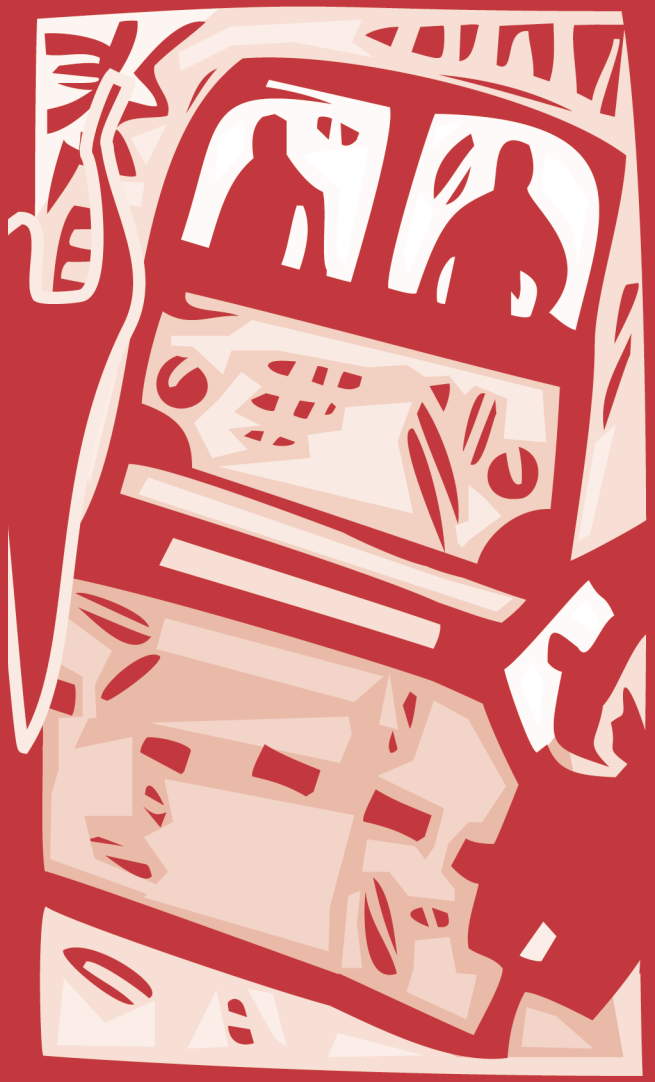


Innovative Practices in Paratransit Services

Easter Seals

Project ACTION

ACCESSIBLE COMMUNITY ®
TRANSPORTATION IN OUR NATION

In 2002, under a contract from Easter Seals Project ACTION, Multisystems completed a national study of ADA complementary paratransit practice. Through surveys and site visits, an extensive amount of information was gathered about innovative practices being used in the delivery of ADA complementary paratransit throughout the country. This report, one of the outcomes of the research, is designed for transit and paratransit providers and people with disabilities and agencies that serve them. It is a resource that can assist in having more efficient and productive paratransit operations.

The phrase "innovative practices" was selected with great care by Multisystems. The descriptor "best" was rejected because what works best in one community may not work in another. However, practices identified in some communities were found to represent progressive thinking and thus worthy of the word "innovative." Finally, transit systems themselves are in the best position to determine effective practices for their communities as they select and implement their choice of "innovations."

Also included in this document are innovative practices identified through related work and by participants in a 1997 workshop conducted in Monterrey, Calif., titled "Developing and Disseminating Creative Paratransit Operations Ideas." More than 100 invited paratransit professionals also included representatives of the Federal Transit Administration (FTA), the Transportation Research Board (TRB) Committee on Paratransit, the Community Transportation Association of America (CTAA) and Easter Seals Project ACTION (ESPA).

This volume is organized into four main sections representing elements deemed critical to the successful operation of paratransit systems including:

- One **Paratransit Service Operations** — techniques and strategies for achieving greater efficiency in day-to-day operations
- Two **Paratransit Service Management** — methods for determining quality and performance standards and measuring all aspects of daily operations
- Three **Paratransit System Design** — structures for organization and management, types of services provided by paratransit systems, procurement options and strategies and a quick-reference troubleshooting guide for maximizing service quality and productivity
- Four **Supplementary and Associated Programs** — programs that can be developed and implemented in existing systems and community resources to provide transportation to entire communities

Another purpose of this project was to begin the development of a paratransit database to complement information already collected by the National Transit Database and in particular, permit agencies providing paratransit services to engage in peer comparisons. With the availability of a searchable/sortable database of ADA complementary paratransit characteristics, transit agencies and consumers would be better able to understand the options available for designing and delivering services and to be able to identify those

systems that appear to provide high quality and innovative services that meet the needs of customers. As of the date of this publication, work is continuing under another Easter Seals Project ACTION contract to refine the database system, acquire additional information to enter, and prepare it for national use. Information about the system becoming operational will be announced through Easter Seals Project ACTION's multiple communication channels including the web site (**www.projectaction.org**), newsletter and contacts with transportation and disability organizations.

Data collection for this project began with a mail survey developed through a task force representing the disability and transportation communities (see below).

Quantitative and qualitative questions in 11 categories were distributed to 50 transit agencies representing a wide variety of geographic and operating characteristics to pilot test the instrument. Twenty-eight surveys were returned representing large urban, small urban and rural systems; different geographic areas of the country; systems with ADA complementary paratransit only and those that also provide other paratransit services; service directly operated by the transit agency, contracted service and brokerage; dedicated versus non-dedicated fleets and systems that provided pre-ADA paratransit versus those that began paratransit service in response to the ADA. Five of the agencies that returned the surveys were selected for site visits that also produced findings included in this document.

A complete report of the project, including the data collection methodology, instrument design, and sample screen prints displaying data are available on ESPA's web site at **www.projectaction.org**.

ESPA would like to extend special thanks to Rosemary G. Mathias, Senior Associate with Multisystems, for her fine work in conducting this project. In addition, appreciation is extended to the members of the task force that ably assisted and guided the development of the survey instrument. These individuals and the groups they represented are:

- **American Public Transportation Association**
  Richard De Rock, LINK, Wenatchee, Wash.
  Tina Morris, Transit Authority of River City, Louisville, Ky.
- **Disability Rights Education and Defense Fund**
  Marilyn Golden, Policy Analyst, Oakland Calif.
- **National Council on Independent Living**
  Paul Spooner, Metrowest Center for Independent Living, Framingham, Mass.
- **Transit Research Committee on Paratransit**
  Roy Glauthier, Consultant, Costa Mesa, California
  Pam Ward, Ottumwa Transit Authority, Ottumwa, Iowa
- **Easter Seals Project ACTION**
  Doug Douglas, Dallas Area Rapid Transit, Dallas, Texas
  Alan Smith, Metro Regional Transit Authority, Akron, Ohio

Easter Seals Project ACTION
ACCESSIBLE COMMUNITY® TRANSPORTATION IN OUR NATION

CONTENTS

INTRODUCTION i

PARATRANSIT SERVICE OPERATIONS

Eligibility Determination 1
- In-Person Interviews
- Functional Assessments
- Public Information and Outreach
- Trip-by-Trip Eligibility Determinations 2
- Coordinating Eligibility Determination and Travel Training Efforts 3

Reservations 3
- Using Appointment Times as Well as Requested Pick-Up Times 4
- Establishing Compatible Pick-Up and Vehicle Wait-Time Policies 4
- Verifying Trip Information 5
- Automated Booking Systems and Automated Trip Confirmation/Cancellation Lines 6

Scheduling 6
- Keeping Drivers and Riders in Sync on Pick-Up Times 6
- Reviewing Long Trips 7
- Managing Subscription Services 8
  - Changes to subscription trips 8
  - Interruptions of subscription service 9
  - Frequent cancellations or no-shows 9
- Reviewing Automatically Generated Schedules 9
- Refine Schedules Using Input from Contractors and Operators 9
- Automated Callbacks with Estimated Pick-Up Times 10

Dispatching 10
- Maintaining Control of All Runs 10
  - Stop-by-stop driver call-ins 10
  - Problem-only radio call-ins 10
  - Mobile data terminals (MDTs) or mobile data computers (MDCs) 10
- Pick-Up Notification 11
- Will-Call Management 11

PARATRANSIT SERVICE MONITORING & MANAGEMENT

Service Quality Standards 13
- Telephone Performance 13
- On-Time Performance 14
- Travel Time 15
- Trip Denials 16
  - Types of trip denials 17
  - Planning and budgeting service capacity 17

Service Monitoring 17
- Performance Reports 18
- Data Definitions 18
- Service Quality Reports 18
- Field Observations 19
  - On-Street Driver Observation 19
  - Office-place monitoring 20
  - Secret rider/client programs 20
- Contract Provider Reviews 20

CONTENTS

Driver qualification 20
Vehicle standards 21
Customer Comments and Complaints 21

PARATRANSIT SYSTEM DESIGN
Management/Organizational Structures 23
Choosing the Right Management Structure 24
In-house/direct management operation 24
Transportation management/brokerage firm operation 24
Appropriate Services/Service Design 25
Allocation of Functions 26
Other Design Considerations Within a Paratransit System 29
Procurement 30
Set Rate Ceilings. 30
Avoid "low-ball" bids 30
Minimize bidder risk 30
Per-hourly vs. per-trip service contracts 30
Market share control 31
Trouble shooting 31
Local Service Options 31
Mobility Managers 31
Local, regional and state transportation programs 35
Additional community outreach transportation programs 35
Increase Efficiency. 35
Improve Location Accessibility. 36
Public Information 36
Fixed-Route Innovations. 37
Provision of Accessible Fixed-Route Information 37
Improving Bus Stop Accessibility 37
Automated Stop Announcements and Vehicle Identification 37
Kneeling Buses 37
Low-Floor Buses and Universal Design 38
Wheelchair and Scooter Securement 38
Passenger Assistance. 38
Summary 38

FEDERAL TRANSIT ADMINISTRATION ADA INFORMATION
Published by the Office of Civil Rights • Volume I 39
Office of Civil Rights • Volume 2 41
ADA Business Brief: Service Animals 43

TABLES
Advantages & Disadvantages of Centralized Reservations. 27
Advantages/Disadvantages of Centralized Scheduling. 28
Productivity – Troubleshooting Guide 32

PARATRANSIT SERVICE OPERATIONS

Eligibility Determination

Maintaining strict guidelines that comply with both ADA and U.S. Department of Transportation regulations is vitally important to successfully implementing ADA paratransit services. A strict and thorough eligibility determination process will help agencies allocate resources to serve people who truly need the paratransit service and identify those individuals able to use fixed-route service when combined with support services such as travel training and trip planning.

