

TCRP

REPORT 105

TRANSIT
COOPERATIVE
RESEARCH
PROGRAM

Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged

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TRANSIT COOPERATIVE RESEARCH PROGRAM

TCRP REPORT 105

**Strategies to Increase Coordination
of Transportation Services for the
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WASHINGTON, D.C.
2004
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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.

Project H-30A FY'02
ISSN 1073-4872
ISBN 0-309-088135
Library of Congress Control Number 2004113994

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Price \$31.00

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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.

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TRANSIT COOPERATIVE RESEARCH PROGRAM

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500 Fifth Street, NW
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AUTHOR ACKNOWLEDGMENTS

The research for this report, or resource guide, was performed under TCRP Project H-30 by TranSystems Corporation, with assistance from the Center for Urban Transportation Research (CUTR) of the University of South Florida, the Institute for Transportation Research and Education (ITRE) of North Carolina State University, and Planners Collaborative. TranSystems was the prime contractor for the project.

Patricia Monahan of TranSystems was the project's principal investigator and was responsible for the overall direction of the research. She wrote the summary, Chapters 1 through 3 and sections of the remaining chapters and edited the document. Thomas J. Cook and Judson J. Lawrie of ITRE researched and prepared substantial sections of Chapters 4, 6, and 7 and developed Appendix C. Joana Conklin of TranSystems also contributed to Chapter 6; and she prepared Appendices D, E, and F. David Chia and Scott Hamwey of

Planners Collaborative researched and prepared Chapter 5. Case studies were conducted and summarized by Mr. Chia, Mr. Cook, Ms. Conklin, Mr. Hamwey, Mr. Lawrie, Rosemary G. Mathias of TranSystems, and Beverly G. Ward of CUTR. All team members made significant contributions to the selection of case study sites and the identification of the coordination strategies that are used as examples throughout the report.

The team would like to thank the project panel for offering useful guidance and direction that reflected the breadth of their experiences and viewpoints. Dianne Schwager, TCRP Senior Program Officer, provided much appreciated support and assistance throughout the project. Finally, we would like to acknowledge the valuable contributions of the many individuals from transportation and human services organizations who hosted case studies and participated in telephone interviews.

FOREWORD

*By Dianne S. Schwager
Senior Program Officer
Transportation Research
Board*

TCRP Report 105: Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged will be of interest to practitioners and policy-makers in agencies and organizations that plan, provide, administer, and fund transportation services for persons with disabilities, clients of human services agencies, and others who can be described as transportation disadvantaged. The research results are presented in a report and on an accompanying CD-ROM.

During the past 20 years, a great deal of effort has been directed to improving coordination of publicly funded transportation services for the transportation disadvantaged. These services include transportation for persons with disabilities, clients of human services agencies, recipients of Medicaid, participants in Headstart programs, and others with special needs who can be described as transportation disadvantaged. The United States Department of Transportation (U.S. DOT) and the Department of Health and Human Services (DHHS) have worked together for more than a decade to foster increased coordination among the transportation services sponsored by each agency. Several states have followed suit and are pursuing improved coordination of their transportation services.

Despite the progress that has been made, there are still many more opportunities throughout the United States to improve the local and regional coordination of transportation services for the transportation disadvantaged. Duplication of services, insufficient funds, unmet trip demand, numerous regulatory constraints, lack of interagency coordination, and poor service quality still exist. Service area boundaries often preclude trips from being made by publicly funded transportation to important destinations, such as medical facilities, jobs, and training. In addition, rapid growth and suburbanization in many communities have made it far more costly and difficult to provide accessibility by publicly funded transportation to many destinations.

Under TCRP Project H-30, "Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged," the research team of TranSystems Corporation, in association with the Institute for Transportation Research and Education, and Planners Collaborative, conducted the research project. The objective of the research was to develop strategies for initiating or improving coordination of local and regional publicly funded transportation services for the transportation disadvantaged. The results of this research may be used throughout the United States by public transportation agencies, human resources agencies, transportation brokers, planning organizations, and other organizations and entities seeking methods and concepts that can be used to initiate or improve the local or regional coordination of publicly funded transportation services.

The study included the following elements:

- Documentation of current funding sources, decision-making processes, and service types that can be utilized by entities wishing to improve the coordination of their transportation services;

- New case studies highlighting approaches and strategies not investigated to date;
- Collection of updated information about previous case study sites that have been shown to illustrate the benefits of coordination and/or important elements of successful strategies; and
- Analysis of existing and new case study information to identify overall themes, elements of success, and recommended approaches.

The research report is presented in seven chapters that present (1) an introduction that includes a “road map” to the final report; (2) a history of transportation coordination in the United States; (3) a discussion of current coordination trends and challenges; (4) a review of transportation services and options; (5) the processes used to plan, budget, and promote coordinated transportation services; (6) a review of funding sources; and (7) information on technology and its application to transportation coordination. Most chapters are supported by case studies. *TCRP Report 105* includes six appendixes presented on the accompanying CD-ROM (*CRP-CD-51*). Complete case studies can be found in Appendix A. Appendix B consists of a questionnaire that can be used to inventory providers of transportation services for the transportation disadvantaged. Information about state funding sources is provided in Appendix C. Appendixes D and E contain information about private foundations and foundation grant resources. An index of previously published coordination case studies and guidebooks, organized by topic, is presented in Appendix F.

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STRATEGIES TO INCREASE COORDINATION OF TRANSPORTATION SERVICES FOR THE TRANSPORTATION DISADVANTAGED

SUMMARY

During the past 20 years, significant efforts have been made to increase coordination among publicly funded transportation services for people who can be described as transportation disadvantaged. Despite encouragement at federal and state levels and many local successes, there are still many opportunities to improve the local and regional coordination of transportation services for the transportation disadvantaged. Duplication of services or administration, insufficient funding, unmet trip demand, numerous regulatory constraints, lack of interagency coordination, and poor service quality still exist. Moreover, the rapid growth and suburbanization that has taken place in many communities has made it more costly and difficult to provide publicly funded transportation access to many destinations, at a time when public resources at many levels are constrained. These conditions make the coordination of transportation services for the transportation disadvantaged an even more desirable goal than ever.

This Report, or Resource Guide, was developed as part of Transit Cooperative Research Program (TCRP) Project H-30, *Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged*. The project's goal was to identify strategies for initiating or improving coordination of publicly funded transportation services for transportation-disadvantaged individuals—older adults, people with disabilities, human services agency clients, and others—that could be implemented on the regional or local level. Recognizing that transportation coordination has been the subject of extensive previous work, the identification of innovative strategies and approaches was an important objective.

The Resource Guide is intended for public and private transportation and human services organizations that fund, operate, purchase, or use transportation services for the transportation disadvantaged and are interested in improving coordination with other providers. Based on case studies of public and private organizations that have recently undertaken coordination activities, the Resource Guide describes current trends in the coordination of transportation services for the transportation disadvantaged and identifies several ongoing challenges that coordination partners have faced.

Other topics covered in the Resource Guide include the following:

- Transportation service delivery options
- Planning and decision-making processes associated with transportation and human services funding programs
- Opportunities for political involvement and tools for transportation advocacy
- Funding sources and their requirements
- Use of technology to coordinate the operation of transportation services

Readers will also learn how to identify potential sources of funding and inventory local transportation providers. Throughout the Resource Guide, effective coordination strategies and approaches are drawn from the case studies and the experiences of other organizations that have planned and implemented coordination initiatives. An index to existing case studies on the topic of transportation coordination, organized by topic, is included as well.

CURRENT COORDINATION TRENDS

A total of 22 full and mini–case studies were conducted to take a close look at recent examples of successful coordination strategies and innovative practices. The case studies illustrate a number of different types of coordination strategies, ranging from state-level efforts and implementation at the local or regional level of federal or state programs to ways of coordinating the planning, funding, or delivery of this type of transportation service. While each of the case study subjects has its unique features and illustrates a particular coordination issue or approach, some underlying themes or trends emerged.

Coalition-Building

Building a coalition organized around transportation issues is an effective way to achieve a number of goals: pursuing funding opportunities, increasing public awareness of transportation issues and support for solutions, and influencing state/federal actions.

The concept of building transportation coalitions has become more prominent in recent years, so one set of mini–case studies focused on this topic in relation to efforts to coordinate transportation services for the transportation disadvantaged. However, the theme arose repeatedly throughout other case studies, as it became clear that other case study subjects had established coalitions as part of a larger coordination strategy. Moreover, the success of those strategies was often due at least in part to the coalition’s endeavors.

The experiences of the case study subjects indicate a trend toward looking beyond the transportation providers and human services agencies that are the typical partners in a coordination effort and enlisting the support of other stakeholders—businesses, local elected officials, faith-based organizations, educational institutions, and others.

In some cases, a coalition has been used to plan or manage a coordination effort. In other cases, a coalition has been established for a broader purpose. Other coalitions were established to pursue job access funding or respond to welfare reform, but have since broadened their focus.

The experiences of the case study sites suggest the following lessons for coalition-building efforts:

1. A broad-based coalition has the highest chance of achieving its goals. In order to attract a wide range of participants, the transportation services advocated by the coalition should be available to as many rider groups as possible.

2. Funding or sponsorship are critical coalition-building tools. Early on, partners should identify a means of underwriting expenses such as meeting space, transportation, administrative tasks and items, and information dissemination.
3. A key element is the existence or development of trust among coalition participants and with potential partners. Building trust involves investing time, developing an effective means of communication, and listening to the needs and concerns of partners with an open mind, so that a balance between special interests and group goals can be attained.
4. The support of state and local elected officials and representatives of federal agencies is also extremely helpful. Adequate research and data are needed in order to enlist the cooperation and assistance of such individuals. Decision makers have many competing demands for their limited time.
5. Building trust, enlisting additional coalition participants, gathering data, and planning actions all require an investment of time, but are critical elements of a fruitful coalition.

Leadership

Strong leadership—at both the local/regional and state levels—is a key to the success of a transportation coordination initiative.

The success of coordination efforts continues to be linked to the involvement of a local champion, at least in the initial stages of development and implementation. The vision, dedication, perseverance, and hard work of such an individual (or individuals) were noted in many case study interviews as invaluable contributions to the implementation and success of a coordination strategy.

Leadership at the state level was also identified by a number of case study sites as a crucial factor. State leadership may take several forms:

- Encouragement and support
- A state-level coordination initiative
- Policy or procedural changes to make coordination more feasible
- Funding to implement or operate coordinated services

Lead Agencies

Successful coordination initiatives are led by all types of entities—transit providers, state or local-level human services agencies, Metropolitan Planning Organizations (MPOs), state DOTs, and private nonprofit organizations.

The experiences of a number of the case study sites suggest that coordination efforts do not need to be initiated by transit providers. In fact, in some cases, efforts are more successful when an entity other than the local transit agency takes the lead role.

With the transit agency as an equal partner to other participants, a coalition can more easily broaden both its agenda and support for its efforts among decision makers.

When a human services agency or planning organization leads a coordination effort, the mistrust that participants may have of the transit provider—based on fears that it will encroach on other agency functions besides transportation, promote its own agenda, or transfer responsibility for providing transportation services to other entities—can be neutralized. Finally, coordination partners may be more willing to discuss transportation needs if by doing so they do not appear to be criticizing existing services.

Even when the local transit agency is the administrator or manager of a coordination program, the creation of an advisory group headed by another entity can provide similar benefits of impartiality, openness, and inclusion.

Federal Programs as Catalysts for Coordination

Federal mandates or programs can be leveraged to help build transportation infrastructure and expand customer bases.

Many recent successful coordination strategies were implemented in order to address the transportation needs of individuals making the transition from welfare to work. The degree of coordination that has been achieved is due in large part to the joint efforts of the federal Department of Health and Human Services (DHHS), Department of Labor (DOL), and DOT to make it possible for states and communities to respond to the transportation challenges of welfare reform. These efforts have included joint guidance from all three agencies on the coordinated use of funding sources and the FTA's requirement for coordinated planning and funding of services to be supported by its Job Access and Reverse Commute (JARC) grant program.

The case studies provided several examples of areas in which coordinated services that began as a means to provide access to jobs were expanded to become more comprehensive systems. In one particular example, a coalition of human services agencies used pilot project funding from the state's welfare reform program and a JARC grant to implement a countywide demand-responsive service for transitioning welfare recipients. The service became so successful that a local millage, or additional dollar per \$1,000 of taxable property value, was passed several years later to expand the service and open it to the general public.

Similarly, efforts in another area to find a cost-effective means of meeting the requirements of the Americans with Disabilities Act (ADA) for complementary paratransit service led to the development of programs to help community-based agencies provide service for ADA-eligible individuals. As a result, transportation options were created for older adults and people with disabilities, as well as ADA-eligible individuals.

State-Level Coordination Initiatives

Formal state programs that require or encourage local organizations to coordinate contribute greatly to coordination successes, especially when incentive funding is an element of the program.

Experience has shown that coordination efforts have the greatest chance of success when supported by a formal coordination policy or program at the state level, with or without a legislative mandate. Incentive funding at the state level further increases the chances of successful implementation of coordination efforts. Several case study sites illustrate the effectiveness of state-level guidance and leadership.

The Importance of Planning

Transportation planning typically encompasses a range of activities, including the assessment of mobility needs, design of appropriate services or strategies, identification of resources, estimation of expected benefits and costs, development of implementation plans and schedules, and evaluation of programs and services.

The experiences of the case study subjects highlight several planning issues of which organizations considering a coordination initiative should be aware.

1. Transportation and human services agencies need to become involved in the various planning processes that are used to make transportation decisions.

It is not unusual for human services agencies, advocates, and other organizations that have an interest in transportation but are not primarily transportation providers to have little input into transportation planning processes and planning decisions. Similarly, transportation providers are not always involved in human services decisions regarding transportation or related issues such as the location of programs or facilities. One reason that planning efforts continue to proceed in parallel is that the planning processes that recipients of federal transit funding are required to follow are often unfamiliar to human services agencies, while the planning requirements associated with health and human services programs are diverse and usually unfamiliar to transportation providers.

The case studies, however, illustrate the value of joint transportation planning to a successful coordination effort. The majority of the case study subjects participate in joint planning activities with their partner organizations or other stakeholders. In some instances, coordination partners are involved in the planning process required at the federal level for projects that utilize funds from federal transportation agencies. These and other coordination initiatives grew out of job access planning efforts. In other instances, the planning process in which coordination partners participate is led by a human services agency.

2. Adequate planning is a necessary foundation for a successful coordination initiative.

A number of case study organizations recommended a solid planning effort as one of the first steps in a coordination initiative. Data collection and outreach to transportation-disadvantaged groups, advocates, and stakeholders are necessary in order to identify and document mobility needs. A clear definition of needs can help to ensure that the solutions that are developed are effective. In addition, assembling data to document needs and make the case for suggested actions must precede attempts to raise awareness of transportation issues among decision makers.

If the coordination initiative involves the deployment of a technology system, early research and planning to identify the steps necessary for implementation are especially important. Without such preparation, it can be difficult to implement a project effectively within the desired timeframe.

3. Program evaluation is essential.

Collecting data from the beginning of a coordination effort in order to document success and measure accomplishments is essential. Essential elements and evaluation criteria should be identified at the start, and reporting processes should be designed to be as simple as possible.

Coordination at the Regional Level

Coordination is a key strategy for addressing needs for interregional service and providing that service efficiently.

As residential and commercial development continues to sprawl and the trend toward the provision of services on a regional basis persists, destinations for many transportation-disadvantaged individuals may lie beyond county, state, or transit service area boundaries. For example, regional medical centers may draw patients from multicounty regions. Similarly, major employment centers are no longer located exclusively in downtown areas of major cities, but may be dispersed throughout suburban or rural areas. In order to access health care or travel to work, individuals may need to identify available service

options, evaluate schedule and price information, and, assuming that options are available from origin to destination, arrange trips with multiple providers.

Centralizing services through one provider can fill regional service gaps and streamline the processes of identifying options and planning trips for customers. An alternate approach is coordination among multiple transportation operators in a region.

Nontraditional Funding Sources

Nontraditional funding sources exist, and should be explored.

In addition to the major grant programs administered by transportation and human services agencies at the federal and state levels, public and private foundations and other nontraditional funding sources can be resources for local organizations that are planning or implementing coordination activities.

Use of Technology

Technology can be used to coordinate operations, manage information, and enhance customer service.

The use of technology systems in transit and paratransit services is the focus of other studies and research projects, and it was not the intent of this study to duplicate that work. However, several mini–case studies were conducted to highlight ways in which technology can be used to increase or support coordination.

The lessons learned at these sites relate directly to the introduction of an advanced technology—for instance, sufficient technological resources and ongoing technical support are necessary for a successful implementation.

CURRENT COORDINATION CHALLENGES

Most of the themes or trends that emerged from the case studies dealt with effective strategies or key ingredients for a successful coordination effort. Two themes, however, spotlight challenges faced by many organizations that have been involved in recent efforts to coordinate transportation services for the transportation disadvantaged.

Sustainability

Sustaining a coordination effort over the long term—especially after a local champion departs or a primary funding source is no longer available—can be a major challenge.

Several of the case study sites encountered such circumstances. Their continued success is attributed to the broad base of support that was created when the coordination initiative was first established and to the systems' reputations for high-quality service and for customizing transportation services to meet the needs and available funding of agencies and communities.

Flexibility can also help to sustain a coordination effort. A coordinated system that has the ability to react to a loss of funding by shifting focus from one client group to another, restructuring its operations as needed, is more likely to remain viable.

Another key factor that can contribute to the sustainability of a coordination effort is the existence (or establishment) of a legal or institutional framework for coordination, such as a formal county ordinance, or the creation of an office specifically focused on coordinating transportation.

Building Trust

Trust among potential or actual coordination partners and concerns about control over client services or funding continue to be obstacles to coordination.

The other major challenge that was mentioned in nearly every case study was the development of trust among coordination partners.

The organizations that were successful in developing good relationships with partners cited a number of important factors. Ongoing communication is critical, and this can be accomplished through regular meetings, the development of some mechanism for disseminating information, and workshops or summits on particular topics. Individual meetings with organizations that may have concerns about control over services for their clients or funding, for example, can help to neutralize those fears. While communicating with partners, it is essential to listen to their needs and concerns with an open mind, so that a balance between special interests and group goals can be attained. Developing relationships takes time, often more time than the case study sites anticipated, but it is well worth the investment in terms of the success of the coordination effort.

Another factor is identifying all potential stakeholders at the beginning of the process and involving them from the start—they are more likely to be supportive and will also have the chance to contribute ideas or information that can improve the coordination strategy that is adopted.

Trust also develops when the lead agency in a coordination effort makes sure that services and programs are tailored to the particular needs of partner organizations or communities.

Finally, case study sites mentioned the value of doing adequate research and collecting data to share with partners or potential participants to enlist their participation—to identify transportation needs in the beginning of a coordination effort, for example, or to document coordination successes as they are achieved.

CROSS-CUTTING LESSONS

Lastly, the case studies offered several lessons for organizations that are interested in the coordination of transportation services for the transportation disadvantaged, no matter what particular strategy they may adopt:

- An incremental or phased approach to implementing coordinated services can increase the likelihood that the services will be successful.
 - Communication among entities considering or engaged in coordination activities is vital.
 - Time and effort will need to be devoted to developing trust among partners and addressing concerns about control.
 - The time spent in developing support, resources, and a framework for coordination will pay off in terms of future growth and stability for the effort. Benefits may not appear in the short term.
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CHAPTER 1

INTRODUCTION

During the past 20 years, a great deal of effort has been made to increase coordination among publicly funded transportation services for people with disabilities, clients of human services agencies, and others who can be described as transportation disadvantaged. Throughout the 1980s, local organizations, seeking to eliminate duplication or stretch scarce transportation resources, demonstrated that the coordination of transportation services among providers (defined to include both operators and agencies that purchase transportation services) could result in improved efficiency and service quality. Initiated by local champions—either individuals or agencies—these efforts were successful, but could be difficult to maintain and were often challenging to replicate in other areas.

At the federal level, the U.S.DOT and the U.S. DHHS began working together in the 1980s to foster increased coordination among the transportation services sponsored by each agency. Likewise, a number of states developed programs and guidance to improve coordination among the transportation services they fund or administer. These federal and state initiatives encouraged and contributed to the success of subsequent local coordination efforts. In many instances, local efforts have resulted in reduced transportation costs, improved mobility for transportation-disadvantaged individuals, and increased administrative efficiency.

Despite the progress that has been made, there are still many opportunities to improve the local and regional coordination of transportation services for the transportation disadvantaged. Duplication of services or administration, insufficient funding, unmet trip demand, numerous regulatory constraints, lack of interagency coordination, and poor service quality still exist. Moreover, the rapid growth and suburbanization that has taken place in many communities has made it far more costly and difficult to provide publicly funded transportation access to many destinations at a time when public resources at many levels are constrained. These conditions make the coordination of transportation services for the transportation disadvantaged an even more desirable goal than ever.

STUDY OBJECTIVES

The primary objective of TCRP Project H-30 was to identify strategies for initiating or improving coordination of local and regional publicly funded transportation services for the transportation disadvantaged. An important foundation for the

research effort was the extensive work that has already been done in the area of transportation coordination, but innovative approaches and strategies were a primary focus. Other key focal points included coordination strategies that have been implemented at a variety of levels—state, regional, and local—and those that increase mobility for clients in addition to improving the use of transportation resources.

The study included the following elements:

- Documentation of current funding sources, decision-making processes, and service types that can be utilized by entities wishing to improve the coordination of their transportation services.
- New case studies highlighting approaches and strategies not investigated to date.
- Collection of updated information about previous case study sites that have been shown to illustrate the benefits of coordination or important elements of successful strategies.
- Analysis of existing and new case study information to identify overall themes, elements of success, and recommended approaches.

RESEARCH METHODOLOGY

The following paragraphs summarize the approach taken by the research team to the first three tasks of the project, which focused on the identification of the funding sources, planning and decision-making processes, and types of services usually associated with transportation services for the transportation disadvantaged. The selection of the case study sites is also discussed.

Typical Funding Sources and Service Types

Research into funding sources and service types typically associated with transportation for the transportation disadvantaged was conducted through several means. The first was an extensive literature review. Next, the team conducted comprehensive Internet searches. Key printed and online sources are listed in Table 1.

Finally, an e-mail survey was sent to over 500 state agencies or divisions, based on a listing of state agencies that

TABLE 1 Sources for literature review and internet searches

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- The most recent federal funding source report from the Community Transportation Association of America (CTAA) and Easter Seals Project ACTION (ESPA) — *Building Mobility Partnerships: Opportunities for Federal Funding* (March 2002)
 - A recent study conducted by the Institute for Transportation Research and Education (ITRE) on the subject of Regionalizing Public Transportation Services
 - Pertinent federal and state legislation and program information regarding transit funding
 - U.S.DOT and FTA
 - CTAA
 - American Public Transportation Association (APTA)
 - Coordinating Council on Access and Mobility (CCAM)
 - Transportation Research Information Services (TRIS) Online
 - TRB/TCRP
 - Each state's DOT
 - Human services agencies in each state (identified from a list of agencies provided by the American Public Human Services Association)
 - Community or regional transit agencies (RTAs) with innovative practices
-

have a direct connection with the provision of public or community transportation prepared by the Community Transportation Association of America (CTAA). This list included departments or divisions such as transportation, aging, family services, human resources, human services, social services, health, labor, workforce development, education, vocational rehabilitation, rehabilitation services, and developmental disabilities.

The survey requested information on state programs that fund or support transportation services for the transportation disadvantaged and asked for examples of exemplary coordinated systems or practices operating in each state. Approximately 100 surveys were returned. Many respondents stated that they did not offer transportation programs, declined to complete the survey, or referred the research team to another person or to a website. About 40 survey responses contained useful information.

Typical Decision-Making Processes

The research team also used a variety of methods to collect information on the processes used by transportation and human services agencies to make transportation funding and programming decisions. Telephone interviews with state, regional, and local officials and staff involved with the programming and planning of federal transportation and human services funding were the primary source of information. Team members conducted these interviews with MPOs and other regional planners, state DOT officials with oversight responsibility for coordination issues, and directors and staff from state agencies charged with developing and administering state coordination efforts.

The states contacted were primarily a subset of those identified by the research team at the outset of the project as hav-

ing successful approaches to coordination, particularly in the area of planning. Additional states and localities were identified during the course of the interviews.

In addition to these interviews, team members conducted secondary research, including an online review of new federal initiatives and advocacy group websites and a review of other relevant documents.

Case Study Approach

To look into recent coordination efforts in more detail, the research team conducted a number of case studies.

Seven full case studies each involved a site visit. Nine mini-case studies were conducted through telephone interviews, to update earlier work, investigate a different aspect of a previously documented coordination effort, or develop a brief profile of a promising strategy. In addition, several mini-case studies were combined into two theme-based clusters, one focused on coalition building and the other on the use of technology. The process used to select case study sites is summarized below.

As the research team reviewed the literature on coordination, conducted searches of Internet sites, conducted e-mail surveys of state officials, and interviewed representatives of organizations involved with coordination, a running list of successful efforts that might be potential case study sites was assembled. In compiling the list, the team sought examples of innovative approaches and representation of a variety of operating environments (e.g., urban, small urban, suburban, rural, and statewide) and organizational levels (e.g., state, regional, and local). In addition, team members sought to identify practices that not only increased the efficiency of transportation services for the transportation disadvantaged, but resulted in improved mobility for transportation-disadvantaged individuals.

The list that resulted was quite long. To facilitate selection of the best examples and to ensure that case study recommendations covered a range of strategies and environments, the team collectively developed a set of selection criteria. These included the following:

- Innovation
- Documented benefits
- Freshness (not previously documented)
- Transferability to other areas
- Operational longevity

Ideally, each potential case study would have all of these features.

In addition, the following attributes were identified for each case study site, so that the final list of candidates would be sufficiently varied:

- Geographic region
- Service area characteristics—urban, suburban, rural, statewide
- Lead/participating agencies—public and nonprofit transportation providers, human services agencies, MPOs, state DOTs
- Client groups/trip types served—older adults; people with disabilities; low-income individuals; human services agency clients; students; medical, job access, human services program trips
- Service provider types—public, private, nonprofit
- Transportation modes—fixed route, paratransit, volunteer drivers, taxi, vanpool
- Organizational levels—state, regional, local

An evaluation matrix that combined the selection criteria, other considerations, and several descriptive fields was constructed. Each team member then entered what he/she thought were the best coordination examples from the original long list into the matrix and indicated whether the system or practice was recommended for a full or mini-case study.

The team then discussed the completed matrix. As a result, several coordination efforts were moved from the category of full case study to that of mini-case study, or vice versa. Also, it seemed that several groups of mini-case study candidates would be more interesting if clustered than if studied individually.

The research team then recommended case study sites to the project panel members, who suggested several modifications. The final list of selected sites is presented in Table 2 and shown on the map in Figure 1.

ROAD MAP TO THE RESOURCE GUIDE

This Resource Guide presents practical guidance for increasing coordination among transportation services that target

transportation-disadvantaged individuals, using the information compiled through the various research efforts and from the case study subjects. The Guide is intended to be of use to public and private transportation and human services organizations that fund, operate, purchase, or use transportation services for the transportation disadvantaged.

Topics covered in the Resource Guide include the following:

- Current trends and innovative strategies
- Transportation service delivery options
- Planning and decision-making processes associated with transportation and human services funding programs
- Opportunities for political involvement and tools for transportation advocacy
- Funding sources and their requirements
- Use of technology to coordinate the operation of transportation services

Readers will also learn how to identify potential sources of funding and to inventory local transportation providers.

The document is organized as follows:

- Chapter 1 has introduced the reader to TCRP Project H-30 and the Resource Guide.
- Chapter 2 reviews the history of coordination efforts at the federal, state, and regional levels.
- Chapter 3 defines coordination, presents a continuum to describe the range of coordination actions, and summarizes the lessons learned from the experience of the 22 case study sites.
- Chapter 4 reviews different service delivery models for coordinated transportation systems.
- Chapter 5 describes typical planning and decision-making processes.
- Chapter 6 discusses potential funding sources.
- Chapter 7 explores the role of technology in coordinating transportation operations.

Each chapter also includes advice from coordination practitioners and references to additional resources.

Throughout the Resource Guide, effective coordination strategies and approaches are illustrated by case studies, mini-case studies, and examples drawn from the experience of organizations that have planned and implemented coordination initiatives.

Additional material is given in the appendices on the accompanying CD-ROM. Complete case studies can be found in Appendix A. Appendix B consists of a questionnaire that can be used to inventory providers of transportation services for the transportation disadvantaged. Information about state funding sources is provided in Appendix C. Appendix D and Appendix E contain information about private foundations and foundation grant resources. An index of previously published coordination case studies and guidebooks, organized by topic, is presented in Appendix F.

TABLE 2 Case study sites

Full Case Study Sites
<ul style="list-style-type: none"> • Aaron E. Henry Community Health Center/Delta Area Rural Transit System, Mississippi • Greater Twin Cities United Way, Minnesota • King County Metro Community Partnerships Program (CPP), Washington State • Massachusetts Human Service Transportation Office • Michigan Welfare-to-Work Program and Midland County • RIDES Mass Transit District (MTD), Illinois • Space Coast Area Transit (SCAT), Florida
Clustered Mini-Case Study Sites
<i>Coalition-Building</i>
<ul style="list-style-type: none"> • Baldwin County Public Transit Coalition, Alabama • Oklahoma Department of Rehabilitative Services • Toledo Metropolitan Area Council of Governments (TMACOG), Ohio
<i>Use of Technology</i>
<ul style="list-style-type: none"> • Client Referral, Ridership, and Financial Tracking System (CRRAFT), State of New Mexico • Ottumwa Transit Authority, Iowa • St. Louis Transportation Management Association, Missouri
Mini-Case Study Sites
<ul style="list-style-type: none"> • ACCESS Transportation Systems, Pennsylvania • Cross County Transit, North Carolina • DuPage County Taxi Subsidy Program, Illinois • Flint MTA, Michigan • Maricopa Association of Governments (MAG), Regional Action Plan on Aging and Mobility, Arizona • Massachusetts Rehabilitation Commission, Transportation Options Project (TOP) • MichiVan—Nontraditional Vanpool Program, Michigan • Washington State Agency Council on Coordinated Transportation and Thurston County (ACCT) • York County Transit Authority/rabbitransit, Pennsylvania



Figure 1. Case study locations.

CHAPTER 2

COORDINATION HISTORY

Public transportation providers and human services agencies have a long history of delivering transportation services for individuals who are considered to be transportation disadvantaged. For transit operators, this group typically includes seniors and people with disabilities, although in small urban or rural areas, the general public also may use the services. Human services agencies frequently supply transportation to enable clients to participate in the programs and services they offer. Client groups often include seniors, people with disabilities, children, and low-income individuals.

