



WISCONSIN DEPARTMENT OF TRANSPORTATION

Coordination Strategy Handbook

May 2008



Table of Contents

	PAGE
Chapter 1. Overview	1-1
Introduction.....	1-1
Strategy Handbook Organization	1-1
Chapter 2. Communication, Training and Support Strategies	2-1
Implementation and Service Delivery	2-1
Funding.....	2-1
Chapter 3. Coordination and Consolidation of Transportation Services.....	3-1
Implementation and Service Delivery	3-1
Funding.....	3-1
Chapter 4. Mobility Strategies	4-1
Implementation and Service Delivery	4-1
Funding.....	4-1
Chapter 5. Technology Strategies.....	5-1
Implementation and Service Delivery	5-1
Appendix A: Coordination Strategy Handbook: Summary of Strategies	
Appendix B: Glossary of Terms	
Appendix C: Resource References	

Table of Figures

	PAGE
Figure 2-1 Communication, Training and Organizational Support Strategies	2-2
Figure 3-1 Communication, Training and Organizational Support Strategies	3-2
Figure 4-1 Communication, Training and Organizational Support Strategies	4-2
Figure 5-1 Communication, Training and Organizational Support Strategies	5-2

Coordination Strategy Handbook

Chapter 1. Overview

Introduction

The Wisconsin Interagency Committee on Transportation Coordination (ICTC) and the Wisconsin Department of Transportation (WisDOT) retained the consulting team of Nelson\Nygaard Consulting Associates and RLS & Associates to develop a statewide model to guide future coordination efforts in Wisconsin. The statewide model is working to strengthen coordination among state agencies as well as to support and encourage coordination efforts at the local level. Recognizing that attempts to coordinate transportation services are more likely to succeed when specific objectives are identified and appropriate strategies are pursued, WisDOT requested the consultant team to prepare a coordination strategy handbook.

The objective of the strategy handbook is to provide a resource for a wide variety of coordination strategies and to support the Wisconsin 2008 Planning Process. The handbook highlights individual strategies that have been successfully used by coordination committees in urban, suburban and rural areas. It contains an overview of a wide range of strategies, recognizing that not all strategies will be relevant to every coordination effort in Wisconsin. Each strategy is defined and shown together with potential benefits and obstacles. Individual strategies are also discussed in terms of how they may work within Wisconsin's transportation funding and service environment. This handbook includes examples where the strategy has been successfully achieved within Wisconsin¹. Examples of national best practices are also included. A summary table of all strategies included in this handbook is provided in Appendix A.

Individual strategies are grouped into chapters by strategy type. Each chapter begins with introductory text, explaining the strategy group and generally how this type of strategy is best used to support coordination efforts. Introductory text also includes indicative costs, implementation timeframes and potential funding sources. For the purposes of this analysis, the implementation costs are classified into three categories: low cost – estimated start-up costs of up to \$50k; medium – estimated greater than \$50,000 but less than \$100,000; and high – greater than \$100,000.

Strategy Handbook Organization

The coordination strategy handbook is organized into chapters by type of strategy:

- Chapter 2: Communication, training and organizational support strategies;
- Chapter 3: Strategies to coordinate and/or consolidate programs and resources;
- Chapter 4: Strategies to increase mobility options; and,
- Chapter 5: Technology-oriented strategies.

¹ Wisconsin examples are drawn from counties and mini-regions examined as part of the developing the Statewide Coordination Model. The examples, therefore, reflect the team's familiarity with these regions. We recognized that other counties and regions also offer relevant examples and best practices.

Two additional resources included in this handbook are found in Appendix B, which contains a glossary of coordination terms and Appendix C, which contains a partial listing of coordination resources, including web addresses.

Chapter 2. Communication, Training and Support Strategies

Communication, training and support strategies are a combination of techniques that focus on the administration and marketing of transportation services. Of the four strategies, two support coordination by making it easier for people to learn about services, understand how they work and have the confidence to use them. The other two strategies help local agencies develop internal resources to facilitate coordination. The four strategies are:

- Centralized information directory;
- Consumer travel training;
- Dedicated mobility managers; and,
- Technical training for mobility managers.

An overview of the communication training and support strategies are included in Figure 2.

Implementation and Service Delivery

Communication, training and support strategies will develop a foundation for coordination efforts and may be pursued immediately following a locally developed coordinated plan. A centralized information directory, for example, may be developed out of the service inventory prepared as part of a coordination plan. The directory of service may be among the first opportunities for regions to identify, understand and evaluate the full spectrum of existing transportation services. The directory helps consumers understand and learn about existing services; the information helps agency identify potential for collaboration and cooperation. Likewise, dedicating staff resources for as mobility managers and providing them with the technical skills to manage and encourage coordination efforts is an essential component of successful coordination.

Funding

In most cases, funding for communication, training and support strategies is available through the Federal Transit Administration (FTA) grant programs, including Capital Assistance Program for Elderly Persons and Persons with Disabilities (Section 5310), Job Access and Reverse Commute Program (Section 5316), and New Freedom Program (Section 531).

In Wisconsin, a variety of FTA grants are currently sponsoring 16 mobility managers around the State, with several similar grant applications anticipated for 2009. In addition, some community-based and non-profit organizations have also provided funding to support these types of strategies. Wisconsin will also allow the use of 85.21 grants for most of these activities.

Figure 2-1 Communication, Training and Organizational Support Strategies

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Communication, Training and Organizational Support					
Develop Centralized Information	Create centralized listing of available regional services	Senior Resource Guides – examples include Ashland & Wood Counties	Makes existing services more user friendly; increases access to service	Requires lead organization; requires on-going maintenance	Low
Hire Mobility Manager	Dedicate personnel resources to manage local mobility issues. Individual may assume responsibility to manage and staff coordination efforts	16 mobility managers hired as part of the 2008 federal grant process to hire mobility managers	Creates staff resources to promote and implement coordination efforts	If manager is shared across agencies/programs will require jointly allocating resources and setting goals	Low-Medium
Provide Technical Training for Coordination Staff	Obtain technical training on background skills needed to implement coordination strategies, such as financial tools, team-building, etc.	Wisconsin DOT is currently developing a mobility managers training curriculum	Ensures local coordination staff has skills to implement recommended programs	May require additional local resources	Low-Medium
Offer Customer Travel Training Program	Encourage frequent paratransit users to use fixed-route services by teaching them how to ride the bus	None known	May reduce paratransit costs to more cost-effective fixed-route services	Requires trained staff to carry out	Low

Centralized Information

A lack of information prevents some people from using public transportation. Creating a comprehensive directory of available transportation services, therefore, may help individuals understand available services and encourage them to use transit. A directory may be created for an individual county and/or a multi-county region and should be consumer-oriented with essential information such as eligibility, service hours, and geographic coverage. As appropriate, centralized information may be formatted in multiple languages and in a variety of accessible formats, including large print, web-based or telephone.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Developing a provider directory parallels development of service inventory required in 2008 planning process ● Improves access to available services ● Supports and facilitates regional travel ● Benefits consumers and agencies 	<ul style="list-style-type: none"> ● Multitude of services means developing and updating information to one source will be challenging ● Requires lead organization to take responsibility for a county-level and/or regional directory ● Information requires on-going maintenance

Wisconsin Application

Wisconsin has a statewide database of community transportation service providers and several counties publish senior resource guides. None of these documents, however, are directories specifically oriented to transportation with a full description of the available services and how to use them. Ideally, centralized information may be a published document or database of transportation services that can easily be accessed by individuals seeking services, and/or by agencies seeking to advise clients about resources. As necessary, the centralized information may also be available in a variety of formats, such as large print and/or multiple languages. Counties and/or transportation coordinating councils can build on transportation inventories prepared as part of the 2008 planning process to develop an inventory of service; a process that should prove useful for planners and consumers alike. A key challenge will be to keep directories current as services and providers change.

National/Regional Best Practices

Directory of Specialized Transportation Services, Consolidated Transportation Service Agency (CSTA), Los Angeles, CA - CSTA created a comprehensive directory of service and eligibility information for 200 social service, public, medical and commercial agencies offering transportation services. The directory is available to the public in multiple languages and on the web.

RIDEINFO, Consolidated Transportation Service Agency (CSTA), Los Angeles, CA - In conjunction with its directory, CSTA also made its service directory available through a telephone referral service that provides callers with quick and accurate referrals to over 200 public, private, and human service transportation providers. Travelers can also access the directory by sending an email; responses are provided within 24 hours.

Website Directory, North Texas Transit Cooperation Association, Dallas/Fort Worth, Texas - NTTCA created a transit information website that includes a searchable directory of regional transit providers with basic contact and service information for each county and each region.

Consumer Travel Training

People who have never used public transportation often have real concerns and fears about using the bus. A training program that teaches consumers how to use public transportation and become confident bus riders will encourage use of public transit. Travel training may be promoted as a marketing strategy to encourage key consumer groups (i.e., older adults) to use public transit; or it may be targeted towards frequent users of paratransit to encourage individuals to use lower-cost fixed route services, as appropriate to the individual's circumstances.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Encourages and support use of local fixed-route services ● May reduce demand for paratransit services ● Increases awareness and use of a variety of community transportation services 	<ul style="list-style-type: none"> ● Some audiences and individuals may require specialized training ● Requires multiple-agency cooperation to identify training opportunities ● Training may require support from agencies that perceive no, or minimal, long term gain

Wisconsin Application

Travel training has multiple applications in the State of Wisconsin. Despite the abundance of public transit systems in the State of Wisconsin, many residents have limited experience or understanding of how these systems work. Developing and marketing training programs to key transit markets, such as older adults, and using the programs to encourage transit ridership is an effective strategies. Transit agencies may also work with the Department of Motor Vehicles to reach individuals who have just lost their licenses. Travel training can cover basic transit skills such as reading a schedule, paying fares, and transferring between services.