Because many applicants may have limited or no experience using fixed-route service, the key to a thorough eligibility determination process is detailed follow-up and contact with applicants after the initial paper application form is filed. Each applicant is unique. Providing complete and detailed information about all issues that affect their travel on a short application form may be difficult.

A more accurate and efficient determination of applicant eligibility can be accomplished through in-person interviews, functional assessments and public outreach programs. Employers do not hire employees based solely on a résumé; the successful paratransit system administrator should use information gathered in interviews to determine which applicants can benefit most from the service and which would be better served by existing, fixed-route systems. Interviews and functional assessments can be conducted in a number of ways and many systems will benefit from a combination of some or all of the following.

In-Person Interviews

- Maintain a policy to contact every applicant by telephone to discuss the information included in their paper applications.
- Ask all applicants to participate in in-person interviews to discuss travel needs and issues.
- Some situations may require in-home interviews, from which a representative gathers information about the location, specific needs and/or obstacles faced by the applicant.

Functional Assessments

A growing number of paratransit systems have implemented eligibility determination processes that involve in-person interviews combined with functional assessments. Various tools are at your disposal to assess the special needs of applicants.

- Work with local professionals to assess physical and functional travel abilities.
- Easter Seals Project ACTION's resource titled Functional Assessment of Cognitive Transit Skills (FACTS) can be a valuable tool.
- Supplement information from in-person interviews with information from professionals familiar with the applicant—particularly for applicants with vision disabilities, mental illness and certain other health conditions.

Public Information and Outreach

Public information and outreach also can be used to educate potential applicants and disability agencies about ADA paratransit eligibility. Straightforward public information about ADA paratransit eligibility, written in non-regulatory language, is an effective means to educate the community and maximize resources. Greater public awareness of eligibility requirements can help reduce the number of applications received

from individuals who are able to fully use fixed-route service. Resources can then be used to better serve those applicants that do qualify.

- A detailed service brochure with a "pre-application" can be effective in educating local communities.
- Conduct seminars for local agencies to educate them about ADA paratransit eligibility criteria.

As the community better understands ADA paratransit eligibility, the mark of a thorough determination process is the ability to understand when and under what conditions ADA complementary paratransit is needed and when applicants are able to use accessible fixed-route service. Thorough determination processes are consistently finding that 20 to 30 percent or more of all applicants are able to use fixed-route service at least some of the time, but need paratransit under certain conditions.

Trip-by-Trip Eligibility Determinations

For riders who are able to use fixed-route service some of the time, conditional and trip-by-trip eligibility may be determined. Such a determination requires its own criteria and demands additional steps. Conditional and trip-by-trip eligibility can be managed as follows:

- Identify specific barriers that prevent riders from using fixed-route service during the eligibility determination process. For example, a person may be unable to use fixed-route services (eligible for paratransit) if they have to travel more than 1/2 mile to get to/from bus stops, if there are not accessible paths of travel to/from bus stops, or if there is snow or ice.
- Riders who are sometimes able to use fixed-route service should be designated as "conditionally eligible" in the system and given a code identifying the types of barriers that prevent fixed-route use.
- Outside of the reservations/scheduling process, the transit system evaluates trips that conditionally eligible riders make. This requires determining the distance to/from stops, evaluating the path of travel to/from stops, etc. As specific trips are evaluated, they are determined either to be paratransit eligible or not and the exact origin and destination is recorded in the system. A "trip eligibility file" is thus created in the system that might look something like:

  10 Elm St. to 50 Main Street — eligible (C5)

  10 Elm St. to 2100 Common Avenue — not eligible

- The "C5" notation after the first trip is a code that indicates why the trip cannot be made on fixed route (e.g., not yet accessible). When the trip is booked, the code is entered into a "conditional trip eligibility" field. By recording how many trips are provided for conditionally eligible riders and what barriers prevented fixed-route use, the system is then able to identify and correct barriers that are creating significant paratransit demand. In the above example, if this person makes this trip daily, it may be more cost-effective to put accessible buses on this route.
- When conditionally eligible riders call to book trips, the reservationist opens the trip eligibility file to see if the trip requested has already been evaluated. Depending on whether the trip is listed as eligible or ineligible, the reservationist accepts or denies the trip accordingly.
- If the origin and destination of the trip requested is not in the trip eligibility file, the reservationist tells the person the trip has not yet been evaluated, books the paratransit trip

as presumptively eligible and tells the person the agency will evaluate the trip as soon as possible and will let them know if a fixed-route option exists.

Coordinating Eligibility Determination and Travel Training Efforts

The eligibility process can also be used to identify the potential to use fixed-route services with some instruction. Individuals who might benefit from instruction or training are then offered this service. A growing number of transit agencies are contracting with professionals and agencies in the community to make travel training available. Some agencies are hiring travel trainers and developing travel-training services in-house.

Systems with comprehensive travel training programs can offer many different types and levels of instruction. For individuals with physical disabilities or seniors who are simply unfamiliar with how to use fixed-route services and who may be anxious about trying the fixed-route system, more general transit system orientation training may be offered as follows.

- Customer service staff can travel with individuals on one or two trips and provide individual instruction in planning trips and understanding route and schedule information.
- Volunteers can be used to train seniors how to use fixed-route services.
- Group instruction followed by planned outings using fixed-route buses. Work with schools and senior centers as well as other local community agencies that are interested in providing these general transit orientation sessions.
- For individuals with cognitive disabilities, some transit systems contract with agencies that have experienced travel trainers available to provide more extensive one-on-one instruction. The Southwestern Ohio Regional Transit Authority (SORTA) in Cincinnati, Ohio, has a particularly innovative arrangement. The contractor that makes ADA paratransit eligibility determinations also provides travel training. Two full-time, trained travel trainers split their time between conducting eligibility interviews and assessments and providing one-on-one travel training.)
- For people with vision disabilities, transit systems typically contract with local agencies for expanded orientation and mobility training. Support from transit allows agencies to offer instruction to many more people and allows the transit agencies to make referrals if individuals who are interested in instruction are identified in the eligibility determination process.

Travel training has proven to be very cost effective. For an annual expenditure of $161,580 on travel training in 2000, Seattle Metro estimated that it saved $417,000 in paratransit costs by successfully transitioning individuals to the fixed-route system. SORTA in Cincinnati reported that by spending $84,000 a year on training, it saves about $250,000–$300,000 a year on paratransit. Broward County Transit estimated that it saves $2,300 per year for each person who is successfully travel trained.

Reservations

The relationship among reservations, scheduling, dispatch and drivers is a key predictor in the overall performance of any paratransit system. Reservationists receive and record customer requests for trips. That information is used to create schedules, either using a computer or developing them manually. Drivers then use the schedules to provide service to their customers. Dispatch troubleshoots and manages the delivery of trips in real time. Any mistake made in reservations will have a ripple effect throughout the entire process. At best, a reservations mistake is an inconvenience. At worst, a reservations mistake means a missed trip, wasted resources and unhappy passengers and drivers.

Using Appointment Times as Well as Requested Pick-Up Times

It is important to ensure that people are not only picked up on time but that they get to where they are going on time as well.

When most people make plans to travel, they think first about the time that they need to be at their destination and then plan backward to the time that they need to leave. This is certainly the case when people use fixed-route service—they first look at the schedule to see when the bus gets to the stop near their destination and then read backwards to find the time they need to catch the bus.

Both desired pick-up times and appointment/desired arrival times should be considered in paratransit operations. USDOT ADA regulations state that any pattern or practice that limits the availability of service to eligible candidates is prohibited. Effective use of both pick-up and arrival times for scheduling purposes can increase on-time performance and still achieve efficient scheduling.

Some systems have argued that riders need to understand that the service is a shared-ride service and that they need to allow adequate time to get to their destinations when placing reservations.

Given the complexity of paratransit operations, placing the burden of estimating appropriate pick-up times on riders can present difficulties. Most riders don't fully understand the implications of "shared-ride service" let alone understanding all of the related scheduling, pick-up and travel-time policies. The paratransit agency should provide riders with information that clarifies these strategies.

- On outgoing trips, riders should make reservations using either a requested pick-up time or a desired arrival/appointment time. If the rider needs to be at the destination at a specific time, the system should calculate a pick-up time, which can then be offered to the rider. Both the negotiated pick-up time and the appointment time should be captured and considered in subsequent scheduling and service delivery. Additionally, "windows" can be set around each time to allow for grouping of trips. For example, there could be a 30-minute window around the drop-off/appointment time that would allow the system to get the person there up to 30 minutes early (but 0 minutes late). A 30-minute pick-up window also could be set (e.g., 15 minutes before to 15 minutes after the negotiated pick-up time).
- Conversely, if a caller wants to be picked up at a specific time, it is still a good idea for the reservationist to ask whether there is a set time that the person needs to arrive. Then the reservationist can be sure that the person is leaving enough time to be at his or her destination on time.
- Systems that fail to request or record appointment/desired arrival times may unintentionally be providing poor on-time service if passengers are consistently late arriving at their destinations.