Yet, although transit providers and human services agencies operate similar services for similar types of riders, transportation is often provided through separate, parallel delivery systems. Reasons for this separation include differences in funding sources, administrative and regulatory requirements, and the importance of transportation to the missions of different types of agencies. The results of this separation are often duplication of services or of administrative efforts, inefficient use of vehicles and other resources, poor service quality, and unmet transportation needs. A common example of uncoordinated services is the arrival of two vehicles at a medical facility: a public transit vehicle carrying customers of its paratransit program and a private vehicle transporting Medicaid recipients to their medical appointments—with both vehicles being utilized at less than their full capacity.

Planning, designing, funding, and delivering transportation services for the transportation disadvantaged in a coordinated manner can help to address such problems. At the regional or local level, coordination efforts can involve any combination of partners: public providers of fixed-route transit and paratransit service, nonprofit transportation providers, private transportation companies, and public or nonprofit human services agencies.

Often the aim of coordination is increased efficiency and a lower cost per passenger trip for participating agencies. In some cases, coordination has been shown to result in significant reductions in cost per vehicle hour or passenger trip, which may lead to lower transportation expenditures. A Medicaid agency, for example, that pays a very high cost per trip when purchasing service on its own, may be able to reduce its overall transportation expense by purchasing service from a coordinated system, particularly one that takes full advantage of existing fixed-route transit services. For many participants, however, the result of increased coordination may lead

to benefits other than cost savings. For human services agencies or transit providers that may be serving only a portion of the demand for their transportation services or whose unit costs are already relatively low, coordination is likely to enable them to serve more customers or offer a higher level or quality of service for the same expenditure.

Today, partly due to encouragement and support at the federal and state levels, coordinated systems typically provide some or all of the following transportation services:

- ADA-complementary paratransit services and other services for people with disabilities
- Medical transportation
- Job access transportation
- Services for seniors
- Transportation to human services program sites
- Student transportation

In rural areas, coordinated systems may provide the only available public transportation option.

EARLY COORDINATION EFFORTS: INITIATIVES AT THE LOCAL LEVEL

Throughout the late 1970s and 1980s, a number of coordination efforts were undertaken by local transit providers and human services agencies. A critical ingredient in many of the early initiatives was the leadership of a particular individual who believed in the value of coordinated services and worked to make them a reality. State- or federal-level actions to encourage coordination also played a role in some of the first efforts. In other cases, early local successes proved difficult to replicate until the development of state legislation or programs to encourage coordination made the task easier for other organizations.

Beyond the efforts of a local champion, a grant or contract from a federal or state agency was a factor in either the initial implementation or the success of some early coordination initiatives.

For example, two well-known, long-standing coordinated systems are Wheels of Wellness and ACCESS Transportation Systems, operating in the Philadelphia and Pittsburgh

areas, respectively. Wheels of Wellness, a not-for-profit organization, was established in 1959 to provide nonemergency medical transportation free of charge to low-income residents of the Philadelphia area. Since 1981, Wheels has been offering service through a transportation brokerage that includes fixed-route transit services (operated by the Southeastern Pennsylvania Transportation Agency [SEPTA]), paratransit service provided by local profit and nonprofit operators, and a volunteer driver program. One of Wheels' major programs, the Medical Assistance Transportation Program began in 1981 with a contract between the Pennsylvania Department of Public Welfare and Wheels for provision of service to Medicaid recipients in the City and County of Philadelphia.

In the other most urbanized part of Pennsylvania, ACCESS Transportation Systems has been managing a brokerage under contract to the Port Authority of Allegheny County (PAT), the Pittsburgh area's public transit provider, since 1979. Development of the ACCESS brokerage was made possible by FTA funding for a brokerage demonstration program, which PAT received in 1978.

Another state-level action that has benefited the ACCESS program and assisted with coordination efforts in other parts of Pennsylvania was the creation of the State Lottery by the Pennsylvania legislature in 1971. A unique aspect of the lottery program is that all net proceeds are used to fund programs and services for older Pennsylvanians. The Shared Ride and Free Transit Programs subsidize, respectively, door-to-door, specialized transportation and use of off-peak public transit services for individuals age 65 and over. These two programs generate approximately \$188 million per year for providers such as ACCESS and encourage coordination by promoting the use of multiple modes to meet the transportation needs of older adults in the state.

In other areas, local successes helped lead to statewide initiatives. In Massachusetts, for example, some of the earliest coordinated services were operated by the following:

- Call-A-Ride, a nonprofit transportation provider on Cape Cod
- Brockton Area Transit Authority (BAT), one of the first transit agencies to contract with a variety of human services agencies to provide client transportation
- Share-A-Ride, a nonprofit human services transportation provider in the northwestern section of the Boston metropolitan area
- SCM Elderbus, a nonprofit operator originally established to provide medical transportation to seniors that expanded to serve seniors and people with disabilities in 21 communities in south central Massachusetts

Several of these systems were among the state's first recipients of vehicles under the former Section 16(b)(2) program. At least in part because of the success of these systems, a parallel program using state transportation bond funds was created to make the same types of specialized transit

vehicles available to communities and RTAs. An interagency advisory committee, composed of state and local transportation and human services representatives, was established to review applications for both programs and make award decisions. Over time, applicants within an RTA service area were required to explore options for service with the transit agency before requesting their own vehicles. Building on the relationships developed through the interagency advisory committee, state-level human services agencies began to contract with more RTAs for the provision of client transportation services. Today, state-level human services agencies in Massachusetts have joined together in a new consolidated human services transportation office and contract with RTAs to broker services for all participating agencies within defined regions.

The earliest coordination efforts offer several important lessons for current practitioners:

- Support of a local champion is critical.
- Encouragement or incentives provided at higher policy levels is helpful, as described in more detail below.
- Local successes can move statewide efforts forward.

SUPPORT FOR COORDINATION AT THE FEDERAL LEVEL

On the transportation side, addressing issues of inefficiency and unmet need through coordination of the resources used to provide transportation services for the transportation disadvantaged has been a federal priority for several decades. Beginning with the U.S.DOT regulations that implemented the requirements of Section 504 of the Rehabilitation Act of 1973, continuing with the passage of the Transportation Equity Act for the 21st Century (TEA 21) in 1998, and including recent proposals for the reauthorization of the federal transit programs, coordination in the planning and delivery of transportation services has been encouraged, if not required, at the federal level.

The federal DHHS has been involved for nearly as long, since the formation of the Joint DHHS/DOT Coordinating Council on Human Services Transportation (now the Coordinating Council for Access and Mobility) in 1986. Formed to support coordination efforts by facilitating the discussion and resolution of issues between U.S.DOT and DHHS and by providing technical assistance to transportation providers and human services agencies, the Coordinating Council has conducted outreach efforts, identified barriers to coordination, disseminated useful information, and developed planning guidelines and other aids for organizations engaged in coordination activities.

Federal support for the coordination of transportation services was reinforced once more by the funding programs and guidance, for both transportation providers and human services agencies, that resulted from federal welfare reform. Following passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, several separate federal welfare

programs administered by DHHS were combined into a single new block grant to states called Temporary Assistance for Needy Families (TANF). A new welfare-to-work grant program, offering formula grants to states and competitive grants to local communities, was established by the U.S. DOL. The new programs recognized transportation as an important element of a successful transition from public assistance to independent employment by the new programs and included it among eligible project expenses. In addition, FTA created the JARC grant program, which required that projects be the result of a coordinated human services/public transit planning process in order to be eligible for funding. Joint guidance to grant recipients from federal agencies outlined the ways in which TANF and welfare-to-work funds could be used to provide transportation services.

Two recent events highlight the prominence of human services transportation coordination on the federal transportation policy agenda. In late 2003, the U.S. DOT, DHHS, DOL, and Department of Education introduced a new human services transportation coordination initiative, United We Ride. It has five components—including state leadership awards and coordination grants, as well as technical assistance tools and activities—designed to make coordination of human services transportation easier and more rewarding for states and local communities to pursue.

In February 2004, President Bush issued an Executive Order on Human Services Transportation Coordination, reasserting the federal government's commitment to improved mobility for transportation-disadvantaged citizens and more efficient use of transportation resources. The Executive Order established a new Interagency Transportation Coordinating Council on Access and Mobility, composed of representatives of 10 departments. It charged the council with identifying laws, regulations and procedures that facilitate coordination as well as those that hinder it, recommending changes that will streamline and coordinate federal requirements, and assessing agency and program efforts to reduce duplication and provide the most appropriate, cost-effective transportation services.

STATE AND REGIONAL COORDINATION EFFORTS

Coordination has also been an ongoing subject of interest among both transportation providers and human services agencies at the state level. State DOTs and human services are concerned with making maximum use of limited resources and serving as many transportation needs as possible, as are local transit operators, nonprofit agencies, and human services providers.

Coordination at the regional level is becoming an increasingly important issue as populations continue to disperse. The closest or most convenient employment opportunities, shopping centers, or medical facilities to many residential areas may be located in a neighboring city, county, or state. At the

same time, local transportation providers, which usually have distinct service area boundaries, may not have the operating authority to offer services in those neighboring areas. This creates a particular problem for people needing the mobility that transportation services for the transportation disadvantaged can provide. However, regional coordination of services has been specifically addressed in only a few states to date.

Coordination at the State Level

Most states encourage at least informal coordination among transportation providers. In 1994, CTAA published a report that summarized coordination efforts in each of the 50 states (1). By 1994, the following accomplishments had been made:

- Thirty-eight states had established state-level interagency advisory committees/coordinating councils to promote information sharing or assist in decision making about the distribution of available transportation funding.
- Thirteen states had Memorandums of Understanding (MOUs) between their DOTs and human services agencies. These MOUs often establish the above cited committees/councils and define general policy regarding the desire for improved coordination.
- Twelve states had informal agreements between DOTs and human services agencies.
- Nineteen states had passed legislation requiring some level of coordination. In some cases, this legislation is general and formally establishes the interagency processes noted above.
- In three states (New Jersey, Delaware, and Rhode Island) a single, statewide transit agency had worked to some degree with state human services agencies to coordinate public and human services transportation.
- Legislation requiring coordination and specifically defining processes for achieving coordination had been enacted in Arizona, California, Florida, Iowa, Kansas, Maine, North Carolina, and Vermont.

An updated survey of states, prepared in 2000, showed substantially the same results (2).

A number of states are generally regarded as having developed successful coordination programs that serve as models for other areas. They include, among others, Florida, Iowa, Kansas, Kentucky, Maine, North Carolina, Ohio, Pennsylvania, and Washington.

Coordination at the Regional Level

A great deal of research has been conducted over the past 20 years on the development of coordinated transportation systems, but that effort has typically focused on coordination activities within a single county. Recent experience has demonstrated that many trip destinations lie beyond the county

of trip origin and that there is a need to better coordinate trips on a regional level. Examples of regional trips involve non-emergency medical transportation to regional medical centers (often funded by Medicaid) and employment transportation to regional work centers. The need to develop public transportation services that respond to living patterns that are becoming oriented to increasingly larger geographic areas is also a regional issue.

While many public transportation systems have achieved some local coordination in transporting clients of human ser-

vices programs as well as the general public, there is a lack of coordination for regional trips. For example, each county typically transports patients in its own vehicles to regional medical centers instead of providing feeder service to regional routes. A similar situation exists with employment transportation. Major employment centers are no longer located exclusively in downtown areas of major cities but are dispersed throughout many regions. There is typically a lack of coordinated transportation service provided to employees in such regions.

CHAPTER 3

CURRENT COORDINATION TRENDS AND CHALLENGES

This chapter summarizes the key trends and themes that emerged from the case studies of current, innovative approaches to the coordination of transportation services for transportation-disadvantaged individuals. Common challenges faced by coordination practitioners and cross-cutting lessons for organizations considering a coordination initiative are also discussed. A definition of coordination and a framework for classifying coordination strategies are presented first, to provide an overview of the range of actions that may be used to coordinate transportation services for the transportation disadvantaged.

DEFINING AND CLASSIFYING COORDINATION STRATEGIES

Even when used in the specific context of the provision of transportation services for transportation-disadvantaged individuals, coordination is a term that can have many meanings. Many types of organizations with an interest in such transportation services have a role in coordination activities, and the range of actions that can be taken by coordination partners is similarly diverse. Taking a closer look at possible coordination participants and actions may help to define coordination more clearly.

Coordination Participants

Transportation services for individuals with limited travel options are typically of interest to two types of organizations: (1) those that are charged with providing human services and other types of assistance to such individuals and (2) those whose primary mission is the provision of transportation services. Organizations in the first category include public and nonprofit human services agencies and advocacy organizations. Organizations such as public transit agencies and private nonprofit or for-profit transportation providers fall into the second category.

The first category of organizations can be broken down further. Because transportation is often a vital link between individuals and health care, employment, and other types of programs and services provided by human services organizations, the organizations may provide transportation services

for their transportation-disadvantaged clients in some manner, even though transportation is not their primary mission. Some human services agencies operate transportation services, while others purchase or subsidize transportation services for their clients. Human services agencies that operate transportation services have more in common with organizations whose primary mission is transportation than human services agencies that purchase or subsidize trips for clients.

In addition, coordination activities tend to focus on different aspects of transportation services. Some types of strategies are designed to increase coordination in the way services are planned, funded, purchased, or used. Other types of strategies concentrate on improving coordination in the operation and management of services.

Therefore, a useful way to distinguish among entities that may participate in coordination activities is on the basis of whether or not the entity *directly operates* transportation services. Note that an organization that does not operate service directly may contract for or purchase service from a provider, or it may subsidize its clients' use of available public or private transportation services.

For example, organizations that do not usually operate transportation services could include the following:

- State-level human services agencies
- State departments of transportation
- Regional or local human services agencies
- Advocacy groups
- Community organizations (such as United Way or American Red Cross)
- Faith-based organizations
- MPOs or Regional Planning Agencies
- Public transit agencies that contract for services

Organizations that operate transportation services could include the following:

- Public transit agencies
- Private nonprofit transportation providers
- Private for-profit transportation companies
- Regional or local human services agencies
- Community organizations
- Faith-based organizations

Any combination of organizations such as these could work together to plan, implement, or operate coordinated transportation services or some other type of coordination strategy.

Coordination Actions

Coordination among entities in the planning, design, funding, and delivery of transportation services for the transportation disadvantaged has been shown to address the problems that can arise when multiple organizations provide similar transportation services independent of one another. These problems include duplication of services or administrative efforts, inefficient use of vehicles and other resources, poor service quality, and unmet transportation needs.

Together, organizations with an interest in transportation services for the transportation disadvantaged can undertake a variety of actions to improve coordination. At one end of the range of coordination activities are steps to improve communication and cooperation among interested parties while leaving separate transportation programs intact. At the other end of the range are actions that significantly change the way in which services are delivered by consolidating transportation programs previously managed or administered by separate organizations.

Figure 2 illustrates the types of actions that can be taken by organizations working together in a coordination effort. Within the column, potential actions are listed according to the degree to which they will result in blended, or consolidated, transportation programs. Listed in the first block at the top of the column are the coordination activities that might be pursued among organizations that do not operate service directly, by transportation operators, or by a combination of both types of organizations. These are also actions that will not change the separate nature of transportation services or programs. For example, several organizations that do not operate transportation services directly might join together to promote awareness of transportation needs among the general public and community decision makers, yet continue to purchase or subsidize services for their clients independently.

The second block from the top of the column shows the types of coordination activities that might be undertaken between organizations that do not operate transportation services directly and those that do. They include actions to subsidize or facilitate use of existing services by individuals. These actions will affect the way in which transportation services are provided or the degree to which they will be used by transportation-disadvantaged individuals, but transportation programs will still remain separate.

Actions that might be undertaken by several transportation operators to improve coordination between their services are listed in the third block from the top of the column. Note that many of the potential coordination activities that transportation operators might pursue concern the coordination of operational functions as well as the management and administration of services. These types of coordination actions begin to blend transportation services by virtue of centralized functions or shared resources.

Finally, in the last block at the bottom of the column, coordination actions that will result in a change to the structure of transportation services are shown. Like the actions listed at the top of the column, these are actions that might be taken by organizations that do not operate service directly, by transportation operators, or by a combination of both types of organizations. These strategies include the collective procurement of the services of a contract transportation operator, hiring of a transportation broker to manage services for the transportation-disadvantaged constituents of a number of agencies, or consolidation of transportation programs. (More information about transportation brokerages and other types of consolidated systems is provided in Chapter 4.)

SUMMARY OF CASE STUDY FINDINGS

As a result of the research team's review of the coordination literature, Internet searches, and the survey of state officials, a great deal of information about funding sources, types of transportation services, and planning/decision-making processes was compiled. Guidance for organizations interested in initiating or expanding coordination efforts based on that information is presented in subsequent chapters of the Resource Guide.

The case studies were conducted to look more closely at recent examples of successful coordination strategies and innovative practices. The case studies illustrate a number of different types of coordination strategies, ranging from state-level efforts and implementation at the local or regional level of federal or state programs to ways of coordinating the planning, funding, or delivery of this type of transportation service. To place successful strategies in the context of the range of coordination actions, Table 3 shows the types of coordination actions that each of the case studies has undertaken, using the framework of coordination partners and actions that was depicted in Figure 2.

An overview of the case studies is provided below. Full case studies can be found in Appendix A on the accompanying CD-ROM.

After the introduction to the case study sites, this chapter summarizes the key trends and themes among these recent coordination efforts, as well as some ongoing challenges.

Full Case Study Sites

A brief description of each of the seven coordinated systems or coordination initiatives that were the subjects of full case studies is provided below.

Aaron E. Henry Community Health Center/Delta Area Rural Transit System

The Aaron E. Henry Community Health Center (AEHCHC), Inc., is a primary health care provider serving seven counties in northwest Mississippi. In 1993, AEHCHC began provid-

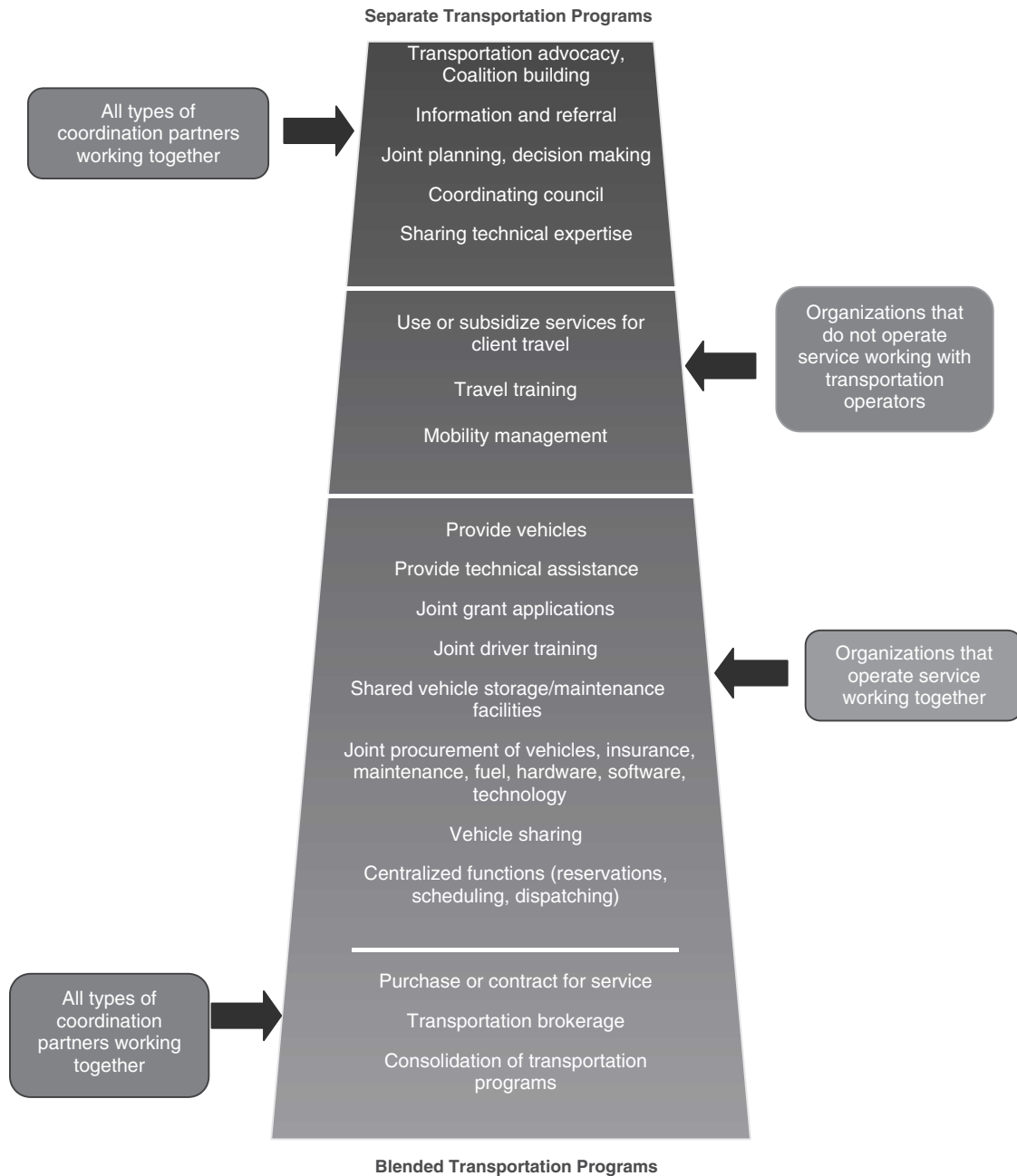


Figure 2. Coordination participants and actions.

ing general public transportation as the Delta Area Rural Transit System (DARTS) using 5311 funds. Over the last 10 years, DARTS has proactively collaborated with a number of area partners and developed consortia arrangements with other transportation providers.


Greater Twin Cities United Way

Since a survey of United Way Vision Councils identified transportation as a barrier for clients of many human services agencies in the region several years ago, Greater Twin Cities

United Way has been funding pilot transportation projects to advance a twofold agenda: to help individuals who would benefit from car ownership and to encourage informal transportation systems to work together in a more coordinated way. United Way has partnered with the Center for Transportation Studies at the University of Minneapolis for assistance in evaluating its efforts and assessing results.

United Way’s goal is a coordination model that includes a network of four to five experienced nonprofit transportation providers that are able to provide needed services throughout the region and are supported by services such as centralized

TABLE 3 Coordination actions illustrated by case studies

Case Studies	Separate Transportation Programs 							
	Both Types of Coordination Partners: Transportation Operators and Organizations That Do Not Operate Service				Organizations That Do Not Operate Service, Working with Transportation Operators			
	Transportation Advocacy/Coalition-Building	Information and Referral	Coordinating Council	Joint Planning, Decision Making	Use/Subsidy of Service	Standardized Requirements	Travel Training	Mobility Management
Aaron E. Henry Community Health Center/Delta Area Rural Transit System	•							
Greater Twin Cities United Way	•			•		•		
King County Metro Community Partnerships Program	•		•					
Maricopa Association of Governments Regional Action Plan on Aging and Mobility	•		•	•				
Massachusetts Human Service Transportation Office				•		•		
Michigan Welfare to Work Program and Midland County	•			•				
RIDES Mass Transit District	•							
Space Coast Area Transit	•			•				•
Baldwin Rural Area Transit System (BRATS)	•			•				
Oklahoma Department of Rehabilitation Services	•			•				
Toledo Metropolitan Area Council of Governments (TMACOG)	•			•				
St. Louis Transportation Management Association				•				
Ottumwa Transit Authority								
Alliance for Transportation Research Institute, University of New Mexico		•				•		
ACCESS Transportation Systems	•						•	
Cross County Transit		•						
DuPage County Taxi Subsidy Program			••					
Flint MTA				•				
MichiVan – Nontraditional Vanpool Program								
Transportation Options Project (TOP)	•						•	•
Washington State Agency Council on Coordinated Transportation and Thurston County	•		•					
York County Transit Authority/rabbittransit							•	

driver training and vehicle maintenance. Coordination will be assisted by use of a software system for rider management that United Way helped to create. Full implementation of a coordination network is estimated to be about 2 years away.

Dakota Area Resources and Transportation for Seniors (DARTS) and American Red Cross of the St. Paul Area (ARC)

are the first of those experienced providers. DARTS is providing support to United Way agencies in the areas of operations support (where a focus will be coordination), technology, driver training, and vehicle maintenance. Red Cross has taken vehicles from other agencies and has assumed responsibility for transporting their clients.

TABLE 3 (Continued)

Transportation Operators Working Together							Blended Transportation Programs Both Types of Coordination Partners: Do Not Operate Service		
Provide Vehicles	Provide Technical Assistance	Joint Grant Applications	Joint Driver Training	Joint Procurement of Vehicles, Equipment	Vehicle Sharing	Centralized Functions	Purchase or Contract for Service	Brokerage	Consolidation of Transportation Programs
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King County Metro Community Partnerships Program (CPP)

Metro provides public transit service in the City of Seattle and King County, Washington, and participates in the delivery of regional transit service with other providers.

Metro also works with other local organizations to develop transportation options for human services agency clients through the CPP.

Particularly interesting elements of this program include the following: (1) the provision of retired paratransit vehicles, free vehicle maintenance, and limited operations fund-

ing to local nonprofit human services agencies that can provide service directly for clients who are ADA-eligible; and (2) the provision of retired vanpool vehicles to agencies that need vans to provide limited transportation for clients.

Massachusetts Human Service Transportation Office

In 2001, Massachusetts consolidated the purchase and management of transportation services for the clients of a number of human services agencies in a new state-level Human Service Transportation Office (HST). Transportation managers from the state's Medicaid, Public Health, Mental Retardation, and Job Access agencies, among others, jointly drew new district boundaries, standardized procurement procedures, and began to contract with RTAs for the brokerage of coordinated client transportation services.

Michigan Welfare-to-Work Program and Midland County

Welfare reform began in the state of Michigan several years before efforts at the national level were initiated. From the outset, identifying and resolving transportation issues was a high priority. Project Zero, a program aimed at eliminating households on public assistance without earned income, was initiated in July 1996. Six pilot sites were selected for efforts to identify and remove barriers to employment, which included transportation.

Midland County was one of the original Project Zero pilot sites; it also received funds from Michigan's JARC grant. Prior to the job access initiative, service consisted of demand-responsive service in the City of Midland only. Funding was used to extend days and hours of service and to provide transportation to jobs at a large casino in a neighboring county. Services were so successful that a local millage, or additional dollar per \$1,000 of taxable property value, to fund county-wide service was recently passed.

RIDES MTD

The RIDES MTD, based in Harrisburg, Illinois, has been so successful at providing transportation service to human service agency clients that it has been able to (1) increase its service area from two counties to nine, (2) offer service for the general public, and (3) persuade legislators to amend Illinois' MTD-enabling legislation, which originally authorized the creation and funding of MTDs in urban areas, so that RIDES and another rural provider are now able to receive state operating assistance.

Space Coast Area Transit (SCAT)

SCAT has a long history of providing nontraditional and innovative transportation services. SCAT evolved from a sys-

tem serving primarily people who were transportation disadvantaged to providing services for the entire community. Included in its array of services are fixed routes, ADA paratransit, paratransit service for transportation-disadvantaged individuals (part of the Florida Coordinated Transportation System), a bus pass program, a Medicaid brokerage, and a Commuter Assistance Program. SCAT also provides Contracted Routes using its bus fleet to serve several not-for-profit agencies with contracted, demand-responsive service, and manages an innovative Volunteers in Motion program to provide rides for seniors by using volunteer drivers.

Clustered Mini-Case Study Sites

Groups of mini-case studies were conducted on the themes of (1) building coalitions to support coordinated transportation initiatives and (2) the use of technology to coordinate transportation operations and other functions. Each cluster of mini-case studies is described below.

Coalition Building: Baldwin County Public Transportation Coalition, Oklahoma Department of Rehabilitative Services, and TMACOG

The Baldwin Rural Area Transit System (BRATS), a rural public transportation provider, has a history of successful coordination. Its funding base is FTA Section 5311, matched with local funds (Alabama provides little or no funds for public transportation). Most recently, BRATS worked with resort areas (Gulf Shores, Alabama) to fund transportation for resort employees. A public transportation coalition has been formed to address expansion needs. The coalition includes BRATS, faith-based organizations, and the economic development alliance.

The rehabilitation services provided by the Department of Rehabilitative Services involve accessing medical services, training, and employment, all of which require a client to have a means of transportation. With the goal of working with the state legislature to increase the scope and quality of community-based transportation for all residents, the department has made a concerted effort over the past year to form a multiagency transportation coalition in order to establish a unified approach.

Efforts to date have included a statewide survey, Public Service Announcements, and a statewide conference/workshop on transportation and employment for those with disabilities.

TMACOG has been instrumental in a number of transportation coordination initiatives in the Toledo area. For example, the CommuterLINK program, operated by TMACOG's Commuter Services Council, is a transportation brokerage for clients of the Ohio Works First and Prevention, Retention and Contingency programs and other low-income individuals. Lucas County Job and Family Services contracts with CommuterLINK to identify transit, vanpool, and taxi options for clients who need to travel to work, training, and child care.

One of the most interesting features of the efforts in the Toledo area is the leadership role that TMACOG, the region's MPO, has played. Responding to guidance from the National Association of Regional Councils and federal agencies on the role of MPOs in welfare reform activities, top staff at TMACOG took the initiative to become actively involved in a significant welfare-to-work planning effort, spearhead the development of solutions to transportation problems, and secure JARC funding. Today, TMACOG continues to administer transportation programs and services and to collaborate with a number of human services and business organizations in the region.

Use of Technology: CRRAFT, State of New Mexico; Ottumwa Transit Authority (OTA), and St. Louis Transportation Management Association (TMA)

In 2000, spurred by welfare reform and the corresponding need to better manage transportation being provided to welfare clients, the Alliance for Transportation Research Institute (ATRI) at the University of New Mexico began to develop a web-based software application to coordinate rural transportation funding. The CRRAFT system is an interagency effort that includes the New Mexico DOL, the New Mexico Human Services Department, the New Mexico State Highway and Transportation Department's Public Transportation Programs Bureau (PTPB), and rural transit service providers.

OTA provides both fixed-route and demand-responsive services in the City of Ottumwa, Iowa, and the surrounding 10 counties. A significant amount of coordinated client transportation is also provided under contract to human services agencies.

OTA has implemented several important Intelligent Transportation Systems (ITSs) components to enhance the operation of its coordinated services, which can be difficult due to the size of the service area and its low population density. ITS components include a new two-way radio system, an Automated Vehicle Location (AVL) system, a scheduling and dispatch software component, and Mobile Data Terminals (MDTs) for the transfer of data between dispatchers and drivers.