A second opportunity for travel training is to train frequent paratransit patrons to use fixed-route services as appropriate to their individual circumstances. Critical training issues for some populations, especially wheelchair users may be using wheelchair lifts and safely securing wheelchairs inside transit vehicles. Encouraging use of lower-cost fixed-routes over higher cost paratransit services, however, may work to preserve transit agency resources and potentially lead to more services.

Some agencies have further supported wheelchair users riding transit with a wheelchair breakdown service. Similar to a Guaranteed Ride Home (GRH) program, this service would provide a ride home for wheelchair users experiencing mechanical problems with their wheelchairs. Much like GRH, the service is typically not widely used by the individual, but does provide people an extra measure of confidence. Thus, wheelchair users are more confident relying on fixed-route public transportation over paratransit, knowing they can get picked-up if necessary. Individuals who are able to use fixed-route service are often encouraged by an increased sense of freedom and flexibility.

Overview of National/Regional Best Practices

Out and About Travel Training Program, Ann Arbor Transportation Authority (AATA) “The Ride”, Ann Arbor, Michigan - AATA/The Ride offers free, personalized, one-on-one travel training instruction for seniors and/or people with physical or mental disabilities who want to learn to ride AATA buses. Group orientation sessions are also available. Topics in the training include requesting information, trip planning, reading schedules, boarding and exiting from buses, using the wheelchair lift and securement system, fare discounts, payment and stranger awareness

Road to Independence, CSTA, Frederick, Maryland – CSTA holds half-day training sessions that teach people with disabilities how to use public transportation. The program includes a short video and a personalized training session to review transit schedules and fares. Participants “graduate” from the class with an accompanied trip on the bus.

Hire Dedicated Mobility Managers

Mobility managers are staff resources dedicated to promoting and improving mobility of residents and/or agency clientele. Individual mobility managers may be hired by a particular agency or may be shared among multiple agencies and/or counties. Mobility managers typically identify, develop and implement programs, policies and projects that coordinate transportation services.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> • Dedicating staff to improving coordination creates resources to make sure programs can get started and carried forward. • Ideally will create neutral resources that can be shared across agencies • Partial funding available through federal grants 	<ul style="list-style-type: none"> • Determining which department will “house” staff person and how to best share resource • Requires lead organization to take responsibility to house and pay overhead for staff

Wisconsin Application

In many parts of Wisconsin, the lack of staff resources is a leading obstacle to identifying and pursuing coordination strategies. Hiring a mobility manager, who is dedicated to coordination efforts, therefore, is a good strategy for many counties. Currently, there are 19 mobility managers funded with federal grant resources plus several more mobility managers funded by non-profit and other local resources. There are many types of mobility managers in Wisconsin; some are more focused on planning and policy development, others are primarily involved with helping individuals connect with available transportation services, while the third group are supporting regionalization of other human service program changes, such as the formation of multi-county ADRCs.

Overview of National/Regional Best Practices

Mobility Managers, Southwest Regional Development Commission (SRDC), Southwest, Minnesota – As part of their coordinated human service and public transportation plan, SRDC recognized the value and need for a dedicated mobility manager. SRDC developed a project definition, researched training opportunities and hired a mobility manager. The mobility manager now facilitates coordination efforts and plays a leading role in marketing and outreach for regional transportation services.

Trip Planners, Capital District Transportation Authority (CDTA), Albany, New York – CDTA, the regional transit provider for the Albany region employs three “trip planners” to work directly with case managers and individuals in need of transportation services. The trip planners help individuals learn about available services, provide training and develop travel itineraries.

Technical Training for Mobility Managers

Mobility managers often need a new skill set to succeed in mobility management. Agencies may arrange for their mobility managers to attend technical training. Training is available through the Wisconsin Department of Transportation Mobility Management Training Program and/or statewide conferences and is currently available through web-based resources. Additional opportunities for mobility managers are listed in the best practices section.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> • Develop skill sets to improve effectiveness of mobility managers • In most cases, some training will be required to advance certain coordination strategies • Training may assist mobility managers identify additional funding sources 	<ul style="list-style-type: none"> • May require funding above and beyond mobility manager's salary

Wisconsin Application

Mobility managers require a wide range of technical skills to do their jobs effectively and the diversity of required skills means many managers could benefit from technical training. In August, 2007, three staff persons in Portage County working on improving coordination attended a Transportation Coordination Workshop sponsored by the Community Transportation Association of America (CTAA) in Washington DC. Funding for the training was provided, including travel costs. The workshop also included follow-up on-site assistance from CTAA to help Portage County with advanced stages of program implementation.

Overview of National/Regional Best Practices

Mobility Management Distance Learning - The National Center on Senior Transportation (NCST) hosts several distance learning web conferences, including several addressing various Mobility Management topics. Transcripts and presentation materials are posted on their website, and act as a training resource for mobility managers.

Mobility Planning Workshop - The Mobility Planning Services Institute is an Easter Seals Project ACTION workshop that brings together small teams of public transportation mobility managers and community leaders for mobility planning training. During the three-day course, the community team develops individualized coordinated mobility action plans. After the workshop, participants are eligible for free technical assistance or additional training for up to 12 months.

National Transit Institute (NTI) - NTI provides training and education services to support public transportation. The programs are developed in collaboration with the Federal Transit Administration and other transportation organizations and are based on identified needs and current topics, such as coordination planning and implementation.

Mobility Ambassadors. United We Ride supports States in developing coordinated transportation plans through their Regional Ambassadors program. The Ambassadors offer direct technical assistance during the development and implementation of a coordination plan, including guidance about new SAFETEA-LU funding opportunities.

Chapter 3. Coordination and Consolidation of Transportation Services

Coordination and consolidation of transportation services refer to strategies that create cost-efficiencies by sharing services, strengthening purchasing power and combining administrative resources across agencies. These strategies are fundamental to coordinated systems and offer immediate potential for agencies to reduce costs, save resources and expand services. An overview of these strategies is presented in Figure 3-1. Strategies include:

- Joint Purchasing;
- Contracting with Agency Operations;
- Contracting with Common Providers;
- Sharing Resources;
- Coordinated Dispatch; and,
- Consolidating Functions.

Implementation and Service Delivery

Conceptually coordination and consolidation strategies are relatively simple strategies. Implementing them, however, requires considerable negotiation among agencies and typically requires a longer time frame due to the effort associated with changing business practices and developing agreement and contractual terms across independent agencies. This is true even in areas with functioning coordinating councils. Once these agreements are in place, implementation can be achieved within three to six months. An exception to this is consolidating service delivery functions, since successful implementation of this strategy requires not only legal and contractual agreements but also new physical, technological and personnel systems.

Funding

Most federal programs are designed to reward grant applications that demonstrate how additional services can be purchased by utilizing capacity of existing operations. In most cases, therefore, funding for contracting and consolidation projects is available through the larger federal programs, including FTA section programs 5310, 5316 and 5317.

By definition, contracting and consolidation strategies offer business models that seek to maximize existing funding. This principle is further evidenced with new regulations regarding local match requirements under most FTA programs. When a coordination program involves the provision of service under contract, the revenues earned by the FTA-funded service provider may be used as the local match (as opposed to fare box and related income), even if the source of the contract funds are from another federal program. The Tri-County Community Action Program in New Hampshire, for example, matches FTA Rural Formula Program Section 5311 funding with Temporary Assistance for Needy Families (TANF) and Medicaid grants.

Figure 3-1 Communication, Training and Organizational Support Strategies

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Coordination and Consolidation of Transportation Services and Resources					
Develop and Improve Joint Purchasing	Consolidate functions such as vehicle maintenance, insurance, driver training and substance abuse testing	None known	Reduces costs; increases consistency across organizations	Requires leadership and on-going attention	Low
Facilitate Contracting with Agency Operators	Allow agencies with capacity to "sell" rides to other organizations	Ashland County Aging Unit and Laurie Jean Zach Center	Improves service productivity and cost-effectiveness	Requires leadership and on-going attention	Low
Facilitate Contracting with Common Service Providers	One or more sponsors have contracts with a common vendor and permit co-mingling of clients	MetroRide and Marathon County Transportation Program	Increases vehicle productivity; reduces per trip costs	Requires coordination and cooperation among multiple organizations	Low
Share Resources	Share use of operational and capital resources (vehicles, facilities, support services)	Green Lake County	Reduces costs; increases vehicle productivity; improve service quality	Turf issues; requires increased quality control and monitoring and cost allocation	Low
Coordinate Dispatching Functions	Create centralized call center and share trip dispatch under single entity	Dispatch coordinated within multiple programs of single agency – Marathon County Transportation Program	Improves program access; creates cost-efficiencies; maximizes ridesharing	Requires lead agency, personnel training and cost reimbursement models; Requires trust across merged service providers	Medium/High

Shared Resources

This strategy involves the shared purchase and/or use of resources. Sharing resources may include capital resources such as vehicles and facilities and/or operating and support services. Examples of sharing operating and support services include sharing software, offering joint driver training or drug testing programs, and sharing (or developing joint) policies, procedures, and implementation plans.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Provide more rides by reducing per trip costs ● Increase vehicle productivity ● Improve service quality 	<ul style="list-style-type: none"> ● Requires lead agency to champion ● Some agencies may be reluctant to share agency funded vehicles due to high costs of purchasing vehicles ● Requires quality control, monitoring and cost allocation systems

Wisconsin Application

Sharing resources among transportation providers is often one of the first coordination efforts undertaken as agencies begin to collaborate. By sharing resources, participating agencies can benefit immediately with little start-up costs. In some Wisconsin communities, agencies are already sharing several aspects of transportation operations. In Green Lake County, agencies are collaborating to share workload and administrative functions including grant writing, training and policies and procedures. Fox River Industries, a human service agency, will write the 5310 grant while the Department of Human and Health Services (DHHS) prepares the 85.21 grant. Funding provided by these grants is shared among agencies. All training is provided by the University of Wisconsin – Milwaukee and is coordinated and arranged by Fox River Industries. DHHS also shares its formal policies and procedures with interested agencies to help avoid administrative duplication. Examples of shared policies include behavior guidelines for riders on vehicles and grievance/complaint procedures.