Establishing Compatible Pick-Up and Vehicle Wait-Time Policies

To operate paratransit services efficiently, it is important that vehicles do not linger for an excessive amount of time at pick-up locations. Some riders have difficulty understanding both the on-time pick-up window and the vehicle wait-time policy. For example, consider a system that has a 30-minute pick-up window "centered" on the negotiated pick-up time (i.e., the vehicle can arrive up to 15 minutes before or after the negotiated pick-up time) and has a 5-minute vehicle wait time policy. Vehicles may arrive 15 minutes before the time given to riders and could leave 10 minutes before the negotiated time and record the rider as a no-show. Even though riders may be

told they need to be ready 15 minutes before, they may not understand that the vehicle can leave before the negotiated pick-up time they have been given, as long as the vehicle arrives within the window and waits for the prescribed time.

To address this issue, adjustments to pick-up window policy or changes in the way that pick-up times are stated when confirming reservations is in order. Two possible approaches are described below.

- Give callers a pick-up window rather than a specific time. For example, if the automated system suggests a 9 a.m. pick-up time, the reservationist tells callers that they will be picked up between 8:45 and 9:15 a.m.
- Change the pick-up window to prohibit vehicles from arriving before the negotiated pick-up time. Rather than having a 30-minute window centered on the negotiated pick-up time, the window might allow vehicles to arrive no earlier than the negotiated pick-up time and up to 30 minutes after. (Note that if this approach is used, it is even more important to pay attention to appointment/desired arrival times. Pushing the on-time performance window forward may cause arrivals to be 15 to 30 minutes later than scheduled.)
- In either case, it is important to constantly educate and inform riders about the pick-up window. Reservationists should make sure that the rider understands the pick-up window by saying, "You have a 9 a.m. pick-up, which means that you need to be ready between 8:45 and 9:15 a.m."
- Reservationists also should make sure that riders are aware that the driver can only wait a short time (e.g., 5 minutes) when it arrives during the pick-up window.

Verifying Trip Information

The paratransit trip booking process can be relatively complex. It is easy for incorrect information to be entered or for riders to misunderstand questions or times. Reservationists might assume that the trip is originating from the person's home, use the home address that automatically comes up on the client screen without verifying the origin of the trip. Riders might hear so many times mentioned as the reservationist searches for trip options that they end up not writing down the final negotiated pick-up time. To ensure that the reservationist has booked the trip correctly and that the rider has recorded the correct times, the reservationist should repeat key trip information back to the rider at the end of the booking process.

- Key information includes pick-up and estimated arrival times, pick-up and drop-off addresses, how many people will be traveling (rider, companions, PCA), the fare for the trips and other key information.
- To emphasize the importance of verifying trip information, some systems prominently display posters or signs that say things like "ALWAYS VERIFY" in the reservations area.
- State-of-the-art reservations/scheduling software systems have a screen that provides trip summary information to facilitate this process.

It is also important that riders write down trip information so that they remember it correctly on the day of service. Several methods can be implemented to encourage this process.

- Provide a Rider Guide that urges riders to have a pen and paper handy when they call to make a reservation.
- Print trip information note pads and send them to registered riders. The pads may list key paratransit telephone numbers and provide spaces for the rider to record the trip date, the pick-up times and other information.
- To reduce problems with late return rides from doctors' offices, consider providing riders with return-ride appointment cards. The passenger

gives the card to the medical office receptionist. The card indicates at what time the passenger is scheduled to be picked up and asks the office to notify the transit agency if the appointment is running late.

Automated Booking Systems and Automated Trip Confirmation/Cancellation Lines

Automated telephone services can help improve telephone access and service. Interactive voice response (IVR) systems allow riders to check on scheduled ride times and to cancel trips without waiting on hold for a reservationist.

IVR telephone systems can also be used for scheduling, confirming and canceling service. Consideration should be made to make the system accessible from touch-tone, rotary and pulse telephones as well as when automated service can be accessed (e.g., seven days a week anytime between 2 a.m. and midnight).

Scheduling

Sometimes scheduling is performed by schedulers whose only role is to assign trips to runs based on reservation requests. As automated scheduling has become more common, the role of schedulers has changed from creating runs to managing runs. In addition, sometimes reservationists now perform tasks more traditionally handled by schedulers. No matter what the arrangement, there is no substitute for the human element. Computers can be programmed to generate schedules based on parameters (such as system speed), but humans still must review the schedules and manage the process. Regularly monitoring schedules to ensure that pick-up times are met, ride lengths are reasonable and schedules are manageable within the system is critical to a successful paratransit system.

Keeping Drivers and Riders in Sync on Pick-Up Times

In a shared-ride paratransit operation, many different trip times must be recorded and used. The various times can be defined as follows.

- **Requested pick-up or drop-off time:** The time requested by the rider. These requested times might be adjusted as reservationists search for trip options. At the end of the booking process, a pick-up time is agreed upon. This is usually referred to as the pick-up window.
- **Negotiated pick-up time.** The time agreed upon between the rider and reservationist and is based on available trip options. (The negotiated time may undergo further adjustment within the pick-up window when grouped with other trips. The adjustment may be made by schedulers as they review and make final changes to runs or by an automated scheduling system.)
- **Scheduled pick-up time.** The time that the system estimates the driver will actually make the pick-up.
- **Estimated time of arrival (ETA).** The computer may add this time based on the **scheduled pick-up time**.
- **Actual pick-up time.** The time recorded by a driver when the actual pick-up and drop-off is made.

With so many different times and with potential changes in times as schedules are developed, it is easy for riders and drivers/dispatchers to end up with different understandings of when pick-ups are to be made. The most common problem is double use of the scheduling and on-time performance windows. For example, systems often will allow schedulers to adjust pick-up times

within a certain window, often the same as the negotiated pick-up window. Drivers also are typically given an on-time pick-up window based on the final scheduled pick-up time.

- For example, suppose a rider has been given a pick-up time of 9 a.m. (the negotiated pick-up time) and has been told to be ready between 8:45 and 9:15 a.m. If the system allows schedulers to adjust the pick-up time by up to 15 minutes on either side of the negotiated pick-up time, the scheduled pick-up time could be moved to 9:15 a.m., which is still within the negotiated pick-up window. However, if this happens, the driver might assume an on-time pick-up window of +/– 15 minutes, based on the new scheduled pick-up time of 9:15. As a result, the driver could make the pick-up as late as 9:30 (30 minutes after the negotiated pick-up time and 15 minutes beyond the negotiated pick-up window) and think that it is still within the on-time window. However, the pick-up actually would be 15 minutes late. To further complicate matters, the scheduling program might even generate a different ETA based on the scheduled pick-up time!

The following approaches may be used to make sure that drivers and riders share the same understanding of pick-up times.

- Computer scheduling programs should retain the original negotiated pick-up time and the associated on-time window. Passengers should be notified of any scheduling changes that would significantly move their pick-up outside of that window.
- List both the scheduled and the negotiated times on manifests. Drivers are instructed to complete the run based on the scheduled time in bold (e.g., 11:15) but to be aware of the originally negotiated time (11:00) if they need to vary from the scheduled time.
- Show the scheduled times on manifests and then show the on-time windows based on the negotiated times. For example, a rider may have been given a negotiated pick-up time of 11:00 and told to be ready between 10:45 and 11:15. The final scheduled time might be 11:15. Thus, in addition to being given the 11:15 scheduled time, the driver would be given the negotiated window for this trip of 10:45 to 11:15, which lets the driver know he or she can show up before the scheduled time but not after.
- Use different font sizes and enhancement features (**bold**, <u>underline</u>) to emphasize times on the manifest. Be sure drivers are well trained and understand what the emphasized time means.

Reviewing Long Trips

To meet all trip requests and provide service as cost efficiently as possible, more grouping of trips may be necessary and ride times may increase. Standards should be set that limit ride length. To ensure that ride times are not excessively long, ride lengths should be monitored regularly to identify scheduled trips that last longer than the system standard. For instance, it may be feasible to ensure that ride lengths do not exceed 1.5 times the same trip on a fixed route, including wait times and transfers. Schedulers should review lengthy trips to determine whether the ride time appears to be reasonable. In some cases, the trips may be inherently long or regional trips and long ride times may be appropriate. In other cases, the trip may just be poorly scheduled and on a very circuitous route. If this is the case, the scheduler should attempt to reschedule the trip on a better run.

In addition to looking for single occurrences of long trips, regularly review group runs. Riders who are the "first on, last off" on these regular group runs usually constitute many of the long trips in the system. By regularly reviewing the on-board time of the riders picked up first (or dropped off last) on these runs you can keep travel times within acceptable limits. The longest ride times on these runs should be compared to fixed-route

travel times using the system's ride-time standards. When the ride times exceed the standard, the group run should be split onto different vehicles.

Identify runs that "double back." That is, the vehicle may be scheduled to pass close by a rider's destination on the way to another pick-up/drop-off and the rider must "double back" to finally complete the trip. Even if the total travel time is not excessive, this approach may anger riders who cannot understand why they are kept on board. In these instances, consider more direct routing. Some state-of-the-art scheduling systems also have parameters that can be set to minimize this from happening.