A number of paratransit providers serving St. Louis City and County are participating in a joint effort led by a TMA created for this purpose, East-West Gateway Coordinating Council, and Metro (formerly known as Bi-State Development Agency).

Metro; OATS, Inc.; Medical Transportation Management (MTM); and Care Cab Transportation Service are key members of the TMA. These four organizations provide service to ADA-eligible individuals, seniors, the general public in rural areas, individuals with developmental disabilities, and Medicaid recipients (MTM operates a Medicaid brokerage throughout Missouri).

The call centers and radio dispatch centers of these four large paratransit providers have been joined by means of a new communications network. This network, together with paratransit reservations and scheduling software, enables the agencies to book trips for their customers on vehicles operated by the other providers, thereby filling empty seats.

Mini-Case Study Sites

Each of the nine subjects of mini-case studies is described below.

ACCESS Transportation Systems

ACCESS Transportation Systems, Inc., has been providing brokerage services for PAT, which is the Pittsburgh area's public transit provider, since 1979. ACCESS has sponsorship agreements with over 120 local agencies, including PennDOT, which provides state lottery revenues for senior transportation, and the County Office of the Bureau of Federal Programs, which is responsible for Medicaid transportation. PAT provides funding for ADA paratransit trips and the local match for the senior transportation program.

For these 120 agencies, ACCESS is responsible for the provision of over 2 million trips annually through the network of eight for-profit and not-for-profit transportation providers it has under contract. The system is known for its high levels of efficiency and cost-effectiveness.

Cross County Transit

Cross County Transit, based in Asheville, North Carolina, is an effort to coordinate nonemergency, out-of-county medical transportation that has been in operation since 1999. Coordination is achieved by means of a database accessible via a website on which the general public can request a trip, transit systems can notify the public and other transit systems of upcoming trips scheduled to regional medical centers, and health care providers can view scheduled trips.

The project has grown from a regional application to coordinate nonemergency medical transportation in the Asheville area to now include a second site in the Piedmont Triad, with plans to develop the database to include statewide coverage.

DuPage County Taxi Subsidy Program

In order to address countywide transportation needs that ADA paratransit and municipal Dial-A-Ride services were not able to meet, a group of municipalities and human services agencies in DuPage County, Illinois, formed an Interagency Paratransit Coordinating Council to oversee the implementation of two pilot projects. One of those was a user-side subsidy taxicab program open to any entity interested in subsidizing

transportation for clients or customers, particularly seniors and people with disabilities.

The taxi subsidy program is an example of an extremely flexible and cost-effective coordination alternative, since levels of subsidy, eligibility requirements, and other service policies can be easily tailored to meet the needs of the individual municipalities and agencies that are participating.

Flint MTA

Flint MTA provides transit service for a three-county area around the city of Flint, Michigan. In addition to traditional fixed route and paratransit, Flint MTA provides student transportation, service for human services agencies, and job access transportation.

Student transportation provided by the MTA may be of particular interest to organizations in other areas. Service is combined with general public service; the MTA initiated an educational program for its traditional riders, particularly seniors, when it took over school transportation.

MAG Regional Action Plan on Aging and Mobility

MAG, the MPO for the Phoenix, Arizona, region, recently completed its Regional Action Plan on Aging & Mobility, which is likely to serve as a model for other transportation efforts for older adults. The comprehensive plan included active participation by more than 75 community stakeholders and focused on four key issues: (1) older driver competency, (2) alternative transportation modes, (3) infrastructure and land use, and (4) education and training. Public involvement was a key component of the effort.

Massachusetts Rehabilitation Commission: TOP

The Massachusetts Rehabilitation Commission's TOP is aimed at identifying affordable transportation for people with disabilities to get to work, school, or training. The initiative covers over 70 rural communities in three regions across the commonwealth of Massachusetts. The primary purpose of the project is to help identify transportation resources for people with disabilities, to identify unmet transportation needs, and then move these needs into transportation solutions. Through TOP, local transit providers develop an individualized transportation plan for people with disabilities; the plan can include a variety of public transit, paratransit, and ridesharing services. Travel training, information about transportation voucher and auto ownership programs, and itinerary planning are also provided.

MichiVan—Nontraditional Vanpool Program

The Michigan DOT administers the MichiVan program. In addition to traditional vanpool services, the private vanpool

operator leases vehicles to the City of Detroit's Department of Employment and Training to provide shared rides to connect city residents with suburban employment opportunities. Traditional vanpool services require members of the vanpool to assume responsibility for driving the vehicle and providing insurance. Many of the residents that the city aimed to assist with this service had been unable to participate in these programs due to the lack of a driver's license or funds to contribute toward insurance. Using funds from a JARC grant, the city paid for the leasing of the vehicles, while community and faith-based organizations provided the drivers and insurance.

Washington State ACCT and Thurston County

The Washington state legislature formed ACCT, a state-wide forum on coordination, in 1998. An advisory council of state agencies was established to provide guidance to ACCT, and local community forums were set up to develop local coordination plans in accordance with ACCT guidelines. Demonstration projects were funded with \$1 million that was appropriated by the legislature in 1997.

Thurston County provides an example of a successful local effort to coordinate, in accordance with priorities established by ACCT at the state level. The county's MPO, transit agency, and health department have teamed up with the state's welfare agency to implement Village Vans service, which provides work trips for welfare clients.

York County Transit Authority/rabbitransit

York County Transportation Authority, or rabbitransit, is known as a leader in the field of public transportation coordination, providing a variety of services ranging from traditional fixed-route to demand-responsive service, as well as flexible services, such as route and point deviation, and park-and-ride shuttles. It also is well known for its coordinated approach to program funding, utilizing a wide range of funding sources.

Coordination Trends

While each of the case studies has unique features and illustrates a particular coordination issue or approach, some underlying themes or trends emerged.

The themes cover the following topics:

- Coalition-building
- Leadership
- Lead agencies
- Federal programs as catalysts for coordination
- State-level coordination initiatives
- The importation of planning
- Coordination at the regional level
- Nontraditional funding sources
- Use of technology

These themes, discussed below, provide insight into the strategies and approaches that have helped the case study sites successfully coordinate transportation services for the transportation disadvantaged.

Coalition-Building

Building a coalition organized around transportation issues is an effective way to achieve a number of goals: pursuing funding opportunities, increasing public awareness of transportation issues and support for solutions, and influencing state/federal actions.

The concept of building transportation coalitions has become more prominent in recent years, so one of the mini--case study clusters focused on this topic in relation to efforts to coordinate transportation services for the transportation disadvantaged. However, the theme arose repeatedly throughout other case studies, as it became clear that other case study subjects had established coalitions as part of a larger coordination strategy. Moreover, the success of those strategies was often due at least in part to the coalition's endeavors.

The experiences of the case study subjects indicate a trend toward looking beyond the transportation providers and human services agencies that are the typical partners in a coordination effort and enlisting the support of other stakeholders—businesses, local elected officials, faith-based organizations, educational institutions, and others.

In some cases, a coalition has been used to plan or manage a coordination effort. MAG is noted for its development of a multifaceted and multidisciplinary community response to the mobility needs of the rapidly growing population of older adults in Maricopa County, Arizona. MAG effectively used coalition-building as a tool for creating its Regional Action Plan on Aging and Mobility. In Midland County, Michigan, organizations that partnered to provide a successful job access transportation service were able to bring local human services agencies, businesses, and politicians into their coalition, resulting in passage of a county millage to fund a county-wide service for the general public. Seattle's King County Metro has strengthened its CPP—a collection of programs and services designed to help community organizations fill service gaps and create cost-effective options to Metro's ADA Complementary Paratransit Service—by making outreach to the communities and involving a variety of stakeholders in the review and development of transportation services for people with disabilities.

In other cases, a coalition has been established for a broader purpose. The Oklahoma Department of Rehabilitation Services has taken the initiative to form a coalition whose goal is to collect data and speak with a unified voice to the state legislature and local communities about the transportation needs of people with disabilities.

Other coalitions were established to pursue job access funding or respond to welfare reform, but have since broadened

their focus. In Alabama, the Baldwin County Public Transportation Coalition was established in response to welfare reform, but is now working to develop expanded public transportation services for seniors, tourists, and employees. Similarly, a coalition of agencies working together in the Toledo area, under the guidance of TMACOG to obtain JARC funding for welfare-to-work transportation is now tackling issues related to improving housing for disadvantaged families in addition to transportation services.

The experiences of the case study sites suggest the following lessons for coalition-building efforts:

1. A broad-based coalition has the highest chance of achieving its goals. In order to attract a wide range of participants, the transportation services advocated by the coalition should be available to as many rider groups as possible.
2. Funding and sponsorship are critical coalition-building tools. Early on, partners should identify a means of underwriting expenses for resources such as meeting space, transportation, administrative tasks and items, and information dissemination.
3. A key element is the existence or development of trust among coalition participants and with potential partners. Building trust involves investing time, developing an effective means of communication, and listening to the needs and concerns of partners with an open mind, so that a balance between special interests and group goals can be attained.
4. The support of state and local elected officials and representatives of federal agencies is also extremely helpful. Adequate research and data are needed in order to enlist the cooperation and assistance of such individuals. Decision makers have many competing demands for their limited time.
5. Building trust, enlisting additional coalition participants, gathering data, and planning actions all require an investment of time, but are critical elements of a fruitful coalition.

Leadership

Strong leadership—at local, regional, and state levels—is a key to the success of a transportation coordination initiative.

The success of coordination efforts continues to be linked to the involvement of a local champion, at least in the initial stages of development and implementation. The vision, dedication, perseverance, and hard work of such an individual (or individuals) were noted in many case study interviews as invaluable contributions to the implementation and success of a coordination strategy.

Leadership at the state level was also identified by a number of case study sites as a crucial factor. State leadership may take several forms:

- Encouragement and support. The Mississippi DOT offers an increased level of assistance to Section 5310 applications that can demonstrate coordination, and encourages organizations to apply for 5310 grants through Section 5311 recipients. This has made it easier for providers like the Delta Area Rural Transit System (DARTS) to add to its coordination partners.
- A state-level coordination initiative. Efforts such as North Carolina DOT's sponsorship of the development of the Cross County Transit system to coordinate out-of-county medical trips, or the centralization of the purchase and management of human services client transportation in the new Massachusetts HST, can change the manner in which transportation services for the transportation disadvantaged are delivered or offer real opportunities for coordination.
- Policy or procedural changes to make coordination more feasible. The New Mexico DOT has encouraged transportation providers to use CRAFT and now requires recipients of Section 5311, 3037, or TANF funding to use the system. This has increased the number of providers that have coordinated their trip reservations, billing, and record-keeping.
- Funding to implement or operate coordinated services. In Michigan, the DOT, the Family Independence Agency, and the Department of Community Development all contributed funds that were used to establish the County Connection service in Midland County.

Lead Agencies

Successful coordination initiatives are led by all types of entities—transit providers, state or local-level human services agencies, MPOs, state DOTs, and private nonprofit organizations.

The experiences of a number of the case study sites suggest that coordination efforts do not need to be initiated by transit providers. In fact, in some cases, efforts are more successful when an entity other than the local transit agency takes the lead role.

With the transit agency as an equal partner to other participants or, as in the case of the Baldwin County Public Transportation Coalition, an advisory member, a coalition can more easily broaden both its agenda and support for its efforts among decision makers.

When a human services agency or planning organization leads a coordination effort, the mistrust that participants may have of the transit provider—based on fears that it will encroach on other agency functions besides transportation, promote its own agenda, or transfer responsibility for providing transportation services to other entities—can be neutralized. Finally, coordination partners may be more willing to discuss transportation needs if by doing so they do not appear to be criticizing existing services.

Even when the local transit agency is the administrator or manager of a coordination program, as is the case with King

County Metro and its CPP, the creation of an advisory group headed by another entity (in King County, the Key Partners in Transportation group, led by the Area Agency on Aging, advises Metro on the CPP) can provide similar benefits of impartiality, openness, and inclusion.

Federal Programs as Catalysts for Coordination

Federal mandates or programs can be leveraged to help build transportation infrastructure and expand customer bases.

Many recent successful coordination strategies were implemented in order to address the transportation needs of individuals making the transition from welfare to work. The degree of coordination that has been achieved is due in large part to the joint efforts of the federal DHHS, DOL, and DOT to make it possible for states and communities to respond to the transportation challenges of welfare reform. These efforts have included joint guidance from all three agencies on the coordinated use of funding sources and the FTA's requirement for coordinated planning and funding of services to be supported by its JARC grant program.

The case studies provided several examples of areas in which coordinated services that began as a means to provide access to jobs were expanded to become more comprehensive systems. The most striking example occurred in Midland County, Michigan. A coalition of human services agencies used pilot project funding from Project Zero, Michigan's long-standing welfare reform program, and Michigan's JARC grant to implement a countywide demand-responsive service for transitioning welfare recipients in 1996. The County Connection service became so successful that a local millage was passed in 2000 to expand the service and open it to the general public. Between 1998 and 2002, the number of vehicles in operation increased from 6 to 19, and ridership doubled to 69,000 trips per year. Spot surveys conducted by the Education and Training Connection, the community-based nonprofit educational organization that operates the service, indicate that only about one-half of the trips taken on the County Connection today are work-related.

Similarly, King County Metro developed its CPP in order to find a cost-effective way to meet its ADA Complementary Paratransit service requirements. As a result of three different programs through which Metro provides retired but serviceable paratransit vehicles and limited operating subsidies to community-based agencies, transportation options have been created for seniors and people with disabilities as well as for ADA-eligible individuals. In 2003, nearly one-half of the 100,000 trips provided on 45 vehicles operated by 21 local agencies were taken by non-ADA eligible riders.

State-Level Coordination Initiatives

Formal state programs that require or encourage local organizations to coordinate contribute greatly to coordina-

tion successes, especially when incentive funding is an element of the program.

Experience has shown that coordination efforts have the greatest chance of success when supported by a formal coordination policy or program at the state level, with or without a legislative mandate. Incentive funding at the state level further increases the chances of successful implementation of coordination efforts.

Several case study sites illustrate the effectiveness of state-level guidance and leadership. In 2001, Massachusetts consolidated the purchase and management of transportation services for clients of a number of human services agencies in a new state-level HST. Transportation managers from the state's Medicaid, Public Health, and Mental Retardation agencies jointly drew new district boundaries, standardized procurement procedures, and began to contract with RTAs for the brokerage of coordinated client transportation services. This joint effort has already resulted in common service standards and standardized reporting requirements that are followed by all brokers. Most of the entities involved in the program feel that the brokerage system will ultimately result in cost savings, due to grouped trips, use of more cost-effective modes of transportation, monitoring of service providers, and competitive procurements.

Pennsylvania provides another example. The state's Shared Ride Program, funded with lottery revenues, subsidizes shared ride demand-responsive service for seniors 65 years of age and older. In York County, rabbitransit uses its large base of Shared Ride Program riders as the foundation for an integrated system of paratransit services that provide mobility for younger seniors, people with disabilities, Medicaid recipients, ADA-eligible individuals, low-income residents, current and former welfare recipients, and the general public.

The Importance of Planning

Transportation planning typically encompasses a range of activities, including the assessment of mobility needs, design of appropriate services or strategies, identification of resources, estimation of expected benefits and costs, development of implementation plans and schedules, and evaluation of programs and services.

The experiences of the case study subjects highlight several planning issues of which organizations considering a coordination initiative should be aware.

1. Transportation and human services agencies need to become involved in the various planning processes that are used to make transportation decisions.

It is not unusual for human services agencies, advocates, and other organizations that have an interest in transportation but are not primarily transportation providers to have little input into transportation planning processes and planning decisions. Similarly, transporta-

tion providers are not always involved in human services decisions regarding transportation or related issues such as the location of programs or facilities. One reason that planning efforts continue to proceed in parallel is that the planning processes that recipients of federal transit funding are required to follow are often unfamiliar to human services agencies, while the planning requirements associated with health and human services programs are diverse and usually unfamiliar to transportation providers.

The case studies, however, illustrate the value of joint transportation planning to a successful coordination effort. The majority of the case study subjects participate in joint planning activities with their partner organizations or other stakeholders. In some instances—in Midland County, Michigan, and the metropolitan Toledo area, for example—coordination partners are involved in the planning process required at the federal level for projects that utilize funds from federal transportation agencies. These and other coordination initiatives grew out of job access planning efforts. In other instances, the planning process in which coordination partners participate is led by a human services agency, such as Greater Twin Cities United Way or the Oklahoma Department of Rehabilitation Services.

The Phoenix area offers an example of the value of institutionalizing joint planning efforts by transportation and human services agencies. MAG, the region's MPO, is charged with helping to coordinate human services programs as well as transportation. This close connection between the two types of programs has helped to facilitate the exchange of information and to advance the region's mobility agenda through cooperative efforts.

2. Adequate planning is a necessary foundation for a successful coordination initiative.

A number of case study organizations recommended a solid planning effort as one of the first steps in a coordination initiative. Data collection and outreach to transportation-disadvantaged groups, advocates, and stakeholders are necessary in order to identify and document mobility needs. A clear definition of needs can help to ensure that the solutions that are developed are effective. In addition, assembling data to document needs and make the case for suggested actions must precede attempts to raise awareness of transportation issues among decision makers.

If the coordination initiative involves the deployment of a technology system, early research and planning to identify the steps necessary for implementation are especially important. Without such preparation, it can be difficult to implement a project effectively within the desired timeframe. For example, unanticipated aspects of the federal procurement process caused implementation delays and difficulties with equipment integration for the Ottumwa Transit Authority and its AVL/MDT project.

3. Program evaluation is essential.

King County Metro staff involved with the CPP suggested collecting data from the beginning of a coordination effort in order to document success and measure accomplishments is essential. Essential elements and evaluation criteria should be identified at the start, and reporting processes should be designed to be as simple as possible.

Coordination at the Regional Level

Coordination is a key strategy for addressing needs for interregional service and providing that service efficiently.

As residential and commercial development continues to sprawl and the trend toward the provision of services on a regional basis persists, destinations for many transportation-disadvantaged individuals may lie beyond county, state, or transit service area boundaries. For example, regional medical centers may draw patients from multicounty regions. Similarly, major employment centers are no longer located exclusively in downtown areas of major cities, but may be dispersed throughout suburban or rural areas. In order to access health care or travel to work, individuals may need to identify available service options, evaluate schedule and price information, and, assuming that options are available from origin to destination, arrange trips with multiple providers.

Centralizing services through one provider can fill regional service gaps and streamline the processes of identifying options and planning trips for customers. For example, the RIDES MTD serves nine mostly rural counties in southeastern Illinois with a combination of demand-responsive and deviated fixed-route services. Initially providing service in 1974 as part of the Golden Senior Citizens Council, RIDES expanded service into five counties by 1989 and formed the first rural MTD in the state in 1990. Today, in addition to serving the general public, RIDES contracts with approximately 50 federal, state, and local agencies, providing access across the nine-county region and beyond to a wide range of rider groups. By developing creative solutions to requests for transportation services, designing efficient routes and vehicle runs, and coordinating trips for multiple agencies, RIDES has been able to keep the cost of its service close to what it was in the late 1980s.

An alternate approach is coordination among multiple transportation operators in a region. This approach has been adopted in North Carolina, where a web-based system is used to coordinate out-of-county nonemergency medical trips. The system, known as Cross County Transit, features a database accessible via the Internet through which individual riders can request a trip, transit systems can notify the public and other providers of upcoming trips scheduled to regional medical centers, and health care providers can view trip schedules when arranging appointments with patients. Developed

and operated with funding from the North Carolina DOT, Cross County Transit is currently in use in the Piedmont Triad (Winston-Salem, Greensboro, and High Point) and in the western portion of the state in and around Asheville, but will eventually be in place throughout the state.

Nontraditional Funding Sources

Nontraditional funding sources exist and should be explored.

In addition to the major grant programs administered by transportation and human services agencies at the federal and state levels, public and private foundations and other nontraditional funding sources can be resources for local organizations that are planning or implementing coordination activities. For example, Greater Twin Cities United Way relies on both traditional and nontraditional funding sources to support its series of pilot transportation coordination projects. Traditional sources include FTA, Medicaid, Older Americans Act funds, and welfare-to-work grants. Nontraditional sources include the contributions it receives from individuals and corporations and the McKnight Foundation.

Use of Technology

Technology can be used to coordinate operations, manage information, and enhance customer service.

The use of technology systems in transit and paratransit services is the focus of other studies and research projects, and it was not the intent of this study to duplicate that work. However, several mini-case studies were conducted to highlight ways in which technology can be used to increase or support coordination. The case studies included the following:

- The New Mexico CRRAFT system developed by the ATRI. The web-based CRRAFT system is used to enable 27 rural transportation providers to certify human services clients, schedule trips, track riders, prepare invoices, and generate reports in a standardized way.
- The use of AVL/MDTs by the OTA in the services it provides under contract to the 10-15 RTA, which covers the ten counties of the Iowa DOT Region 15. The technologies are intended to improve communications with drivers, identify the location of vehicles, increase the safety and security of drivers and passengers while onboard vehicles, and manage vehicle inspections and maintenance at remote locations.
- The use of linked trip reservations and centralized reservations/scheduling software by the St. Louis TMA, which comprises St. Louis Metro (formerly known as Bi-State Development Agency) and two large paratransit providers. The systems enable the agencies to assign

customer trips to vehicles operated by the other providers, thereby filling empty seats.

The lessons learned at these sites relate directly to the introduction of an advanced technology—for instance, sufficient technological resources and ongoing technical support are necessary for a successful implementation.

Current Challenges

Most of the themes or trends that emerged from the case studies dealt with effective strategies or key ingredients for a successful coordination effort. Two themes, however, spotlight challenges faced by many organizations that have been involved in recent efforts to coordinate transportation services for the transportation disadvantaged—sustainability and building trust.

Sustainability

Sustaining a coordination effort over the long term—especially after a local champion departs or a primary funding source is no longer available—can be a major challenge.

Several of the case study sites encountered such circumstances.

In Midland County, the County Connection service survived the retirement of the director of the local Family Independence Agency, one of its earliest and most committed supporters, as well as the reduced role of that agency in day-to-day operations (due to changes in funding flows following the passage of the local millage to support the service). Its continued success is attributed to the broad base of support that was created as part of efforts to ensure that the millage was approved by voters and to the quality and reputation of the system.

The RIDES MTD also recently saw the retirement of its founder and long-time champion. RIDES was able to ensure its continued success by relying on a similar reputation for high-quality service and for customizing transportation services to meet the needs and available funding of agencies and communities.

Flexibility can also help to sustain a coordination effort. The St. Louis TMA, which has centralized reservations, scheduling, and dispatching among several large paratransit providers, experienced the loss of state funding for job access transportation but was able to shift its focus away from job access transportation to providing service for developmentally disabled individuals and to restructure parts of its operations accordingly.

Another key factor that can contribute to the sustainability of a coordination effort is the existence (or establishment) of a legal or institutional framework for coordination. King County adopted a formal county ordinance and policies that

ensure that ADA complementary paratransit service is provided in compliance with federal law and regulations and also that services beyond the minimum ADA requirements will be provided as funding allows and as desired by King County. This structure formalizes Metro's CPP, among other programs and services. In Massachusetts, the creation of an office specifically focused on coordinating transportation resulted in a level of formality that helped the effort move forward. An even higher level of formality appears to be on the horizon for the HST office. As of the beginning of calendar year 2004, the Massachusetts Executive Office of Health and Human Services has decided to bring the HST office directly under its umbrella. Under the new arrangement, staff will be dedicated to the HST office, rather than spending only part of their time there. The management fee provided to the RTA brokers will be pooled for all participating agencies. The agencies will also negotiate contracts together, rather than each having their own contract with the RTAs.

Building Trust

The other major challenge that was mentioned in nearly every case study was the development of trust among coordination partners. Trust among potential or actual coordination partners and concerns about control over client services or funding continue to be obstacles to coordination.

The organizations that were successful in developing good relationships with partners cited a number of important factors. Ongoing communication is critical, and this can be accomplished through regular meetings, the development of some mechanism for disseminating information, and workshops or summits on particular topics. Individual meetings with organizations that may have concerns about control over services for their clients or funding, for example, can help to neutralize those fears. While communicating with partners, it is essential to listen to their needs and concerns with an open mind, so that a balance between special interests and group goals can be attained. Developing relationships takes time, often more time than the case study sites anticipated, but it is well worth the investment in terms of the success of the coordination effort.

Another factor is identifying all potential stakeholders at the beginning of the process and involving them from the start. They are more likely to be supportive if this is done and will also have the chance to contribute ideas or information that can improve the coordination strategy that is adopted.

Trust also develops when the lead agency in a coordination effort makes sure that services and programs are tailored to the particular needs of partner organizations or communities. King County Metro, RIDES MTD, and Midland County's County Connection are all recognized locally for such flexibility and responsiveness.

Finally, case study sites mentioned the value of doing adequate research and collecting data to share with partners or

potential participants to enlist their participation—to identify transportation needs in the beginning of a coordination effort, for example, or to document coordination successes as they are achieved.

Cross-Cutting Lessons

Lastly, the case studies offered several lessons for organizations that are interested in the coordination of transportation services for the transportation disadvantaged, no matter what particular strategy they may adopt:

- An incremental or phased approach to implementing coordinated services can increase the likelihood that the services will be successful.
 - Communication among entities considering or engaged in coordination activities is vital.
 - Time and effort will need to be devoted to developing trust among partners and addressing concerns about control.
 - The time spent in developing support, resources, and a framework for coordination will pay off in terms of future growth and stability for the effort. Benefits may not appear in the short term.
-

CHAPTER 4

TRANSPORTATION SERVICES AND OPERATIONS

Because they serve a wide variety of special transportation needs and are planned, funded, and operated by many different types of organizations, transportation services for the transportation disadvantaged come in all shapes and sizes. To better understand the range of service alternatives, transportation services for the transportation disadvantaged can be described from five different perspectives:

- Mobility needs
- Providers
- Types of service
- Service delivery methods
- Models for coordinated services

In addition to providing an overview of the different kinds of services that currently operate throughout the country, this chapter includes

- Case study examples illustrating noteworthy operational and service delivery practices
- Lessons relating to the delivery of transportation services learned by organizations participating in recent coordination efforts
- Guidance on inventorying local providers of transportation services for the transportation disadvantaged
- References to other resources on the topic of transportation services and operations

MOBILITY NEEDS

Specialized or human services transportation is generally developed in response to several different types of transportation needs. One significant category of needed trip is employment-related—a means by which transportation-disadvantaged individuals can reach job opportunities. This might include job training, job interviews, regular employment, or vocational rehabilitation. Another need often served is access to medical services. Other needs include helping people reach various human services programs or facilities. For example, transportation may be provided by senior centers to enable seniors to participate in nutrition programs or by Head Start programs so that parents are able to get children to a Head Start center. Sometimes the need is simply a general purpose one. People

with limited mobility options may want to go shopping, to a movie, or to church.

Specialized transportation services might be needed because an individual does not have access to an automobile or is unable to use fixed-route public transportation because of a disability or because of the nature of the trip he/she needs to make. Especially at night, on weekends, or in low-density suburban or rural areas, public transportation is often either unavailable or very inconvenient.

PROVIDERS

Transportation services for the transportation disadvantaged may be *provided*—that is, funded, purchased, managed, or operated—by a wide variety of entities, including traditional public transit operators and other transportation organizations, human services agencies, and many types of community organizations. (See Figure 3 for examples of the types of the different types of providers.)

Transit Agencies

Public transit systems such as city, county, or RTAs typically count transportation-disadvantaged individuals among their customers in addition to other members of the general public. As required by the ADA, most public transit vehicles and systems are now accessible to, and used by, people with disabilities through the provision of fixed-route service using accessible vehicles and complementary paratransit service. Accessible services benefit seniors as well; transit agencies may also provide paratransit service for senior customers who do not meet ADA eligibility requirements. Transit providers may also contract with human services agencies to operate paratransit services for clients. In many areas, transit agencies act as brokers of service for Medicaid recipients and clients of other human services agencies.

Human Services Agencies

People using transportation services for the transportation disadvantaged are often clients of a public or not-for-profit human services agency. These agencies may operate

Transportation services for the transportation disadvantaged may be provided by a wide variety of entities, such as the following:

- York County Transit Authority, or **rabbitransit**, is a municipal authority serving York County, Pennsylvania. It operates fixed-route bus and flexible services as well as demand-responsive service for ADA-eligible individuals and clients of a number of human services agencies. Rider groups for whom the transit authority provides service include seniors, Medicaid recipients, individuals with developmental disabilities, low-income individuals, and job access clients.
- Wake County in North Carolina created the **Wake County Transportation System (WCTS)** over a decade ago to serve the growing accessibility needs of the county's transportation-dependent citizens. It operates as a unit of the County Department of Human Services and provides door-to-door service for clients of that Department as well as clients of other human services agencies in the community. It also provides limited service for the general public in rural areas of the county. The County owns the vehicles and contracts with a private vendor to manage and operate the service.
- The **Urban Rural Transportation Alliance in Maryland**, also known as URТА, is an example of a private nonprofit human services transportation provider. URТА serves both urban and rural areas in central Maryland with mostly curb-to-curb trips to medical, employment, and other destinations. URТА provides medical transportation for Medicaid clients, an HMO, and other local human service organizations.
- **Ride Connection**, a nonprofit agency in Portland, Oregon, was created to provide a more usable transportation system for older adults and people with disabilities than the local public transit operator, Tri-Met, was able to provide. It includes a network of over 30 agencies, utilizes a variety of funds from both public sources and private foundations and businesses, and involves more than 300 volunteers in providing the service.
- **Wheels of Wellness** of Philadelphia is a nonprofit medical transportation brokerage. Wheels serves the primarily urban areas surrounding Philadelphia: five counties in Pennsylvania and four counties in New Jersey. Because Wheels is a brokerage, it is able to offer many types of services, including volunteer car service, taxi service, fixed-route public transit, and demand-responsive door-to-door service. Wheels provides Medicaid, Ryan White Title I, and general volunteer medical transportation services.
- Through its Community Transportation Program, **American Red Cross of Greater Columbus** provides rides for seniors, people with disabilities, and other individuals to medical facilities and other destinations to in Franklin County, Ohio. Volunteer drivers operate Red Cross vehicles. A variety of human services agencies, as well as Red Cross and United Way, subsidize the cost of transportation for eligible individuals.

Figure 3. Providers of transportation services for the transportation disadvantaged.

transportation services to support their primary program goals, often because of a lack of public transit service in the area or specific transit service gaps.