Overview of National/Regional Best Practices

Vehicle Sharing, Dakota Area Resources and Transportation Services (DARTS), West South Paul, Minnesota – DARTS is a private, non-profit human service agency with 37 vehicles. DARTS shares the operation of a Section 5310 vehicle with the City of Farmington Senior Center and St. Michael’s Church. DARTS applied for the 5310 vehicle, paid the local match, and pays insurance and maintenance costs. DARTS operates the vehicle Monday through Thursday. The City of Farmington Senior Center operates the vehicle on Fridays and for special after-hours and weekend events, providing the driver, paying for fuel, and a maintenance and insurance fee. St. Michael’s Church operates the vehicle on weekends, pays for the fuel and supplies volunteer drivers. All drivers operating the vehicle must complete DARTS drivers’ training program and be certified by DARTS.

Joint Purchasing

Joint purchasing focuses on coordinating administrative and fiscal functions commonly undertaken by multiple organizations as a way to achieve greater cost efficiency and eliminate redundant activities. Examples of how transportation operators could consolidate purchasing include combined vehicle maintenance contracts, joint insurance contracts, and/or multi-agency driver training and substance abuse testing. Through group-purchasing of common products and/or services, participating entities may increase purchasing power and receive preferential service and prices.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Agency level cost savings ● More consistent operating procedures ● Shares administrative functions rather than resources or services, therefore, may be more easily implemented ● Opportunity to build and develop trust across agencies 	<ul style="list-style-type: none"> ● Requires a lead agency to champion ● Prohibitive administrative costs to lead agency ● Some agencies may have entrenched procurement/purchasing requirements ● Joint purchases of some items may require large initial expenditure

Wisconsin Application

Several Wisconsin counties are working together to jointly purchase some services and items, including basic services such as vehicle washing services. In Wisconsin, because the State coordinates the purchase of vehicles, agency vehicle fleets are similar. This makes jointly purchasing vehicle maintenance and repair services feasible. As transportation coordinating councils begin to work together to coordinate services, joint purchasing also offers opportunities to share resources and gain experience working together. Agencies may begin collaborating on minor services such as vehicle washing and/or fuel purchasing and progress to larger contracts such as maintenance and repair or insurance.

Overview of National/Regional Best Practices

Shared Maintenance. DARTS, Dakota County, Minnesota - recognizing the need for reasonably priced, high quality maintenance services and in order to offset internal maintenance costs, DARTS began offering its vehicle maintenance services to other agencies. By successfully marketed maintenance services to other local service providers, DART now services between 80 and 90 vehicles.

Joint Fuel Purchasing, Kanawha Valley Regional Transit Authority (KRT), Charleston, West Virginia - KRT implemented a bulk purchase fuel program that allows tax-exempt public and non-profit entities receiving FTA funds to purchase lower cost fuel from KRT. KRT benefits from increased purchasing power; KRT administers the program for qualified eligible recipients and offers below market fuel rates.

Insurance Pools, Non-Profit Insurance Program (NPIP), Washington State – NPIP is a Joint Insurance Purchasing program where members jointly purchase insurance and claims adjustment, risk management consulting, and loss prevention services. Primary benefits are lower insurance premiums, stable access to the insurance market and increased availability of risk management and loss prevention services.

Contract with Agency Operators

Contracting with agency operators involves taking advantage of down-time associated with some services and using this excess capacity to satisfy unmet demand at other organizations or locations. Agencies needing to expand capacity or geographic coverage may benefit by purchasing service from human service agency operators with excess capacity.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Increased efficiency in service delivery ● Lower per trip costs ● Maximizes fleet utilization ● Increased revenues for organizations that “sell” excess capacity ● Improved service quality for clients through increased service options 	<ul style="list-style-type: none"> ● May encounter concern among existing service providers reluctant to give up a portion of the market ● Ensuring potential agency contractors are familiar with program regulations such that the services are administered according to agency standards.

Wisconsin Application

There is potential for agencies to contract with other agencies throughout Wisconsin, including large rural counties where services may be geographically concentrated in one part of the county. In Ashland County, the Ashland County Aging Unit has a contract with the Laurie Jean Zach Center located in central Ashland County, to provide older adults in southern Ashland County access to transportation services.

The Laurie Jean Zach Center is a sheltered workshop offering employment skills training to persons with disabilities. As part of its service, the agency operates a 5310 funded vehicle used to transport clients to/from their day programs. Most of these trips correspond with working hours, so that client trips are primarily in the mornings and afternoons only. Under the agreement with the Ashland County Aging Unit, Laurie Jean Zach Center’s vehicles are available mid-day for client transportation to take seniors to medical appointments. The Ashland Aging Units markets this service, processes all ride requests, dispatches the trip request to the Laurie Jean Zach Center and pays a fixed cost per trip. The program benefits all parties; the Aging Unit is able to efficiently expand its geographic coverage and provide more rides to seniors, and the Laurie Jean Zach Center earns revenue to support its transportation services.

Overview of National/Regional Best Practices

Service Contracting, Norwalk Transit District (NTD), Norwalk, Connecticut - NTD contracts with five different agencies to provide ADA service. This arrangement utilizes spare capacity of the contracting agency vehicles and earns revenue for the agency. The arrangement also benefits NTD through lower hourly rates.

Service Contracting, Massachusetts, the Massachusetts Bay Transportation Authority (MBTA), Boston, MA. MBTA contracts with four operators to provide ADA paratransit service. One operator, the Greater Lynn Senior Services (GLSS), is permitted to co-mingle ADA paratransit trips with its own senior trips, which creates service efficiencies through shared rides. In return, the MBTA gets a discounted trip rate for ADA paratransit service.

Contract with Common Service Providers

This strategy involves two or more agencies contracting with the same transportation operator to provide transportation and allow the operator to co-mingle trips, as long as service levels meet agency standards. Individual agency contracts are not coordinated but because several agencies use the same operator, there are more shared rides, which helps lower per trip costs. Lower trip costs allows more trips with the same budget.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> • Increase efficiency of vehicle operations • Decreases the cost per trip • Increases local or regional capacity 	<ul style="list-style-type: none"> • Requires strict policy directive from administering agency and adoption of policy by participating agencies • Requires administrative oversight, performance monitoring and fraud control efforts

Wisconsin Application

Contracting with common service providers is a relevant strategy for many parts of Wisconsin, as a way to reduce costs, expand service capacity and encourage ride sharing. A Wisconsin example is provided by MetroRide in Wausau and the Marathon County Transportation Program. MetroRide is the public transit operator in the metropolitan Wausau area, responsible for fixed-route and ADA complementary paratransit services, while the Marathon County Transportation Program (MCTP) provides human and medical transportation services. MetroRide and MCTP jointly contract with a private contractor, Abby Vans, for non-ambulatory transportation and ADA complementary paratransit service in Marathon County. The joint contract encourages ride sharing and helps both MetroRide and MCTP control costs. With controlled costs, both MetroRide and MCTP are able to maintain their existing levels of service; a level of service that otherwise might need to be reduced.

Overview of National/Regional Best Practices

Contracting with Common Providers, DARTS, Dakota County, Minnesota – In Dakota County compatible ADA, senior, job access and group-home trips sponsored by different agencies through separate contracts with DARTS are co-mingled on DARTS vehicles, rather than being served by four different fleets.

Contracting with Common Providers, LogistiCare, Denver, Colorado. – LogisCare is Denver’s regional Medicaid broker. It allows its clients’ non-emergency medical transportation trips to be co-mingled with other trips sponsored through other human service contracts with one of its vendors, Special Transit, that serves Boulder.

Coordinate Dispatch/Call Center Functions

Coordinating dispatch and/or call centers involves creating a one-stop call-in number and using a single dispatcher or dispatching center to schedule requested rides among the available providers, vehicles or services. Providing consumers with one call-in number greatly increases customer convenience. Jointly scheduling trips also helps to organize trips efficiently and maximizes ride-sharing. Reducing individual trip costs means more rides to more people for the same amount of resources.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> • Creates cost-efficiencies by consolidated trip reservations and scheduling staff • Maximizes opportunities for ride sharing • Improves service delivery and customer satisfaction • Cost savings translate into increased service 	<ul style="list-style-type: none"> • Requires champion agency to coordinate and implement a centralized call center • Once implemented, requires administrative, oversight and management • May encounter reluctance over service quality, loss of control and loss of client contact • Requires an equitable trip distribution method, so all providers feel the trip referral process and trip referral is fair

Wisconsin Application

Creating a single call-in number for transportation services makes it easier for customers to access available services. Central call-in numbers also helps to schedule shared-rides and guide travelers to the most appropriate service, given the trip destination, an individual's ability, and other factors such as the time of day or weather. There are several Wisconsin counties that have combined call-in numbers and/or centralized dispatch of the services. In Ashland County, for example, the Ashland County Aging Unit handles calls for transportation services and depending on the request, will dispatch the trip to the Laurie Jean Zach Center, refer the client to use BART, or arrange for an aging unit vehicle to provide the ride. In Marathon County, a single call-in number is used to access a wide variety of services, including Medicaid, veteran services, quality of life trips and human/social services. The Marathon County Transportation Program will schedule the individual trip according to the individual's needs and available vehicles.

Overview of National/Regional Best Practices

Consolidated Call Center, Senior Transportation Connection (STC), Cleveland, OH - STC manages and coordinates a centralized call center for transportation services provided in the county. The agency routes trips and assigns trips to the appropriate provider.

Consolidate Functions

The consolidation or merger of various operating functions under a single operating entity is considered the highest level of transit coordination. The two most common approaches are (1) consolidation of call center functions (reservations, scheduling, and even dispatching) under a single manager or broker; and (2) consolidation of call center functions plus some or all of service operations (hiring, training and deploying drivers and maintaining vehicles).