Managing Subscription Services

In most systems, subscription service (also called standing orders) accounts for more than 50 percent of the total number of trips provided. Typically, these trips are placed on runs before other non-subscription trip requests are received and form the base level of service around which other trips are scheduled. Doing an effective job of scheduling subscription trips can, therefore, have a significantly positive impact on system-wide productivity and service quality. However, if not well managed, subscription service can contribute to service problems including trip denials. If riders are always placed on schedules but then regularly cancel or fail to show for scheduled rides, this can have a negative impact on efficiency. Similarly, if subscription trip times are not effectively negotiated, they may not fit well with other demand and can lead to inefficient runs.

The first step in managing subscription service is to clearly define what trips qualify for this designation. The USDOT ADA regulations allow for trip-purpose restrictions, priorities, waiting lists and other capacity constraints for subscription service. Every system should have a clearly defined policy for subscription service that addresses route, frequency and trip-purpose issues. For example:

- Subscription trips must be from the same origin to the same destination at the same times on a recurring basis (e.g., same day each week).
- Require that the trip be made at least once a week (even two or three times a week, depending on local demand) to be considered for subscription status.
- Specify that subscription trips can be for only certain purposes, such as work, school, or medical treatments. Specific policies regarding trip purposes or the required frequency of the trip will depend on the ability of the system to meet all expected requests for subscription service.
- If waiting lists for subscription service emerge or are anticipated, consider tighter policies.
- Require new subscription riders to call in their requested trips for the first few weeks to ensure that the standing order will actually occur as planned. Once the pattern is established (i.e., the trip is made on the same day, at the same time, to/from the same origin/destination for several weeks), then the actual standing order or subscription trip can be established. The passenger no longer needs to schedule every trip.

Following the set standards may cut down on subscription trip changes and cancellations.

Changes to subscription trips

If riders need to adjust their work hours or if they move to a new place or their work location changes, will the trip still be kept as a subscription trip? Most minor changes are easily accommodated, but riders should understand that the request will be reviewed. Review the current schedule to determine whether or not the change can be implemented efficiently. From a "quality of service" perspective, it may make sense to continue to honor the commitment to provide consistent transportation to work once the person

is accepted as a subscription rider. Re-evaluate the request as a subscription trip and, if necessary, renegotiate the pick-up times. Riders should not be placed at the end of the waiting list for subscription service.

Interruptions of subscription service

Short-term interruptions in travel plans should be handled in a similar fashion. For example, students may require regular transportation when school is in session but do not need transportation during breaks. For an established subscription service, quality of service standards should dictate that temporary suspensions of subscription service are feasible, as long as the interruption of service is predictable and not too frequent.

Frequent cancellations or no-shows

Finally, the policy should allow for a review of subscription service if scheduled trips are frequently canceled or no-showed. This will help to discourage riders who simply want to hold a time slot for trips made occasionally. Review cancellations and no-shows made by subscription riders and contact riders who do not appear to be keeping their planned schedules. Require a 30-day trip history before considering a specific trip for subscription.

In addition to carefully defining a subscription policy, schedulers should regularly review the placement of subscription trips on runs. The way that subscription trips are placed on runs will define how the fleet is distributed throughout the service area throughout the day. Consider reviewing on a regular basis, perhaps every few months, how subscription trips are assigned each day that manifests are reviewed. If changes need to be made, schedulers should contact riders to adjust subscription schedules appropriately. The full list of subscription trips may then be "re-mastered" periodically to account for small changes in trip times and locations over that period.

Reviewing Automatically Generated Schedules

Schedule development must consider things like individual customer needs, individual driver efficiency and traffic conditions at various times of the day. Automated scheduling systems have become very sophisticated and can be adjusted to consider many factors. However, even with the best automated systems, a careful review of manifests is needed.

Conduct a careful review of schedules the afternoon/evening before the day of service, but also review runs several days in advance as they are being built by the automated scheduling system. Schedulers may find a better assignment for certain trips, even before they are full, that will minimize deadheading or keep vehicles in areas at times when other demand is expected. By constantly reviewing the runs as they are created, schedulers help the automated system make better decisions on subsequent trip assignments.

Refine Schedules Using Input from Contractors and Operators

Schedules that look good on paper sometimes do not always work on the street. Contractors and individual operators are important sources of information and provide good "reality checks" for schedulers. Develop a process to ensure that input from contractors and operators is channeled back to schedulers. For example, a "Manifest Correction Sheet" might be created to record changes. Resolutions are recorded on the sheet and a copy is returned to the driver.

In a system that uses separate contracts for the reservation and scheduling of trips and for service provision (e.g., one contractor books trips and creates schedules and another hires and supervises drivers and operates the vehicles), regular meetings with each company to discuss and resolve service issues will allow corrections to be made quickly.

Combining regular meetings with contractor staff to review how runs are structured and to discuss problems that have been encountered with operator feedback may facilitate a close working relationship between scheduling and contract operations. The additional input may help develop efficient and workable runs.

Automated Callbacks with Estimated Pick-Up Times

Systems that use batch scheduling (scheduling trips after some or all of the reservations have been received) must have a system for follow-up contact with passengers to inform them of the scheduled pick-up times for their trips. IVR technology can be used to assist in making callbacks. Once the final run schedules are created on the afternoon before the day of service, callbacks are made to all riders to provide them with the exact time of their pick-up. IVR technology is linked to the automated reservations and scheduling system to allow these thousands of callbacks to be made automatically.

Dispatching

The dispatch or control center is the pulse of any paratransit system. It is here where dispatchers control the provision of service in real time. In addition to maintaining control over drivers and their runs, dispatchers often interact with the public in response to "Where's my ride?" questions or "will-call" return trips.

Maintaining Control of All Runs

To be effective, dispatchers need to have an understanding of the status of all runs throughout the day. Approaches for maintaining this level of detail include the following.

Stop-by-stop driver call-ins

Regular contact with each driver keeps dispatchers up-to-date on slack time in each run and which drivers might need help. Active involvement of the dispatchers results in very good on-time performance; trips are shifted between runs as soon as potential problems are identified. This practice lets drivers know they are part of a team that is delivering all of the trips for that day (rather than feeling responsible only for the trips on the run they have to perform). This practice may not be as effective in a larger system in which drivers would have to wait too long for clear air in order to call in their times.

Problem-only radio call-ins

Dispatchers assume that runs are on time when drivers do not check in. This approach requires that drivers adhere to the radio policy and do in fact let the dispatcher know if they are making a pick-up early or if they are running behind schedule. Provide drivers with an incentive to radio in when appropriate by requiring drivers that fail to do so to call in every pick-up and drop-off for three days following their "missed" calls.

Mobile data terminals (MDTs) or mobile data computers (MDCs)

Advanced technology can also be very helpful. With advanced systems installed in their vehicles, drivers will "perform" every pick-up and drop-off. In other words, drivers press the appropriate buttons to indicate they have arrived and departed from each location. As actual pick-up and drop-off times are recorded by the system, new estimated arrival times are calculated for subsequent trips. If a late pick-up or drop-off will cause a subsequent trip to be late, the system automatically highlights that trip for dispatch. The dispatcher can then focus on reassigning these trips or reassigning other trips on the run to get it back on schedule. When working correctly, the level of control over runs is impressive and the dispatch area is surprisingly quiet and calm.

Pick-Up Notification

Implement procedures to notify riders a few minutes before the scheduled pick-up. An automated system can be designed wherein information captured by the reservations, scheduling and dispatch software triggers a telephone call to alert riders 5 minutes before the scheduled pick-up.

Will-Call Management

Some systems allow passengers to leave their return trip times unscheduled, having the passenger call when they are ready to be picked up. These trips are often termed "will-calls" or "call when ready" trips. Others do not allow will-calls at all and require passengers to state a return trip pick-up time, even if they have to call to adjust it because an appointment is running late.

Effectively managing will-calls can be quite a challenge for dispatchers. An important aspect of will-call management is knowing how many will-call returns to expect and when they might occur. Given that many will-calls occur in the afternoon, following appointments, peak hour demands may affect a system's ability to respond in a timely fashion. Thus, it is helpful to capture a list of expected will-call returns so that dispatchers can be aware of the number and approximate times for will-call trips on any given day. It also is important to have a clear system of assigning will-calls to drivers so that enough information is captured on the manifest to facilitate trip reconciliation for billing and statistical purposes.

When will-calls are part of the system, a response-time standard should be set and monitored. A standard may be set to respond to will-call requests within an hour or 90 minutes, perhaps as long as two hours in some systems. Note that this measure of on-time performance should be captured and included in statistical reports. If will-call response times are long or exceed the established response-time standard, passengers will rightfully consider these trips late, even though that information may not be captured by the system.

PARATRANSIT SERVICE MONITORING & MANAGEMENT

It has been said, "What isn't monitored isn't managed." Keeping careful watch on the level and quality of service provided and on adherence to established policies, procedures and standards is important for ensuring quality and cost-effective paratransit operation. In addition, USDOT ADA regulations require that service performance be monitored for patterns or practices that would indicate capacity constraints. This section includes a discussion of service quality standards, followed by a discussion of service monitoring.

Service Quality Standards

The first step in service monitoring is to establish standards for each aspect of the operation against which actual performance can be measured. Standards should be set both for service quality (or effectiveness) as well as service efficiency. Following are examples of thorough and detailed standards for telephone performance, on-time performance, travel time and trip denials.

Telephone Performance

Reliable telephone access to place and change reservations and to check on the status of rides is an important part of paratransit service quality. Long delays in getting through to arrange for service or to check on rides can discourage people from using the service. Similarly, large numbers of abandoned calls can indicate telephone access problems. Telephone performance standards should focus on hold times for important telephone lines, speed in initially answering calls if they are not automatically routed to a central queue, and the number of abandoned calls. Following is an example of a telephone standard:

XYZ Transit Agency Sample Telephone Performance Standard

Answer all calls within 5 rings or less. No more than 10 percent of all calls within any 30-minute period on hold for more than 2 minutes. No more than 5 percent of all calls within any 30-minute period on hold for more than 3 minutes. No calls in any 30-minute period on hold for more than 5 minutes.