For example, local senior centers often provide transportation to and from the center to enable seniors to participate in nutrition programs and other activities. There are usually one or more organizations in a given area that provide residential or day program and employment services to individuals with developmental disabilities or mental retardation; these organizations often provide transportation service to program sites. At the state level, agencies that administer Medicaid and job access or workforce development programs typically provide (either by operating, purchasing, or subsidizing) transportation services that make it possible for clients to access programs and services.

The transportation services a human services agency provides may be open only to its own clients or may also be available to the clients of other agencies.

Community Organizations

Funding organizations like the United Way often provide resources to local agencies that enable them to provide transportation and other services that support United Way's focus areas. In some areas, organizations such as the American Red Cross and veterans' agencies operate transportation services for medical trips and other purposes. Faith-based groups are another source of transportation services, particularly in the area of job access transportation.

TYPES OF SERVICE

The mobility needs of transportation-disadvantaged individuals can be addressed through a wide range of service types and strategies. At one end of the range are efforts to make traditional fixed-route service more attractive or useful for the transportation disadvantaged. At the other end are more indi-

vidualized transportation options such as paratransit service or user-side subsidy programs. Service options and other ways of increasing mobility are described in Figure 4.

SERVICE DELIVERY METHODS

Managing and operating services can also be accomplished in a number of ways. A provider (a public transit system, a unit of local or regional government, a public or not-for-profit human services agency, or a community organization) may own and operate its own vehicles, employ the drivers and mechanics, and manage the system. Alternatively, a provider may contract for service management, service operation, or both. Contractors can include a local public transit system, a public human services agency, a nonprofit organization that

operates transportation service, or a private transportation company.

MODELS FOR COORDINATED SERVICES

As discussed in Chapter 3, coordination can cover a wide range of cooperative efforts among transportation providers. The most comprehensive coordination strategies involve the consolidation of operations and service delivery into a coordinated transportation system. As described in a technical assistance brief written for the Community Transportation Assistance Project (CTAP), there are several basic categories that can be used to describe coordinated systems: the lead agency, brokerage, and administrative agency models (3). However, many variations are possible, based on

Many options are available for increasing the mobility of the transportation disadvantaged, such as the following:

- **Travel training programs** are offered by many transit agencies, sometimes in conjunction with local independent living centers or senior centers, to help seniors or people with disabilities learn to use fixed-route transit service safely and independently. Transit authorities may also give individuals the opportunity to become familiar with a bus in a nonthreatening environment like an agency parking lot or to take a specially arranged test ride in a bus that is not in passenger service.
- **Vouchers, transit passes, and even cash subsidies** are used by some human services agencies. These are given to agency clients so that they are able to use transit service free of charge or for a discounted amount. This is a common method used by agencies responsible for the Medicaid nonemergency transportation and TANF programs.
- **Service routes** tailor service for particular groups of riders like seniors or people with disabilities by operating between key residential areas and popular destinations, such as stores and medical facilities.
- **Deviated fixed-route services** connect residential areas with popular destinations and offer a higher level of assistance for individuals who need it by making door-to-door stops upon request. Deviated fixed-route services are sometimes referred to as flex routes.
- **Demand-responsive, or paratransit, service** operates on flexible schedules and routes and offers a high level of assistance to riders. It usually refers to wheelchair-accessible, dial-a-ride type service using small buses or vans. Riders typically call to request a ride in advance. Service providers usually attempt to group trips for riders with similar trip times, origins, or destinations on a single vehicle in order to make the service more cost-effective.
- **Volunteers** driving private automobiles offer another means of providing service for transportation-disadvantaged individuals. The Independent Transportation Network (ITN) in Portland, Maine, combines the services of 75 volunteer drivers using their own cars with a small fleet of vehicles operated by paid drivers. In another variation on the volunteer driver approach, individuals providing rides can earn credits toward future rides for themselves.
- **Subsidized taxi programs** enable seniors and other paratransit users to make trips with participating taxi providers at a reduced fare, with sponsoring agencies making up the difference between fares and the cost of the trips. Agencies may also set their own eligibility requirements and restrictions on the number or type of trips that will be subsidized.
- **Automobile ownership programs** make private automobile transportation more affordable for individuals with mobility needs. In a number of states, TANF funds are used to support auto financing or vehicle donation programs in order to help transitioning welfare recipients to purchase or lease a vehicle.

Figure 4. Options for increasing mobility for transportation-disadvantaged individuals.

local needs and resources, and many actual coordinated systems are hybrids.

Lead Agency Model

In this type of coordinated system, one agency handles most of the functions associated with the provision of transportation services, such as administration, grants management, scheduling and dispatching, vehicle operations, and vehicle maintenance. Typically, the lead agency is either a human services agency that is responsible for a variety of programs and services including transportation or a nonprofit or other organization that is responsible for transportation services only. In the latter case, the lead agency is often referred to as a pure transportation lead agency.

Vesting responsibility for transportation services with an existing human services agency can be advantageous when the demand or commitment of resources is not high enough to justify the creation of a new transportation lead agency. Use of a lead agency can also lend stability to the coordinated system. The existing lead agency model often works well in rural areas and can be the first step in the creation of a coordinated system that evolves into other models over time.

Brokerage Model

A fairly common approach used in the area of transportation service for the transportation disadvantaged is the use of a transportation broker, an intermediary organization that contracts with a sponsor agency to provide transportation, and in turn subcontracts with a variety of public, nonprofit, or private carriers to actually operate the service. Transportation brokers are sometimes referred to as Mobility Managers. The broker may be a public agency, a private nonprofit organization, or a professional brokerage management firm.

The agencies that choose to participate in a brokerage determine the level and quality of service they would like to obtain and establish their own desired service policies regarding such issues as fares, allowable trip purposes, or degree of driver assistance.

While brokerage by definition involves the centralization of some or all transportation functions, the role of the broker and the specific functions that it will perform can be selected to fit the circumstances of each particular situation.

Core broker functions typically include the following:

- Carrier procurement
- Contract management
- Customer registration
- Record keeping and accounting
- Quality assurance and customer relations

Additionally, the broker may perform the following:

- Eligibility determination
- Scrip/voucher sales
- Trip reservations
- Assignment of trips to providers or vehicle scheduling
- Dispatching
- Provision or procurement of vehicles, maintenance, fuel, insurance or training services
- Drug and alcohol testing
- Information and referral services
- Operation of vehicles

Most brokerages fit one of several models: the centralized, decentralized, hybrid, or partial brokerage. These brokerage types are distinguishable from each other primarily by the roles that the broker plays in trip reservations, scheduling, and vehicle operation.

In the centralized brokerage model, all trip reservations and vehicle scheduling are performed by the broker. Customers of all participating agencies (or agency personnel on behalf of their customers) call the broker to book their trips. The broker then develops schedules for each of the contract providers, choosing the most appropriate and cost-effective provider to serve each trip.

In a decentralized brokerage, the broker performs the basic administrative/management functions such as provider procurement, contract management, customer registration, record keeping, accounting, quality assurance, and customer relations. Each provider is responsible for performing its trip reservations and scheduling.

A hybrid brokerage combines centralized reservations (performed by the broker) and decentralized scheduling (performed by the providers). The broker is responsible for receiving requests for service from customers and assigning trips to providers, who then develop their own vehicle schedules for those trips.

A partial brokerage is characterized by the provision of some direct vehicle operation as well as centralized reservations and scheduling by the broker. In this model, the broker is often a private nonprofit organization or human services agency that is already responsible for providing transportation and related administrative and management services for other agencies as well as for its own customers; as a broker, the organization also purchases some trips from contracted providers to augment the service it operates directly. For example, the broker may purchase trips from taxi operators during peak travel times when its own vehicles are operating at capacity, or during periods of low demand, such as evenings and weekends, when such trips are more cost-effective than those provided on its own vehicles.

Administrative Agency Model

In a coordinated system developed on the administrative agency model, one entity, usually a public agency and most often a transit authority, is responsible for the provision of

coordinated transportation services. This model can be the final stage in the development of a coordinated system that began as a means of providing mobility for human services agency clients and evolved over time into a community transportation system available to the general public.

Variations of this model that incorporate the lead agency and brokerage models are possible. Although the administrative agency has overall responsibility for the provision of service, it can contract with a lead agency or a broker to perform certain functions, or it can act as a broker itself. In all cases, the administrative agency is likely to handle planning, grants management, billing and reporting to participating human services agencies, and possibly the acquisition of vehicles and other equipment.

Coordinating transportation services through an administrative agency can provide more access to public funding from the FTA, state, or local general funds, or dedicated tax revenues. It may provide the highest level of stability of all the possible coordination models and establish transportation as a local public service.

HOW TO LOCATE TRANSPORTATION SERVICES FOR THE TRANSPORTATION DISADVANTAGED IN YOUR AREA

The first step in the process of initiating or expanding coordination efforts is usually to develop or update an inventory of local transportation service providers and organizations that purchase transportation services. This can help to identify gaps and overlaps in existing services as well as potential coordination partners and strategies.

An excellent source of information about transportation services for the transportation disadvantaged is the CTA. The organization's website (www.ctaa.org) is a particularly rich source for most matters relating to the provision and coordination of such services including providers, funding, technical assistance, technology, best practices and much more. CTA can also be reached at (202) 628-1480. If transportation is a new interest for your organization, consider using the resources offered by CTA to increase your familiarity with the terminology and issues associated with transportation service for the transportation disadvantaged. Thus prepared, you can then begin to identify transportation providers in your area.

Information Sources at the State Level

It should be a relatively easy task to locate transportation services for the transportation disadvantaged in any given area, whether it is a city, county, or state. A good place to start is at the state level. Most of the federal funds that are used to support coordinated transportation services are administered by a state agency. Contact the division that is responsible for public transportation in your state's DOT. They will

be able to tell you the systems in the state that receive funding from the FTA, including systems that serve older adults and people with disabilities, rural systems, or systems that are receiving JARC funding. This is best done by phone, e-mail, or personal visit—not all state websites provide this level of detail.

The state DOT may also be able to provide access to two important planning documents that would contain information about various transportation services in the state:

- The Statewide Transportation Improvement Program (STIP), which states are required to submit as a condition of receiving funding from the FTA and other federal transportation funding agencies.
- Many states require community or regional transportation plans for nonurbanized areas. For example, North Carolina requires nonurbanized areas—usually counties or groups of counties—to prepare a Community Transportation Services Plan, which, among other things, addresses the need for, and availability of, human services transportation. In urbanized metropolitan areas, a similar source of information would be found in the Transportation Improvement Programs (TIPs) that are prepared by the MPOs in each area.

Next, contact the departments in your state that are responsible for programs aimed at individuals who are likely to be transportation disadvantaged—older adults, people with disabilities, Medicaid recipients, members of the developmentally disabled or mental health populations, or low-income individuals, for example. State websites typically list all state agencies. Look for departments or divisions that administer the TANF, Welfare-to-Work, Workforce Investment Act, Medicaid, or Older Americans Act programs. These departments may provide or fund transportation services.

In some states, a single department may be responsible for all or most of these programs. In other states, two or more departments are involved. The following are some typical names for health or human services agencies found in states:

- Department of Health and Human Services
- Department of Human Services
- Department of Human Resources
- Department of Social Services
- Department of Labor
- Department of Education
- Department of Aging
- Department of Health and Welfare
- Department of Vocational Rehabilitation
- Department of Children and Family Services
- Department of Workforce Development
- Council on Developmental Disabilities

Most states have websites that will quickly lead you to these departments. In addition, the website of the American Public Human Services Association has links to the key

human service departments in each state: <http://www.aphsa.org/home/StateContacts.asp>.

Another good source of information is the public transportation association in your state. Most states have such an association that includes traditional public transportation systems and specialized or community transportation systems. Some examples are the California Transit Association, Connecticut Association for Community Transportation, Illinois Public Transportation Association, New York Specialized Transportation Association, and Utah Rural and Specialized Transportation Association.

Information Sources at the Local Level

If the area you are concerned about is a county or smaller geographic unit, contact your county and use the same approach described above for states. You should be able to quickly locate transportation services for the transportation disadvantaged, especially if you focus on the departments that fund Medicaid, senior or aging, and employment-related programs. Within a county, contact the same kinds of departments in the major cities.

Finally there may be a number of nonprofit agencies that provide such services. Examples are Easter Seals, Goodwill Industries, American Red Cross chapters, local YMCAs, and churches and charities. These might be located most easily by looking in the appropriate yellow pages (either an electronic or paper version) under such subjects as disabled, handicapped, human services, transportation, mental health, senior services, wheelchair and special needs transportation, and so forth.

Inventorying Providers

Once the agencies providing service have been identified, the next step is to make contact in order to determine the nature of what they provide and their potential interest in service coordination. There are three primary ways to obtain this information:

- Mail surveys
- Telephone interviews
- On-site interviews

Obtaining detailed data from transportation providers, especially those who operate small transportation programs or whose main business is human services, presents a challenge in any initial coordination effort. However, conducting on-site or telephone interviews guided by a detailed survey questionnaire is a very effective method. Sending a copy of the questionnaire to the providers in advance allows them time to prepare, so that the visit or phone call is productive. Discussing transportation services and issues face to face is usually less time-consuming for the provider than completing a lengthy survey, so a greater response can be obtained. Also, this approach typically produces more detailed information

and a fuller understanding of services. A sample questionnaire that could be used as a model when interviewing transportation providers is attached as Appendix B on the accompanying CD-ROM (an abbreviated version is also included).

Whichever method is determined to be most suitable, the information sought should include the following:

- Service area
- Types of individuals served
 - Seniors
 - People with disabilities
 - Human services agency clients
 - Individuals with low income
 - Transitioning welfare recipients
 - Residents of rural areas
 - General public
- Trip purposes
 - Employment-related
 - Medical-related
 - Social services-related
 - General purpose
- Operational data
 - Name of direct or contract operator
 - Number and type of vehicles
 - Types of service offered
 - Days and hours of service
 - Reservations and scheduling practices
 - Ridership
- Funding data
 - Transportation expenses and revenues of the organization
 - Fare or fee charged
 - Funding sources and amounts
 - Funding restrictions
- Unmet transportation needs
 - Clients or people who need transportation assistance but do not receive it
 - Days, hours, or geographic areas in which service is needed
 - Additional trip purposes to be served
- Interest in exploring opportunities for coordination

Providers may also be able to identify other organizations that operate or contract for transportation services.

EXAMPLES OF BEST PRACTICES FROM CASE STUDIES

The case studies illustrate a number of interesting strategies that coordination partners have adopted to deliver service in a coordinated manner or to coordinate operational functions such as trip reservations and scheduling, customer information, fleet management, and technical assistance. Some strategies exemplify new approaches, while others demonstrate that long-standing coordination techniques are still effective.

These best practices are summarized below. More detailed descriptions can be found in the complete case studies in Appendix A on the accompanying CD-ROM.

Other case study subjects are successfully using technology to coordinate operations. More information about those sites is provided in Chapter 7.

Greater Twin Cities United Way

Through its various grants and technical assistance activities, Greater Twin Cities United Way has been testing a number of strategies and models in order to determine the most effective ways to better coordinate service and to improve assistance to the agencies and their transportation-disadvantaged clients.

United Way's goal is a network of four to five experienced, nonprofit transportation providers that are able to provide needed services throughout the region and are supported by services such as centralized driver training and vehicle maintenance.

Dakota Area Resources and Transportation for Seniors (DARTS) and ARC are the first of those experienced providers to participate in United Way's program.

DARTS

DARTS is a United Way affiliated agency that provides transportation service to seniors and people with disabilities in Dakota County, one of the seven counties in the Twin Cities metropolitan area. It operates a fleet of 35 buses and has been in operation for about 30 years. It also provides a number of services for other United Way agencies in the region including

- Vehicle maintenance service (more than 350 vehicles are maintained for 40 to 50 other organizations in a modern, state-of-the-art maintenance facility)
- Maintenance training
- Professional driver training classes (provided to several hundred drivers employed by 25 to 30 organizations)
- Consulting services (in the areas of transit planning, operations, and helping transit collaboratives work together)
- Scheduling software

One of the things that DARTS has accomplished is to develop simplified reservation and scheduling software that is more appropriate for small systems (i.e., those that operate up to 10 vehicles). The software that DARTS uses for its own system is more sophisticated and expensive than is appropriate for many small systems. DARTS therefore developed a much more affordable system that provides capabilities such as a customer and driver database for scheduling and billing purposes but does not include a map-based automated scheduling capability. A license for this software is available for \$2,500, a much lower price than that of a full-scale reservations and scheduling package.

ARC

In addition to operating service for agencies that no longer provide transportation for their clients directly, ARC provides technical and operating assistance to other organizations.

For example, ARC offers the following:

- Technical assistance related to the acquisition of federal Section 5310 vehicles in the county
- Scheduling and dispatching service (for one contractor)
- Backup vehicles and drivers for agencies that are too small to have their own backup capability
- Third-party billing services for its subcontractors, thus saving the small agencies administrative costs and burden

Additionally, ARC is designated by the Minnesota DOT as the operating authority for all agencies in the state that receive state or federal funds for special transportation services. In this capacity, ARC provides training and certification related to driving vehicles, vehicle inspections, vehicle maintenance, and so forth.

King County Metro

King County Metro's CPP is based in the transit agency's Accessible Services Department. CPP expands transportation options for people with disabilities and seniors by developing partnerships between the transit agency and community organizations. Under the CPP, Metro assists organizations in setting up their own transportation programs by providing vehicles and some operating subsidies. Organizations benefit because they can customize their transportation programs to meet their customers' needs. The community benefits because these programs are more cost-effective than Metro's ACCESS Transportation program.

The CPP currently has three different products for agencies in the community, which include AddVANtage and AddVANtage Plus.

Under the AddVANtage and AddVANtage Plus programs, Metro will lease retired ACCESS vans to eligible organizations at no cost and reimburse a percentage of some costs, pursuant to county requirements. The county will also provide a backup vehicle while a van is being maintained or repaired. Organizations are expected to provide their own operators and perform scheduling, assignment of customers, and other operational functions. Organizations must also carry the appropriate insurance and agree to indemnify the county as specified. Organizations are required to maintain trip logs and other records as specified by the county. They also are responsible for providing information to the county to assist with evaluations of the program.

To be eligible to receive vehicle and maintenance support, organizations must submit an application and show that they are regularly providing at least 50 trips per month to people who are ADA paratransit eligible (AddVANtage). To be eligible for vehicle, maintenance, and limited operating support,

organizations must submit an application and show that they are regularly providing at least 100 trips per month to people who are ADA paratransit eligible (AddVANtage Plus).

DuPage County

DuPage County, Illinois, initiated a subsidized taxi service as a pilot program in 1998. The program resulted from a paratransit coordination study conducted for DuPage County and the Chicago area RTA. The study concluded that human services agencies and municipalities could provide improved mobility for their clients and residents by developing a joint taxi program that would augment public transit service provided by Pace, the suburban transit agency. The DuPage County Department of Human Services administers the program on behalf of all participating entities.

The program is primarily aimed at older adults and people with disabilities, although sponsoring agencies have been able to offer subsidies to many other DuPage residents as well. Participation is available through sponsoring cities, villages, townships and human services agencies. The program includes the following features:

- Registration through a sponsor is required.
- Discounted coupons can be obtained through the sponsor. These coupons are worth \$5 toward the cab fare. The typical discount is 50%, although some coupons are provided free of charge to participants in the county's Transportation to Work Program.
- Program participants may ride together and share their coupons for payment.
- Travel is possible 24 hours a day, 365 days a year, anywhere in the county.
- Trip reservations are made through one of nine cab companies and can be made up to 1 week in advance.
- Lift-equipped vehicles are available.

Sponsors include programs such as the DuPage County Transportation to Work Program (for people with developmental disabilities), the DuPage County Health Department Teen Parent Services program, and the DuPage County Access to Jobs Program (short-term assistance for county residents with incomes at or below 150% of federal poverty guidelines who are actively seeking employment or are preparing to do so).

The service initially began by using one taxi company but currently uses nine. The program provides about 35,000 trips per year and involves expenditures of approximately \$310,000 for transportation service. Administration of the program requires the equivalent of one county employee.

ACCESS Transportation Systems, Inc.

In 1978, PAT, which is the Pittsburgh area's public transit provider, received funding from the FTA for a transportation

brokerage demonstration program. The brokerage, which was established in 1979, is managed by ACCESS Transportation Systems, Inc. ACCESS has sponsorship agreements with 120 local agencies, including PennDOT, which provides state lottery revenues for senior transportation, and the County Office of the Bureau of Federal Programs, which is responsible for Medicaid transportation. PAT provides funding for ADA paratransit trips and the local match for the senior transportation program.

For these 120 agencies, ACCESS is responsible for the coordinated provision of approximately two million trips annually through the network of ten for-profit and not-for-profit transportation providers it has under contract. General public customers may also use ACCESS services, but must pay a fare that covers the full cost of their trip.

ACCESS is an example of a decentralized/administrative paratransit brokerage, reservation intake and scheduling being performed by the ten service providers. The ACCESS staff of 35 employees performs several centralized functions, including the following:

- Design and maintenance of the service delivery structure
- Provider procurement and negotiations
- Contract/service monitoring
- Provider training (e.g., management training, passenger assistance training, and training for drug abuse monitoring)
- Reporting
- Accounting (e.g., vendor payments and sponsor invoicing)
- Information and referral
- Eligibility determination
- Customer registration
- Sale of scrip for customers of the brokerage's user-side subsidy program
- Customer information services

Providers are paid on a per hour basis and are assigned to specific zones. Including the administrative cost of the brokerage, the average cost per hour is \$36.00, while the average cost per trip is approximately \$15. Average productivity for the service is 2.38 trips per hour.

SCAT

SCAT is the public transit operator in Brevard County, Florida. Today, SCAT offers a variety of services to the general public, including fixed-route bus service, ADA paratransit service, paratransit service for transportation-disadvantaged individuals, subscription service for human services agency clients, a bus pass program, a Medicaid brokerage, individual trips for seniors provided by volunteer drivers, and a Commuter Assistance Program.

SCAT represents the consolidation of two separate systems—the Consolidated Agencies Transportation Systems (CATS) and the Brevard Transportation Authority (BTA)—which, prior to consolidation, had provided transportation

service to transportation-disadvantaged individuals and the general public, respectively.

In 1970, the Transportation Subcommittee of the Brevard County Community Services Council, made up of a number of human services agencies, conducted a study of available transportation services for transportation-disadvantaged people and developed a transportation plan based on the study's findings. The plan proposed coordination of transportation services, which initially entailed the consolidation and reorganization of existing resources. Many of the coordination recommendations were implemented, which led to the development of CATS in 1974.

Also in 1974, the BTA began providing general public transit service. Over time, BTA ridership declined, while CATS ridership increased significantly. Public support for the transportation services for the transportation disadvantaged provided by CATS grew, while support for general public transportation provided by BTA diminished.

After a performance review by the FTA in the early 1980s, the Brevard MPO worked with the two providers to address and resolve duplication of service and study the feasibility of consolidation. In 1983, a transportation development plan (TDP) was prepared, which included a detailed analysis of both providers, a short-term service integration plan, and a 5-year improvement plan. The MPO adopted the short-term plan in late spring 1983. The service integration strategy was to be tested for 2 years with the goal of total consolidation by 1988.

In 1985, the systems were consolidated, with the Brevard Board of County Commissioners receiving the assets of BTA. A countywide contest was held to name the new system—the winning entry being SCAT.

Reflecting its unique origin, SCAT continues to place a high priority on providing mobility to the transportation-disadvantaged groups that CATS was established to serve.

TOP

The Massachusetts Rehabilitation Commission (MRC) has long recognized the importance of transportation to the self-sufficiency of their clients. In the past, the agency has conducted a number of studies that identified two major barriers that keep people with disabilities from being able to work. One of those barriers is transportation—specifically, finding information about the transportation options that are available and knowing how to navigate the system.

Despite the importance of transportation to their consumers, MRC also believed that a gap exists between transportation and human services providers. Transportation providers are accustomed to focusing on transportation operations and do not always understand the complex issues that affect people with disabilities. In the late 1990s, MRC staff became interested in the idea of Transportation Options Managers (TOM), or mobility managers, and their potential to bridge the communication between human services and transportation pro-

viders. (Note that in this instance, mobility manager refers to a person who identifies travel options for a transportation-disadvantaged customer, much as a travel agent would do for a customer planning a vacation, rather than a transportation broker, which is an alternate definition of the term.)

They recognized that the TOMs could be a centralized source of information for people with disabilities about the transportation services and resources available in their communities. At the same time, TOMs would be able to give MRC staff and the local transportation providers a better sense of the existing unmet need for transportation in local communities. Identifying this need could ultimately help the local providers better design their transportation services and increase coordination activities to meet those needs.

After a year and a half of planning, MRC was able to secure a 5-year, \$1.25 million demonstration grant from the U.S. Department of Education, Rehabilitation Services Administration, to fund their mobility management initiative, called the TOP.

The TOP program is currently in its fourth year, and three local RTAs are involved: the Franklin RTA (FRTA), the Montachusett Area RTA (MART), and Greater Attleboro Taunton RTA (GATRA). These RTAs were selected through a Request for Proposals (RFP) issued by MRC. TOMs are housed at the local RTAs and are experts in both transportation and human services.

In order to help find affordable means of transportation for people with disabilities, the TOMs research the availability of transportation services in their regions, including accessible vanpool and carpool programs, low-cost subscription van programs, Councils on Aging (COAs), car donation and vehicle modification programs, ADA paratransit services, and other public transportation services. The TOMs use a person-centered transportation planning approach to match a person's needs to transportation options available in the community. The focus of this process is to assist people to live and work successfully and independently in their respective communities. TOMs are also active in outreach activities, such as with local human services providers and in public forums.

Cross County Transit

Cross County Transit is a web-based system that tracks requests and schedules for out-of-county nonemergency medical transportation in North Carolina. Centralizing information about scheduled trips not only makes finding transportation easier for individuals, it gives transportation providers more opportunities for grouping trips and improving service efficiency. Developed as a demonstration project with funding from the North Carolina DOT, Public Transit Division, the system is among ongoing efforts by the division to facilitate nonemergency medical transportation for state residents.

The system can help people to find transportation to a medical facility in another county. It consists of a website on

which members of the general public and staff at human services agencies, healthcare facilities, or transit systems can enter trip request information into a database. Regional transportation coordinators check the database periodically and communicate with community transportation systems, which may then choose to coordinate one or more trips with other appropriate transportation providers.

Cross County Transit is envisioned to serve the entire state of North Carolina eventually; however, activities are now focused primarily in two areas—the Piedmont Triad (Winston-Salem, Greensboro, High Point), and Asheville/western North Carolina.

OTHER SERVICE DESIGN RESOURCES

The following documents provide additional information about coordinated service delivery alternatives:

- *Best Practices in Specialized and Human Services Transportation Coordination*, prepared by the Center for Sys-

tems and Program Development, Inc., for the U.S. DHHS and the U.S. Department of Transportation, July 1989.

- *Coordinating Transportation: Models of Cooperative Arrangements*, prepared by EG&G Dynatrend and Community Transportation Association of America for the Community Transportation Assistance Project, January 1992.
- *Coordinating Transportation Resources: States and American Indian Tribes on the Cutting Edge*, prepared by the National Transportation Association of States under contract to Community Transportation Association of America for the Community Transportation Assistance Project, November 1994.
- Jessica McCann, *Medical Transportation Toolkit and Best Practices*, prepared for Community Transportation Association of America's Healthy Partnership Initiative, 2001.

Appendix F, on the accompanying CD-ROM, contains an index of case studies and other guidance on the topic of services and operations.

CHAPTER 5

PROCESSES USED TO PLAN, BUDGET, AND PROMOTE

One of the logical first steps in developing coordinated transportation services for the transportation disadvantaged is planning, which may be difficult to accomplish. Even the initial step of identifying opportunities for coordinating services and the potential benefits that coordination can offer requires established working relationships and communication between multiple agencies with multiple missions, goals, and constraints, which is never an easy undertaking.

Planning for the coordination of transportation services for the transportation disadvantaged must be based on an understanding of the various potential funding sources and programs identified in Chapter 6. Beyond the types of available funding and their eligible uses, it is imperative that service providers and other interested parties also learn about the actual planning processes that precede the awarding or granting of these funds. This can be a daunting task, given the multitude of agencies and levels of government involved in the planning and expenditure of each program's funding, as well as the myriad eligibility requirements inherent in many of these programs.

In today's environment of constrained public budgets and increased competition for available funds, making a strong case for an adequate level of resource allocation to transportation services for the transportation disadvantaged is equally important. This entails educating the public and key parties involved in funding decisions about the benefits of such transportation and of the amounts of funding that are needed for the operation of effective services. Recent experiences, mentioned later, suggest that public information and advocacy efforts are most successful when undertaken by a coalition of interested organizations.

The objective of this chapter is to present transportation service providers and other organizations with several types of information related to coordination planning and decision-making processes and opportunities for advocacy:

- Insight into the planning requirements of transportation funding sources: human services programs that address transportation, state coordination programs, and private funding sources.
- A discussion of political processes in which organizations can become involved in an effort to increase the visibility of transportation issues at the national, state, or local levels.

- Case study examples illustrating best practices.
- Guidance from other coordination practitioners.
- Links to other coordination planning resources.

PLANNING REQUIREMENTS ASSOCIATED WITH FUNDING SOURCES

This section details the planning requirements associated with different types of funding sources that can be used for the provision of transportation service to the transportation disadvantaged—transit funding programs, human services funding programs, and private foundations.

Decision-Making Processes Associated with Funding from Traditional Transportation Sources

The federal government has established planning process requirements, to be carried out at the *regional* level, for projects and services that are supported by federal transportation funds. These requirements offer opportunities for involvement by human services agencies as well as transportation providers and planning bodies. In addition, a number of states have created their own requirements for coordination between transportation providers and human services organizations in the programming of transportation funds. Federal requirements, and a selection of state planning processes, are described below.

Federal Requirements for Planning at the Regional Level

In urbanized areas with populations greater than 50,000 people, federal law requires the establishment of an MPO to carry out the continuing, cooperative, and comprehensive development of transportation plans and programs. The responsibility for carrying out the federal requirements of the MPO lies with its policy board. Membership on MPO policy boards varies from state to state, but almost all consist of a combination of local elected officials, the state DOT, and the RTA. Although MPOs typically do not operate their own transportation systems, by bringing together stakeholders including local elected officials and transit and highway operators, these organizations provide a regional approach to dealing

with an issue—transportation—that transcends municipal and state boundaries. As federal highway and transit funds for a given urbanized area must be programmed through an open process directed by the MPO, these organizations also represent an important step in the flow of a significant and relatively stable source of federal dollars.