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Creates cost-efficiencies by consolidated trip reservations and scheduling staff ● Maximizes opportunities for ride sharing ● Improves service delivery and customer satisfaction ● Provides leverage/local match dollars to secure additional federal funding ● Cost savings translate into increased service 	<ul style="list-style-type: none"> ● Requires champion agency to take on consolidation and support idea ● Once implemented, requires administrative oversight of center and staff ● Agency concerns over service quality, loss of control and client contact ● Requires project management and oversight, cost allocation/reimbursement models and service delivery standards

Wisconsin Application

Some Wisconsin counties have consolidated transportation services across several programs, such as the Marathon County Transportation Program (MCTP) and Indianhead Community Action Agency (Indianhead).

Specialized transportation services in Marathon County are consolidated under the MCTP, operated by the North Central Health Care on behalf of Marathon County. The program coordinates and consolidates transportation services across a variety of programs and provides transportation to veterans, social service clients, Medicaid clients, residents of Marathon County aged 65 and older, and individuals of any age with a disability. MCTP receives funding through several federal, state and local programs.

Indianhead is a private non-profit agency in Rusk County that is also the largest provider of transit services in the County, operating a combination of specialized and general public transit services, including deviated fixed-route service, demand response, shopping shuttles and volunteer drivers. Indianhead earns revenue for its services from a variety of federal, state and local resources and collaborates closely with Rusk County staff.

Overview of National/Regional Best Practices

Consolidated Service Delivery (Centralized Model), DuPage County, Illinois – In DuPage County, the transit operations contractor, Veolia Transportation manages the call center and operates a dedicated fleet. Veolia takes reservations for both ADA and Dial-A-Ride customers, schedules them onto its fleet, and co-mingles the trips when it is efficient to do so.

Consolidated Service Delivery (Decentralized Model), Port Authority of Allegheny County, Pittsburgh, PA. The Port Authority in Pittsburgh contracts with Veolia Transportation as a broker. Veolia contracts with private and non-profit carriers who perform reservations, scheduling, and dispatching for distinct service areas or zones. Customers are assigned to carriers based on their zone and all trips are co-mingled. Fares are also dependant on the customer zone and may be paid using cashless fare methods.

Chapter 4. Mobility Strategies

For purposes of this handbook, strategies to enhance transportation mobility refer to expanding system capacity by creating new services and/or expanding existing ones. The objective of these strategies is to increase the types and amount of services available to clients by designing services that target specific client needs. By targeting services to meet the needs of individual markets, the strategies can help the agency offer efficient services that expand opportunities for riders while agencies reduce transit agency operating costs. An overview of the mobility strategies is provided in Figure 4-1; they include:

- Improve service convenience;
- Establish/expand volunteer driver/escort programs;
- Establish/expand taxi subsidy programs;
- Introduce community bus routes;
- Introduce flexible transit services;
- Introduce agency “Tripper” services; and,
- Improve accessibility at transit stops.

Implementation and Service Delivery

Among the most significant implementation challenges associated with any service improvements are funding and commitment. Many transportation providers (including operators of both public and specialized transit services) are reluctant to take on additional costs associated with new services without reliable, sustainable funding sources. Once funding is secured, however, most transit providers have the skills and tools to improve and expand services. Mobility strategies require longer implementation time frames due to the time associated with increasing operational capacity, especially where vehicles and/or capital equipment is needed.

Funding

An essential component of implementing mobility strategies is identifying and securing reliable and sustainable funding for new and/or expanded service. Unlike capital projects with largely fixed implementation costs, service improvements require on-going funding sources. Some of the national and regional best practices which have been able to offer high levels of service typically are able to do so by identifying a reliable local funding source such as state, municipal or institutional funds and/or by charging higher fees for premium services, such as making same-day reservations. Some of the non-FTA funding sources that may be examined for their potential to support service improvements include:

- Community foundations – A number of service projects use foundation grants (Red Cross, United Way, etc.) as seed or start-up funding for coordination projects, especially programs that can demonstrate expanded mobility for specific target populations.
- Non-DOT Federal Funding – The Federal Interagency Coordinating Council on Access and Mobility identified 64 federal programs support passenger transportation (see listing in Appendix B). In reality, however, only a handful of these programs are applicable to most mobility strategies. Nonetheless, there are some relevant funding sources, including Community Development Block Grants and Older Americans Act Title IIIB resources.

Figure 4-1 Communication, Training and Organizational Support Strategies

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Mobility Strategies					
Improve Service Convenience	Improve/expand service hours, geographic coverage, driver assistance, same-day service, etc.	Ashland County – Bay Area Rural Transit and Ashland County Aging Unit	Enhances travel and service options	Requires increasing financial resources	Medium-to-High
Establish/Expand Volunteer Driver/Escort Programs	Develop/incorporate volunteer driver program to deliver services	Many – examples include City of Green Lake, Western Washington Center for Independent Living; Indianhead	Low cost strategy to increase service, community involvement	Volunteer recruitment and retention; Insurance and fuel costs	Low
Establish/Expand Taxi Subsidy Programs	Provide vouchers or fare script to partially or completely pay for taxi services	Dane County/Madison Metro	Offers flexible service; increases travel options	Lack of taxi providers; issues with quality of service; driver training	Medium-to-High
Introduce Community Bus Routes	Create fixed route services designed for older adults, persons with disabilities or individuals with low incomes	Dane County – Group Access Services (GAS); Monona Lift	Increases travel options; offers low-cost, higher efficiency option	Requires service planning, likely 6-12 months;	Medium-to-High
Introduce Flexible Transit Services	Design routes with specific time points but allow "off route" deviations between time points to pick up/drop off passengers	Fox Cities – Valley Transit "the Connector"	Increases transit service area; attracts more riders and may increase route productivity	More complicated for operators, requires 6-9 months lead time	Medium-to-High

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Introduce Agency "Tripper" Services	Create fixed route services with scheduled deviations to pick up passengers at key locations (schools, agency)	None known	Increases coverage of lower cost fixed routes; Can be oriented to pick up clients from human service organizations	Requires transit system and human service/school agreement	Low
Evaluate and Improve Accessibility at Transit Stops	Make accessibility improvements at bus stops	None known	Improves accessibility of fixed-route; Does not require on-going funding; Reduce reliance on paratransit	Requires planning, construction, management and financial resources	Medium-to-High

Improve Service Convenience

Strategies to improve service convenience can have a profound impact on customer mobility. They include; (1) Expand the days and/or hours of service; (2) Increase the geographic service area for pick-ups and drop-offs, and/or adding destinations beyond the established pick-up area; (3) Upgrade level of driver assistance, such as providing door-to-door assistance; and (4) Offer same-day service or reduce the ride notification period to enable same-day requests.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Enhance customer accessibility, mobility and convenience ● Increase types and ways people can travel 	<ul style="list-style-type: none"> ● Expanding service convenience requires additional financial resources. ● Expanded driver assistance may encounter liability, training, union and service issues

Wisconsin Application

Many public transit agencies in Wisconsin are engaged in on-going efforts to understand customer needs and adjust transit services to meet these needs and improve service convenience. The most salient application of this strategy in Wisconsin is likely encouraging public transit operators (including shared-ride taxi providers) to work with specialized transportation providers in an on-going effort to coordinate needs and services. In Ashland County, Bay Area Rural Transit and the Ashland County Aging Unit are working together to create a combined community transportation service plan for 2009, where the Aging Unit would act as a subcontractor to BART. The joint re-organization of existing services represents considerable effort towards coordinating service and meeting customer needs. The outcome of this process will most likely significantly improve customer convenience with an increase in targeted services and help save reserve funding to provide more rides.

Overview of National/Regional Best Practices

Increased hours of operation, Alameda-Contra Costa Transit Authority (AC Transit), Oakland, CA – AC Transit extended the hours and days-of-week operations for five bus routes connecting low-income areas with employment centers near the Oakland International Airport and downtown. The extended hours more closely reflect airport related employment schedules that include early morning and evening work shifts.

Premium ADA Service, MetroMobility, Minneapolis/St. Paul, Minnesota – Metro Mobility offers same day reservations for paratransit trips but charges users a surcharge for the service. Same day services are typically scheduled using taxi services; passengers pay the first \$7 (as compared with \$3.50 for advance reservations). MetroMobility covers the remaining cost of the trip up to \$20.

Premium ADA Service, Santa Clara Valley Transportation Authority, Santa Clara, CA - With advance reservations one-way trips within the service area cost \$3.50/trip. VTA offers travel outside the service area, same-day service and open-ended returns but levies a surcharge.

Establish Volunteer Driver/Escort Programs

Volunteer driver programs typically provide mileage reimbursement to individuals operating their personal vehicles or allow volunteers to use agency vehicles to take individuals to medical appointments or other services. Volunteer drivers often have more flexible than scheduled, paid drivers and help agencies save operating costs, thereby allowing them to provide more services for limited resources.

Volunteer escorts offer a similar service but in this case volunteers accompany riders traveling to/from their destination on transit or paratransit. Escort services often significantly increase passenger comfort and reduce agency expenditures by supporting travel on lower cost modes and/or reducing staff costs.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Increase schedule flexibility and reduce costs ● Develop program advocates in community ● Volunteers can provide physical and emotional support to riders; ● Most volunteer drivers are limited to ambulatory passengers 	<ul style="list-style-type: none"> ● Recruiting and retaining volunteers can be challenging, requiring on-going effort/attention ● Some time slots are hard to staff with volunteers ● Reimbursement rates do not adequately cover fuel costs and vehicle insurance, which discourages volunteer participation ● Insurance liability coverage may limit participation for some

Wisconsin Application

Volunteer driver and escort programs exist throughout Wisconsin and are an essential resource in cost effectively transporting individuals whose mobility needs are difficult to meet with traditional transit or paratransit alternatives and/or whose travel needs include origins or destinations beyond these service areas. There is great potential for the expansion of this strategy and coordination of programs across the state. There are also opportunities to coordinate volunteer driver programs within a single county or region. Consolidated volunteer programs will lead to more efficient deployment of volunteers, give agencies more resources to sponsor volunteers, and advocate for needed program improvements.

