

Transportation Research Board Business Office 500 Fifth Street, NW Washington, DC 20001

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Printed in the United States of America

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The **National Academy of Engineering** was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. William A. Wulf is president of the National Academy of Engineering.

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The **Transportation Research Board** is a division of the National Research Council, which serves the National Academy of Sciences and the National Academy of Engineering. The Board's mission is to promote innovation and progress in transportation through research. In an objective and interdisciplinary setting, the Board facilitates the sharing of information on transportation practice and policy by researchers and practitioners; stimulates research and offers research management services that promote technical excellence; provides expert advice on transportation policy and programs; and disseminates research results broadly and encourages their implementation. The Board's varied activities annually engage more than 4,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation. **www.TRB.org**

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AUTHOR ACKNOWLEDGMENTS

The research reported herein was performed under TCRP Project J-10A(2) in Fiscal Year 2002 by McCormick, Taylor & Associates, Inc., and Planners Collaborative, Inc. John N. Balog of McCormick, Taylor & Associates served as the Principal Investigator for this task order. The research team would like to thank the Panel Chair, Maureen A. Milan, and all of the members of the panel for their considerable insight and contributions during the conduct of this research. Their guidance and comments contributed substantially to

the quality of the final product. The team would also like to thank all of the individuals and public transportation organizations that provided example materials for consideration. As always, APTA and CTAA also played important roles representing the entire public transportation industry. Lastly, the team is pleased to have had the opportunity to work under the leadership of Stephan Parker, TCRP Senior Program Officer, who provided direction and counsel on a myriad of items throughout the process.

FOREWORD

By S. A. Parker Staff Officer Transportation Research Board This fifth volume of *TCRP Report 86: Public Transportation Security* will be of interest to transit general managers; senior executives; operational and technical managers; transit police; security personnel; and communications, human-resources, and marketing staff. Personnel with similar responsibilities at departments of transportation or public works will also find this report to be of value. The objective of *Volume 5: Security-Related Customer Communications and Training for Public Transportation Providers* is to provide improved tools for security-related customer communications and training.

CRP-CD-43, which accompanies this volume, contains the entire *TCRP Report 86: Volume 5* contents: (1) a 15-minute video on the importance of training for transit emergencies, (2) a PowerPoint overview of the report, (3) the final report in portable document format (pdf), and (4) templates of communication devices. McCormick, Taylor & Associates, Inc., prepared this volume of *TCRP Report 86* under TCRP Project J-10A(2).

Emergencies arising from terrorist threats highlight the need for transportation managers to minimize the vulnerability of passengers, employees, and physical assets through incident prevention, preparedness, response, and recovery. Managers are seeking to reduce the chances that transportation vehicles and facilities will be targets or instruments of terrorist attacks and to be prepared to respond to and recover from such possibilities. By being prepared to respond to terrorism, each public transportation agency is simultaneously prepared to respond to natural disasters such as hurricanes, floods, and wildfires, as well as human-caused events such as hazardous materials spills and other incidents.

This is the fifth volume of *TCRP Report 86: Public Transportation Security*, a series in which relevant information is assembled into single, concise volumes, each pertaining to a specific security problem and closely related issues. These volumes focus on the concerns that transit agencies are addressing when developing programs in response to the terrorist attacks of September 11, 2001, and the anthrax attacks that followed. Future volumes of the report will be issued as they are completed.

To develop this volume in a comprehensive manner and to ensure inclusion of significant knowledge, available information was assembled from numerous sources, including a number of public transportation agencies. A topic panel of experts in the subject area was established to guide the researchers in organizing and evaluating the collected data and to review the final document.

This volume was prepared to meet an urgent need for information in this area. It records practices that were acceptable within the limitations of the knowledge available at the time of its preparation. Work in this area is proceeding swiftly, and readers are encouraged to be on the lookout for the most up-to-date information.

Volumes issued under *TCRP Report 86: Public Transportation Security* may be found on the TRB website at http://www4.trb.org/trb/crp.nsf/All+Projects/TCRP+J-10.

CONTENTS OF TCRP REPORT 86: VOLUME 5 on CRP-CD-43

- 1. Being Prepared: Security Training and Communication (video presentation)
- 2. Overview of TCRP Report 86: Public Transportation Security—Volume 5: Security-Related Customer Communications and Training for Public Transportation Providers (PowerPoint presentation)
- 3. Guide to Security-Related Customer Communications and Training for Public Transportation Providers (final report for *Volume 5* of *TCRP Report 86*, in pdf)
- 4. Templates of Communication Devices Presented in the Final Report for *Volume 5* of *TCRP Report 86* (MS-Word)

Abbreviations used without definitions in TRB publications:

AASHO American Association of State Highway Officials

AASHTO American Association of State Highway and Transportation Officials

APTA American Public Transportation Association
ASCE American Society of Civil Engineers
ASME American Society of Mechanical Engineers
ASTM American Society for Testing and Materials

ATA American Trucking Associations

CTAA Community Transportation Association of America
CTBSSP Commercial Truck and Bus Safety Synthesis Program

FAA Federal Aviation Administration FHWA Federal Highway Administration

FMCSA Federal Motor Carrier Safety Administration

FRA Federal Railroad Administration FTA Federal Transit Administration

IEEE Institute of Electrical and Electronics Engineers

ITE Institute of Transportation Engineers

NCHRP National Cooperative Highway Research Program

NCTRP National Cooperative Transit Research and Development Program

NHTSA National Highway Traffic Safety Administration

NTSB National Transportation Safety Board
SAE Society of Automotive Engineers
TCRP Transit Cooperative Research Program
TRB Transportation Research Board

U.S.DOT United States Department of Transportation

or Public Transportation Providers

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