Because of these overall responsibilities, MPOs present an excellent opportunity to improve the coordination of services for the transportation disadvantaged. The barriers to mobility that confront transportation-disadvantaged individuals are, like MPOs, regional in nature. Federal transit funding, which is most likely to be relevant to the improvement of service coordination, as well as certain federal highway program funds such as the Congestion Mitigation Air Quality (CMAQ) program, pass through the MPO and can only be spent after being part of approved MPO plans and programs. Additionally, the MPO process is an open one, with high minimum standards for public outreach and participation. It is this open access characteristic of MPOs that represents the strongest argument for human services involvement in the MPO process.

There are several points in the MPO process at which documents must be developed and which provide an opportunity for participation in funding decisions:

- Unified Planning Work Program (UPWP)
- Transportation Plan
- Job Access Transportation Plan
- TIP

Each of these documents, and the processes by which they are developed, are described below.

UPWP. The UPWP is a planning document that programs federal transit and highway *planning* funds. Most of the planning studies programmed through the UPWP process are recommended by the MPO policy board. Public outreach requirements provide opportunities for other interested parties to propose projects. For example, community groups in Boston organized around a plan to analyze the merits of the Fairmount Line, an underutilized commuter rail line that cuts through densely populated Boston neighborhoods with a high proportion of transit-dependent residents. By becoming active in the citizens advisory committee of the MPO, the groups were able to convince board members to allocate federal planning funds to this project.

Unless the interests of human services providers are already represented within the MPO policy board, these organizations must actively seek to increase their involvement. The limited amount of available federal planning funds, combined with a seemingly limitless list of planning concepts, means that MPOs are unlikely to dedicate efforts toward bringing more stakeholders, and therefore planning ideas, into the process.

Transportation Plan. MPOs are required to develop a long-term transportation plan for their region, covering at least a

20-year timeframe, but containing short-term as well as long-term projects and activities. The goal of the Transportation Plan is to foster the development of an intermodal, integrated transportation system that is efficient and effective, provides a means of managing congestion, and helps the region to meet air quality standards. The plan must address both the operating and capital resource needs of the projects it includes.

Intermodalism means that highway, ridesharing, bicycle, pedestrian, and public transportation projects and services are all considered. Public transportation projects can include not only fixed-route bus and rail services, but also flex routes, demand-responsive services, and taxi services, making human services agencies relevant participants in the planning process.

Transportation plans must be developed with the input of elected officials, public agencies, and citizens, and MPOs are required to make draft plans available for review and comment.

Job Access Transportation Plan. FTA will consider an application for a grant from its JARC program only if the projects contained in the application are part of the region's Job Access Transportation Plan and have been reviewed and approved by the MPO as being in accordance with the region's Transportation Plan and included in the TIP.

A coordinated transportation and human services planning process that includes all interested stakeholders must be used to develop the Job Access Transportation Plan. MPOs are normally involved in, if not the lead agency for, the development of regional Job Access Transportation plans that are required at the federal level, giving agencies that are concerned with assisting individuals who are preparing to enter the workforce another reason to become involved with their MPO. Stakeholders that typically participate in the job access planning process include the following:

- Transportation officials
- Transit agencies and other transportation providers
- Agencies administering TANF and Welfare-to-Work funds
- Workforce development organizations
- Other human services providers
- Community and faith-based organizations
- Disability groups
- Public and assisted housing providers
- Child care organizations
- Employers and business organizations
- Elected officials
- Citizens

As with the development of the area's UPWP, nontransportation agencies can more effectively and meaningfully participate in the development of the Job Access Transportation Plan by serving on technical or policy committees of the MPO than by attending public meetings.

The Job Access Transportation Plan must describe the location of welfare recipients and low-income residents (particu-

larly those with disabilities); employment centers and facilities for employment-related activities; and public, private, and nonprofit transportation services. It must also identify transportation gaps that limit the target population's ability to prepare for or find and maintain employment. Projects and services to address those gaps must not only be proposed, but assigned a priority for funding and implementation.

Job access transportation services are typically funded with a combination of federal TANF, Welfare-to-Work, and JARC funds. The planning process associated with use of these funding sources is described later in this chapter.

TIP. The TIP is the document that an MPO uses to program operating and capital funds for expenditure within a 2-year period. The TIP includes all federal highway and federal transit funds to be spent in an urbanized area. Projects selected for inclusion in the TIP must be in accordance with the region's Transportation Plan. Of particular interest to agencies looking to coordinate service for the transportation disadvantaged are FTA's Section 5307 (urbanized area formula grants), Section 5309 (capital investment grants), Section 5310 (formula grants for elderly and the disabled), Section 5311 (rural and small urban formula grants), and JARC funds.

FHWA's CMAQ program is also of interest, as transit service is an eligible use for these funds. Three broad categories of transit programs are eligible for CMAQ funding:

- Service expansion
- Provision of new transit service
- Financial incentives to use existing transit services

However, as with the UPWP, MPOs already face funding constraints when developing their programs. This reality and the requirement that all projects programmed in the TIP be consistent with an MPO's long-range transportation plan suggest that stakeholders interested in pursuing coordination efforts through the MPO process get involved not on a project-by-project basis but with a dedicated, long-term participation effort.

The citizen's advisory committee is the most likely point of entry into the MPO process, although the technical advisory committee and policy boards tend to be closer to the ultimate decision-making process. Involvement at these levels, even if it occurs only through attendance at meetings that are open to the public, serves to heighten awareness of the MPO process and increases the likelihood that transportation-disadvantaged interests will become a focus of the MPO.

Environmental Justice as Catalyst. One recent development that has helped to foster stronger links between human services agencies and MPOs is the federal government's emphasis on environmental justice. Title VI of the Civil Rights Act of 1964 requires transportation planning to be sensitive to past inequities in both the provision of transportation services and the burden of negative impacts from transportation invest-

ments. This new emphasis on environmental justice has been most significant in how it has shaped planning at the MPO level. In an effort to ensure that transportation plans and programs satisfy Title VI requirements, MPOs have brought a variety of stakeholders to the table. In most cases, these stakeholders were not previously involved in transportation planning. This has typically resulted in stronger links with organizations and advocacy groups that focus on minority or low-income populations; as well, there has been increased involvement on the part of human services organizations in the planning process.

The emphasis on Title VI has also affected the type of analysis that is conducted as part of the planning process. Title VI requires that the location of low-income and minority populations in each region be identified and that the impacts of projects and services included in the regional Transportation Plan and Job Access Transportation Plan on those groups be evaluated. For example, a Title VI analysis might calculate the length of time low-income residents without cars would have to travel to an employment center with entry-level jobs by bus as compared to the length of time residents with cars would have to travel. Transportation options for the low-income group to reduce that inequity could then be proposed.

Barriers to MPO Involvement. The examples previously cited suggest that planning requirements related to welfare reform and job access programs and recent federal guidelines regarding environmental justice and Title VI can contribute to an increase in interaction between traditional transportation agencies and human services agencies. Although these relationships can help to foster an increase in sensitivity to the transportation concerns of transportation-disadvantaged individuals on the part of the traditional transportation officials and planners, human services agencies may still not be pursuing traditional federal transportation funding streams through the MPO framework. In interviews with MPO representatives, several reasons for this lack of involvement were identified.

One reason is that the MPO process is often unfamiliar to entities that have not historically been involved. Human services agencies, as relative newcomers to the process, may need more time and experience or outreach and education before they are comfortable with the variety of funding programs and the strategies for securing this funding for the transportation disadvantaged. Transportation organizations should be aware that they may need to make a more aggressive effort to involve human services agencies in the transportation planning process, by making direct personal contact with agency representatives, actively soliciting input on agendas and tasks, extending invitations to human services agencies to sit on MPO committees, holding meetings at convenient times and in accessible locations, and simplifying processes for providing input whenever possible.

A second explanation is that the human services agencies may choose to convey their needs and priorities through MPO

forums and committees in which they participate and then to rely on the MPO to advocate for programs to meet these needs. In Thurston County, the MPO/Intercity Transit coalition has greater access to legislators and decision makers than the human services agencies do, so it has made sense for the coalition to carry the human services transportation agenda on some state issues. Thurston County planners also suggested that because MPOs typically are the keepers of so much data on transportation and demographics, they are naturally able to provide more of the contextual information for certain grant programs.

Perhaps the most significant barrier to increased participation in MPO activities on the part of the human services agencies is their own resources. In the Central Massachusetts Regional Planning Commission (CMRPC), not only does the Environmental Justice Committee represent a very small portion of participating human services agencies' workload, it also represents a very small piece of the MPO's overall planning and programming efforts. Although the members of the committee have come together in the past around project-based issues of interest before the MPO, planners in central Massachusetts question whether the amount of time any of the agencies would have to devote to being a full participant in the MPO would be the best use of their limited resources.

State Requirements for Planning at the Regional Level

Despite the large amount of federal funding that could be spent on enhanced coordination efforts, a high level of human services participation in the MPO process does not appear to be common. There are, however, some examples of human services agencies integrating themselves into the MPO structure in order to improve coordination. In Florida, state statutes mandate each county's coordinating board to advise their MPO on any issue pertaining to the provision of transportation services to the transportation disadvantaged. Although the coordinating boards are not full voting members of the MPO, they are still able to bring the concerns and needs of the transportation-disadvantaged population to the attention of the MPO board.

In Arizona, human services planning is a mandated function of the four MPOs and two Councils of Government (COGs). The Arizona Department of Economic Security, the state agency that administers aid to low-income families, requires COGs and MPOs to plan for the use of a portion of each region's Social Services Block Grant (SSBG). Currently, MPOs receive roughly 24% of their region's SSBG funds, which are signed over to the MPO by the local governments that receive them. MPOs have staff specifically responsible for overseeing human services planning with these funds.

Planning efforts in Arizona and Washington offer examples of transportation planning processes that have been used

to develop transportation services for transportation-disadvantaged individuals and to seek funding for those services.

MAG, the Phoenix MPO, has its Human Services Committee submit recommendations to the MPO board as to how to spend the funds. These recommendations are the product of a needs assessment, a public outreach process, and input from experts in the areas of programs for older adults, people with disabilities, and low-income individuals. Although the Human Services Committee has recently made recommendations that included spending a portion of the SSBG funding on transportation for older adults, most of this block grant money goes toward the core missions of the respective human services agencies.

There are examples, however, of greater MAG involvement in pursuing transportation funds specifically for the transportation disadvantaged. The MAG Human Services Committee has worked with Maricopa County to try to secure Welfare-to-Work funding for transportation. Although this effort did not succeed, MAG has also worked with the county to pursue FHWA Surface Transportation Program (STP) funding for an older adult transportation initiative. These efforts included convening a planning group and hosting a national conference on the issue. The MAG Human Services Committee also has the responsibility within the MPO for reviewing all grant applications for the FTA Section 5310 funds.

In Washington State, coordination is encouraged but not required, resulting in a variety of results and lead agencies. In Thurston County, the home of the state's capitol in Olympia, the lead agency for coordination efforts has been the MPO, Thurston County Regional Planning Commission, in conjunction with the RTA, Intercity Transit. Their collaborative effort to take the lead on coordination was born of the increased emphasis on environmental justice in the late 1990s. After realizing that they were not doing all they could to incorporate input from segments of their population, they built a coalition including the County Health Department and applied for a JARC grant. The coalition won the JARC grant and has continued to meet on a monthly basis.

The funds from this grant went primarily to two initiatives. The first was a program to provide transportation to a Native American reservation in the rural southern half of Thurston County. The service is a fixed-route deviation bus system that connects to Intercity Transit's routes. The second initiative funded with the JARC grant is called Village Vans. The MPO coordinated with the county housing commission to identify low-income housing areas and then provided the vans for work trips. Driving was done by WorkFirst (the Washington welfare system) clients as a job training program. Three of the original four drivers now have full-time positions driving for other companies. The MPO estimates that the Village Vans program has also assisted 70 people find and get to work between its startup in February 2002 and the end of 2002. In this project, the coalition found it easier for Intercity Transit to take the lead in dealing with the grantor, FTA, as they were more familiar with the regulations and process.

Decision-Making Processes Associated with Funding from Human Services Sources

In addition to support from transportation funding programs, providers of transportation service for the transportation disadvantaged often rely on funding from human services organizations. The processes used to make decisions about the use of those funds are discussed below.

Outside of U.S. DOT, the most significant sources of federal funding that can be used to support transportation services are located within DHHS and DOL. Three of the most significant funding programs include Medicaid, Title III of the Older Americans Act, and TANF. These and other sources of federal funds are discussed in Chapter 5. The planning requirements that are typically associated with these federal programs are described below.

In terms of their structure, federal programs follow a number of different models that affect how funds flow from the federal level to states and localities. In most cases, however, a requirement to submit a plan for the use of the funds to the federal agency is a condition of receipt, and programs and services must be developed and implemented in accordance with that plan.

Some programs make funds available to a designated state agency, either according to a formula or on a discretionary basis, to support eligible programs and activities. The Medicaid program follows this model. The federal Centers for Medicare & Medicaid Services (CMS) allocate federal Medicaid funds to the designated Medicaid agency in each state, by formula, for use in providing health care services for individuals and families who meet certain income and resource requirements.¹ Each state may design its own Medicaid program, but it must comply with federal guidelines and requirements and be documented in a Medicaid State Plan that is approved by CMS.

The TANF program also follows this basic model. Formula funds are distributed in the form of block grants to the designated welfare agency in each state by the federal Office of Family Assistance (OFA) in the Administration for Children and Families (ACF). When the legislation establishing the TANF program was passed in 1996, each state was required to submit a TANF plan to the OFA that outlined how the state would implement welfare reform.

However, the planning process for the use of TANF funds for transportation can be slightly more complex. From the outset of welfare reform, transportation was seen as a crucial element in the process of moving individuals from welfare into the workforce and was included as an eligible use not only for TANF dollars but also for welfare-to-work grants from the U.S. DOL and was the purpose of JARC grants from the FTA.

TANF funds for transportation are often combined with U.S. DOL welfare-to-work funding or FTA JARC funds or both. These three agencies jointly issued guidance in 1998 and 2000 regarding the use of funds for transportation services (4, 5, 6). Planning often involves an interagency coordinating committee to provide guidance on transportation initiatives, as well as other components of welfare reform programs. This approach has been taken by nine states: Alabama, Idaho, Kansas, Minnesota, Mississippi, Montana, Oklahoma, Pennsylvania, and Wisconsin. New Jersey and Ohio have ensured coordination between transportation and human services agencies through a mandated local job access planning process.

In another structural model, programs distribute funds to a designated state agency and hold the state agency responsible for distributing funds to eligible local recipients and ensuring that policy and administrative requirements are met. For example, Title III funds from the federal Administration on Aging (AoA), which may be used to provide transportation and other support services for seniors living outside of care facilities, are distributed to the agency on aging in each state. The agency on aging then passes funding along to designated Area Agencies on Aging (AAAs). In the case of Title III funds, a state plan must be approved by the appropriate regional AoA office, and an area plan must be approved by the state agency on aging before the funding can be used to implement programs and services.

State Coordination Planning Processes

Planning for coordination of transportation services for the transportation-disadvantaged population has evolved in a variety of ways across the country. States with formal coordination programs or policies may require participants to follow certain planning or decision-making processes or may oversee planning and budgeting at the state level to ensure that coordination guidelines are followed. In Florida, for example, coordination legislation requires Local Coordinating Boards (LCBs), assisted by designated official planning agencies, to identify local service needs and prepare annual plans for addressing them. Maine and North Carolina both require local coordinating bodies to develop periodic plans that identify needs within the area. In Maine, the plans are reviewed by the state DOT when acting on funding requests; in North Carolina, a state-level interagency advisory council is responsible for ensuring that state and federal transportation funding is spent in accordance with the plans developed locally.

The following paragraphs summarize the experience of six states: Florida, Kentucky, Maine, Michigan, New York, and Washington.

Florida

As described in Chapter 4, the Florida Commission for the Transportation Disadvantaged designates and oversees LCBs

¹ In some states, the state Medicaid agency distributes funds to local agencies, such as county departments of social services, for use in providing health care services. State agencies responsible for programs serving individuals with developmental disabilities or mental retardation may also receive Medicaid funds from the state Medicaid agency.

in each of the state's 67 counties. The LCB selects a local Community Transportation Coordinator (CTC) to coordinate the provision of transportation for people who are transportation disadvantaged (seniors, people with disabilities, low-income individuals, and children at risk). Under Florida law, local and state agencies are required to participate in the coordinated transportation system if they receive local, state, or federal funds for the transportation of transportation-disadvantaged people. A variety of state human services agencies contract directly with each CTC.

Another key feature of the Florida program has been the involvement of service providers and groups representing the interests of older adults. Despite some difficulties in its start-up phase, providers of services to seniors began to see the benefits of a coordinated system and the increased purchasing power of pooled resources.

Each county has a designated CTC that is responsible for administering the coordinated transportation. In 2003, 40% of CTCs are AAAs or other agencies that provide transportation and other services to seniors. This makes sense, as they bring the largest pool of money to the coordinated system. Elderly groups are also part of a very sophisticated political network in the state, which has translated the needs of the transportation disadvantaged into a powerful issue for the Florida legislature. (It is not uncommon for legislators to receive 700 e-mails from this network of supporters before votes affecting service coordination.) More government agencies are beginning to take the lead as CTCs. The executive director projects that within 10 years all CTCs will be government agencies.

Kentucky

In 1999, Kentucky mandated transportation services to be coordinated through 15 different brokerages that covered all areas of the state. The motivation for coordination was that, although RTAs were in place statewide to receive 5311 and 5310 funds, there was evidence that Medicaid and TANF transportation funds were being abused by both recipients and providers. The brokerage system was viewed as a means by which to control costs, which were skyrocketing for the two programs.

The Kentucky DOT was selected to lead the effort due to its experience in managing transportation statewide. It originally contracted with two other cabinet-level state departments, Families and Children (DFC) and Human Services. DOT has set the rates for transportation providers in each region. These rates differ to reflect the varying size of the coordinated transportation market in each region. The broker can receive only up to the cap rate, which is a fixed dollar amount per population of eligible recipients. The brokers contract with a variety of providers: nonprofits, taxi companies, and even neighbors who volunteer rides.

DFC subsequently opted out of the system because it was unable to pay the cost of transportation for its TANF clients.

Its costs were high because of the high number of trips taken by its clients to jobs, interviews, and other work-related destinations. As of 2003, DFC gives a fixed amount to each client for transportation.

Maine

In the 1970s, Maine passed a law requiring the DOT, Department of Human Services, and the former Department of Mental Health and Mental Retardation to submit annual operations plans to coordinate planning of transportation services. The latter two agencies were consumers of the vast majority of purchased transportation in the state. Maine DOT designated Regional Transportation Providers (RTPs) in nine regions. Some of these are single-county entities, while others cover multiple counties. Various funding sources are funneled through the RTPs, although initially only funds for seniors and mental health clients were included. Although the structure was initially created for planning purposes, coordination has begun to occur on the operating side as well.

RTPs differ not only in geographic scope but also in function. Some are multipurpose agencies, such as the York County Community Action Corporation. The other RTPs are single-purpose agencies that exist solely for the provision of transportation, such as the Regional Transportation District in Portland. In all cases, regional planning agencies are responsible for the actual planning.

In the last 10 years, there has been more of an emphasis on expanding existing programs and moving into new areas. Maine Medicaid changed transportation from an administrative service to a medical service in order to obtain a higher reimbursement rate from the federal government. Administrative costs require a 50% match from the state, while medical costs require a lower match from the state. The RTPs were very involved with this policy change.

Medicaid services are coordinated at the RTP level. In order for RTPs to have Medicaid ID numbers, they must be full-service providers with an agency vehicle, a volunteer driver program, and arrangements in place for purchasing transportation from taxis. Medicaid is by far the largest program, funding about 80% of York's annual transportation budget, for example. There are 30 to 40 funding sources in all. The biggest programs after Medicaid are Child Development Service (Maine preschool program for special needs children), Mental Health/Mental Retardation, and senior programs.

The Maine Transit Association (to which all RTPs belong) provides a forum for all members to share experiences and ask questions. The small size of the state is an asset in coordinating service, as the York County CAC coordinator knows each of her eight colleagues on a first-name basis. Although MTA does not have any regularly scheduled political conferences or events, members work together effectively when there is relevant legislation before the legislature. MTA also publishes a directory containing information on programs

and contacts for the benefit of their member organizations and state legislators.

Michigan

In Michigan, coordination of service has largely occurred through Project Zero, the state's Welfare-to-Work program. Three state-level agencies—Family Independence, Michigan Career Development, and Michigan DOT—work together to coordinate transportation services for former welfare recipients. Family Independence and Michigan Career Development utilize a portion of their TANF funds, and the DOT matches this contribution. The local partners or departments of these three agencies submit an annual plan of service to the state.

At first, the match provided by Michigan DOT in Project Zero represented such an increase in resources that the total program funds were able to cover all requests for client transportation services. In recent years, as the two nontransportation agencies have seen a decrease in their TANF budgets, policies have been revised. Rather than hold transportation spending constant and cut back in other areas, the state agencies decided to distribute TANF funds to the local agencies and let them determine what share to spend on transportation (with the DOT still matching whatever level of spending the locals decided upon). One year, the DOT used its federal JARC funds as the match for the TANF funds in 10 regions where transit agencies had submitted winning proposals for the JARC funds.

Although coordination is not mandated by the state in Michigan, the DOT does require its transit providers to coordinate. In some rural areas of the state where transit service is not provided, other entities have had to step forward to assist in coordinating service. In Ottawa County, for example, a nonprofit called Life Services System (LSS) has contracted with some agencies to purchase rides from human services providers, taxi companies, and nearby fixed-route transit providers. LSS first became involved in transportation in 1992 after being awarded a Department of Education demonstration grant to provide rides to employment for 3 years. In the years since that grant expired, LSS has continued to broker transportation service for a variety of agencies: Community Mental Health, the DOT (for services for older adults and ADA clients), and Project Zero. A concern voiced by LSS about these sources of transportation funds is that they are not assured from year to year. The DOT funds could be a more stable source, but because the DOT funds can typically be distributed only to transit providers, LSS is not able to rely on them as an ongoing funding source.

New York

The New York DOT structures its transit programs to encourage coordination at the local level. County governments

are the ultimate decision makers, so a wide variety of services has resulted. One unique characteristic in New York is that the state budget for transit is \$1 billion, almost equal to the amount spent on highways. While the overwhelming majority goes to the Metropolitan Transit Authority in the New York City region, the rest of the state sees a greater amount of dedicated transit funding than comparable areas in most other states do.

One aspect of service coordination that is handled at the state level is employment transportation. The DOT has recently signed an MOU with the state's DOL to oversee the provision of transportation service through the TANF program. The exception to this MOU is the auto program of Labor's TANF program, through which the state assists clients in financing and purchasing private automobiles. The DOL is still responsible for overseeing the eligibility of their clients.

Local agencies have attempted to coordinate Medicaid with other programs. Although these attempts may have created savings in Medicaid spending, they may have caused increases to the budgets of other programs. According to the state's director of mobility services, the biggest weakness with attempts at coordination is that there is no established method for determining the costs of the Medicaid program. In addition, in 2002 the governor signed an initiative that increases the pool of eligible recipients of Medicaid in the state. Increased eligibility for Medicaid means increased eligibility for Medicaid transportation, so costs are going up and outpacing any Medicaid-related savings achieved through service coordination in counties where it has been attempted.

Although rural counties in New York have been more interested in coordination (some have coordinated service between Medicaid, TANF, and veteran services), the state's director of mobility services identified the multitude of varying federal requirements for each program as a disincentive. In an extreme example, because of the different federal requirements for eligibility, one county makes use of 15 different color-coded tokens to differentiate riders funded by the various programs.

Washington

In Washington, state legislation stops short of mandating coordination. Instead, the legislation refers only to the "intent" to coordinate services. The ACCT has been undertaking efforts, through its biannual report to the legislature, to push for more of a mandate for coordination. The ACCT administrator identified the lack of high-quality data as the biggest challenge that increased support for coordination faces in Washington. Without complete and reliable data on ACCT's efforts at coordination, it has been very difficult to demonstrate the program's effectiveness to the legislature.

In the absence of a legislated mandate, the state's regions have been free to pursue approaches to coordination that best suit local realities. In Spokane, human services and transportation providers have coordinated data collection efforts.

Some rural regions have shared maintenance facilities. In Mason County, there is a coordinated call center. The lead agency also varies by region. In Thurston County, it is the MPO. In other areas, it is the public transit agency. The ACCT administrator admitted that the lack of a mandate often means that coordination works best in regions where there is a sufficient amount of “peer pressure.” Some areas are much more successful than others, with the most common denominator in success being the presence of a strong leader at the regional level. The variety of approaches means that Washington can serve as a real laboratory for the effectiveness of different methods. However, the reliance on strong leadership is discouraging, because it sends the message that the individuals involved—rather than the particular approach—determine success or failure.

One statewide success that the administrator pointed to is ACCT’s efforts at working with the state in the application for a recent JARC grant. After the state decided to submit the application, as opposed to several individual agencies doing so, ACCT played a key role in ensuring that the application appropriately addressed coordination. WorkFirst (Washington’s TANF/Welfare-to-Work agency) put up the matching funds. ACCT receives money from the grant through an earmark, and the funds are used to ensure that the JARC-funded transportation services are part of a coordinated plan.

In Washington, Medicaid operates on a regional brokered system. Some of the regional brokers of Medicaid service want to be involved in transportation coordination. However, according to the ACCT administrator, the state’s Medical Assistance Administration is reluctant to relinquish control of the funds. The ACCT administrator suggested that this is a different scenario than in many other states, as it is the state and not local entities that has prevented coordination from including the Medicaid program.

Planning Processes Used by Private Funding Sources

Sources of private funding also undertake planning processes to establish agendas, determine priorities, and provide the basis for funding decisions. Local chapters of the United Way, for example, typically conduct a comprehensive needs assessment every 3 years to identify areas in which local organizations believe needs of target populations are not being adequately met. The needs assessment can include research conducted with focus groups and surveys of service providers and human services professionals; those consulted usually include individuals from nonmember as well as United Way member agencies. Transportation providers and human services agencies with an interest in transportation services for the transportation disadvantaged can have input into the priorities established by the local United Way

chapter by participating in needs assessment surveys if asked and can keep abreast of current priorities by requesting a copy of the most recent needs assessment report.

As described in Chapter 6, private foundations may be a source of funding for projects designed to increase the coordination of transportation services for the transportation disadvantaged. There are two aspects of funding from foundations to be aware of as planning for a transportation coordination initiative proceeds.

First, foundation funds are generally awarded to programs or projects that advance the foundation’s central goals, usually based on responses to a competitive solicitation. Researching a particular foundation’s goals and current priority areas should be an initial planning task.

Another important planning step should be to identify the types of organizations that are eligible to receive grants from a particular foundation. Because public agencies may not be eligible, a not-for-profit coordination partner may need to take the lead role and submit the grant application. (As an added incentive for working collaboratively, foundations often view grant applications from partnerships or collaboratives more favorably than those from single entities.)

Most foundations have specific guidelines for grant-seeking organizations—these guidelines vary by foundation. However, grant-seeking organizations might expect to provide some or all of the following pieces of information to foundations:

- The purpose of the project for which funds are being requested
- Problems and issues the proposed project will address
- Estimated project budget
- A list of other sources of secured and potential funding for the project
- Detailed project schedule and implementation plan
- Plans for evaluating program accomplishments

If foundation funds will be sought for a transportation coordination initiative, transportation providers and other participants should ensure that planning for the initiative includes these items.

POLITICAL PROCESSES

Support and funding for coordination of transportation services at the federal, state, and local levels can be a crucial factor in the success of local coordination efforts. Equally important is the degree of local public support for public transportation and transportation services for the transportation disadvantaged. The following sections discuss ways in which organizations that are pursuing coordination can work for advantageous policies, programs, and funding sources to enhance their efforts and create public awareness of, and

support for, the benefits that coordinated transportation services can offer.

National Opportunities for Political Involvement and Tools for Advocacy

As described below, local organizations can become involved in efforts to shape transportation policy at the federal level and build general support for public transportation through industry associations and by following new federal legislative developments and proposed funding programs.

CTAA

CTAA is a national, professional membership association of organizations and individuals involved in community transportation, which is defined by CTAA as transportation service that addresses the transit needs of the entire community, including both the general public and special populations. CTAA conducts research, provides technical assistance, offers educational programs, and serves as an advocate in order to make community transportation available, affordable, and accessible. CTAA has over 1,400 members, including many providers of transportation services for the transportation disadvantaged and human services agencies. As mentioned earlier, CTAA is an excellent resource for organizations that have an interest in, or questions about, the provision of transportation services.

CTAA is undertaking efforts to work for new policies and programs in support of coordination of transportation services. One aspect of this work is the organization's ongoing lobbying efforts in Congress with regard to reauthorization of the federal surface transportation authorization bill, due in fiscal year 2004. This effort, which CTAA refers to as its National Transit Renewal Program, aims to secure improvements for CTAA member organizations that are consistent with CTAA's four basic principles:

- **Investment:** Greater federal investment for all community and public transportation programs
- **Innovation:** New and innovative strategies for community and public transportation
- **Security:** Providing communities of all sizes the capacity to respond to natural and national disasters
- **Building New Partnerships:** All regulatory burdens placed on the community and public transportation field must be examined to ensure necessity and efficiency and serve as a foundation for a new partnership between the federal government and public and community transportation

CTAA's success in translating these goals, in particular the last one, into federal policies through its National Transit Renewal Program will be an important factor in determining

the resources available to continue to further coordination efforts through traditional transportation funding sources.

CTAA is also a source of information and tools that local organizations can use to contact elected representatives about issues that affect public transportation providers, especially those that operate community-based or specialized services. For example, CTAA tracks federal legislative developments and posts information and suggested actions on its website, www.ctaa.org. A recent alert concerned the filing of the Maximum Economic Growth for America through Rural, Elderly and Disabled Transit Investment Act, designed to increase resources for transit service and other transportation services for the transportation disadvantaged in nonurbanized areas. A Community Transportation Local Action Campaign included sample e-mails and letters on topics such as reauthorization of the federal transit legislation, service for seniors, and medical transportation; related background materials; Congressional addresses and phone numbers; and advice from experienced transportation managers. All materials and guidance were available on CTAA's website.

Another way in which CTAA is working to encourage improved coordination efforts is through its annual meeting. For example, a key component of CTAA's 2003 Expo was the National Summit on Transportation Coordination. CTAA used this forum to look carefully at the barriers and create an environment where frank discussion of the topic could occur. One product of the summit was the development of a list of recommendations to be forwarded to federal agencies whose missions are relevant to the issue of improved coordination for the transportation disadvantaged.