Despite the potential for increasing volunteer driver programs, these efforts will continue to be challenged as fuel costs and insurance rates rise while reimbursement rates remain flat. Examples of successful local volunteer driver programs in Wisconsin include the City of Green Lake, Western Wisconsin Center for Independent Living and Indianhead Community Action Agency.

Overview of National/Regional Best Practices

Ride Connection, Portland, Oregon – Ride Connection is a non-profit, community service organization run for and by older adults that developed a volunteer driver program to meet the special needs of older adults. Ride Connection includes a network of over thirty agencies and

over 370 volunteers providing in excess of 358,000 annual rides to 10,500 individuals, and is considered one of the best volunteer transportation services on the west coast.

Volunteer Escort Program - Life Eldercare, Newark, California - Life Eldercare, a non-profit organization, recruits, trains and supervises the volunteer travel escorts used by the city of Newark, California's Travel Escort Program. The escorts travel fare-free while accompanying and assisting paratransit riders.

Taxi Subsidy Programs

Taxi subsidy programs typically involve an arrangement between a sponsoring organization (or its agent) and a participating taxi company or companies. These programs accept and accommodate requests from sponsored customers, clients, or residents and/or accept vouchers provided by the sponsoring organization to riders as partial payment for the trip. Most taxi subsidy programs focus on resident seniors and/or persons with disabilities (or agency clientele), but some are also available to general public residents. Human service agencies that employ this strategy generally limit taxi subsidies to agency clientele or program participants.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Provide same-day service ● Effective for unanticipated travel and evening and weekend hours ● Effective for trips outside of service area ● Method to set/control subsidy per trip ● Effective in low-density areas 	<ul style="list-style-type: none"> ● Requires good communication among all parties ● Need to establish fraud-protection mechanisms ● Shortage of taxi companies in less urban areas within the region ● Shortage of accessible taxicabs

Wisconsin Application

Taxi services are well-integrated with community transportation services in several parts of Wisconsin through shared-ride taxi services. In many areas, there are additional opportunities to increase the use of taxi subsidy programs and/or expand the use of taxi services as part of a coordinated system to reach existing community transportation services. Taxi services can increase flexibility for early morning, late night and/or weekend services. Many of the state sponsored shared-ride taxi programs are very similar to taxi voucher programs. Other local examples of innovative use of taxi services exist in Dane County, where Madison Metro contracts with a local taxi operator, Badger Cab to provide weekend and overflow paratransit trips. The contract has also encouraged the development of a local accessible/lift-equipped taxi fleet, which is an excellent resource for human service agencies as well as members of the general public.

Overview of National/Regional Best Practices

Pilot II Subsidized Taxi Service, DuPage County, Illinois - Pilot II Subsidized Taxi Service is a nearly county-wide, user-side taxi subsidy program. Each sponsor defines its eligibility criteria and decides how much to charge for a voucher/coupon that is worth \$5.00 towards a taxi fare. Service is available 24 hours a day, 365 days a year anywhere in DuPage County.

Access-a-Cab, Regional Transportation District (RTD), Denver, CO - RTD established the Access-a-Cab service in response to a high denial rate on paratransit services and to reduce the per trip cost of its ADA paratransit service. Customers call RTD's ADA paratransit call center (managed by First Transit) to request an Access-a-Ride trip. Trips cost a flat fee of \$7.00.

Community Bus Routes

Community bus routes, also known as “service routes,” are fixed-route, fixed-schedule transit routes. They have a number of features that distinguish them from regular fixed-route bus routes; primarily, the routes and level of service are designed around the origins and destinations and needs of target markets, such as older adults and persons with disabilities.

Community bus routes can be an effective way to divert paratransit users to a lower subsidy per trip service that also provides more convenience because no advance scheduling is needed. Community bus routes may also offer connections to longer distance, inter-city routes. Community bus routes typically use small, low floor buses that are able to operate on neighborhood streets, and enter driveways and parking lots. The focus is on front-door convenience at the expense of direct routing. Emphasis is on convenience, ease of use, and highly-personalized driver service.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> • Enhanced travel options, especially in areas that lack fixed-route service • Increases traveler independence • Potential streamline fixed-route service • May reduce demand for paratransit services 	<ul style="list-style-type: none"> • Funds must be secured for capital, administrative and operating expenses • Need to develop service, implementation and marketing plan

Wisconsin Application

Several parts of Wisconsin provide community bus routes, often as part of shopping shuttles or regularly scheduled subscription trips. By designing fixed-route community bus routes between key destinations on specific days and times, older adults and persons with disabilities gain access to places they need to go. Community bus routes allow operators to provide shared quality of life trips that are frequently cost-prohibitive if trips are diverted from demand response service. The Dane County Department of Human Services sponsors Group Access Services (GAS) which include regularly scheduled group trips specifically for seniors aged 60 or more to nutrition sites, senior center activities, adult day centers and shopping areas. Services are neighborhood based and function much like a neighborhood circulator service connecting residential areas with key service destinations. Although designed for older adults, persons with disabilities may also use the service, which further increases mobility and decreases costs.

Overview of National/Regional Best Practices

Community Bus Routes, Broward County Transit (BCT), Broward County, Florida - BCT established community bus routes in 15 communities to: (1) provide more convenient mobility options for seniors and persons with disabilities; (2) divert ADA paratransit trips to a less costly service; and (3) streamline regional services. The operation has been successful in achieving all of these goals.

Flexible Transit Services

Flexible transit services are routes that have specific time points, but that can go “off route” (up to a certain distance) between those time points in order to pick up or drop off people at their homes or other locations. Flexible transit services usually fall into two categories: 1) Route deviation - the bus operates along a fixed route with a fixed schedule but may deviate to pick-up or drop off customers within a certain distance from the route, returning to the route at or as near as possible to the point of exit, before continuing on the route; and 2) Point deviation - the bus may operate along any path to serve “in-between” requests, as long as the bus gets to the next scheduled bus stop on time.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Provide an alternative service in less-densely populated areas where fixed-routes are not feasible ● Expands service coverage without ADA paratransit obligation ● Can be used to test demand and build ridership for eventual fixed-route service 	<ul style="list-style-type: none"> ● More complicated than fixed-route for operators and dispatchers ● More difficult to stay on schedule ● Requires educating passengers ● Need to study and evaluate costs differentials between flexible- and fixed - route services

Wisconsin Application

Flexible transit (flex-routes) services are a relatively new type of service that has been implemented in various parts of the U.S. with considerable success. Flex-routes are typically most appropriate in lower-density areas with dispersed origins and destinations, such as rural areas or in suburban areas at the end of a regular bus route.

A Wisconsin example is provided by Valley Transit in Appleton, which operates “the Connector” flex service. The Connector operates flexible transportation in a designated area near to but outside of the fixed-route service areas. Individuals who live in the Connector service area may use the Connector to travel to one of four bus transfer points and/or to destinations within the service area. The service is available to all members of the community, costs \$3 per ride, and operates 20 hours a day and six days a week.

Overview of National/Regional Best Practices

Omni Ride, Stafford and Prince William Counties, Virginia - Omni Ride was implemented because (1) the service area’s suburban densities could not support fixed-route service; (2) there was no major travel flow (dispersed origins and destinations); (3) viability of fixed-route service was limited by the road network and lack of sidewalks; and (4) limitations on available funding.

Mountain Line Transit, Morgantown, West Virginia – Mountain Line Transit has seventeen routes that deviate on request for persons with disabilities. This deviation service was introduced to replace a prior system of separate fixed-route and ADA paratransit services.

Agency/Employment “Tripper” Services

Regular “tripper” service typically involves the scheduled deviation of fixed-route buses to provide service to students, employees or travelers that need access to a destination at key bell times only. The stops become part of the routes’ schedules, but buses only go off-route at the scheduled time. The only other real qualifier for this “tripper” service is that buses are open to the general public.

Using this type of service as a template, some transit systems have provided tripper service to human service agencies or employment centers that are located near, but not on routes, at times when clients or employees are going to/from these destinations. Sometimes, only a minor deviation may be needed, e.g., to let off or pick-up agency clients on the agency side of a busy street.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Reduce demand for paratransit service and lower system wide costs ● Increase service options and improve mobility 	<ul style="list-style-type: none"> ● Requires multi-agency agreement on service characteristics, cost sharing, etc. ● Other obstacles may arise depending on time and distance associated with service change.

Wisconsin Application

“Tripper” services could be employed in any part of Wisconsin where there are fixed-route transit services and schools, employment sites or social service agencies near, but not directly on the existing routes. Several of the existing transit services already provide deviated fixed-route services, which allow a driver to deviate up to one-quarter or one-half a mile from its scheduled service to pick-up or drop-off a passenger. For example, some transit agencies schedule “school trips”, where buses will go off the usual routing to drop-off/pick-up at schools. Similar arrangements are also made for employment sites with shift workers that only need transit service at specific times.

Overview of National/Regional Best Practices

Lane Transit District (LTD), Lane County, Oregon - LTD has a route that makes a scheduled deviation to Goodwill Industries at key times when there is a lot of demand from riders with disabilities. The transit staff at Lane Transit worked closely with the Goodwill staff on scheduling, and keeps in contact with Goodwill to make sure that any changes in program start and end times are accommodated. LTD staff report that 7,750 trips are served per year.

Improve Access to Fixed-Route Bus Stops

Improving the accessibility of, and access to, fixed-route bus stops involves examining bus stops to determine how easily they can be reached by older adults and/or people with disabilities. Typically, agencies will examine bus stops used by significant numbers of older adults and/or persons with disabilities and determine if improvements could make stops more accessible. Potential infrastructure improvements may include removing barriers on sidewalks, improving or adding sidewalks, adding curb cuts, adding or improving pedestrian crossing and signals (including audible signals and countdown signals), and adding signage, lighting, benches, shelters, and other pedestrian enhancements, especially in the vicinity of bus stops.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> • Encourage use of fixed-route system • Reduce reliance on paratransit service • Secondary benefits associated with community development and enhanced safety • Does not require on-going funding commitments 	<ul style="list-style-type: none"> • Physical improvements require financing and typically have a long lead time • Many improvements require prioritization, funding and commitment from local authorities.