* The percentage goals and hold times are examples only and will vary from system to system. These standards should be set with input from the local disability community and ADA advisory committee.

Reporting time intervals. Do not rely solely on daily or monthly average hold times. Because there will be low-volume times of the day when all calls are answered immediately, averages over long periods of time will hide poor performance at peak calling times. Average daily performance may

appear to be very good even though hold times during peak calling times may be very long. Performance should be measured hourly (or by the half-hour if telephone reports can capture information that frequently). Find out what reporting time intervals are available given the telephone system in place and set the standard to be measured for each of these intervals.

Secondary holds. When monitoring telephone performance, it also is important to consider initial and secondary hold times. For example, if the telephone system is set up to allow reservationists to handle more than one call at a time, a call may be picked up quickly but then placed on hold a second time while the reservationist handles another call. These secondary hold times can be hidden if not specifically referenced in the standard and identified in regular reports. Similarly, customer service staff or dispatchers may pick up calls off a central queue quickly, but may then place callers on hold for long periods while the status of a ride is determined. Again, if this is a problem, it is important that the standard and telephone reports identify and separate out these secondary holds.

On-Time Performance

A complete on-time performance standard needs to consider several factors. First, the standard should consider on-time performance for both pick-ups and drop-offs. Next, the standard should consider when pick-ups and arrivals are "on time." This is typically defined as a window of time around the time negotiated with the rider. Finally, the standard needs to define the percentage of trips that should be performed on time.

On-time pick-ups. Often a 20- to 30-minute window is used to define on-time pick-ups. This window can be centered on the negotiated pick-up time (e.g., 15 minutes before to 15 minutes after the negotiated pick-up time). It also can be set beginning at the negotiated time (e.g., from 0 to 20 minutes after the negotiated pick-up time).

On-time arrivals. Usually, an on-time arrival is defined as arriving at the destination no later than the appointment/desired arrival time. A window ending at the appointment time could be specified (e.g., from 30 minutes before to no later than the appointment time). On-time arrivals are typically only considered on the outbound trip when there is an actual appointment.

Causes of Late Trips. All transit systems should strive to provide all trips "on time." However, some trips may be late due to traffic, weather, or other factors outside of the control of the transit agency. Systems need to ensure that operating policies and practices that are within their control do not cause trips to be late. Examples of practices that cause late trips might be:

- Poor reservations and scheduling practices that result in manifests containing incorrect addresses, times, or other information.
- Tight scheduling parameters or overbooking runs that result in manifests that are not reasonable.
- Inadequate vehicle or driver backup that causes late or missed pullouts.
- Poor dispatching practices that are not effective in adjusting runs when in-service problems arise.

A standard for on-time performance between 90 and 95 percent is not unreasonable. More important than the precise percentage is the reason for the untimely performance. For example, a goal of 100 percent on-time performance might be established, with a standard of 95 percent on time. A review of untimely trips might show that for every 5 trips that are late, 3 are because of internal practices and only 2 are caused by circumstances beyond the control of the system. This may not be acceptable performance even

though 95 percent of the trips are on time, meeting the internal standard. Such an analysis might suggest that the system needs to focus on the internal practices that regularly contribute to untimely service.

Considering all of these factors, an on-time performance standard might appear something like this:

> ***XYZ Transit Agency Sample On-time Performance Standard***
>
> *The goal of the XYZ Transit Agency is to perform all trips on time. A trip will be considered to be performed on time if: The pick-up is made within the pick-up window, which is from the negotiated pick-up time until up to 20 minutes after that negotiated time; and the drop-off is made within the drop-off window, which is up to 30 minutes before, but no later than, the stated appointment time (if applicable). While there may be a goal of 100 percent of all trips being performed on time, XYZ Transit Agency may adopt a standard of something less than 100 percent on time, such as 95 percent on time, with no patterns of untimely service because of operating practices within the control of the system. All trips will be scheduled to be performed on time. Adequate backup will be maintained to ensure that there is no pattern of missing scheduled pullouts. Adequate in-service backup will be maintained so that there is no pattern of not being able to respond to same-day service problems. Information errors in the reservations process will be minimized.*

* This standard is an example only and will vary from system to system. These standards should be established with input from the local disability community and ADA advisory committee.

Travel Time

According to USDOT regulations, capacity constraints may include an inordinate number of excessively long trips. The local standard should define what makes a trip excessively long and should also provide for an allowance of long trips. This determination should be made in consultation with the local ADA advisory committee.

The FTA has advised that consideration be made to the comparable trip time of a fixed route (at the same time of day) including a set standard to allow for walking time to/from the stop. It would seem reasonable for transit systems to have a goal of always scheduling trips to be performed in a reasonable (not excessive) amount of time. In-service problems and circumstances beyond the system's control may develop and cause a trip to be long, but policies and practices in operations that would lead to an excessively long ride should be avoided.

Policies and practices that might lead to excessively long trips might include:

- Too many pick-ups and drop-offs scheduled into group runs; and/or
- Inadequate backup capacity to handle same-day service problems, resulting in trips added to already tightly scheduled runs throughout the day.

Excessively long trips may be defined in one of the following ways:

- Trips that are longer than a set amount of time (e.g., trips longer than 60 or 90 minutes); or
- Trips that are considerably longer than comparable fixed-route trips (e.g., trips that are more than twice as long as fixed-route trips from and to the same origins and destinations at the same time of day).

In some cases, systems that use set amounts of time also have different thresholds based on trip length. For example, the standard might be no more than 60 minutes for trips less than 10 miles and no more than 90 minutes for trips more than 10 miles in length.

Each of these approaches has its benefits and flaws. Standards based on set times are easiest to use but may be inappropriate for the full range of trips in the system. An hour may still be too long for a trip that is only 1 to 2 miles in length. In addition, even 90 minutes may not allow enough time for trips that are cross-region, which might take two or more hours by fixed route.

Standards that are based on general comparisons to fixed-route travel times (150 or 200 percent of fixed-route time) may not be appropriate for very short or very long trips. For example, if a trip takes 180 minutes by fixed route, would it be appropriate to allow for a paratransit ride that is 270 or 360 minutes (4.5 to 6 hours)? Probably not.

In recent ADA compliance assessments, FTA has made direct comparisons between paratransit travel times and comparable fixed-route travel times, including an allowance for the extra time it may take traveling to/from a stop or station and waiting for the bus or train. So, for example, defining a paratransit trip as excessively long if it is more than the fixed-route travel time for a comparable trip plus 40 minutes might be more appropriate. The extra 40 minutes might be a reasonable surrogate for the extra time to walk to the bus stop, wait for the bus and walk to the destination, depending on the distances involved.

Considering all of the above, a possible travel time standard might be (see below):

XYZ Transit Agency Sample Travel Time Standard

The goal of XYZ Transit Agency is to provide all trips in a reasonable amount of time when compared to fixed-route service. A trip will be considered to be excessively long if it takes more than 40 minutes longer than a fixed-route trip from the same origin to the same destination at the same time of day. XYZ Transit Agency's goal is to perform all trips in a reasonable and comparable time. A minimum of 98 percent of all trips will be performed within this standard, with no patterns of excessively long rides due to operating practices within the control of the system. All trips will be scheduled to be performed within this time standard. Adequate backup services will be maintained to ensure that there is no regular pattern of extra trips being added to already full runs, causing other trips to be excessively long.

* This standard is an example only and will vary from system to system. These standards should be set with input from the local disability community and ADA advisory committee.

Trip Denials

The FTA has issued guidelines on how trip denials should be defined and on goals/standards that should be established for ADA complementary paratransit service, which indicates that:

- A trip request should be considered "denied" if it cannot be accommodated at all or if it cannot be accommodated within one hour before or after the requested pick-up time.
- Trips scheduled more than one hour from the requested time should be recorded as denials even if the person accepts the different time (since they may be taking the time offered only because they have no other option).
- When a customer requests a round trip and only one leg of the trip can be accommodated, if the customer declines the one-way offer, both legs of the trip need to be counted as denials.
- Trip requests need not be considered denials if a time within one hour of the requested pick-up time is offered but is not accepted by the customer.

Defining trip denials in this way creates record-keeping challenges. Trips may actually be scheduled and provided that should be recorded as denials (if outside of the hour scheduling

window). It also suggests that different types of denials need to be identified.

Types of trip denials

It is useful to categorize the various types of trip denials for more accurate monitoring of service quality. Categories such as "capacity denials" and "adversarial denials" can help illustrate where scheduling problems exist.

- Capacity denial — Recorded if a trip request cannot be accommodated at all or cannot be accommodated within one hour of the requested pick-up time.
- Adversarial denial — Recorded if a trip is offered within an hour of the requested time but is refused by the caller.

In addition to denials such as these, it may be helpful to distinguish between trips that are never scheduled and those that are accepted and scheduled outside of the ADA-allowed scheduling window (one hour before or after the requested pick-up time). These trips might, for example, be considered "scheduled denials."

Planning and budgeting service capacity

Systems should plan and budget in good faith to meet 100 percent of expected demand. For example, if the planning and budgeting process indicates that 500,000 trips will be requested in the coming year, the system design and budget should provide for 500,000 trips.

When planning and budgeting for paratransit services, consider:

- Past trends/growth in demand. These trends should be projected out for the coming year(s).
- Denied trips. If there have been denials in the past year, additional capacity should be planned to meet this demand in the coming year.
- Latent demand. If performance issues have depressed demand, the coming year's budget should allow for a correction of these performance problems and for a growth in demand once service is improved.
- Inflationary cost increases. In addition to the above demand considerations, the budget should also allow for expected inflationary cost increases.