National Consortium on the Coordination of Human Services Transportation

The National Consortium, formed in 2003 by the Coordinating Council on Access and Mobility² and supported by several federal agencies, is made up of a number of nonprofit organizations that represent providers of human services transportation, users of such services, or state and local governments. The Consortium's goal is to disseminate information about the coordination of transportation services to policymakers as well as to professionals in both the transportation and human services fields. For example, a survey of Medicaid nonemergency transportation in each state was released in December 2003. Planned products include legislative briefs on coordination and a coordination guide for state legislators and other officials.

More information about the Consortium is available at www.ctaa.org/ntrc/is_coordination.asp.

² A federal interagency group formed in 1986 as the Joint Department of Health and Human Services/Department of Transportation Coordinating Council on Human Services Transportation.

United We Ride

In late 2003, four federal departments—DOT, DHHS, DOL, and Education—introduced a new human services transportation coordination initiative entitled United We Ride.

United We Ride includes five components designed to make coordination of human services transportation easier and more rewarding for states and local communities to pursue.

A Framework for Action: Building the Fully Coordinated Transportation System is an assessment tool that can be used by states or community organizations to determine how well local transportation services measure up to the ideal of a fully coordinated transportation system.

A Framework for Action includes a series of modules for both communities and states, each of which focuses on one aspect of a fully coordinated human services transportation system. Modules for local communities include the following:

- Making Things Happen by Working Together
- Taking Stock of Community Needs and Moving Forward
- Putting Customers First
- Adapting Funding for Greater Mobility
- Moving People Efficiently

State-level modules cover the following topics:

- Making Things Happen by Leadership and Partnership
- Taking Stock of State Needs and Moving Forward
- Putting Customers First
- Adapting Funding for Greater Mobility
- Technology Moves Coordination to the Next Level
- Moving People Efficiently

Each module features a question that is central to the module's topic, statements to help participants rate state or local progress, and a standardized rating scale. A facilitator's guide provides step-by-step assistance with the process of bringing a group together and using the tool to conduct an assessment.

A Framework for Action is available at www.fta.dot.gov/CCAM/United_We_Ride.html.

The other four elements of United We Ride are awards to states that have achieved successes in human services transportation coordination, a National Leadership Forum on Human Services Transportation Coordination (held in February 2004), a coordination grant program for states, and technical assistance activities for states and local communities known collectively as Help Along the Way.

At the National Leadership Forum held in February 2004, five states received the first State Leadership Awards: Florida, Maryland, North Carolina, Ohio, and Washington.

APTA

APTA assists public transportation providers in much the same way as CTAA does for community transportation and

human services organizations (although some transportation providers belong to both organizations). Several recent APTA initiatives may be of interest to organizations pursuing coordination of transportation services for the transportation disadvantaged or working to move transportation issues to a higher priority on local planning or funding agendas.

Communities in Motion. National market research has determined that the theme of “community benefit built on personal opportunity” is a meaningful way to promote public transportation, even to those who do not need or use it. Based on a research effort that included a national telephone survey and detailed discussions with small groups, only about one-half of the public is familiar with the public transportation services in their local areas; about one-quarter has no knowledge about them. Moreover, people tend to be more concerned about other issues than about public transportation. However, when public transportation is promoted in a way that emphasizes the mobility, freedom, and access to opportunities that it can provide for all members of a community, even nonsupporters become more favorably disposed toward it (7).

APTA has developed an outreach campaign based on this theme, known as Communities in Motion, and a toolkit for transit systems and other organizations to use as they plan and conduct Communities in Motion activities. While some of the information in the toolkit specifically applies to transit service, many of the activities, events, and graphics could be used with equal success to increase awareness of transportation services for the transportation disadvantaged, coordination issues, and achievements.

The stated goals of the campaign, to quote APTA's website (8), are as follows:

- Build public support for public transportation by increasing awareness of how public transportation improves quality of life—providing opportunity, freedom, mobility and access for all citizens.
- Increase appreciation for public transportation's contributions to communities.
- Recognize elected officials who have been supportive of public transportation initiatives.
- Reach out and involve local groups and individuals that have a vital interest in public transportation's local, state and federal legislative goals.
- Communicate the importance of investment in public transportation.

APTA's website also contains an online version of the toolkit. It includes the following:

- Communication tools, providing facts and message points about the impact that public transportation has on communities, for use in speeches, press releases, and discussions with local elected officials.
- Suggested activities and community events.

- An official Communities in Motion logo, with instructions for duplicating and using the logo in a number of different applications.

The home page for Communities in Motion is <http://www.apta.com/CIM/index.html>.

APTA Access and Legislative Committees. Several APTA committees have established subcommittees that focus on coordination issues. The APTA Access Committee has formed a Coordination Subcommittee, which keeps abreast of developments in coordination initiatives at the federal level between DHHS and FTA. The Coordination and Sustainability Subcommittee of APTA's Legislative Committee also tracks relevant developments at the federal level, such as the recent study on transportation coordination conducted by the General Accounting Office. In addition to reporting to their sponsor committees on the status of relevant agency and legislative activities, these groups help to develop industry responses to federal actions related to coordination, share information with APTA members and other interested organizations, and formulate recommended strategies for enhancing coordination efforts.

Legislative Conference. Each year in March, APTA sponsors a legislative conference during which attendees can hear updates on legislative developments, participate in the development of APTA's legislative agenda, and call on their own Congressional representatives to discuss transportation achievements and issues of concern.

Public Transportation Partnership for Tomorrow. APTA also participates in Public Transportation Partnership for Tomorrow, referred to as (PT)². Composed of transit authorities, state DOTs, transit associations, and businesses, the aim of (PT)² is to highlight the benefits that public transportation generates, build support for public transportation services at all levels, and increase public transportation funding at the federal level. Similar to the outreach campaigns of APTA and CTAA, (PT)² provides legislative alerts, news bulletins, educational materials, and other information on its website, www.publictransportation.org. The (PT)² site can also be accessed through APTA's website.

Proposed Federal Programs and Judicial/Legislative Developments

In addition to the state and regional opportunities to fund coordination efforts discussed earlier in this section, recent years have produced a series of federal initiatives, court decisions, and legislation that address, at least peripherally, the needs of the transportation disadvantaged. Several of these are described in Chapter 5. Coordination of transportation services is not identified as a specific objective of any of these

programs or decisions. However, in many cases they target the same population groups as those served by the agencies attempting to further the cause of coordination, suggesting that these agencies may have an opportunity to tap into new funding streams that may be created.

Opportunities for Political Involvement at the State Level

Transportation and human services organizations can also become involved locally in transportation policy development. Efforts to pass state and local ballot initiatives for transportation service funding offer an excellent opportunity for coalition-building and advocacy, even if the main purpose of the initiative is not to advance coordinated services.

State Transit Associations

At the state level, one of the best ways for a local organization to participate in public transportation policy development and coalition-building is by becoming involved with that state's transit association. Typically made up of transportation providers and human services agencies (with transportation suppliers and vendors often involved as associate members), state transit associations provide opportunities such as the following:

- Networking with peers at periodic meetings and conferences.
- Presenting unified positions on possible actions to federal and state legislators.
- Participating in events that highlight public transportation's contribution to local communities.

State and Local Ballot Initiatives

In recent years, there have been numerous transportation funding ballot measures at the state and local level. In 2002 alone, there were 9 statewide and 32 local or regional ballot questions to fund transportation projects. Only in a few measures, however, was there a specified component dedicated to specialized or coordinated transportation.

According to the Surface Transportation Policy Project (STPP), the use of direct ballots to fund transportation marks a significant change from the traditional method of financing, away from user fees approved by the legislature (primarily gasoline taxes) and toward voter-approved general revenue taxes, such as sales taxes and bonds (9). The proposed funding source for nearly one-half of the 2002 ballot questions (20 of 41) was a local sales tax. Other proposed funding sources included property taxes, bonds, or some combination of these sources.

The STPP concluded that the following are among the keys to successful ballot initiatives:

- Creating as broad as possible public involvement in the initial development of a transportation measure.
- Specifying projects and their benefits to voters, rather than following a “trust-us” approach.
- Matching the benefits to those who will be paying the costs.

The third key seems crucial in understanding the relatively greater success that local measures have had compared to regional and state measures. In general, the statewide and regional referenda concentrate the benefits in certain areas, i.e., certain voters, while spreading the costs across the entire area. When the statewide and regional ballots have spread the benefits across the voting area, they have had a greater tendency to be less specific with the benefits or timetables for improvements. On the other hand, as described below in two successful transportation ballot measures, local initiatives are more likely to be able to provide benefits to a large portion of the voters and specify those benefits.

Miami-Dade County, Florida. In Miami-Dade County, Florida, 66% of the voters approved the People’s Transportation Plan in the November 2002 elections. The funding mechanism for the plan is a one-half-cent increase in the county sales tax. Its proposed service improvements included the following:

- Nearly doubling the Miami-Dade Transit Agency’s bus fleet, from 700 to 1,335 vehicles
- Expanding the municipal circulator program
- Using minibuses on all new neighborhood and municipal circulator bus routes
- Adding 3,000 transit jobs

The organizers of the ballot measure pointed to the broad range of public participation prior to the election:

- 100,000 hits on their website (www.trafficrelief.com)
- 2,000 attendees at two transportation summits
- 80 public meetings
- “Thousands of meaningful suggestions” to provide input to the plan

Alameda County, California. In Alameda County, California, over 81% of the voters approved Measure B in November 2000. This measure proposed to fund a wide range of transportation programs totaling \$1.4 billion with a one-half-cent increase in the local sales tax. Included in the \$1.4 billion is \$149 million for paratransit, 11% of the total.

After the failure to renew a sales tax in 1998, the sponsors of that measure tried to create a broad coalition of support for transportation funding. The STPP report states the following:

Groups representing the homeless and the working poor featured prominently in the negotiations over spending categories and percentages. Social justice advocates argued persuasively that if they were going to support a regressive tax that their clients would have to pay as a significant portion of their overall income, then the tax should support transportation services that would help connect low income individuals with jobs and services (9).

Measure B also included provisions for the creation of both a citizens’ advisory committee and a citizens’ watchdog committee. The watchdog committee reports directly to the public rather than the county government and is charged with issuing an annual report that includes information on the expenditure of funds and the completion of projects.

EXAMPLES OF BEST PRACTICES FROM CASE STUDIES

As Table 3 in Chapter 3 shows, a large number of the organizations and systems that were the subject of case studies plan transportation services for members of transportation-disadvantaged groups (or make transportation-related decisions) in consultation with their coordination partners and other interested stakeholders. Several case study subjects stand out as examples of innovative or comprehensive planning processes.

In the Phoenix area, MAG spearheaded an extensive outreach effort so that a wide range of stakeholders could contribute to the development of the region’s action plan to improve mobility options for older adults. After facilitating the creation of the plan, MAG is now overseeing implementation of its 25 recommended and prioritized strategies. A key activity for MAG is helping community groups to incorporate senior mobility issues into their programs and to identify new program and partnering opportunities. An ongoing stakeholders group provides guidance and assistance as implementation of the strategies proceeds.

The Greater Twin Cities United Way has made transportation a focus since a 1999 survey of six Vision Councils identified transportation as either the number one or number two barrier to United Way programs and services for constituents. While the United Way has tested a number of coordination strategies as part of its Transportation Alternatives Initiative, several of its planning efforts are worthy of note here. First, United Way followed up on its survey of Vision Councils with a web-based survey of transportation programs, aimed at identifying the amount expended on transportation services for the transportation disadvantaged in the region and assessing the potential for coordination. Second, the organization has partnered with the Center for Transportation Studies at the University of Minnesota to conduct two transportation conferences. The conferences provided an opportunity for numerous state and local public and nonprofit agencies to gather and discuss transportation needs, barriers, and potential solutions.

Finally, THE CENTER and the Humphrey Institute of Public Affairs at the University of Minnesota are helping United Way to evaluate its pilot transportation projects and assess the results they have achieved.

For more detail on each of these efforts, see the full case studies in Appendix A on the accompanying CD-ROM.

ADVICE FROM PRACTITIONERS

The points listed below have been compiled from comments made by the transportation and human services providers and state officials interviewed as part of the case studies described above, as well as from other case study subjects. These lessons offer guidance from experienced organizations related to the groundwork that is necessary for a successful coordination initiative—working with coordination partners, creating effective coalitions, and planning and evaluating coordination activities.

- It is important to include all of the entities involved early in the planning process, so that they have a stake in the success of the system. Additionally, things will go more smoothly if policy issues are anticipated and discussed early on.
- Choose coordination partners carefully. Pick those who show a clear willingness to change the way they have traditionally done things.
- Have the right people at the table at the right time. It greatly slows down and complicates the coordination process if the people at the table are not able to make appropriate decisions when needed.
- Define goals and objectives clearly at the beginning. This serves to focus attention and energy and helps keep the process from wandering off track.
- Building trust is critical and can take time. Be prepared to meet and discuss issues of concern to coordination partners until satisfactory solutions can be identified. Another strategy is to make sure that the benefits of a more coordinated system are readily visible to all the parties.
- Establish an effective coalition early. It takes time to identify the major players and get them involved. The activities of the coalition should also be supported by adequate planning and research; action must be balanced with careful consideration of the consequences. Elected officials and other key decision makers should be approached only when the coalition has assembled all the facts to document transportation needs and issues and requests for support or assistance.
- Enlist the support of local elected officials. This can be especially helpful in efforts to obtain funding for coordination initiatives.
- Although proposed programs that affect the provision of transportation services for the transportation disadvan-

taged (such as the New Freedom Initiative and legislative decisions such as the Olmstead decision, which are discussed in Chapter 6) may not have dedicated sources of funding, enhance opportunities to benefit from these initiatives by becoming familiar with the legal framework and by building coalitions with other potential beneficiaries.

- The broader the coalition organized around a funding effort and the more specific and wide-ranging the benefits to be achieved by a new funding measure, the more likely it is to succeed. This suggests the value of involvement in such efforts to broaden public awareness of, and support for, public transportation services of all types, including those that serve the transportation-disadvantaged population.
- Foster commitment to coordination throughout each participating agency. It is not enough to have commitment from the top if middle managers are opposed or resistant or if unwritten rules or status issues that may deter coordination efforts are not addressed (e.g., the status or pay of a manager may be based on the number of vehicles he or she manages). Nor is it enough to have middle management commitment if top management is not interested or has other priorities.
- Focus on improvements that can be created by a few people but that will benefit many. Make sure everyone has a specific mission and a budget to make it happen. Focus on short-term improvements such as communications tools (listservs and websites, for example), and data management software to simplify record keeping and reporting.
- For long-term systemic changes, start small and test the concept before broadening the scope. Start by thinking about the desired system improvement, then determine what changes are needed to achieve it. Develop a better understanding of technical and political issues before developing more formal systems for coordinating riders and resources.

OTHER COORDINATION PLANNING RESOURCES

Other resources that can provide information and guidance related to planning, decision making, and advocacy include the following:

- Access to Jobs—Planning Case Studies, prepared by the Office of Planning, FTA, U.S.DOT, Washington, DC, September 2001.
- Coordinating Transportation Services: Local Collaboration and Decision-Making, prepared by Creative Action, Inc. for Project ACTION, Washington DC, May 2001.
- Innovative State and Local Planning for Coordinated Transportation, prepared by the Volpe National Transportation

Systems Center for the Office of Planning, FTA, U.S.DOT, February 2002.

- Job Access Planning: Challenges and Approaches, prepared for the FTA by the BRW Consulting Team, May 2001.
- Planning Guidelines for Coordinated State and Local Specialized Transportation Services, prepared by the

Coordinating Council on Access and Mobility, Office of the Secretary, U. S. DHHS, and the FTA, U. S. DOT, December 2000.

See Appendix F, on the accompanying CD-ROM, for a guide to case studies conducted as part of previous research efforts by topic area, including Planning and Building Coalitions.

CHAPTER 6

FUNDING SOURCES

Fortunately, there are many sources of funding that may be used to support the provision of transportation services for transportation-disadvantaged individuals. Federal transportation and human services agencies provide a level of assistance that has been estimated to be as high as \$10 billion annually (10). Many states, in addition to administering federal funds for transportation services, make funds available to transportation providers from sources such as sales taxes, motor fuels or vehicle taxes, or lottery revenues. At the local level, funding sources for transportation services for the transportation disadvantaged may include revenues from general or special taxes or grants from foundations or other private organizations.

The number and diversity of funding programs, however, may make the identification of suitable funding sources difficult. Moreover, the regulations attached to some programs impose restrictions on eligible recipients, riders, or trip purposes; prescribe planning processes; or set requirements for local matching funds. Such constraints may limit their usefulness to some transportation providers.

To aid organizations that may be considering coordination or are looking for sources of funding for an ongoing effort, this chapter has three sections:

- **Types of Funding:** Describes the types of funding that are typically used to support the provision of transportation services for the transportation disadvantaged, from federal, state, regional/local, and private sources. Funding methods, eligibility, and requirements are also discussed in this section as appropriate.
- **Identifying Funding Sources:** Provides guidance for identifying funding sources to fit your organization's particular needs.
- **Practitioners' Advice and Other Resources:** Lists other resources for information about relevant funding programs.

TYPES OF FUNDING

Federal Funding Programs

There is a wide array of federal funding available for public transportation services, either in their own right or indirectly as an important ingredient of a nontransportation program's

primary goals. For example, funds from FTA are generally used to fund public transit services, while Medicaid funds from the CMS primarily support medical services, but may also be used to fund transportation services needed to get Medicaid recipients to those services.

CTAA and ESPA in their 2002 compilation of such programs found 70 different programs in 15 federal departments and independent agencies that could be used to fund community transportation, defined as "transportation services that address the transit needs of an entire community, including the needs of both the general public and special populations" (11). The following summary relies heavily on the CTAA/ESPA compilation, supplemented where appropriate from other sources such as information from funding agency websites and previous research reports.

The CTAA/ESPA compilation separated federal funding programs into three categories:

1. A program that routinely addresses or supports community transportation services
2. A program that has been used, in at least a few instances, to support community transportation services
3. A program that could support such services but does not have a documented history of such support

With several exceptions, programs in the first category account for the great preponderance of the funding most likely to be used for coordinated transportation services. These 20 programs are summarized in Table 4.

Agency Programs

Although all the funding programs provide the potential for funding public transportation services, they may differ in a number of important respects, as noted in Table 2 and the following paragraphs.

Funding Methods. The CTAA compilation identified six basic funding methods or styles:

1. *Formula or Block Grants.* Funds are allocated on a formula or block grant basis to states or other public agencies. Such funding can be categorical or block in nature.

TABLE 4 Major federal funding sources for transportation services

Program Name	Funding Method^a	Total FY 2003 Funding^b (millions)	Eligible Uses^c	Eligible Recipients^d
Department of Education				
• Vocational Rehabilitation Grants	Formula/block grants	\$2,481.0	O	PB
Department of Health and Human Services				
• Supportive Services and Senior Centers (Title III-B)	Formula/block grants	\$357.0	C/O	NP/PB
• Alaskan Native/Native Hawaiian Elders (Title VI)	Subcontracts	\$25.7	C/O	TR
• Head Start	Subcontracts	\$6,537.9	C/O/T	NP/PB/TR
• TANF	Formula/block grants	\$16,489.0	O	PB
• Medicaid	Formula/block grants	\$144,842.9	O	FP/NP/PB/TR
Department of Labor				
• Senior Community Service Employment Program (Title V)	Solicited grants	\$445.1	A/O	NP/PB
• Workforce Investment Act Programs	Formula/block grants	\$5,630.3	O/T	PB/TR
Department of Transportation				
• Federal-Aid Highway Program	Formula/block grants	\$31,178.0	A/C	PB
• Federal Lands Highway Program	Other	\$706.0	A/C/T	PB/TR
• ITS Program	Solicited grants	\$225.0	A/C/T	FP/NP/PB/TR
• Transportation and Community and System Preservation Program	Designated/ earmarked	\$25.0	A/C	PB
• JARC Program	Designated/ earmarked	\$125.0	C/O	NP/PB/TR
• National Transit Planning and Research	Other	\$49.1	T	FP/NP/PB/TR
• Nonurbanized Area Formula Transit Grants (Section 5311)	Formula/block grants	\$223.4	A/C/O	NP/PB/TR
• Over-the-Road Bus Accessibility Program	Solicited grants	\$7.0	C/O	FP
• Statewide Transit Planning and Research	Subcontracts	\$11.6	P/T	PB
• Transit Capital Assistance for Elderly/Disabled (Section 5310)	Formula/block grants	\$84.6	C	NP/PB
• Transit Major Capital Grant Program (Section 5309)	Designated/ earmarked	\$2,841.0	C	PB
• Urbanized Area Formula Transit Grants (Section 5307)	Formula/block grants	\$3,199.9	C	PB

Source: *Building Mobility Partnerships: Opportunities for Federal Funding*. Community Transportation Association of America. March 2002.

^aAn explanation of the funding methods listed is given in the text

^bFunding shown is for the total program, not just for transportation. For many programs, transportation is a relatively minor component.

^cEligible Uses: C = capital; O = operating; A = administrative; T = technical; P = planning.

^dEligible Recipients: PB = public body; NP = nonprofit; FP = for-profit; TR = tribal entity.

Categorical grants have a narrow range of eligible uses that permit funds to be used only for specific, narrowly defined purposes, e.g., for transportation operating expenses. Block grants have a broader range of eligible uses that address a general rather than a specific problem area, e.g., the TANF program that allows funds to be used for many different kinds of expenses as long as they are in support of the overall goals of the program. Organizations that wish to participate in this type of funding generally have to contact the state or public agency that administers these funds. An example of this type of grant is the nonurbanized area formula transit grants (Section 5311) that are allocated to states for support of rural public transportation services.

2. *Solicited Grants.* These funds are awarded on a discretionary basis, often through a competitive solicitation process. The federal agency usually announces the availability of such funds by posting a Solicitation for Grant Application (SGA). Examples are some of the Workforce Investment Act grant funds administered by the Employment and Training Administration of the U.S. DOL.
3. *Designated/Earmarked.* These funds are usually earmarked by members of Congress as part of the legislative process. Even though earmarked by Congress, it is often necessary to apply to the appropriate federal agency through a defined grant application process. To obtain such funding, organizations should contact their Congressional delegation. Examples are the Section 5309 major capital grants for transit administered by the FTA of the U.S. DOT.
4. *Subcontracts.* Funds can only be obtained through subcontracts, interagency agreements, or partnerships with existing grantees. Funds provided for transportation under the Head Start program of the DHHS are an example.
5. *Other.* A simple categorization of this program's funding is not possible—additional information may be obtained from the administering agency. An example is funds awarded under the National Transit Research and Planning Program of the FTA.
6. *Loans.* Funding is through federally sponsored loans. Loans provided by the Small Business Administration are an example.

Eligible Uses. The various programs have a variety of eligible purposes for which the funds can be used. For example, some programs fund only capital expenses such as the purchase of buses or facilities. Other programs may fund only operating expenses such as driver salaries and fuel costs, or expenses such as administration, planning, or technical assistance. Some programs allow a great deal of flexibility as long as the use is in furtherance of the program's central goals.

Eligible Recipients. The funding programs allow a variety of types of recipients. Most often, the recipient must be a

public body such as a state, municipality, or transit authority. Sometimes grants can be made to nonprofit agencies or community organizations. In addition, the initial recipient can often provide funds for transportation purposes through contracts with nonprofit or for-profit service providers.

In general, the programs provide funds to the suppliers of the transportation service. In some instances, however, funding is provided directly to the users of the services in the form of vouchers, transit passes, and so forth that can be used to pay for rides on public transportation or by taxi.

Planning Requirements

Some funding programs require only the planning that goes into preparing a good grant application. Other programs require participation in an elaborate planning process. For example, as discussed in Chapter 5, most projects funded by the FTA must be included in either a metropolitan area's 3- to 5-year TIP or a STIP. These plans are produced by a federally required planning process coordinated by either the MPO or the state, a process that involves local governments, transportation authorities and providers, and other important stakeholders including the public.

Matching Requirements

Most federal funding programs require local matching funds. However, the amount of the required match can vary greatly. Funding provided by the FTA typically requires at least a 20% local match. Sometimes all or part of the local match can be in the form of in-kind services rather than in cash. Some programs do not require matching funds.

Federal Efforts to Overcome Funding-Related Barriers to Coordination

The wide variety of funding types, eligible uses and recipients, and matching and planning requirements among federal funding programs creates a challenge—it can be extremely difficult to develop a coordinated transportation system involving several agencies, multiple funding sources with varying program requirements, and different kinds of riders. However, many service providers are finding ways to surmount the barriers to such coordination, and many federal and state funding agencies are making strong efforts to eliminate them. The following are some recent actions taken at the federal level in this effort.

Joint Efforts in Welfare Reform. An excellent example of addressing barriers at the federal level is the effort by the U.S. DHHS, DOL, and DOT to make it possible for states, tribes, and communities to respond to the transportation challenges of welfare reform. This effort involves three specific

funding sources that can be used to address the transportation needs of individuals entering the workforce: (1) the TANF block grant program of DHHS; (2) the Welfare-to-Work (WtW) program of DOL; and, (3) the JARC grant program administered by the U.S. DOT. The agencies issued joint guidance on how these three programs can be used in combination to provide transportation services.

States may use TANF block grants to finance transportation and other support services that will make it easier for welfare recipients to find and maintain employment or help to achieve other goals of the welfare reform effort. In its JARC Grant Program, the FTA makes it clear that service and funding coordination is required. The use of a coordinated human services/transportation planning process and financial commitments from both human services providers and transportation providers are factors in FTA's evaluation of grant applications for these funds.

Formal Coordination Policies between the FTA and the Administration on Aging. In January 2003, the FTA and AoA executed an MOU designed to increase affordable mobility for older Americans by encouraging coordination between the transportation services supported by each agency's funding programs.

The objectives which the two agencies have agreed to work toward include the following:

- Promoting awareness of the transportation needs of older adults.
- Gathering information about existing and innovative transportation services and coordination models.
- Providing technical assistance and training to state and local agencies to encourage the implementation of promising coordination strategies, including the use of ITS technologies.
- Conducting outreach to other national, state, and local entities to identify issues of concern, possible solutions, and future activities.
- Coordinating funding for transportation and aging-related organizations so as to encourage coordination of transportation services and development of innovative ways of addressing mobility needs.

Executive Order on Human Services Transportation Coordination. In February 2004, President Bush issued an Executive Order on Human Services Transportation Coordination, reasserting the federal government's commitment to improved mobility for transportation-disadvantaged citizens and more efficient use of transportation resources. The Executive Order establishes a new Interagency Transportation Coordinating Council on Access and Mobility, composed of representatives of the U.S. DOT, DHHS, and DOL; Departments of Education, Veterans Affairs, Agriculture, Housing and Urban Development, and the Interior; and the Attorney General and Social Security Commissioner.

To further its goals of eliminating duplication and overlap among federal transportation programs and services, facilitating use of the most cost-effective services available within existing resources, and developing policies and procedures to enhance transportation services, the Council will identify laws, regulations, and procedures that facilitate coordination as well as those that hinder it; recommend changes to streamline and coordinate federal requirements; and assess agency and program efforts to reduce duplication and provide the most appropriate, cost-effective transportation services.

New or Proposed Federal Funding Opportunities

From time to time, new funding programs are established that complement the long-standing sources of funding for transportation services for the transportation disadvantaged. Other programs and legislative decisions, which are not supported by funding, may also touch upon coordination issues or indicate areas of future federal priority.

In addition, legislative reauthorization of the transportation funding programs administered by agencies of the U.S. DOT, which typically occurs at 5-year intervals for most major programs, can lead to changes in funding levels, priorities, and administrative requirements.

A few recent funding and policy developments, as well as reauthorization proposals, are discussed below.

Advanced Technologies. A promising new federal program in regard to the coordination of transit services concerns operational tests of advanced technologies in rural transit service. The FTA, DHHS, DOL, and U.S. Department of Agriculture are jointly funding grants to local transit systems in rural areas to implement advanced technologies and test their performance and usefulness in transit service.

Grants will fund use of advanced technologies to demonstrate and evaluate innovative approaches to integrating Advanced Public Transportation System (APTS) technologies (also referred to as ITS technologies for transit, or Transit ITS) and available information technology systems to better coordinate subsidized transportation services among multiple transit operators in rural areas. Eligible recipients include community groups and public and private transportation providers currently developing, operating, coordinating, or brokering rural transit services. Community Access Program grantees may also apply, as may consortia or partnerships of eligible parties.

The FTA is serving as the lead agency in the administration of this program.

CTAA's Community Transportation Development Fund. CTAA offers financial assistance through a loan program, the Community Transportation Development Fund, to provide financial and technical assistance to various public transportation service providers, suppliers, and manufacturers. This

fund is flexible and available to develop new products for the special needs of potential borrowers in the public and community transportation field. Negotiable loan financing is offered through the following products:

- General fund financing
- The Transit Small Business Fund
- Micro-loans for transit software and hardware
- Transit operating loans
- Transportation and Railway Facilities Fund
- Insurance and self-insurance funds

New Freedom Initiative. A new federal program that should be noted is the New Freedom Initiative, first announced by President Bush in February 2001. This program, included in the administration's proposal for legislation to reauthorize federal transportation funding programs, is part of a nationwide effort to remove barriers to community living for people with disabilities.

The U.S. DOT requested authorization in the amount of \$145 million in FY 2004 for the transportation component of the New Freedom Initiative. Funds would be distributed to states on a formula basis for the development and implementation of transportation services designed to increase access to jobs and related services for people with disabilities.

FTA has developed an internal working group to develop these programs. The Office of the Secretary, the FHWA, and others participate. Consultation with advocates for the transportation disadvantaged and other federal agencies has taken place to discuss program development and implementation.

Olmstead Decision. The U.S. Supreme Court ruled in 1999 (*E.W. & L.C. v. Olmstead*) that providing services for people with disabilities in an institutional setting while failing to provide those same services in a community setting is a violation of the Americans with Disabilities Act. Most states have formed task forces and commissions to assess what needs to be done to comply with *Olmstead* and many have already developed *Olmstead* plans. Although the Court's decision has much more direct implications for the provision of human services agencies' core mission services, some states have looked at transportation as a means to comply with the ruling.

In Missouri, for example, the state's *Olmstead* plan recommends additional subsidies for the statewide paratransit system, OATS, so that the system can serve all people with disabilities regardless of age. This recommendation is one of several developed by the state to address the *Olmstead* goal of "ensuring the availability of community-integrated services." Additional information on Missouri's progress is available on the state's Department of Labor and Industrial Relations website at <http://www.dolir.mo.gov/>. Other states have also identified increasing accessible transportation options as a component of their *Olmstead* plans, with recommendations including the provision of transportation (other

than Medicaid-funded trips) from general revenue and the extension of public transportation service hours.