Wisconsin Application

Improving accessibility around fixed-route transit services in Wisconsin is most applicable to existing urban areas where transit stops could become easier to use for older adults or persons with disabilities with better sidewalks, lighting or street crossings. Improved maintenance at the bus stops also helps encourage use and makes the stop more accessible. Growth areas in Wisconsin may also benefit from this strategy; new developments may incorporate transit-oriented design principles and accessibility standards to encourage transit and ensure transit facilities can be safely and easily accessed by all members of the community.

Overview of National/Regional Best Practices

Bus Stop Accessibility and Safety Toolkit, Easter Seals Project ACTION – Easter Seals developed a Bus Stop Accessibility and Safety Toolkit to help transit agencies develop an inventory of bus stops, assess the accessibility and safety of each bus stop and create an action plan to address shortcomings. Hillsborough Area Regional Transit (HART) in the Tampa, Florida area has recently used this toolkit to put together such an inventory. Dallas Area Rapid Transit (DART) in Dallas, Texas is in the process of surveying all of its bus stops to evaluate accessibility. DART has created a bus stop inventory that consists of photographs of each stop location and potential improvement projects.

Chapter 5. Technology Strategies

Technology strategies include technological tools that support and enhance public transit and human service transportation operations and planning. Our list of relevant strategies includes a series of technological tools, including tools that support or improve data integrity, fare collection, cost sharing/allocation, billing/reporting and transfers; live dispatch; and productivity.

Implementation and Service Delivery

The most significant obstacle associated with implementing new technology, especially in cases where new technology is being developed, is training staff to operate and manage the technology and integrating new systems with older technologies. Similar with other strategies, best practice models suggest that implementation must be done carefully, especially when consumers are involved. Technological projects are likewise best achieved by demonstrating success on a smaller scale, learning from and building on success before implementing new tools on an agency- or system-wide basis.

Other implementation lessons involve ensuring front-line staff and end-users are involved throughout the project, including design and testing. It is also essential that all potential users are sufficiently trained in the system. Experienced operators also underscore the importance of allocating sufficient time for new technologies to be developed, examined and fully tested before encouraging widespread use of the system.

Funding

The FTA New Freedom (Section 5317) program allows for capital funding (requiring a 20% local match) for hardware and software that support coordination strategies, especially when strategies will help persons with disabilities travel to employment.

Figure 5-1 Communication, Training and Organizational Support Strategies

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Adopt Technology Strategies					
Evaluate, Develop and Purchase Tools that Support Data Management	Install tools that improve data integrity, fare collection, cost sharing/allocation, billing, reporting and transfers	None known	Improves service operations, design and management; may create cost savings	Requires initial investment in software, training and staff and on-going management of system	Medium
Evaluate and Purchase Tools that Support Live Dispatch	Buy software that incorporates reservation and scheduling capabilities; uses vehicle location information to dispatch of unscheduled trips	None known	Removes obstacles to providing same day, shared ride service; potential to reduce costs and increase productivity	New software; may take time to function smoothly	Medium
Evaluate and Purchase Tools that Improve Productivity	Use Non-Dedicated Vehicle software to matches operational information with ridership data to maximize service design and enhance productivity	None known	Increase services productivity and frees resources for service expansion	Few - staff time to test and apply model to existing service	Low

Tools that Improve Data Integrity, Fare Collection, Cost Sharing/Allocation, Billing/Reporting, and Transfers

MDT/AVL Technology – strategies that incorporate mobile data terminals (MDTs) and automatic vehicle locating system (AVL) technology into paratransit services to track vehicle movements.

Automated Cost Allocation of Co-Mingled Trips – systems that automate costs associated with co-mingled trips and track the live (or “real”) travel time or mileage for each trip.

Centralized Fare Collection – systems that allow centralized fare accounts to be maintained for each customer (individual or agency) with fares collected automatically as trips are taken.

Smart Card Technology – involves storing client and eligibility information on a card, which is swiped in (or held in proximity of) a reader as riders board and exit the vehicles.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> • Improved system management and reduced administrative costs • Increased service efficiency and enhanced service delivery • Provide more rides to more people with existing resources 	<ul style="list-style-type: none"> • Start up costs may be significant or prohibitive • Requires staff training to operate and manage technology • Integration of old and new systems

Wisconsin Application

Many of the technology tools are most applicable to Wisconsin’s most urbanized areas, where the volume and complexity of services is greatest. National best practices suggest that several of the technology tools also have rural applications.

Overview of National/Regional Best Practices

MDT/AVL Technology and Trip Sponsorship, Advanced Rural Transit Information and Coordination (ARCTIC) Arrowhead, Minnesota – ARCTIC uses AVL systems to coordinate communication between transit vehicles and a central dispatch facility. The AVL system allows ARCTIC to track the exact location of transit vehicles; a function that improves scheduling and enhances vehicle and passenger safety.

Automated Cost Allocation, Outreach, Santa Clara County, California – Outreach, the ADA paratransit broker in Santa Clara County, uses a version of Trapeze software that allocates shared trip mileage among sponsors. Using an objective method to allocate shared trip mileage helped to make providers more confident about how charges are divided and thus, has increased ride sharing, saving money for the operators and increasing the number of rides available in Santa Clara.

Centralized Fare Collection, Ann Arbor Transportation Authority (AATA), Ann Arbor, Michigan; and Outreach, Santa Clara County, California – Both AATA and Outreach use an automated

centralized system to bill agencies and collect fares for paratransit customers. The automated system is an efficient system for scheduling customer rides. It also supports cost allocation systems and helps bill agencies for rides taken by clients in a transparent and equitable way.

Smart Card Technology, Division of Aging Services, Northern Nevada Transit Coalition (NNTC) – NNTC received a grant to develop and implement the use of magnetic swipe cards in several transit operations that serve senior citizens. The magnetic swipe cards enabled NNTC to verify actual trip making and bill responsible agencies accordingly. This ability made it easier to co-mingle trips and greatly reduces the administrative overhead associated with billing agencies and allocating costs.

Tools that Support Live Dispatch

Live dispatch refers to automated dispatching systems that permits same-day scheduling and trip making. Such systems are critical for large paratransit services wanting to allow for same-day travel requests. Live dispatch necessitates a software system that incorporates reservations and scheduling capabilities with current or predicted vehicle location information. Information may be transmitted to the system via MDT/AVL equipment to facilitate dynamic, “live” dispatching of unscheduled trips to vehicles.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Live dispatch enables same-day shared ride service ● Increase service efficiency and reduces cost ● Offers method to replace unproductive bus routes ● Meets individual riders’ needs 	<ul style="list-style-type: none"> ● System requires significant cost ● May further increase costs by increasing service demand ● Requires investment in staff training ● Requires agency-wide acceptance and commitment

Wisconsin Application

Live dispatch is most applicable to the larger more urbanized parts of Wisconsin, especially if transportation providers in these areas are interested in same-day reservation systems. Live dispatching, however, may also assist flex-services, such as the Connector in Appleton. Agencies in Wisconsin may be interested in implementing a demonstration project that uses the software in conjunction with same-day general public Dial-A-Ride or flex-services. At the point where more than a few Dial-A-Ride vehicles are required, the Call-n-Ride (see below) system may be appropriate.

Overview of National/Regional Best Practices

Semi-Automatic Dispatch, Sweetwater County Transit Authority (STAR), Sweetwater, Wyoming – STAR, in cooperation with local human service and coordinating agencies, installed a semi-automatic dispatching system to assist with paratransit services. The dispatching system uses color-coded computer maps to identify origins and destinations and route buses. The system also allows STAR to track demographic and trip information for every passenger trip, and compiles statistics and reports without additional data collection.

Call-n-Ride, Regional Transportation District (RTD), Denver, Colorado – RTD established 14 neighborhood-based same-day/immediate-request Dial-A-Ride services. The Dial-A-Ride services are available to the general public, providing service in neighborhoods covering an area approximately 4 by 6 miles. Previously, Call-n-Ride service requests were sent directly to driver’s cell phones. In response to higher demand, RTD commissioned software that will enable multiple Call-n-Ride vehicles to operate in a service area in a way that is transparent to the user (uses a single phone number) and streamline trip requests, scheduling, and system management.

Tools that Improve Productivity

High costs associated with paratransit operations mean agencies frequently need to increase service productivity, improve cost efficiency and reinvest “savings” into expanded service. There are two operational strategies that focus on improving productivity and cost efficiency but that have not been widely adopted by paratransit operators: (1) craft a vehicle run structure that mimics fixed-route services and better aligns the demand with routing; and (2) use lower-cost non-dedicated vehicle trips, such as taxis.

These strategies are not standard practice among paratransit operators primarily because to date no reliable tools have been available. A new software application was specifically designed to help with these two needs. The software is available, along with a user manual, on the TRB website: <http://onlinepubs.trb.org>.

Expected Benefits	Potential Obstacles
<ul style="list-style-type: none"> ● Improve service delivery and increase service productivity ● Examine different operating scenarios ● Reduce paratransit service costs 	<ul style="list-style-type: none"> ● New tool that needs more testing ● Achieve internal buy-in from planning and operations staff ● Requires staff resources to learn the application, as well as collect and format data to operate it

Wisconsin Application

The model offers potential for any paratransit service in the region.

Overview of National/Regional Best Practices

Non-Dedicated Vehicle (NDV) Model - The Non-Dedicated Vehicle (NDV) model was developed as part of TCRP B-30 Optimal Split of Dedicated and Non Dedicated Services for Demand Responsive Paratransit. The report comes with an excel-based model, which is available free-of-charge from the TRB website (<http://onlinepubs.trb.org>). The model uses service information and data readily available for local parameters, such as driver/vehicle shifts, local labor practices (work shifts), driver costs, pay premiums for difficult shifts, operating and cost data, passenger trip length distributions, driver/vehicle run start and end times, passenger demand data by time of day, and availability and cost of non-dedicated vehicles.