Service Monitoring

Detailed notes about daily operations are needed to accurately investigate service issues. It is important to be able to determine why trips are early, late or excessively long or why other issues arise. Reasons behind variations between scheduled and actual pick-up/drop-off times should be detailed to accurately reflect the source of the changes. Changes can occur for a variety of reasons including rider requests, scheduling errors, driver error, vehicle breakdown, traffic problems or other circumstances beyond the control of the system.

Although most automated reservations/scheduling/dispatch systems have features that allow detailed notes to be added to the trip file, it still may be useful to run a daily dispatch log of traffic situations, breakdowns, incidents, etc., as their impacts may not be directly evident for individual trips but may have an effect on the system. It also is good to keep a daily dispatch log indicating there have been no major events that might have disrupted service.

Notes detailing these variations are a valuable resource when meeting with contractor representatives to review service performance and scheduling issues.

Performance Reports

Key information gathered through service monitoring should be reviewed regularly to determine both service quality and service efficiency. This service data can be used to identify trends over time as well as to compare performance with peer systems. Following is a summary of the types of information that should be reported, along with lessons learned by systems for accurate and meaningful collection of key data. Examples of ways that some systems use and analyze the data to ensure compliance with the ADA requirements are also provided.

To properly gauge service quality, a transit agency should measure:

- Effectiveness — achieving a desired level of service as measured by predetermined standards (doing the right things).
- Efficiency — achieving maximum service for minimum cost, subject to minimum service criteria (doing things right).
- Productivity — a performance measure that indicates the relative operating efficiency of a transportation service, usually expressed as the number of passengers carried per hour or per mile of vehicle operation.
- Reliability — relates to the variability of predicted and actual waiting times, punctuality and arrival times; also employed in its common meaning of dependability when referring to attitudes on transit.

Data Definitions

Recently, an effort was undertaken to improve the data definitions used for paratransit reporting in the annual National Transit Database (NTD). This effort was spearheaded by the American Public Transportation Association (APTA) Access Committee. The committee offered several definitions that might better capture relevant operating characteristics for ADA complementary paratransit.

These definitions included:

- Total vehicle-hours for the year — defined as hours when the vehicle is on its way to pick up or is actually carrying a passenger.
- Total revenue-hours for the year — defined as hours when the vehicle is actually carrying a passenger.
- Total vehicle-miles for the year — defined as pullout to pull-in.
- Total revenue-miles for the year — defined as miles from first pick-up to last drop-off minus driver breaks and lunch.

Systems should account for and distinguish between service provided by dedicated and non-dedicated vehicles, as well as service provided by the transit agency versus contracted service. For example, it is difficult to measure productivity of a taxi vehicle used in non-dedicated service (i.e., it may serve passengers other than ADA paratransit customers). On the other hand, measuring productivity is much easier in a system where all vehicles are dedicated to that program. If incorporated into the NTD, these elements will help to advance the data quality reported for ADA paratransit.

Service Quality Reports

There are several reports that should be generated routinely to help measure and track service quality and performance. These reports are useful for managers and their governing boards. Both system-wide performance and individual performance of carriers should be measured. A few of these reports include:

- Telephone system reports — Daily reports that show total calls, calls answered, calls abandoned, average hold times and maximum hold times by time of day. Reports should be

generated to show this data by the hour (or even half hour) of each day.

- Trip denials — All types of defined denials— "capacity denials," "scheduled denials," "adversarial denials," "eligibility denials," etc. It may be helpful to analyze denial patterns. Examine denials by number of days in advance that trip requests are placed by time of day, day of the week, and for trip requests from riders who are ambulatory versus those who are non-ambulatory. This type of analysis helps determine high-capacity times as well as needed changes to fleet composition. Make sure reservationists properly code denials to avoid undercounting or incorrectly categorizing denials. Only one denial should be attributed to any one trip. If both legs of a roundtrip are refused, two denials should be recorded, regardless of whether or not one of the legs of the trip satisfied the rider's needs.
- On-time performance — Compare actual pick-up times to negotiated pick-up times to determine on-time pick-up performance. A similar comparison between actual and negotiated drop-off times should be conducted where applicable. Examine time-of-day and location patterns to accurately locate poor performance areas. If the paratransit fleet is not 100 percent accessible, an analysis of performance for riders who use wheelchairs should also be made periodically. Information generated should be used to adjust scheduling parameters and to address internal operating issues (e.g., trips late at the beginning of shifts due to pullout problems).
- Trip length — Tabulate trips by duration (number and percentage less than 60 minutes; number and percentage 61–90 minutes; number and percentage more than 90 minutes). Periodically compare these times to fixed-route travel times for reasonableness.
- Missed trips — Record all trips that were not performed by the carrier through no fault of the passenger.
- Accidents/incidents — Record accidents (sometimes called crashes) and incidents by type, driver and provider. Develop measures of accidents (crashes) per 100,000 vehicle miles and incidents per 100,000 vehicle miles for performance comparison.
- Complaints — Record all complaints; develop subtotals of complaints determined valid versus not valid; track complaints by provider, vehicle and driver; link the complaint process to regular service monitoring (if there is a pattern of complaints for a particular provider or driver, schedule on-street monitoring to check on the performance of that provider/driver); calculate a ratio of valid complaints per 1,000 trips provided as a way to compare the number of complaints with other systems.

Field Observations

Actual on-street observations, as well as office-place monitoring, are important for verifying the accuracy of service data that is collected. This might include verifying that service was actually provided or performance reports were accurately recorded. Service observations can also confirm compliance with service policies and procedures, including compliance with vehicle design and maintenance standards, driver qualification standards, the level, type and appropriateness of assistance provided by drivers and safe vehicle operation.

On-Street Driver Observation

Service monitors must be accurate and thorough. On-street observation can be done by street supervisors, audit departments or other management staff, as well as by service brokers where applicable.

On-street monitoring can include:

- Observing driver performance at pick-ups and drop-offs

- Following vehicles to confirm safe operation
- Spot-checking vehicles being used and comparing the information with an approved vehicle list
- Spot-checking vehicle condition
- Comparing pick-up and drop-off times with data on completed manifests or in final trip files

Office-place monitoring

First-hand observations of other operational functions, such as reservations and customer service, can help isolate system breakdown and deficiencies. Many systems record telephone lines used by riders and then periodically review these recordings to ensure that reservationists and dispatchers are following established policies and are treating callers appropriately. For example, to ensure that reservationists are properly recording any trip denials, reservation lines are monitored for a selected period of time, any denials recorded. Recorded denials are then cross-checked with computerized trip records to be sure that they were recorded as denials.

Systems that are voice-radio dispatched may also have a mobile unit installed in the office of the service monitoring staff so that radio transmissions can be monitored and the appropriate handling of same-day service issues verified.

Secret rider/client programs

In addition to using transit agency or broker/contractor staff to make service observations, consumer-based service monitoring programs ("secret rider" programs) can provide an effective means of assessment. A selected group of riders is typically trained to keep detailed trip logs. These trip logs can include information about all aspects of the service, including:

- Telephone service and hold times
- Requested versus offered trip times (and trip denials)
- Trip dates
- Origin and destination information
- Actual pick-up and drop-off times
- Driver and vehicle identification information
- Driver assistance and performance
- Vehicle and equipment operation and condition
- General observations and comments

Riders who participate in the program are typically compensated in some way. This might include free fare vouchers or a payment per completed trip log.

It is important in these programs to protect the confidentiality of riders who agree to monitor the service. For this reason, consumer-based programs are often coordinated by people outside of the paratransit service provider or transit agency (in the case of in-house operation). This might include a local disability agency or a contractor that specializes in setting up programs of this type.

Contract Provider Reviews

For systems that contract out for paratransit service, it is important to have a process to verify compliance with contract requirements. In addition to ongoing observations of day-to-day service, a process for verifying compliance with driver qualification and training requirements, vehicle design standards, vehicle maintenance requirements, insurance standards and other contract provisions is needed. The transit agency should have access upon request to all provider records and should plan to spot-check records regularly.

Driver qualification

To ensure compliance with driver qualification and training requirements, contractors should be required to provide up-to-date lists of drivers hired to provide paratransit service. Using this list, the transit agency can spot-check personnel files to ensure that drivers on the list have proper

qualifications and that appropriate background checks have been run. Dates of training and other information may also be included in the files. On-street monitors can use the current driver list to ensure that only authorized drivers are being used to provide the service.

Vehicle standards

To ensure compliance with vehicle design standards, all vehicles used in service should be inspected by an agent of the transit system before they are placed in service and a list created. On-street monitors can examine the current list to ensure that only authorized vehicles are utilized. Maintenance and insurance records of vehicles on the list should be checked periodically to ensure adequate service and required coverage are maintained.

Customer Comments and Complaints

All customer comments, complaints and commendations should be included as a critical part of service monitoring. In contracted operations, complaints and commendations should be taken centrally by the transit agency. In brokered systems, the broker should manage the complaint process only if they are paid a negotiated fee for managing the service. If the broker is paid on a unit of service basis and hires the service providers, then the transit agency should maintain central control of complaints. For an in-house operation, transit systems should consider having complaints managed by the central customer service office rather than the paratransit operations division.

The process for commenting or filing a complaint or commendation should be advertised in service brochures and rider guides. Comment cards and posted information about the comment/complaint process made available on vehicles are effective means of gathering data from customers.

All comments and complaints should be documented and separated into "valid" and "not valid" categories. (A complaint that a same-day trip request was denied in a system that requires one-day advance notice would be considered "not valid.")

Consider acknowledging complaints with a postcard, e-mail, or telephone call noting that the comment was received and is being investigated.