Ticket to Work. Another federal program with potential implications for coordination is Ticket to Work. This program is the centerpiece of the Ticket to Work Incentives Improvement Act of 1999. The program is under the authority of the Social Security Administration (SSA). The SSA contracts with national, state, and local service providers to become Employment Networks (ENs). SSA beneficiaries with disabilities are eligible to receive tickets that can be used to obtain rehabilitation and employment services or a job from any EN of their choosing. Any qualified state or local agency or private entity that assumes responsibility for the coordination and delivery of training/employment services is eligible to be an EN. ENs are then reimbursed by SSA for achieving predetermined results with beneficiary ticket holders.

The focus of the Ticket to Work program is primarily job training and the development of career paths and goals. The program does list transportation assistance, however, as one of the possible responsibilities that an EN can assume. This may provide an opportunity to target the market for coordinated services, particularly as the Ticket to Work program expands in scope and funding. At this point the program has only been implemented in 33 states, with the remainder to be included in 2003.

Reauthorization of Federal Funding Programs

Reauthorization is the term used for the renewal of federal laws that permit funds to be spent for particular purposes or programs. Reauthorization of the Older Americans Act occurred in 2000, after a delay of several years beyond the expiration of the previous version. Reauthorization of the Personal Responsibility and Work Opportunity Act, the legislation passed in 1996 that reformed the federal welfare system and created the TANF block grant program, is currently underway. The legislation that contains authorization for all U.S. DOT programs, TEA-21, expired on September 30, 2003, but has been extended several times by Congress. At the time this report was prepared, legislation reauthorizing the transportation programs was about to be taken under consideration by a Congressional conference committee.

The changes that can be brought about by reauthorization can be significant. Authorized levels of funding may increase or decrease, existing programs may be consolidated, new programs may be created to address current priorities, and administrative requirements may be streamlined or revised.

It is important for transportation providers and human services agencies to keep up to date on a number of items: the reauthorization schedules of relevant pieces of legislation, issues that are being debated, reauthorization proposals and analysis, and opportunities to comment on proposed legislative

changes. The easiest way to stay informed is to identify key pieces of legislation that govern the funding programs that support your transportation services and regularly check the websites of the federal agencies that administer those programs, as well as those of transit and human services industry associations and other stakeholders.

State-Level Funding Programs

As mentioned earlier, many of the main federal funding programs that support transportation services distribute funds to states, often by formula, to pay for eligible services and programs, oversee compliance with federal requirements, and make grants to eligible local recipients. DOTs and departments of human services are the primary sources of funding for transportation services for transportation-disadvantaged individuals.

This section first provides a brief description of the major federal programs that, as administered by the states, supply much of the funding that is used to support transportation services for the transportation disadvantaged. Selected examples of innovative state programs that encourage coordinated transportation services for the transportation disadvantaged are then presented. A more comprehensive listing of selected state funding programs is provided in Appendix C on the accompanying CD-ROM.

Federal Programs Administered by State and Local Agencies

The primary sources of federal funding typically used to support transportation services for the transportation disadvantaged include Medicaid, various transportation programs administered by the FTA, the TANF program, and Title III of the Older Americans Act. An overview of each of these funding programs is provided below.

It is important to note that states may administer the same federal program in very different ways. While the federal government has established broad guidelines for these programs that state government agencies must follow, it grants the state agencies the flexibility to develop the specific program parameters that will best meet local needs.

Medicaid. Title XIX of the Social Security Act of 1965 established the Medicaid program as a joint effort on the part of the federal and state governments to ensure health care services for individuals and families who meet certain income and resource requirements, or who belong to other needy groups. A critical component of achieving this goal is the provision of transportation services that allow Medicaid recipients access to health care services.

CMS, part of the federal DHHS, oversees the Medicaid program. CMS issues general program guidelines and requirements, but each state is responsible for the design of its own

Medicaid program, including such components as eligibility standards; the type, amount, duration and scope of services to be provided; rates of payment for services; and administrative procedures.

Funds are allocated to states on a formula basis and are distributed to a designated state Medicaid agency. Medicaid agencies are usually located in state departments of human services; health services; health care planning, administration or financing; public health services; medical services; social services, or public welfare—they may have Medicaid or Medical Assistance in their titles.

The federal share of the cost of medical services (including transportation necessary to ensure access to those services) may range from 50 to 83%. The nonfederal share of Medicaid expenses is typically provided by state or county funds.

In addition to supporting nonemergency medical transportation, Medicaid is a significant source of funding for organizations that operate day programs and other types of services for individuals with mental retardation or developmental disabilities. Such organizations often provide transportation so that clients are able to attend programs. Service may be provided with agency-owned vehicles driven by program staff or contracted to a local public, not-for-profit, or for-profit transportation provider. Transportation is usually one element of the services that are covered by the Medicaid funding the organization receives for a particular client (typically a set rate per day that the client attends the program). Budgets and funding for transportation services are not typically separate from those of the other services the organization operates.

Examples of approaches states have taken to the provision of Medicaid nonemergency transportation are provided in Figure 5.

FTA's Section 5310 Program. This program, which is administered by state DOTs, authorizes capital grants to private nonprofit organizations to assist in providing transportation for the elderly or people with disabilities. Section 5310 funding provides up to 80% of all costs for equipment, with a 20% match from nonfederal sources. Vehicles can be obtained by a wide range of agencies serving elderly or disabled clients.

FTA's Section 5311 Program. The Non-Urbanized Area Formula Program, or Section 5311, makes funds available to rural and small urban areas with populations under 50,000. The apportionments are made directly to individual states and administered by the state's DOT. These funds may be applied for either capital or operating purposes, providing federal funding for up to 80% of capital projects and 50% of operating projects.

Transportation and the TANF Program. Government initiatives to reform welfare policies have led to a new emphasis on transitioning welfare recipients from federal assistance to viable self-employment. Recognizing that

State Medicaid agencies provide transportation services in a number of different ways. Some continue to purchase trips directly from qualified, authorized transportation providers (that may be for-profit, nonprofit, or public entities) on a fee-for-service basis. Other approaches include managed care models, brokerages, and coordination with public transit and human services agencies.

Over the past 5 or 10 years, more states have implemented managed care approaches to the delivery of health care services. Some of those states, including Arizona and New Mexico, hold managed care organizations responsible for obtaining transportation services and reimburse them on a fee-for-service or capitated basis. In a Medicaid program using a capitation rate, managed care organizations are reimbursed a set amount that is based on a rate per Medicaid recipient per month; the amount is agreed upon and paid in advance and does not change regardless of the number of recipients that actually receive transportation service. The managed care organizations, in turn, typically contract with transportation providers and pay for service either on a fee-for-service or capitated basis. Under a managed care system, states also have the option of excluding transportation from the services that a managed care organization is required to provide or including it only for certain Medicaid recipients or geographic areas.

According to a survey conducted in 2003 for the National Consortium on the Coordination of Human Services Transportation by the American Public Human Services Association, 21 states use brokers to manage their Medicaid transportation services. Some brokers are professional brokerage management firms (as in Connecticut and Georgia). State Medicaid agencies may also contract with local or regional public transportation providers to perform brokerage services; Massachusetts, Oklahoma, Oregon, and Rhode Island use this approach. Human services agencies and other nonprofit organizations may also serve as brokers, as they do in Vermont and Washington. Brokers may be responsible for transportation of Medicaid recipients in a designated region or throughout the state (as is the case in Oklahoma, Rhode Island, and Utah, for example). Brokers typically contract with a number of transportation providers and may also utilize the fixed-route services provided by the local transit agency or operate their own vehicles. For each Medicaid trip, the broker identifies the most appropriate and cost-effective provider, bills the Medicaid agency, and reimburses the provider. Use of a broker often results in improved service quality, better record-keeping, and lower costs (particularly if the broker performs centralized reservations and scheduling). For more information about brokerages, see Chapter 3.

State Medicaid agencies also coordinate with public transportation providers by subsidizing use of fixed-route bus and rail services for Medicaid transportation. The most widely known example of a Medicaid bus pass program is in operation in Miami-Dade County, Florida. Administered by the Miami-Dade Transit Agency, the program has resulted in significant annual savings for Florida's Medicaid program.

Figure 5. State approaches to Medicaid transportation purchases.

transportation barriers are among the most significant to preventing a successful transition to employment, the TANF program allows significant federal funds to contribute to removing transportation barriers. Specifically, the TANF program has designated the following as appropriate uses of these funds for transportation, according to DHHS's website (12):

- Provide transportation allowances to cover incidental expenses and participation-related expenses for unemployed families.
- Provide transit passes or tokens.
- Arrange with another agency to use its buses or vans or share in the costs of purchasing transportation services.
- Invest in reverse-commute projects and other local initiatives to improve the existing transportation network so that needy parents can access jobs.
- Reimburse clients for mileage, auto repairs, or auto insurance to facilitate finding employment and job retention.
- Contract with a private organization or service to refurbish previously owned cars and provide the cars to TANF recipients or provide financing support that enables recipients to purchase a car.
- Subsidize costs of transporting needy children to child care.

However, certain restrictions do apply to the use of TANF funds. Funds must be used only for programs and activities that further the goals of the TANF program, which include the provision of transportation service for use by eligible TANF recipients for work and work-related activities.

TANF funds may not be used to subsidize the use of such transportation services by non-TANF individuals. If non-TANF individuals use a service provided with TANF funds, or if the TANF agency participates with another agency in the provision of transportation services, only the expenses associated with eligible TANF recipients' use of those services may be allocated to the TANF program.

TANF funds also may not replace other federal funds that normally would be used to provide those services. If funds from another federal agency, such as FTA, are currently used to provide transportation services that will be used by TANF recipients, TANF funds may not be substituted for those other funds.

Funding Programs That Support Transportation for Older Adults. The AoA, another DHHS agency, is responsible for the administration of a number of programs authorized by the Older Americans Act. These programs support a variety of services for seniors, especially those who are frail or vulnerable, including home-delivered and congregate meals, preventive health care, in-home services, senior centers, transportation, ombudsman services, insurance and benefits counseling, and community service employment. AoA also funds research, training, and demonstration projects.

Title III of the Older Americans Act of 1965, which authorizes state and community programs, supports programs and services that are intended to aid active seniors and those who are at risk of losing their independence.

Title III funds are awarded to each state's designated Agency on Aging on a formula basis, according to the state's senior population (people aged 60 years and older). Each Agency on Aging in turn distributes funds to the state's designated AAAs for the development and implementation of programs and services to meet the needs of seniors in each local area or region. Funds are allocated among AAAs according to intrastate funding formulas that are subject to approval at the federal level. Factors such as geographic distribution of seniors and degree of economic and social need are taken into consideration in the development of these formulas.

Individuals aged 60 years and older are eligible for services provided with Title III funds, with priority given to individuals with the greatest economic or social needs; low-income minority seniors and older individuals living in rural areas are targeted in particular.

Fees may not be charged for services, but seniors must be given the opportunity to make voluntary contributions toward the cost of the services they receive. The prohibition against fees was retained in the 2000 amendments to the Older Americans Act.

States must provide funds to match the federal dollars in the following proportions: 25% for state administrative activities, 25% for administration of the state plan, and 15% for supportive services and multipurpose senior centers.

Supportive Services (Part B) is one of the types of programs and services that are funded under different parts of Title III. Title III-B covers supportive services in several categories, including access services, one of which is transportation. Transportation is often delivered by nonprofit or for-profit service providers. This is typical of other types of services for seniors that are developed and implemented by state and area agencies on aging and financed with Title III-B funds.

Amendments to the Older Americans Act—Coordinated Transportation Services. The 2000 amendments to the OAA include several provisions to promote coordination of transportation services. Language in the section dealing with Title III activities encourages local AAAs to coordinate with local transportation providers, public transportation agencies, and local government entities. A new provision explicitly explains that Title III services may be provided to nonelderly individuals if other sources of funding, such as Medicaid, are available to support those services. Title IV, which covers training, research, and discretionary projects and programs, now includes authorization for grants to public or private nonprofit organizations to design and implement health care service projects for seniors in rural areas, which may encompass a number of related services, including transportation. Grants are also authorized for nonprofit organizations to provide technical assistance to transportation providers and aging organizations to “encourage and facilitate coordination of federal, state, and local transportation services and resources for older individuals.” Several specific examples of technical assistance are included in the amendments.

State Funding Sources

State transportation funds derive primarily from two fundamental tax sources: sales taxes and fuel/vehicle taxes. Some states have also incorporated lottery or casino revenues as a source for transportation funding. Some examples of these state funding sources are summarized in Table 5 and described below.

Sales Taxes

- California Local Transportation Fund (LTF): LTF revenues are derived from $\frac{1}{4}$ cent of the 7.25% retail statewide sales tax and are returned to each county in proportion to the amount of tax collected in that county.
- Indiana Public Mass Transportation Fund: Receives 0.76% of the state's general sales and use tax revenue.
- Michigan Comprehensive Transportation Fund (portion): Michigan funds public transportation services through the Comprehensive Transportation Fund, which is administered by the DOT. The fund is supported from a portion of state motor fuel taxes, vehicle registration fees, and state sales taxes on automobiles and other auto-related products.

Motor Fuels/Motor Vehicle Taxes

- California State Transit Assistance Fund: Established in 1980 through the Transportation Development Act, the Fund derives its income from the statewide sales tax on gasoline and diesel fuel. Assistance is allocated by for-

TABLE 5 Selected state funding sources

Sales Taxes	Motor Fuels/Motor Vehicle Taxes	State Lottery and Casino Revenues	For Programs to Increase Coordination
California —Local Transportation Fund: ¼ cent from the 7.25% statewide retail sales tax	Arizona —portion of vehicle license tax, as required to provide an annual minimum of \$20.5 million in the Local Transportation Assistance Fund	Arizona —Local Transportation Assistance Fund II: up to \$41 million from state lottery fund revenues	Florida —Commission for the Transportation Disadvantaged: supported by \$1.50 from each motor vehicle registration
Indiana —Public Mass Transportation Fund: 0.76% of state general sales and use tax revenue	California —State Transit Assistance Fund: portion of locally collected statewide sales tax on gasoline and diesel fuel (amounts vary regionally)	Pennsylvania —Lottery: all lottery proceeds targeted to benefit elderly citizens; Shared-Ride/Free Transit Programs provide free/reduced fares (\$114.4 million in FY 2000-01)	North Carolina —Human Service Transportation Management Program: state funds (\$2.4 million in FY 2002) provided on 75% state/25% local basis
Michigan —Comprehensive Transportation Fund: portion of state sales taxes on automobiles and related products—FY 2004, 2005=6%; FY 2003, 2006 and after=6.98%	Florida —Transportation Disadvantaged Trust Fund: \$1.50 from each vehicle registration	New Jersey —Casino Revenue Program: portion of casino revenues (\$24.9 million in FY 2003)	Ohio —Coordination Program: state General Revenue Funds (\$1.3 million in SFY 2003) provide up to 75% of total direct operating expenses to a maximum of \$75,000 for first 3 years, \$50,000 in subsequent years
	Iowa —Highway Trust Fund: 1/20 of the first 4 cents, or 0.002 cents per dollar collected, of sales tax on motor vehicles and accessory equipment		
	Michigan —Comprehensive Transportation Fund (portion): portion of state motor fuel taxes—FY 2004, 2005=6%; FY 2003, 2006 and after=6.98%		
	South Carolina —State Mass Transit Funds: 0.0025 cents per gallon gasoline tax		

mula to each Transportation Planning Agency, the five county transportation commissions, and the San Diego Metropolitan Transit Development Board. Funds are allocated 50% by population and 50% by operator revenues from the prior fiscal year. Funds are allocated to operators within each county in proportion to each operator's share of total revenues within the state.

- Florida Transportation Disadvantaged Trust Fund: The fund receives \$1.50 from every vehicle registration and includes the Put Your Dollar to Work program enacted

in 1994, which allows donating an additional \$1 (or more, in \$1 increments) to the fund when renewing a car, truck or boat registration. Operating revenue (\$271.0 million in 2001) included funding from agencies:

- Agency for Health Care Administration (Medicaid): 30%
- Local entities (government and nongovernment): 38%
- Commission for the Department of Children and Families: 11%
- Transportation Disadvantaged Trust Fund: 9%

- Florida DOT: 5%
- Department of Elder Affairs: 3%
- Department of Labor and Employment Security: <1%
- Other federal/state programs: 4%
- Iowa Highway Trust Fund: Iowa devotes 1/20 of the first 4 cents (or 0.002 cents per dollar collected) of the sales tax collected on sales of motor vehicles and accessory equipment to support public transportation. In addition, Iowa Code allows cities to levy a dedicated property tax for transit of \$0.95 per \$1,000 assessed valuation. Other local tax funding comes from General Fund levies and, sometimes, from trust and agency levies.
- Michigan Comprehensive Transportation Fund (portion): As described above, a portion of this fund derives from motor vehicle taxes other than sales, such as registration and motor fuel taxes.
- South Carolina State Mass Transit Funds: The state DOT receives the remainder of allocated highway and motor vehicle usage tax revenues to support transportation activities such as construction and mass transit.

State Lottery and Casino Revenues

Arizona and Pennsylvania are two states that use state lottery revenues to support transit or transportation services for the transportation disadvantaged. Similarly, New Jersey makes casino revenues available for the provision of service to seniors and people with disabilities.

- Arizona Local Transportation Assistance Fund II: Revenues from the Vehicle License Tax and excess Powerball (lottery) monies go to this fund, which received an estimated \$15.4 million for FY2001. A local match of at least 100% for cities and towns with a population greater than 50,000, and a match of at least 25% for all other cities and towns is required. Eligible uses are for transit only, except for communities receiving less than \$2,500, which may use funds for any local transportation purpose.
- Pennsylvania Lottery: Proceeds were initially targeted to provide property tax relief for the elderly. Since its introduction in 1971 by a legislative act, Title 91, program benefits funded by the Pennsylvania Lottery have expanded to include rent rebates, administered by the Pennsylvania Department of Revenue, and free and reduced-fare transit for older Pennsylvanians and reduced vehicle registration fees, programs administered by the Pennsylvania DOT. The Pennsylvania Department of Aging administers a co-pay prescription drug program, and the Pharmaceutical Assistance Contract for the Elderly, and allocates funding for services provided by AAAs, as well. The Pennsylvania Lottery is the only state lottery that exclusively targets its proceeds to benefit older citizens.

The Lottery Programs for Older Pennsylvanians and Shared-Ride/Free Transit Program are available to senior citizens 65 years of age and older and received a total of \$120.8 million in Lottery funds in fiscal year 2002–2003. The Shared-Ride Program offers door-to-door shared-ride, demand-responsive services, for which riders pay only 15% of the shared-ride fare. State Lottery proceeds are used to reimburse the participating service provider up to 85% of the fare. In 2001–2002, the 59 Shared-Ride operators served all 67 counties in the state, provided approximately 6 million rides to seniors, and received \$62 million in Lottery funds. The Free Transit Program provides free transportation on local fixed-route bus, trolley, subway, elevated, and commuter rail services during off-peak hours weekdays and all day on weekends/holidays. Fifty-five programs provide service in 50 counties. In fiscal year 2002–2003, 39.6 million free rides were provided to seniors through this program.

- New Jersey Casino Revenue Program: The Senior Citizen and Disabled Resident Transportation Assistance Act, passed in 1984, enables NJ TRANSIT's Office of Special Services to apply a designated portion of the state's casino revenues to the provision of transportation services for seniors and people with disabilities. Of the funds that are dedicated to transportation, a small percentage is retained by NJ TRANSIT for upgrading the accessibility of fixed-route systems and administration of the program. However, most of the funds are distributed to the coordinated paratransit systems operating in each county. Funds may be used for capital, operating, or administrative purposes. Transportation services may include feeder service that connects users to rail or fixed-route bus services, or traditional local paratransit services.

State Programs to Increase Coordination of Transportation Services

While many states encourage coordinated transportation efforts, some states provide financial incentives for coordination initiatives. The following overview highlights several examples.

- Florida's Commission for the Transportation Disadvantaged (CTD) was created in 1989 when the Florida State Legislature passed Chapter 427. The commission, whose members represent a variety of public agencies, citizens and consumers, and transportation professionals, oversees the coordination and delivery of transportation services to transportation-disadvantaged individuals, as well as local government, federal, and state funding for such services. Transportation-disadvantaged individuals include older adults, people with disabilities, low-income individuals, and children at risk.

The commission utilizes CTCs throughout the state to implement its policies and procedures at the local level. CTCs can be public, nonprofit, or for-profit entities and are selected through public competitive bidding. They serve as transportation brokers for a designated service area and contract with transportation operators for the provision of service to transportation-disadvantaged individuals in that area. State and local agencies are required to participate in the coordinated system if they receive local, state, or federal funds for the transportation of transportation-disadvantaged people. These agencies contract with each CTC.

LCBs identify local service needs and provide information, advice, and direction to the CTCs on the coordination of services to be provided to the transportation disadvantaged. Each county has an LCB, with membership that is similar to that of the CTD.

Located within the Florida DOT, the CTD is supported by the Florida Transportation Disadvantaged Trust Fund, which was described earlier. Trust fund proceeds are also used to subsidize transportation services provided to individuals whose service is not covered by another agency

- North Carolina's Human Service Transportation Management Program provides administrative assistance to community transportation systems that provide only human services transportation or are located in one of the state's urban areas. Funding (\$2.4 million in FY 2004) is provided on a 75% state-25% local match ratio.
- Ohio's Coordination Program enhances and expands transportation through coordination in counties with no public transportation system. Projects must demonstrate some level of interagency coordination in their local area to be eligible for funding and must designate a lead agency and start the project within 90 days of contract award. Applicants may apply for up to 75% of their total direct operating expenses, to a maximum of \$75,000 for a 1-year period. A 25% cash match is required, and a project may not receive funding at the \$75,000 level for more than 3 years. Continuation grants are limited to \$50,000 per year, and there is no limit to the number of years a project may receive a continuation grant. Funding in the amount of \$1.3 million was provided from State General Revenue Funds in Fiscal Year 2003.

Regional and Local Funding Strategies

In addition to funds that are available from federal and state programs, support for transportation services may be provided from regional or local sources. These may be from the general fund of local or regional governments or generated by a dedicated tax source, such as a local sales or property tax. Such regional or local funds are often used to provide the required match to federal assistance.

As of 2001, voters in 23 counties and 43 municipalities in Michigan that were served by public transit systems had approved local millages to support those systems (13). In Massachusetts, RTAs rely on local property tax revenues to fund at least 25% of expenses remaining after federal grants, farebox receipts, and other revenues have been applied to the annual operating deficit.

Another approach to financing transportation services at the regional or local level is to coordinate a variety of funding sources. While each source may be directed at serving a specific type of trip or client group, combining the individual funding streams can form the financial basis for a cohesive transportation system.

The LYNX system in Orlando, Florida, is one such system. It serves the three-county Orlando urban area and has been designated by the state as the CTC for that area. As CTC, it provides paratransit service for the Medicaid, Transportation-Disadvantaged, and ADA programs. It does so by contracting with a regional transportation broker. It receives funding from the state from the Transportation Disadvantaged Fund and from local human services agencies that contract for service from the broker. An unusual source of funding for this service is the Transportation Disadvantaged Voluntary Trust Fund. Each time that a person in Florida registers or renews a vehicle license, he or she may choose to check a box that contributes \$1 to this fund. Money collected in each county provides funding for transportation services for the transportation disadvantaged in that area.

The RIDES MTD in rural southern Illinois evolved from a nonprofit organization to a state-funded agency. This system began as a small nonprofit organization (Golden Circle Senior Citizens) that provided various transportation services for seniors in two counties. A succession of federal grant funds starting in the 1970s allowed it to gradually expand its services and open them to the general public. In 1990, the RIDES MTD was created under Illinois law and it took over the transportation operations of the nonprofit agency. The main purpose of this move was to make the organization eligible for state funding that could only go to MTDs, thus providing a more stable funding source than contracts with human services agencies. RIDES now serves nine counties and 70 to 80 human services agencies.

Human Services Contracting

A common source of local or regional funds for transportation services for the transportation disadvantaged is through contracts with human services agencies. Often, human services agencies provide transportation services directly because of a lack of transportation alternatives for their clients. For example, AAAs may operate van services to enable their mobility-limited, senior clients to get to nutrition sites or activities at the local senior center. Agencies that operate residences or programs for individuals with developmental disabilities may use program staff to transport clients to day programs.

However, for such agencies, transportation is not their primary mission and they are often more than willing to contract for such service if a suitable provider can be found.

While the sources of funding for client services are likely to be many of the federal and state programs previously described, contracting with human services agencies is one way for transportation providers to access those funds.

Many community transportation systems began in this manner. Service was first provided by a human services agency for its own clients. It might have done so with its own vehicles and drivers, or it might have contracted with a private transportation provider. The transportation provider may have operated such service for more than one agency and soon the nucleus of a more comprehensive service was formed. The ability to use resources such as vehicles and drivers more efficiently created a synergy that made it possible to serve more users than if the services had remained independent. Later, federal or state transportation funding may have been added to the mix, thereby requiring that the service be made available to the general public.

Funding from Client-Specific Agencies

Organizations that focus on advocacy or the provision of services for certain population groups may also be local sources of funding for transportation services. In Missouri, for example, Senate Bill 40, enacted by the state legislature in 1969, gives county residents the ability to dedicate tax revenues to services for individuals with developmental disabilities. The Developmental Disabilities Resource Board (DDRBR) is the agency established in St. Charles County to oversee the programs and services provided for this group of county residents and their families. DDRBR coordinates closely with the St. Louis Regional Center, the local branch of the state agency responsible for services for the developmentally disabled (i.e., the Department of Mental Health, Division of Mental Retardation/Developmental Disabilities).

DDRBR distributes several million dollars of property tax revenues annually to about 30 organizations for the development and operation of a variety of support programs and services.³ Many contracts between DDRBR and service delivery organizations include transportation as an eligible expense, either as an identifiable item separate from other services or as part of a daily rate for services. In some cases, DDRBR provides matching funds for capital purchases.

Organizations are required to exhaust all other possible funding sources before applying for assistance from DDRBR. Often, DDRBR funds cover the gap between reimbursements from the St. Louis Regional Center (mainly federal and state Medicaid funds that allow individuals to reside at home rather than in some type of facility) and the cost of providing services to the developmentally disabled population.

³ \$0.16 for every \$100 of assessed value is dedicated to programs and services for individuals with developmental disabilities in St. Charles County.

The federal Administration on Developmental Disabilities (ADD), part of the Administration for Children and Families of DHHS, administers four grant programs created by the Developmental Disabilities Assistance and Bill of Rights Act of 2000 (the ADD Act). One of those programs funds state councils on developmental disabilities, which work to make independent living and community inclusion a reality for individuals with developmental disabilities. The ADD Act sets forth federal emphasis areas—employment, education, child care, health, housing, transportation, recreation, and quality assurance. State councils focus on all or a subset of those.

The Illinois Council on Developmental Disabilities (ICDD) makes grants available to organizations and individuals for the purpose of implementing programs and services that address its priority areas through periodic calls for investment. Current investments of the council are contributing to projects designed to increase access to transportation service for individuals with developmental disabilities. Current projects include the following:

- MetroLINK in Moline, Illinois, is expanding its transportation service area to include three rural counties, which will improve access for people with disabilities and others.
- Voluntary Action Center of DeKalb County is providing additional transportation service on weekdays, serving destinations such as job sites, health care facilities, educational institutions, and shopping areas.
- Greater Peoria MTD is pursuing coordinated, regional transportation services in rural Peoria County.

Foundation Funding

Public and private foundations can be excellent resources for transportation funding, although they are not often considered by agencies looking for such funds. Foundation funds typically fall into four categories, according to the Foundation Center's website (14):

- Private foundation: a nongovernmental, nonprofit organization with an endowment (usually donated from a single source, such as an individual, family, or corporation) and a program managed by its own trustees or directors. Private foundations are established to maintain or aid social, educational, religious, or other charitable activities serving the common welfare, primarily through making of grants.
- Corporate grant-maker: corporate giving programs and company-sponsored foundations. Corporate giving programs are grant-making programs established and administered within a for-profit business organization. They differ from company-sponsored foundations (also referred to as corporate foundations) in that the foundation, while it derives its assets primarily from the for-profit business

and may maintain close ties with the parent company, is an independent organization. A corporate-sponsored foundation has its own endowment and as such is subject to the same rules and regulations as other private foundations. Some companies make charitable contributions through both a corporate giving program and a company-sponsored foundation.

- **Grant-making public charity:** a nongovernmental public charity that operates grants programs benefiting unrelated organizations or individuals as one of its primary purposes. There is no legal or IRS definition of a public foundation, but such a designation is needed to encompass the growing number of grant-making institutions that are not private foundations.
- **Community foundations:** 501(c)(3) organizations that make grants for charitable purposes in a specific community or region. The funds available to a community foundation are usually derived from many donors and held in an endowment that is independently administered; income earned by the endowment is then used to make grants. Although a community foundation may be classified by the IRS as a private foundation, most are classified as public charities and are thus eligible for maximum tax-deductible contributions from the general public.

Although few foundations specifically fund transportation projects, many provide support in areas that are directly or indirectly related to transportation, such as social welfare, health care access, smart growth, economic development, and environmental sustainability. In general, program goals and guidelines vary dramatically from foundation to foundation. However, many foundations explicitly state that they will not fund capital or ongoing operating expenses. Thus, transportation providers are more likely to obtain funding for new and innovative programs that fit into a foundation's program goals than for general vehicle purchases or reimbursement of operating expenses. An excellent use of foundation funding

might be to jump-start a program that will later be funded by other sources, such as state or local funding.

Additionally, many foundations are geographically focused in their support of nonprofit organizations. Thus, in looking for support from public and private foundations, transportation providers may want to concentrate on ones that specifically fund nonprofit organizations in their state or locality. Moreover, most foundations will only fund nonprofit organizations that have 501(c)(3) status.

Table 6 lists just a few of the foundations that transportation providers may approach for funding transportation initiatives, while the following paragraphs describe each foundation in more detail. It should be noted that this is by no means an exhaustive list of potential funding foundations, but rather is meant to give the reader an idea of the types of programs funded by foundations, as well as the types of guidelines generally imposed by foundations. Additional guidance for finding potential foundations to fund transportation programs is provided later in this chapter. Resources that can be helpful in identifying foundations that support transportation projects and preparing grant proposals are listed in Appendix D and Appendix E on the accompanying CD-ROM.