Appendix A: Coordination Strategy Handbook: Summary of Strategies

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Communication, Training and Organizational Support					
Centralize Information	Create centralized listing of available regional services	Senior Resource Guides – examples include Ashland & Wood Counties	More user friendly programs; increases access to service	Requires lead organization; requires on-going maintenance	Low
Hire Mobility Manager	Dedicate personnel resources to manage local mobility issues. Individual may assume responsibility to manage and staff coordination efforts	16 mobility managers hired as part of the 2008 federal grant process to hire mobility managers	Creates staff resources to promote and implement coordination efforts	If manager is shared across agencies/programs will require jointly allocating resources and setting goals	Low-Medium
Provide Technical Training for Coordination Staff	Obtain technical training on background skills needed to implement coordination strategies, such as financial tools, team-building, etc.	Wisconsin DOT is currently developing a mobility managers training curriculum	Ensures local coordination staff has skills to implement recommended programs	May require additional local resources	Low-Medium
Offer Customer Travel Training	Encourage frequent paratransit users to use fixed-route services by teaching them how to ride the bus	None known	May reduce paratransit costs to more cost-effective fixed-route services	Requires trained staff to carry out	Low
Coordinate and Consolidate Transportation Services and Resources					
Allow Joint Purchasing	Consolidate functions such as vehicle maintenance, insurance, driver training and substance abuse testing	None known	Reduces costs; increases consistency across organizations	Requires leadership and on-going attention	Low
Contract with Agency Operators	Allow agencies with capacity "sell" rides to other organizations	Ashland County Aging Unit and Laurie Jean Zach Center	Improves service productivity and cost-effectiveness	Requires leadership and on-going attention	Low

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Contract with Common Service Providers	One or more sponsors have contracts with a common vendor and permit co-mingling of clients	MetroRide and Marathon County Transportation Program	Increases vehicle productivity; reduces per trip costs	Requires coordination and cooperation among multiple organizations	Low
Share Resources	Share use of operational and capital resources (vehicles, facilities, support services)	Green Lake County	Reduces costs; increases vehicle productivity; improves service quality	Turf issues; requires increased quality control and monitoring and cost allocation	Low
Coordinate Dispatch	Create centralized call center and share trip dispatch under single entity	Dispatch coordinated within multiple programs of single agency – Marathon County Transportation Program	Improves program access; creates cost-efficiencies; maximizes ridesharing	Requires lead agency, personnel training and cost reimbursement models; Requires trust across merged service providers	Medium/High
Consolidate Functions	Merge various operating functions under single entity such as call center and/or service delivery	Marathon County Transportation Program Indianhead Community Action Agency	Improves program access; creates cost-efficiencies; maximizes ridesharing	Requires lead agency, personnel training and cost reimbursement models; Requires trust across merged service providers	Low/Medium (estimated 5-10% of operating costs)
Mobility Strategies					
Improve Service Convenience	Improve/expand service hours, geographic coverage, driver assistance, same-day service, etc.	Ashland County – Bay Area Rural Transit and Ashland County Aging Unit	Enhances travel & service options	Requires increasing financial resources	Medium-to-High
Establish/Expand Volunteer Driver/Escort Programs	Develop/incorporate volunteer driver program to deliver services	Many – examples include City of Green Lake, Western Washington Center for Independent Living; Indianhead	Low cost strategy to increase service, community involvement	Volunteer recruitment and retention; Insurance and fuel costs	Low

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Establish/Expand Taxi Subsidy Programs	Provide providing vouchers or script to partially or completely pay for taxi services	Dane County/Madison Metro	Offers flexible service; increases travel options	Lack of taxi providers; issues with quality of service; driver training	Medium-to-High
Introduce Community Bus Routes	Create fixed route services designed for older adults or persons with disabilities	Dane County – Group Access Services (GAS); Monona Lift	Increases travel options; offers low-cost, higher efficiency option	Requires service planning, likely 6-12 months;	Medium-to-High
Introduce Flexible Transit Services	Design routes with specific time points but allow "off route" deviations between time points to pick up/drop off passengers	Fox Cities – Valley Transit "the Connector"	Increases transit service area; attracts more riders and may increase route productivity	More complicated for operators, requires 6-9 months lead time	Medium-to-High
Introduce Agency "Tripper" Services	Create fixed route services with scheduled deviations to pick up passengers at key locations (schools, agency)	None known	Increases coverage of lower cost fixed routes; Can be oriented to pick up clients from human service organizations	Requires transit system and human service/school agreement	Low
Improve Accessibility at Transit Stops	Make accessibility improvements at bus stops	None known	Improves accessibility of fixed-route; Does not require on-going funding; Reduce reliance on paratransit	Requires planning, construction, management and financial resources	Medium-to-High

	Key Elements	Wisconsin Example	Benefits	Implementation/Obstacles	Costs
Technology Strategies					
Implement Tools that Support Data Management	Install tools that improve data integrity, fare collection, cost sharing/allocation, billing, reporting and transfers	None known	Improves service operations, design and management; May create cost savings	Requires initial investment in software, training and staff and on-going management of system	Medium
Implement Tools that Support Live Dispatch	Buy software that incorporates reservation and scheduling capabilities; uses vehicle location information to dispatch of unscheduled trips	None known	Removes obstacles to providing same day, shared ride service; potential to reduce costs and increase productivity	New software; may take time to function smoothly	Medium
Implement Tools that Improve Productivity	Use Non-Dedicated Vehicle software matches service information with data to maximize service design and enhance productivity	None known	Increase services productivity and frees resources for service expansion	Few - staff time to test and apply model to existing service	Low

Appendix B: Glossary of Terms²

Access – the opportunity to reach a given destination within a certain time frame or without being impeded by physical, social or economic barriers.

Accessibility – the extent to which facilities and individual travel vehicles are barrier-free and can be used by persons with disabilities, including wheel chairs.

Americans with Disability Act (ADA) – the Federal law that requires public facilities, including transportation facilities, to be fully accessible for persons with disabilities. ADA also requires the provision of complementary or supplemental paratransit services in areas where fixed-route transit services operate.

Americans with Disability Act Complementary Paratransit – demand response services that operate accommodate persons who cannot use the fixed-route service because their disability prevents it. Under ADA, a fixed-route service (excluding commuter services) is required to provide complementary paratransit with service characteristics equivalent to fixed-route service.

Advance Reservation Scheduling – passengers call ahead and reserve, in advance, for a ride on a particular date and time. This is used in demand-response transportation systems. Transit systems may set limits on the minimum and maximum advance reservation times before the requested trip. Advance reservation of trip requests allows the scheduler/dispatcher to identify ridesharing opportunities and assign rides to vehicles for the most efficient service delivery. A drawback to allowing requests far in advance of the desired trip is that no-shows may be more frequent than with real-time scheduling.

Block Grant – categorical funds that are distributed to a recipient without specific spending requirements.

Brokerage – in general, an institutional organization that functions as an interface between transportation providers and users. More specific roles include the following:

- Coordination of transportation services in a defined area. The transportation broker may centralize vehicle dispatching, record keeping, vehicle maintenance, and other functions under contractual arrangements with agencies, municipalities, and other organizations. This type of brokerage may be appropriate when full consolidation of services is not the best option.
- A method of matching travelers with a variety of transportation providers and modes through use of central dispatching and administrative facilities. Volunteer drivers are often coordinated by a broker.

Capital Costs – refer to the costs of long term assets of a public transit system such as property, buildings and vehicles. The Federal Transit Administration (FTA) defines capital costs to include bus overhauls, preventative maintenance, and even a portion of ADA paratransit expenses.

² Glossary adapted from the Seniors Benefit from Transportation Partnerships – A Toolkit, published by the United We Ride, the Administration on Aging and the Department of Health and Human Services.

Senior Centers – senior centers are considered a vital link in the service delivery network for older persons. Senior centers function as meal sites, screening clinics, recreational centers, social service agency branch offices, etc.

Shared Ride Taxi – a shared ride taxi service provides taxi transportation in which more than one passenger is in the vehicle at the same time, usually at a reduced rate for each of the passengers, shared ride taxi is a way of using taxicabs for paratransit service.

Shuttle Service – shuttle service refers to fixed-route that connects only a small number of fixed stops and operates at a high frequency (or short headways). The vehicle follows a repetitive back-and-forth route. This type of service is related to a circulator service but connotes a more linear route structure.

Specialized Transit – refers to transit services that support particular populations, frequently consisting of older adults, persons with disabilities and/or individuals with low incomes.

Subscription Service – when a passenger or group of passengers requests a repetitive ride, such as on a daily or weekly service on an on-going basis. Trips are often scheduled on a subscription or “standing order” basis. The passenger makes a single initial trip request and the transit system automatically schedules them for their trip(s) each day or week. This type of service is frequently used in transporting human service agency clients to regular agency programs.

Taxi – demand-responsive transportation vehicle offered to individual members of the public on an exclusive basis, in a vehicle licensed to render that service, usually operated by a private, for-profit company. Fares are usually charged on a per-mile or per-minute (or both) basis on top of a base fare charged for all trips. Passengers may call the dispatcher to request a trip (live dispatch) or hail a passing unoccupied taxi.

Transit Dependent – persons who must rely on public transit or paratransit services for most of their transportation. Typically refers to individuals without access to personal vehicles.

Transit Disadvantaged – a term used to describe those persons who have little or no access to meaningful jobs, services, and recreation because a transportation system that does not meet their needs.

Transportation Management Association – a voluntary association of public and private agencies and firms joined to cooperatively develop transportation-enhancing programs in a given area. Transportation Management Associations (TMAs) are appropriate organizations to better manage transportation demand in congested suburban communities.