In thorough processes, the investigation of the complaint goes well beyond simply forwarding the complaint to the provider for comment and resolution. Information to corroborate the complaint should be gathered. This might include listening to telephone recordings, examining completed driver manifests and computer trip records and contacting other riders on the vehicle for statements.

Consideration also should be given to confidentiality. Complainants should be asked if they are willing to have their identity revealed to the service provider. Every effort should be made to identify the complainant in the file in case additional information or clarification is required, or to verify the validity of the complaint, if needed. Under some circumstances it may be appropriate to protect the rider's anonymity from the service provider.

It also is important to link the complaint process with the first-hand service observation process. First-hand observations or inspections of specific drivers or vehicles should be scheduled using complaint information. Periodic reviews of provider records should also be used to verify that agreed-upon corrective action was actually taken. For example, if the outcome of a complaint is that a driver will be given refresher training, the next desk audit of that provider should include a check of that driver's personnel file to verify that the training was completed.

PARATRANSIT SYSTEM DESIGN

The overall goal of a paratransit service design should be to implement a service delivery structure that produces the optimal balance of service quality and unit cost. The corollary goal to balancing cost, productivity and quality is to translate the needs and expectations of the passengers (and their sponsoring agencies) into an appropriate and cost-effective service delivery network.

When considering system design/structure issues, paratransit management needs to determine the following:

- *What is the most appropriate management/organizational structure?*
- *What are the most appropriate services and service designs?*
- *What is the most appropriate procurement strategy?*

Management/Organizational Structures

With the desired balance of productivity, quality and cost in mind, the first task is to vest management and functional responsibilities with the most appropriate organization. Services provided by the system can be provided in-house or contracted out to external brokers and agencies. An in-house (direct) management/organizational structure is perhaps the most prevalent. The next most prevalent structure is one in which carriers under contract to the sponsoring agency perform the vehicle operations component. The day-to-day management of the operation can be outsourced either to a management firm or the contract carrier(s) themselves. These options are sometimes portrayed as follows:

Management/Organizational Structure Options

Administration Oversight	*Day-to-Day Management*	*Vehicle Operations*
Sponsoring Agency	Sponsoring Agency or Management Firm or Carrier(s)	Sponsoring Agency or Carrier(s)

Choosing the Right Management Structure

Across the United States, most paratransit programs fall into one of the management/organizational models described below. There are both exemplary programs and poorly managed programs reflected in all of the models, indicating that there is not one structure that enhances the success of achieving the desired balance of unit cost, productivity and service quality. At the same time, there does appear to be a set of related factors that have a direct bearing on where certain functions should be housed. These factors include:

- The perceived objectivity of the prospective organization and the support and trust that that organization holds with the community
- Its capabilities in terms of experience, resources and stability
- The will it has to carry out the mission
- The ability to be flexible and adaptive

Additionally, it makes sense to look at the management/organizational structure of similar paratransit services in other communities or regions that have similar demographics, services and goals. It should be noted that national databases of paratransit services have very little information about management structure.

In-house/direct management operation

In-house (direct) operation offers the sponsoring agency more direct control over and flexibility within the operation. This can directly translate into the ability to balance the appropriate service quality and service level with the available budget. On the other hand, direct operation can require an enormous capital investment not only in terms of procuring and maintaining the vehicles, but also in housing the staff. It is also true that the cost structure of any paratransit operation is largely dictated by driver wages, which typically reflect approximately half of the cost structure. For many sponsoring agencies, the use of in-house, and often unionized, labor may be more costly than the use of contract carriers. While in-house management offers more direct control and flexibility, it is typically more costly.

Transportation management/brokerage firm operation

The primary reason to consider a transportation management/brokerage firm to manage a paratransit service is financial. A private entity may be able to achieve cost efficiencies to the point at which the management cost plus the operations cost is lower than the cost of in-house management, while maintaining or improving the level of service quality. Savings can be found in a management firm's ability to obtain favorable and appropriate rates and to shift market share among contract carriers, in contrast to public agencies that are more constrained by procurement restrictions.

A sponsoring agency may decide to retain a management firm for a host of other reasons, including:

- A desire to outsource paratransit management
- Lower costs
- A lack of in-house expertise
- An inability to attract experienced personnel or an in-house hiring freeze
- Union concerns about contracting vehicle operations

Moreover, in the case of a multi-sponsor coordinated system, a management firm serves as an objective third-party entity from which service is purchased.

Appropriate Services/Service Design

Paratransit is only one component, albeit a potentially broad one, in the menu of service options available to an organization or group of organizations charged with sponsoring transportation for its constituents, customers, or clients. There also is an obvious need for the paratransit practitioner to plan for the delivery of paratransit in a holistic manner, i.e., in consideration of the other transportation resources available and in consideration of community goals for overall mobility. A typical menu of available transportation services in any community may appear as follows.

- **Public transit** is a **core transportation infrastructure** in more populated areas. These may include a network of rail services, bus rapid transit, bus ways, express bus routes, local fixed-route bus service and even flexibly routed buses at times or in areas where there is less demand for service.
- **Paratransit services** that are delivered in either a coordinated or an independent fashion. These include ADA complementary paratransit services in areas where fixed-route transit is provided and general public paratransit (dial-a-ride) services that act as feeders and distributors, as well as local circulators in areas with a demand that cannot support transit. In addition, with the advent of Federal Welfare-to-Work and Job Access Reverse Commute (JARC) programs, paratransit provides a solution for transportation to child-care sites that cannot be accessed via other modes.
- **Dial-a-ride** services may represent the sole mode of public transportation in some less populated communities where fixed-route transit is not provided.
- **Human service paratransit programs** may be offered by sponsoring agencies that provide service for their clients who are unable to use public transit or paratransit options. However, it may be more efficient and cost effective for the local transit agency to provide these services.
- **Taxis and livery operators**, while often serving as contractors to public and private paratransit programs, also provide an on-demand transportation resource.
- **University shuttle programs** coordinate services and benefits provided by transit agencies, particularly for students with disabilities.
- **Commuter transportation** makes up another layer of transportation. This may include privately provided shuttles connecting major transit points with employment sites, subscription vans/buses for groups of commuters and rideshare/vanpool programs, many of which rely on taxis or paratransit programs to provide a guaranteed-ride-home service. In some areas, the lines between paratransit and vanpooling are blurring as the agencies responsible for ADA complementary paratransit provide vans to human service agencies for clients with developmental disabilities whose daily trips are ADA-eligible.
- **School transportation** forms the final layer. While school transportation and public transportation have evolved as industries in their own right, there are numerous examples where public transit and paratransit services are used to transport students. Many communities are also beginning to better coordinate their public and school transportation resources. Meanwhile, special needs transportation providers often are the same carriers that participate in public/agency paratransit programs.

Thus for the paratransit practitioner, the menu of paratransit service types depends on how paratransit is to be used. In most cases, the paratransit service will be an ADA complementary paratransit service, a senior dial-a-ride, a general public

dial-a-ride, an agency transportation program, or a combination thereof. What is important is that the paratransit practitioners understand the synergies among the different paratransit programs and among the different components of the community's transportation network.

Allocation of Functions

The allocation of functions among the sponsoring agency, the managing agency (if different), and the contract carriers (if different) depends on the management structure and the types of services that will be provided. Primary functions related to paratransit include:

- Procuring a management agency (if different from sponsoring agency)
- Procuring carriers (if not directly operated)
- Procuring and providing vehicles
- Providing hardware and software
- Determining eligibility, certification and registration
- Reservations intake and processing
- Cancellations intake and processing
- Scheduling trips onto dedicated vehicle runs
- Assigning other trips to carriers operating undedicated vehicles
- Dispatching
- Handling "Where's my ride?" calls
- Collecting and accounting for fares
- Documenting/tracking actual service data
- Processing carrier invoices
- Monitoring service
- Managing complaints
- Reporting
- Training

Which entity performs certain functions can have a significant impact on productivity, quality and cost. For example, consider:

- Who should procure carriers?
- Who should provide the vehicles?
- Who should provide the call-computer hardware/software?
- Who should perform eligibility certification?
- Who should perform reservations?
- Who should perform scheduling?
- Who should perform dispatching?
- Who should handle the "Where's my ride" calls?
- Who should handle customer complaints and comments?
- Who will train the drivers and other personnel?

A couple of examples may help to illustrate the point. Table 1 shows the advantages and disadvantages of centralized reservations. Table 2 shows the advantages and disadvantages of centralized scheduling. One thing that does appear to be clear, regardless of whether the system is centralized or decentralized, is that it is far easier to manage a system when reservations, scheduling and dispatch are housed in the same location.

Table 1

Advantages (+) & Disadvantages (–) of Centralized Reservations

Staffing	+ Potentially reduces total number of reservation agents; may depend on whether vendors have other business. – Additional staff may be required to support centralized reservations.
Service Quality	+ Allows flexibility and control over reservations agents, e.g., the time they spend with each caller, call-taking procedures. + Provides equity, e.g., all callers are in the same queue. + Provides opportunities to eliminate scrip / vouchers and implement centralized fare accounts. – Potentially eliminates user choice. – May add to consumer confusion about which entity customers should call and under what circumstances.
Accountability	+ Provides uniform and comprehensive telephone management. + Provides control over client and trip eligibility. + Potentially reduces "phantom" trips. – Eliminates clear lines of responsibility, e.g., complaints about late or missed service.
Operator Reaction	– Potential conflicts based on quality and reliability of information taken from callers (reservations, cancellations) and timeliness of data transmission. Negates use of vendor's existing reservations and scheduling infrastructure.
Operating Cost	+ Potential cost reductions depend on reduction in vendor reservation staffs. + Potential cost reductions as a result of control over trip eligibility. – Potential additional cost of support staff and automation.
Start-up Costs	– Telephone system, hiring, training, information dissemination and computerized reservation system software/hardware and training.