The Bullitt Foundation. The Bullitt Foundation is focused on “protection and restoration of the environment of the Pacific Northwest” (14). Grantmaking activities are focused on nonprofit organizations that serve Washington, Oregon, Idaho, British Columbia, western Montana, and the rain forest region of southern Alaska. Program areas include the following:

- Energy and climate change
- Forests and land ecosystems
- Growth management and transportation
- Public outreach, education, and capacity building
- Rivers, wetlands, and estuaries
- Sustainable agriculture
- Toxic substances, mining, and radioactive waste

TABLE 6 Selected foundation funding sources

Foundation	Eligible Recipients	Eligible Grant Uses Related to Transportation
Bullitt Foundation	Nonprofit organizations serving WA, OR, ID, British Columbia, and parts of MT and AK	Growth management and transportation
Pew Charitable Trusts	Nonprofit organizations	Health and human services
Meyer Foundation	Community-based nonprofit organizations	Increasing the welfare of low-income individuals and improving neighborhoods
National Kidney Foundation	Kidney disease patients and organizations providing services to these patients	Support for kidney disease patients and their families, including transportation assistance

The Pew Charitable Trusts. The Pew Charitable Trusts are based in Philadelphia and support nonprofit activities in the areas of culture, education, the environment, health and human services, public policy, and religion. Both national and local funding is available through the trusts. One of the more relevant programs for transportation providers is the health and human services program, which is designed to promote the health and well-being of Americans and to strengthen disadvantaged communities (15).

The Meyer Foundation. The Meyer Foundation is focused in the greater Washington, D.C., area and supports “community-based nonprofit organizations that foster the well-being of all people in the region” (16). Goals of particular concern to the foundation are improving the welfare of low-income people and creating healthy neighborhoods.

National Kidney Foundation. The mission of the National Kidney Foundation is “to prevent kidney and urinary tract diseases, improve the health and well-being of individuals and families affected by these diseases, and increase the availability of all organs for transplantation” (17).

The Foundation has six goals, according to its website (17):

- Educating the public
- Supporting research
- Expanding patient services
- Providing continuing professional education
- Shaping health policy
- Fund raising

Under its Patient and Community Services Program, the foundation provides support for kidney disease patients and their families, which may include aid for transportation.

Healthcare Foundation for Orange County. Healthcare Foundation for Orange County, California, was formed with excess funds from the acquisition of the United Western Medical Centers (a nonprofit hospital) by OrNda Healthcare (for-profit company). The foundation’s mission is “to improve the health of the neediest and most underserved residents of Orange County, with particular emphasis on United Western Medical Center’s historic service area of Central Orange County” (18). One of the specific areas that the Foundation focuses on is removing access barriers, such as those due to transportation. Preference is given to “programs that maximize existing resources and enable individuals and communities to take charge of their own health” (18).

The Robert Wood Johnson Foundation. The overarching goal of the Robert Wood Johnson Foundation is to improve the health and health care of all Americans. Among the foundation’s program goals is assuring that all Americans have access to quality health care at a reasonable cost. The foundation funds a variety of grantees, including hospitals; med-

ical, nursing, and public schools; hospices; professional associations; research organizations; state and local government agencies; and community groups. Funding is provided via both competitive national calls for proposals and unsolicited proposals. General operating expenses and capital costs will not be funded by the foundation.

The Public Welfare Foundation. The Public Welfare Foundation is dedicated “to supporting organizations that provide services to disadvantaged populations and work for lasting improvements in the delivery of services that meet basic human needs” (19). The Foundation has a wide range of interests including community support; the disadvantaged elderly; employment, training, and alternative education; health; and the environment.

IDENTIFYING FUNDING SOURCES

Wading through the labyrinth of transportation and human services funding programs, regulations, guidelines, and constraints can be an arduous and complex task. Fortunately, many of the resources cited in Chapter 4 as starting points for identifying existing transportation providers in a local area can also provide helpful information about funding programs. In addition, a number of aids to locating foundations whose funding priorities may include transportation services for the transportation disadvantaged are also available.

Identifying Public Sources of Funding

This chapter has presented an overview of the major sources of public funding that can be used to support specialized or coordinated transportation services and examples of the types of funding strategies that are being used by transportation providers across the country. For additional information, consider the following steps:

- Use the Internet to research funding programs in more depth and to obtain the latest information.
- Network locally or within your state with other organizations that have an interest in transportation issues.
- Keep abreast of developments in proposed new programs, particularly at the federal and state levels.

Whether your organization is a transportation provider or a human services agency, the most comprehensive single source of information about federal transportation funding programs is CTAA. CTAA’s publication, “Building Mobility Partnerships: Opportunities for Federal Funding,” was the source of much of the information presented in this chapter and several of the appendixes. The guide, which is updated periodically, is available on CTAA’s website, www.ctaa.org. Click on Information Station and then on Funding. The CTAA website is also a good place to find current information about

proposals for new federal programs and initiatives and legislative developments, all of which can affect specialized transportation funding.

For more detail about the requirements associated with federal funding programs, the websites of the federal transportation and human services agencies that administer the programs can be helpful. Start at www.firstgov.gov, or go directly to the FTA (www.fta.dot.gov) or DHHS (www.dhhs.gov) websites for links to program and agency information.

State DOTs and regional and state-level human services agencies can also be sources of information. Refer to the section on locating transportation services for the transportation disadvantaged in your area in Chapter 3 for tips on identifying relevant organizations.

If you are located in an urbanized area with a population over 50,000, another organization with which you should be acquainted is the region's MPO. Involvement with this planning body, through participation on its citizen's advisory committee or attendance at public meetings as described in Chapter 5, can help you to gain insight into funding opportunities and processes (as well as to bring transportation issues of concern to the attention of the MPO). In nonurbanized areas, county or municipal planning departments may be able to serve the same function.

Finally, if you are not already a member of your state transit association, consider joining or participating in activities it sponsors. Meetings and conferences typically include presentations by federal or state officials on topics such as funding programs and new initiatives. Discussion of issues with organizations that have the same interests and challenges as yours can also be educational and lead to the formation of beneficial partnerships.

Identifying Foundations That Fund Transportation Projects

The prospect of identifying sources of foundation funding for transportation services may be discouraging, but some key resources can make the task easier.

Perhaps the most widely recognized source of information is the Foundation Center, an independent, nonprofit organization founded in 1956. The Foundation Center serves as a clearinghouse of information about grants available throughout the country. It offers the following methods for researching potential funding foundations:

- **Center Libraries and Cooperating Collections:** The Center operates libraries in New York, Atlanta, Cleveland, San Francisco, and Washington, DC. Additionally, 220 Cooperating Collections are offered around the country (in local libraries, for example). Cooperating Collections have a core collection of the Center's resources. The five Center libraries have staff trained to help with foundation searches. Free orientations on how to use Center

resources are available at the libraries and at many of the Cooperating Collections. All Center libraries and Cooperating Collections maintain a selection of books and periodicals relating to fundraising and philanthropy. *The Literature of the Nonprofit Sector Online*, a web-based version of the Center's bibliographic database, lists and abstracts many of these resources.

- **Electronic Resources:** Grantseeking organizations can order FC Search: The Foundation Center's Database on CD-ROM, which includes more than 70,000 grant makers and 202,000 grant listings. CD-ROM prices range from \$1,200 to \$1,900, or the database can be used free of charge at any Foundation Center library or Cooperating Collection. FC Search is searchable by subject, name of foundation, geographic focus, and other categories.
- **Online Resources:** The Foundation Center's database information is also available online. Individuals and agencies may do basic searches free of charge. More detailed searches of the *Foundation Directory Online* are available by purchasing an online subscription. The Center offers four different subscription levels (offering varying levels of access to information), ranging from \$19.95 to over \$200 per month. Additionally, the libraries in New York, Washington, D.C., and San Francisco offer fee-based custom database searches for the public. The Foundation Directory Online subscription page is available online at <http://fconline.fdncenter.org/>.
- **Publications:** The Foundation Center's online Marketplace offers published directories, guides, research reports, and books for grantseekers. The Marketplace has descriptions of all Foundation Center print and electronic publications, as well as some of the Center's other services. Directories of foundations are available at the national, regional, or international levels. Directories for specific subject areas are also available. Additionally, grantseekers can subscribe to the Foundation Center's weekly newsletter, *Philanthropy News Digest*, which offers a compendium of philanthropy-related articles. The Marketplace is available online at <http://fdncenter.org/marketplace/>
- **Courses:** The Foundation Center offers a variety of classroom-based and online courses, including an Online Orientation to the Grantseeking Process. Information on the Center's educational offerings is available online at <http://fdncenter.org/learn/>

The Foundation Center also includes an online listing of websites maintained by community foundations, another source for geographically specific funding; it is available at http://fdncenter.org/funders/grantmaker/gws_comm/comm.html. Additionally, the Center has compiled a bibliography of grantmaker directories, which are state-specific. These books are typically published by nonprofit organizations, public libraries, or for-profit publishers and are sometimes available electronically. The Foundation Center's list of state founda-

tion publications is shown in Appendix E on the accompanying CD-ROM; the list is taken from the *Guide to U.S. Foundations: Their Trustees, Officers and Donors*, which is another excellent source for finding potential funding foundations and is also available from the Foundation Center.

In addition to the Foundation Center, there are a few other sources of information for grantseeking organizations. The Council on Foundations is an association of more than 1,500 grant-making foundations and corporations. The Council is geared more toward serving the needs of grantmakers than those of grantseekers. Nonetheless, it does maintain information on its members, and this information can be accessed via its website, <http://www.cof.org/>. Similarly, Foundations On-Line offers a small directory of charitable grantmakers, available at <http://www.foundations.org/>. However, the Foundation Center is by far the most comprehensive resource for finding foundations, and transportation providers are likely to have the greatest level of success using the Center's resources.

ADVICE FROM PRACTITIONERS AND OTHER RESOURCES

Practitioners' Advice

Guidance from case study subjects related to funding and other financial issues is summarized below.

- Focus on cost savings early in the process. It is helpful to have a clear idea of what some of the concrete benefits of coordination may be.
- Develop better cost information. Many agencies are unaware of the true cost of the transportation service that they provide. This creates problems when billing third-party agencies and also keeps agencies from realizing how much money they devote to transportation. A cost allocation methodology should allow "apple-to-apple" comparisons between service proposals by a public entity and nonprofit agencies. It may be difficult to explain the benefits of contracting with a public provider to such agencies because they compare the cost of contracting to their own estimates, which often do not represent the full cost of providing the service. Standardized guidelines and procedures for costing such services would be useful.

- Recognize that benefits may not be realized immediately but may be long-term. Decision makers often want to see an immediate cost-savings from a coordination initiative. However, cost savings and other benefits may not be immediately apparent. Participants need to realize the value of long-term impacts.
- Start-up funding is likely to be necessary. Although a primary goal is often to save money, getting a coordination effort underway usually requires some front-end money for planning, buying necessary technology, etc.
- Prepare to spend financial resources on ongoing management and administrative functions. Consider expenditures on items such as a sufficient number of well-qualified staff and tools such as hardware and software as an investment in the future success of the coordination initiative.
- Enlist the aid of a coordination partner with access to significant financial resources. The participation of such a partner can make it much easier to acquire large items, such as hardware or software, which may be needed for the coordination effort.
- Be aware that budget cutbacks at various levels of government may affect transportation service coordination efforts. On the one hand, cutbacks may provide additional incentives to find ways of more effectively coordinating service, thereby saving money. On the other hand, the stronger effect may be to reduce the amount of funds that could otherwise be made available for coordination efforts, particularly some of the front-end money needed to plan the coordination effort or to purchase necessary equipment or technology.

Other Funding-Related Resources

For more information about potential federal sources of funding for transportation services, see *Building Mobility Partnerships for People with Disabilities: Opportunities for Federal Funding and Promising Practices*, prepared by CTAA and Easter Seals Project ACTION for the U. S. DOT, FTA, June 2002.

Appendix F, on the accompanying CD-ROM, provides an index of case studies, coordination guidebooks, and other documents that contain information about funding sources.

CHAPTER 7

USE OF TECHNOLOGY

The use of ITS components and other technologies is a subject of ongoing interest among both transportation providers and human services agencies and has been the focus of a number of studies and demonstration programs. This chapter provides background information from one previous study, then describes how three case study subjects are using technology to improve coordination of transportation services for the transportation disadvantaged.

As coordinated transportation systems begin to serve more clients, operate more vehicles, involve more agencies and funding sources, or serve a larger geographic area, the operation and management of the system become more complex. Although this growth allows more system efficiency through the sharing of resources (economies of scale), it can also present difficulties if supporting technology is not upgraded. For example, it may no longer be possible to handle trip scheduling and vehicle dispatching functions manually as the number of trip requests increases. More sophisticated communications systems may be needed to communicate with drivers or vehicles. More advanced accounting, billing, and financial reporting systems may become necessary to keep track of multiple funding sources, bill the various human service agencies, and provide timely and accurate reports to management and to funding agencies.

The role that technology can play in the coordination of transportation services is aptly explained in *TCRP Report 76, Guidebook for Selecting Appropriate Technology Systems for Small Urban and Rural Public Transportation Operators*. Following is a brief description of some technologies that would be most applicable to the delivery of coordinated transportation services, based on *TCRP Report 76*.

Demand-Responsive Transit Software—Expedites call taking; automatically schedules trips and routes vehicles; collects and maintains client, service, and vehicle data; and generates standard and customized reports. Both automated and computer-assisted software is available. Automated software schedules trips and routes vehicles using internal computations; computer-assisted software requires some additional decision making from the computer operator to generate routes and schedules.

MDT or Mobile Data Computer—Serve as links between the transit system control center and a driver to relay relevant information, such as dispatch, trip, route, and rider data.

AVL—Determines vehicle location using navigation sensors, usually a Global Positioning System (GPS), most commonly by sending position data to a base station via radio or other communication link.

Fare Media (e.g., bar code, smart cards, magnetic stripe cards)—These allow easy identification of passengers and the payment of fares without cash. Magnetic stripe cards electronically deduct the trip fare from the account balance on the card. Smart cards work in a similar fashion, deducting the trip fare from the cash value stored on an embedded microchip.

Geographic Information Systems (GIS)—Computer mapping application that displays and analyzes the spatial relationship between different data such as vehicle routes, trip pick-up and drop-off points, bus stops, streets, and landmarks.

Mayday System—Allows the vehicle operator to trip an inconspicuous onboard switch to alert the base station of an accident, crime, or medical or other emergency.

A cautionary note: In considering the technology possibilities outlined above, be aware that while technology can often be a helpful solution to a need or problem, such solutions can be both expensive and difficult to implement. Careful thought and evaluation is necessary before deciding that a particular solution is right for a given need and organization. It is not uncommon for an organization to adopt a technology solution only to find itself mired in a situation requiring additional unanticipated human, financial, and other resources because it selected an inappropriate technology for the task or because staff was not adequately trained to install or operate the equipment.

CASE STUDIES

The subjects for the clustered mini-case study on the topic of technology were selected to illustrate the ways in which technology can facilitate coordination of such functions as vehicle operations, billing, grants management, and reporting. There were three case study sites:

- The New Mexico CRRAFT system developed by the ATRI.
- The use of AVL/MDTs and automated scheduling and dispatch software at the Ottumwa Transit Authority (OTA)/10-15 RTA.

- The use of linked trip reservations and centralized scheduling/dispatching software at the St. Louis TMA.

The experiences of each of the three subjects are summarized below. More detailed descriptions can be found in the complete case studies in Appendix A on the accompanying CD-ROM.

New Mexico

The CRRAFT system is a statewide technology deployment intended to streamline the data reporting process between the PTPB of the New Mexico DOT and its subgrantees. In addition, the system will ultimately integrate human services transportation referrals with daily rural public transportation operations.

CRRAFT is a web-based application that includes standardized invoicing and ridership reports, a simplified scheduling tool, and modules that can be used by transit providers to track vehicle usage and maintenance. Eventually, the system will include installation of magnetic stripe readers on vehicles, which will be used to read information from clients' Electronic Benefits Transfer cards. The focus of this system is on improving coordination between human services and transportation funding agencies and their subgrantees.

Individuals applying for public assistance do so through the New Mexico Human Services Department, Income Support Division. Once an individual has been approved for public assistance, a case worker assesses the client's available transportation resources and needs. If the client requires transportation assistance and if the chosen means of transportation is public transit, the client is given transportation privileges on his or her benefits' card, and the case worker provides a referral to a transportation provider. Referrals are currently completed manually and then faxed to the transportation provider.

After the referral information has been entered into the database, the transportation provider can obtain the client information from the CRRAFT system. Clients eligible for demand-responsive service call the transportation provider to schedule a trip. The trip request is entered into the CRRAFT system, and the provider schedules the trip. When making the trip, clients show their benefits' cards to the driver, who records the card information, which is entered into the CRRAFT system at the end of the day. Once the card readers have been installed, this process will be automated. Clients eligible for fixed-route trips will simply board the bus and show their cards to the driver.

The CRRAFT system has been implemented at 26 rural transit centers throughout New Mexico and is used to track an estimated 150 vehicles and 3,000 to 5,000 human services clients. Clients from a number of agencies are included in the CRRAFT system, including the following:

- Selected developmental disability service providers.
- The Welfare-to-Work Program of the New Mexico DOL (an original, not a current participant).
- The TANF and Food Stamps Programs of the New Mexico Human Services Department.
- The New Mexico Department of Vocational Rehabilitation (an agency that has recently started to participate in the system).

There is anecdotal information that the cost per passenger mile has decreased as a result of using the CRRAFT system; however, there is no supporting data at this time. The FTA and the ITS Joint Program Office have hired a consulting team to conduct an evaluation of the system that will include a before-and-after analysis to determine any increased efficiencies from use of the CRRAFT system. This evaluation should be completed by the end of 2004.

The CRRAFT system assists human services agencies with the generation of financial and client tracking reports, as well as generating FTA Sections 5310, 5311, and JARC reports for transit systems. Through the use of standard reports, the CRRAFT system has likely reduced the time required for the PTPB to provide payment to subgrantees.

OTA

OTA operates both fixed-route and demand-responsive transit services in the City of Ottumwa, Iowa. In addition, OTA operates demand-responsive and regional rural services in the remainder of the ten-county area (Iowa DOT Region 15) as a contractor to the 10-15 RTA. A significant amount of coordinated client transportation is provided under contract to human services agencies.

OTA was a relatively early adopter of advanced technologies, receiving an FTA demonstration grant in 1995 to implement AVL/MDTs to improve communications between the central administration/dispatch office and vehicles serving a ten-county service area. The AVL/MDT implementation is also aimed at increasing the safety and security of vehicle occupants, especially while traveling in remote rural areas. In addition, OTA has installed automated scheduling and dispatch software.

Goals for the ITS project include the following:

- Achieving reliable communications with all vehicles throughout the ten-county area.
- Identifying the location of all vehicles, particularly the 40 vehicles based outside the Ottumwa facility.
- Increasing the safety and security of drivers and passengers on board vehicles, particularly in remote areas.
- Transmitting maintenance problems and results of pre-trip vehicle inspections to the base station.
- Facilitating the billing process.

The use of AVL/MDTs is intended to accomplish all but the last goal, which will result from full implementation of computerized scheduling and dispatch software.

Implementation of AVL/MDTs at OTA has taken several years. While the original FTA grant for this demonstration project was executed in 1995, implementation of the AVL/MDTs did not start until late in 1999, and implementation of the scheduling and dispatch software did not start until summer 2000. Full installation occurred in March 2000, and the scheduling and dispatch software is not yet operational.

TMA

The St. Louis TMA serves the City and County of St. Louis and adjoining St. Charles County, Missouri. It is an example of cooperation and coordination among local planning agencies, transportation providers, and human services agencies. The focus of this coordination effort is a trip reservations and scheduling system operated by Metro (name adopted February 1, 2003; formerly known as Bi-State Development Agency) with transportation provided by multiple operators.

A number of paratransit providers serving the City of St. Louis and two surrounding counties (St. Louis and St. Charles Counties) are participating in a joint effort led by the TMA, which was created for this purpose, the East-West Gateway Coordinating Council, and Metro (formerly known as Bi-State Development Agency). Four agencies—Metro, OATS, MTM, and Care Cab Transportation Service—were the original core members of the TMA. Metro serves as the managing contractor but only provides service in St. Louis City and County. Metro performs the functions of a partial broker, by providing centralized planning and management; grants administration; accounting, billing and record keeping; vehicle maintenance; and, driver training.⁴ In addition to Metro, there have been as many as 11 transportation providers involved; currently there are 6 transportation providers in addition to Metro and OATS.

The vast majority (over 90%) of trips are performed in St. Louis City/County. Users of the services include ADA-eligible individuals, seniors, the general public in rural areas, individuals with developmental disabilities, and Medicaid recipients (MTM operates a Medicaid brokerage throughout Missouri).

The original coordination concept came from the East-West Gateway Coordinating Council paratransit committee. Committee members believed that paratransit service delivery was fragmented and inefficient in the St. Louis area and sought a means to maximize service efficiency as well as to achieve economies of scale through coordinated vehicle operations and maintenance. The TMA was originally formed to

address Welfare-to-Work transportation service needs; however, due to a lack of state funds for Welfare-to-Work transportation, the focus shifted to transporting clients of mental health agencies.

The call centers and radio dispatch centers of the four original paratransit providers were linked by means of a communications network of T1 lines. This network, together with paratransit reservation and scheduling software enables the agencies to book trips for their customers on vehicles operated by the other providers, thereby filling empty seats. The software shows all routes, scheduled trips, and available slack time. Demand-responsive trips can then be assigned to appropriate routes with sufficient slack time.

MDTs installed in all the larger providers' vehicles are used to communicate with drivers and to capture operational data; smaller providers use cell phones for communication. Because of the linked dispatch centers, dispatchers are able to assign trips to the most appropriate vehicle even if it is operated by another provider.

The St. Louis TMA has managed to coordinate service in the city and surrounding two-county area. Trips are shared and riders from different agencies and programs are mixed on the same vehicles. Resources, particularly vehicles and drivers, are used more effectively. Client agencies receive the benefit of more revenue when they are given riders from other programs.

Some service to the general public in rural areas is able to be accommodated by mixing these trips with agency trips. Otherwise, these general public trips could not be served because of program eligibility restrictions.

Another benefit to the TMA arrangement is that Metro is able to provide backup vehicles and drivers for the small providers when they experience a vehicle breakdown or driver problem. Another interesting feature is that Metro, with its resources and expertise, is able to involve a number of very small providers in the system. These small providers would not otherwise have the ability or resources to participate in the large agency contracts that the larger TMA is able to bid on and win.

Finally, a major benefit to the TMA arrangement is that Metro is able and willing to pay the other transportation providers immediately, then submit an invoice to the funding agencies for subsequent payment. Otherwise, the providers would often have to wait months to be paid.

ADVICE FROM PRACTITIONERS

Several factors were cited by key staff at each case study site as being critical to the successful development and implementation of a technological aid to coordination. Some of the projects implemented at the case study sites benefited from the existence of these factors; in other cases, their absence caused project delays or required specific actions to

⁴ The program manager believes that a pure brokerage arrangement would not work in this situation. It is only through Metro's ability and willingness to provide a number of other resources such as hardware and software technology that the TMA has been able to function effectively.

encourage their development. Guidance from the case study sites is summarized below.

- Commit to spending the time and energy needed to build cooperation and trust among participating agencies. This may involve meetings to discuss issues of concern and develop acceptable solutions, changes to operating policies or procedures, or a redesign of some aspect of the technology system.
- Find (or become) a local champion for the development and implementation of the technology application. An individual with the time, energy, enthusiasm, and expertise to bring all the parties together and provide ongoing leadership is a key factor in a successful implementation.
- Enlist the support of a partner with plentiful resources. An agency with financial and technological resources may be able to acquire items such as hardware, software, and related support and make them available to smaller partners. The participation of a state-level agency can be an invaluable source of support, especially if it encourages transportation providers to use the technology system.
- Anticipate the need for technological resources to support the implementation of technology applications. Needs can include items such as high-speed access to the Internet, technical support at the sites at which the technology will be in use, hardware and software security systems, and communications facilities (such as radio towers) with suitable capabilities. Identify resources that may be lacking and develop back-up plans or redesign aspects of the technology system to address the gaps.

Consider the ability and knowledge of internal staff and supplement this as needed through support from other agencies, such as the state DOT.

- Conduct adequate research and planning prior to the implementation of the technology system. In addition to assessing needs and developing a technology application that will address them effectively, consider issues such as the procurement requirements of funding sources.

OTHER TECHNOLOGY RESOURCES

Other resources that can provide information and guidance related to choosing, implementing, and using technology in transportation include the following:

- *TCRP Report 76: Guidebook for Selecting Appropriate Technology Systems for Small Urban and Rural Public Transportation Operators*, Transportation Research Board, 2002
- *Rural Transit ITS Best Practices*, prepared by Multisystems, Inc., for the ITS Joint Program Office, March 2003.
- *Best Practices in APTS/ITS Applications for Rural Transit Systems*, prepared by Harvard Design and Mapping Company, Inc., for FTA Office of Research, Demonstration and Innovation, June 2001.

For a guide to existing case studies and coordination guidebooks that include information about the use of technology systems, see Appendix F on the accompanying CD-ROM.

REFERENCES

1. *Transportation Resources: States and Indian Tribes on the Cutting Edge*, prepared for the U.S. Department of Health and Human Services by the National Consortium of States, under contract to the Community Transportation Association of America, November 1994.
 2. *Working Together: A Directory of State Coordination Programs, Policies and Contacts: 1999—2000*, prepared by the National Transportation Consortium of States, Ecosometrics, Incorporated, and the American Public Works Association for the Coordinating Council on Access and Mobility, February 2000.
 3. *Coordinating Transportation: Models of Cooperative Arrangements*, prepared for the Community Transportation Assistance Project by EG&G Dynatrend and the Community Transportation Association of America, 1992.
 4. "Use of TANF and WtW Funds for Transportation," Dear Colleague letter from the Secretaries of the U.S. Departments of Health and Human Services, Labor, and Transportation, May 4, 1998.
 5. "Policy Announcement TANF-ACF-PA-98-5: Updated joint guidance regarding the ways in which TANF, Welfare-to-Work (WtW), and Job Access funds can be used to help States and communities provide transportation services to eligible individuals." U.S. Department of Health and Human Services, Administration for Children and Families, Office of Family Assistance. December 23, 1998, and TANF-ACF-PA-00-2, dated May 26, 2000.
 6. "Policy Announcement TANF-ACF-PA-00-2: Updated joint guidance regarding the ways in which TANF, Welfare-to-Work (WtW), and Job Access funds can be used to help States and communities provide transportation services to eligible individuals." U.S. Department of Health and Human Services, Administration for Children and Families, Office of Family Assistance. May 26, 2000.
 7. Wirthlin Worldwide and FJCandN, *TCRP Report 63: Enhancing the Visibility and Image of Transit in the United States and Canada*, Transit Cooperative Research Program, National Research Council, Washington, D.C., 2000.
 8. APTA website, Communities in Motion Objectives, available at http://www.apta.com/CIM/overview_objectives.html.
 9. Surface Transportation Policy Project, *Measuring Up: The Trend Toward Voter-Approved Transportation Funding*, October 2002.
 10. Rubel, Thom, *Improving Public Transportation Services through Effective Statewide Coordination*, National Governors Association, 2002, p. 17
 11. *Building Mobility Partnerships for People with Disabilities: Opportunities for Federal Funding and Promising Practices*, Easter Seals Project ACTION and Community Transportation Association of America, June 2002.
 12. U.S. Department of Health and Human Services, Administration for Children and Families, website. Available online at <http://www.acf.dhhs.gov/programs/ofa/funds2.htm#appropriate>.
 13. "CRC Memorandum: The SMART Millage Vote," Citizens Research Council of Michigan, July 2002, <http://www.crcmich.org/PUBLICAT/2000s/2002/memo1064.pdf> (May 20, 2003).
 14. The Foundation Center website, available online at <http://fdncenter.org/>.
 15. The Pew Charitable Trust website, available online at <http://www.pewtrusts.com/>.
 16. Meyer Foundation website, available online at <http://www.meyerfoundation.org/>.
 17. National Kidney Foundation website: <http://www.kidney.org/general/aboutNKF/>
 18. The Foundation Center website, available online at http://fdncenter.org/funders/grantmakers/gws_priv/indiv/hcareorg.html
 19. Public Welfare Foundation website, available online at <http://www.publicwelfare.org/about/about.asp>
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GLOSSARY OF ACRONYMS

AVL	Automated (or Automatic) Vehicle Location	LCBs	Local Coordinating Boards
AAAs	Area Agencies on Aging	MAG	Maricopa Association of Governments
ACCT	Agency Council on Coordinated Transportation	MDT	Mobile Data Terminal
ADA	Americans with Disabilities Act	MOUs	Memorandums of Understanding
AoA	Administration on Aging	MPOs	Metropolitan Planning Organizations
APTS	Advanced Public Transportation System	MTD	Mass Transit District
ARC	American Red Cross of the St. Paul Area	MTM	Medical Transportation Management
ATRI	Alliance for Transportation Research Institute	OTA	Ottumwa Transit Authority
CMAQ	Congestion Mitigation Air Quality	PAT	Port Authority of Allegheny County
CMS	Centers for Medicare & Medicaid Services	(PT) ²	Public Transportation Partnership for Tomorrow
CPP	Community Partnerships Program, King County	PTPB	Public Transportation Programs Bureau
CRRAFT	Client Referral, Ridership, and Financial Tracking System	RTA	Regional Transit Agency (or Authority)
CTAA	Community Transportation Association of America	SCAT	Space Coast Area Transit
CTC	Community Transportation Coordinator	STIP	Statewide Transportation Improvement Program
DHHS	Department of Health and Human Services	TANF	Temporary Assistance for Needy Families
DOL	Department of Labor	TEA 21	Transportation Equity Act for the 21st Century
ESPA	Easter Seals Project ACTION	TIPs	Transportation Improvement Programs
HST	Human Service Transportation Office	TMA	Transportation Management Association
ITS	Intelligent Transportation System	TMACOG	Toledo Metropolitan Area Council of Governments
JARC	Job Access and Reverse Commute	TOP	Transportation Options Project

APPENDIXES

Appendixes A through F are published on the accompanying CD-ROM (*CRP-CD-51*). The appendixes are as follows:

- Appendix A: Case Studies
 - Appendix B: Transportation Provider Inventory Questionnaires
 - Appendix C: State Funding Programs for Transportation Services
 - Appendix D: Foundation Directories by State
 - Appendix E: Foundation Grant Resources
 - Appendix F: Index to Previous Case Studies and Coordination Guidebooks by Topic
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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