Volunteer Driver Network – a volunteer network matches requests for transportation with a volunteer driver who is typically reimbursed on a per-mile basis for providing the trip. Persons requesting service call the network; the network calls the driver and schedules the trip. Volunteer networks are frequently used in rural areas where resources are scarce, persons needing transportation may live in remote areas, and a sense of community is not uncommon.

Volunteer Escort Network – a volunteer escort service maintains a network of volunteers who will travel with a person needing mobility assistance on the transportation service. Volunteer escorts typically accompany individuals on longer distance trips and/or trips with multiple passengers.

Central Transfer Points – a central meeting place where routes or zonal demand-responsive buses intersect so that passengers may transfer. Routes are often timed to facilitate transferring.

Charter Service – transportation service offered to the public on an exclusive basis (either as individuals or as groups). It is provided with a vehicle that is licensed to render charter service and engaged at a specific price for the trip or period of time, usually on a reservation or contractual basis.

Circulator – a bus that makes frequent trips around a small geographic area with numerous stops around the route. It is typically operated in a downtown area or area attracting tourists, where parking is limited, roads are congested, and trip generators are spread around the area. It may be operated all day or only at times of peak demand, such as rush hour or lunch time.

Community Routes – community routes are transit routes that are tailored to meet the needs of a specific market segment (such as persons with a disability or older adults) in a community. Community routes often evolve out of a pattern of demand-responsive travel within a community.

Connector Service – service in which a transfer to or from another transit system or mode is the focal point. An example of this is service provided under the Greyhound Rural Connector program: local transit providers operate service that brings people to and from the Greyhound station. This type of connector is also known as a feeder service.

Coordination – coordination is a resource management technique used to achieve greater cost-effectiveness in service delivery. Coordination requires shared power, which includes shared responsibility, shared management and shared funding. In coordination, two or more organizations (who may not have worked together previously) interact to jointly accomplish their transportation objectives.

Curb-to-Curb Services – a service that picks up and delivers passengers at the curb or roadside, as distinguished from door-to-door service. Passenger assistance is generally not rendered other than for actual boarding and alighting.

Demand-Responsive Service – service activated based on passenger requests. Usually passengers call the scheduler or dispatcher and request rides for particular dates and times. A trip is scheduled for the passenger, and may be canceled by the passenger. Usually involves curb-to-curb or door-to-door service. Trips may be scheduled on an advance reservation basis or in “real time”. Usually smaller vehicles are used to provide demand-response service. This type of service usually provides the highest level of service to the passenger but is the most expensive for the transit system to operate in terms of cost per trip.

Destination – a place which a passenger ultimately disembarks from a transit vehicle; the point at which a trip terminates.

Dial-A-Ride – a name that is commonly used for demand-responsive service.

Door-through-Door Service – a service that may involve assisting the passenger through the door of their place of origin and delivering them through the door of their destination. The driver or escort may provide substantial hands-on physical assistance for the passenger if needed.

Door-to-Door Service – a service that picks up passenger at the door of their place of origin and delivers them to the door of their destination. The driver pulls the vehicle off the road, if possible,

and escorts or physically assists the passengers if needed. Door-to-door service provides a higher level of assistance than curb-to-curb service and is typically used for passenger with physical disabilities.

Federal Transit Administration (FTA) – the agency within the DOT that administers federal transit aid programs. Before 1991, FTA was known as the Urban Mass Transportation Administration (UMTA).

Fixed-Route – bus service on a prescribed path or route that never varies. The schedule may be fixed or flexible. Passenger may be required to wait at designated stops, or flag stops may be permitted. Usually larger vehicles are used to provide fixed-route service.

Fixed Schedule – predetermined times at which a vehicle is to arrive at certain location. The actual bus route may be fixed or flexible. A flexible route combines fixed scheduled stops with demand response stops.

Headway – the length of time at a stop between buses following the same route. If buses operating along Route A arrive at Stop 1 at 9:00, 9:30, 10:00, 10:30 and 11:00, it is operating on half-hour headways during the period between 9:00 and 11:00.

Human Service Transportation Agency – transportation for clients at a specific agency that is usually limited to a specific trip purpose. Human service agency trips are often provided under contract to a human service agency and may be provided exclusively or shared with riders from other human service agencies.

Individual with a Disability – any person who by any reason of illness, injury, age, congenital malfunction, or other permanent or temporary incapacity or disability is unable, without special facilities, to use local transit facilities and services as effectively as persons who are not so affected. This definition is part of the Americans with Disabilities Act.

Live Dispatch or Real-Time Scheduling – passengers call and request demand-responsive trips a short time before the trip is needed and the dispatcher is responsible for assigning vehicles and drivers to meet passengers' requests. This type of scheduling is most convenient for passenger but most costly for a transit system to implement as a large fleet of vehicles and drivers is needed to ensure all trip requests are met. This type of scheduling is most frequently used by taxi services.

Local Bus Service – local bus service is a term used to describe a route along which many stops are made, allowing passengers to board and disembark. It is typically used in contrast to express bus, a bus that makes a limited number of stops and is targeted more at long distance riders. Local bus service is important in rural areas unless feeder or connector service is available to bring people to the station.

Medicaid – also known as Medical Assistance, this is a health care program for low-income and other "medically-needy" persons. It is mostly funded by State and Federal governments. The Medicaid program pays for transportation to non-emergency medical appointments if the recipient has no other means of travel to the appointment.

Medicare – the national health insurance program for eligible people 65 and older and some disabled individuals. Medicare covers hospital costs, Medicaid B covers doctor bills and other medical costs. At this time, Medicare covers only emergency transportation services.

Metropolitan Planning Organization – the organization entity designated by law with lead responsibility for developing transportation plans and programs for urbanized areas of 50,000 or more in population. MPOs are established by agreement of the governor and are designed so that combined, they represent 75 percent of the affected population of the urbanized area.

Mobility – the ability to move or be moved from place to place.

Mode, Intermodal, Multimodal – mode refers to a form of transportation, such as automobile, transit, bicycle, and walking. Intermodal refers to the connection between modes and multimodal refers to the availability of transportation options within a system or corridor.

Operating Cost – the costs associated with operating and maintaining a transit system, including labor, fuel, administration and maintenance.

Paratransit Service – paratransit is a broad term that may be used to describe any means of shared ride transportation other than fixed-route mass transit services. The term paratransit usually indicates that smaller vehicles (less than 25 passengers) are being used. These services usually serve the needs of persons that standard mass transit services would serve with difficulty or not at all. A paratransit service is typically advance reservation, demand responsive provided curb-to-curb or door-to-door. Route deviation and point deviation are also considered paratransit.

Point Deviation Service – a type of flexible route transit service in which fixed scheduled stops (points) are established but the vehicle may follow any route needed to pick up individuals along the way if the vehicle can make it to the fixed points on the schedule. This type of service usually provides access to a broader geographic area than does fixed-route service but is not as flexible in scheduling options as demand responsive service. It is most appropriate when riders change from day to day but the same destinations are consistently in demand.

Provider of Transportation (Transportation Provider) – an agency that offers or facilitates (purchases, contractors for, or otherwise obtains) transportation, as opposed to an agency whose role is limited to funding programs.

Pulse System – a type of fixed-route transit system (usually involving a radial network) in which all routes arrive at and depart from the central transfer point at the same times. This timing facilitates transferring but necessitates a transfer facility where simultaneously all bus can safely drop off passengers, wait and passengers can easily and safely get to the bus to which they are transferring.

Real-Time or Live Dispatch Scheduling – passengers call and request demand-responsive trips a short time before the trips are needed and the dispatcher is responsible for assigning vehicles and drivers to meet passengers' requests. This type of scheduling is most convenient for passengers but most costly for a transit system to implement as a large fleet of vehicles and drivers is needed to ensure all trips requests are met. This type of scheduling is most frequently used by taxi services.

Route Deviation Service – transit buses travel along a prescribed route at scheduled times and maintain scheduled or unscheduled checkpoint stops. The vehicle may leave and return to the route to pick up persons who have requested demand-responsive trips near the route; passengers may call in advance for route deviations or may access the system at predetermined route stops.

Appendix C: Resource References

Best Practices

Innovative State and Local Planning for Coordinated Transportation, February, 2002; www.fta.dot.gov/library/policy/islptc/establish.html

Planning Case Studies, Access to Jobs, Washington DC Federal Transit Administration Office of Planning, September 2001, www.fta.gov/wtw/casestudies/

Transit Consolidation Study Summary Report. Chico, C; Butte County Association of Governments, Nelson\Nygaard Consulting, January 2001, www.bcag.org/cctssumweb.pdf

Technical Resources

Coordinated Transportation Contracting Instructions, Commission for the Transportation Disadvantaged, July 2002, www11.myflorida.com/ctd/

Coordinating Transportation Services: Local Collaboration and Decision-Making: A "How-To" Manual for Planning and Implementation, Project Action, Washington DC, www.projectaction.easterseals.org/site/PageService?pagename=ESPA_doclible_coordandoutreach

Economic Benefits of Coordinating Human Service Transportation and Transit Service, TCRP Report 91, prepared for the Transportation Research Board by Westat, March 2003, www.gulliver.trb.org/publications/tcrp/tcrp_rpt_91.prf

A Guide for Implementing Coordinating Transportation Systems, 1997, Ohio Department of Transportation, Office of Public Transportation, www.dot.state.oh.us/ptrans/default.htm

A Handbook for Coordinating Transportation Services, 1997, Ohio Department of transportation, Office of Public Transportation, www.dot.state.oh.us/ptrans/default.htm

Making a Transit Service Accessible, Community Transportation Association of America, Technical Assistance Brief No. 9, www.ctaa.org/ntrc/rtap/pubs/ta/accessible.asp

Toolkits

Transportation Coordination Toolkit, Minnesota Department of Transportation, 2005; www.cts.umn.edu/ct/coordination/toolkit/documents/06MotorCarrierRegistration.pdf