Table 2

Advantages/Disadvantages of Centralized Scheduling

Staffing	+ Potentially reduces total number of schedulers; may depend on whether vendors have other business. – Additional staff may be required to support scheduling.
Service Quality	+ Allows flexibility and control over the vendor / vehicle to which a trip is assigned and over the balance between service reliability vs. productivity. + Gains in cost efficiency may translate into more, better service. + Provides control over trip prioritization, standing orders. + Provides equity, e.g., all callers are in the same queue. + Improves communication between reservation agents and schedulers.
Accountability	– Reduces clear lines of responsibility between schedulers and vendor dispatchers and operators, e.g., poor on-time performance, complaints about late or missed service.
Operator Reaction	– Potential to cause conflicts based on quality of the scheduling, the timeliness of data transmission and distribution of trips among carriers (in a multi-carrier environment). – Negates use of vendor's existing reservations and scheduling resources/investment.
Operating Cost	+ Potential labor cost reductions depend on reduction in vendor scheduling staffs. + Potential cost reductions (or increase in cost efficiency) as a result of productivity gains, i.e., increased ridesharing opportunities. – Potential additional cost of support staff and automation. – Eliminates opportunities for cost reduction by not taking advantage of vendors' undedicated vehicles.
Start- Up Cost	– Scheduling staff, hiring and training. – Computerized scheduling system software/hardware, training.

Other Design Considerations Within a Paratransit System

Single vs. Multiple Carriers — In a single-carrier system, the responsible agency-sponsor directly operates the service or elects to retain a carrier. Typically, systems use more than one contractor because the advantages of using multiple carriers usually outweigh the disadvantages. An advantage to having more than one vendor is that it tends to enhance service quality. Where riders have a choice, the quality of service provided by a carrier is market driven.

Single vs. Multiple Service Areas — If the managing agency decides to pursue a design with multiple carriers, the agency can opt to divide the region into service zones. This approach can be pursued in cases where the managing agency performs the scheduling or in cases where user choice (of carriers) is desired. Market share can be predetermined based on bid rates and capabilities. For example, the carrier with the lowest rate and/or best capabilities receives the lion's share of the work; other carriers are scaled accordingly. Where the service mix (see below) includes dedicated vehicle service, the allocation of work can simply be accomplished by allocating a specific number of vehicles, vehicle runs and/or revenue hours to each carrier. The allocation of trips to carriers operating undedicated vehicles is more difficult, as the managing agency must keep track of trip allocations against daily trip or budgetary ceilings for each carrier.

The key to sizing service zones is to accommodate a high volume of trips within each zone in order to keep the dedicated vehicles productive, while minimizing the interzonal trips, and to take advantage of the local carrier locations and to maximize the number of carriers interested in bidding.

Paratransit-to-Paratransit Transfers — Although seldom seen, paratransit-to-paratransit interzonal transfers are generally initiated to reduce long-distance trips that would adversely affect the productivity of a dedicated vehicle, or that could be very costly for an undedicated vehicle. On the other hand, too many transfers or poorly executed transfers can decrease productivity, performance levels and customer satisfaction. Transfers do have a place in a multi-carrier, multi-zone system design, but that they should be minimized so as not to decrease the service quality of the majority of riders. Here, too, the paratransit practitioner should look to the balance of cost, productivity and quality.

Service Mix — The split between dedicated and undedicated vehicle service is delicate and highly dependent on the characteristics of the trips. For example, a service that has a relatively condensed service area (with shorter trips and common trip patterns) will benefit from a high percentage of dedicated service. In contrast, a regional service (with longer trips and more diverse trip patterns) would probably benefit from a higher percentage of undedicated service.

Flexible Capacity — Through flexible capacity, systems may be better able to efficiently and cost-effectively accommodate all trip requests. Flexible capacity is typically achieved through a separate contract (or allowing the primary service provider to have a subcontract) with taxi or other private van operators in the area. Trips that cannot be efficiently scheduled on dedicated vehicle runs are then referred to these providers. These overflow providers typically make vehicles available on a non-dedicated basis and payment is usually made on a per-trip or per-mile basis. Examples of typical overflow providers include general public taxi companies, general public "chair-car" or "ambulette" lift-van companies, or local human service agencies that operate transportation services in the area.

Usually, the number of trips referred to overflow providers is small (roughly 1 to 5 percent of total trips). As the number increases, additional regular runs with dedicated vehicles should be created.

Procurement

Again, with an eye toward achieving a desired balance of cost, quality and productivity, there are several procurement practices, the success of which depend greatly on the service delivery design.

Set Rate Ceilings

For systems with constrained budgets, a common procurement strategy is to establish rate ceilings for each type of trip, service, or vehicle, above which carrier bids would be rejected. However, it is very important that these rate ceilings be realistically set. The primary purpose of this strategy is to thwart ridiculously high profit margins. They should be established so that private for-profit contractors can make a reasonable profit and so non-profit carriers can cover their costs. But remember, it does no one any good to negotiate a rate that will directly cause a carrier to go out of business or to breach a contract.

Avoid "low-ball" bids

If bids are too good to be true, they probably are. The most common ramification of these bids is the inability of the carrier to attract and maintain good drivers, which can make or break a system. As a rough guideline, driver wages and fringe benefits should comprise approximately half the cost structure. In addition, driver wages should be well positioned relative to other driving positions in the community; otherwise, as soon as a driver is trained, s/he will probably leave for a higher paying driver position.

Minimize bidder risk

Sometimes another goal of the procuring agency is to minimize the risk to the bidder, less risk equals lower bids. There are several ways in which the procuring agency can minimize risk to bidders.

- Provide vehicles and software to carriers.
- Lengthen the contract period to enable bidders to cover financing periods.
- Purchase dedicated vehicle service by the hour, as opposed to by the trip. Carriers' cost structures are mostly calculated on an hourly basis. Buying dedicated service on an hourly basis thus offers less risk to the carrier.
- The level of dedicated vehicle service purchased should be commensurate with the demand, with run construction scaled to match areas and times that have the tendency to generate higher volumes.

Per-hourly vs. per-trip service contracts

Note that hourly rates for dedicated service should always be accompanied by incentives and penalties relating to cost, productivity and service quality, especially if scheduling is decentralized. In contrast, it is very tempting for sponsoring agencies to purchase dedicated service by the trip; such a cost structure is easy to administer and it facilitates budget adherence. However, danger lies in inaccurate forecast trip volume. In cases where the actual volume falls short, the managing agency or carrier is unable to cover costs and breaches contract. The same result can occur with trip lengths: much longer trip lengths will reduce productivity, which in turn increases costs per trip. In addition, in other cases where the actual trip volume significantly exceeds the forecast levels, the carriers can achieve an inappropriately high profit. None of these results benefits the system. The industry experience suggests that use of hourly rates for dedicated service makes the most sense. Another option is a cost-plus-fixed-fee contract form, which works very well and reduces the risk for both the contracting agency and the contractor. This practice is not seen very often and does require close monitoring and an audit of service invoices and contractor performance.

Undedicated vehicle service should generally be purchased on a per-trip basis if the characteristics of the trips are relatively homogeneous. If the trip characteristics are very diverse or unknown, undedicated service should be purchased by the

passenger-mile, again to reduce the risk for the carriers. (Undedicated service may also be a cost-saving device by which prospective contractors with other contracts can pass along a "shared" per-trip rate.) Again, the goal is to develop the proper mix of dedicated and undedicated service that will minimize the collective, system-wide cost per trip and cost per passenger-mile, while meeting or exceeding established service quality standards.

Market share control

In a multiple carrier setting, the procurement of paratransit service also should guard against monopolies. The establishment of ceilings on market share is therefore a good practice. The experience around the country suggests that this ceiling should range between 33 and 50 percent. Market share can be controlled and allocated by:

- controlling the number of trips that are scheduled onto a carrier's vehicles (or perhaps more simply, assigning a certain number of vehicle runs to each carrier commensurate with the controlled market share), or
- assigning a carrier to a specific service zone that equates to the controlled market share.
- promising a higher percentage of the business to the qualified carrier with the lowest rate. (For example, if three contract carriers are sought, the procuring agency could give 50 percent of the market share to the lowest qualified bidder, 30 percent to the next lowest and 20 percent to the third lowest. This strategy has proven to be successful in a number of sites.)

In addition, the procuring/managing agency should make it understood that this is only the starting point and that subsequent market share gains and losses during the course of the contract will be based on ongoing performance of each carrier.

In seeking prospective carriers, consider putting a premium on existing carriers from the community, while not excluding the national firms from competing. Not to be overlooked among the local operators are private, non-profit carriers and especially agency operators. When using agency operators, attempts should be made not to over-extend their capabilities. In this way, the purchasing agency can gain a low-cost resource, giving them work within their sphere of comfort, while using the for-profit carriers to handle the rest of the system. Where for-profits and non-profits are competing for the same service, the procuring agency should create as level a playing field as possible by ensuring that lower non-profit rates at least reflect grants and that the non-profit rates truly reflect fully allocated costs.

Troubleshooting

It is hoped that the information in the System Design section is presented in a way that gives the paratransit practitioner an overview of service delivery design components and how different elements interact. Table 3 presents a troubleshooting guide to easily identify common problems that have prospective design-change solutions.

Local Service Options

A vast array of complementary services that may be effective in meeting the transportation needs of many potential customers can be incorporated into a paratransit system. Programs can also be established in conjunction with other agencies to provide services. Coordination ranges from informal cooperation between agencies to complete consolidation of services.

Mobility Managers

As a local Mobility Manager, a transit agency (or sometimes another entity) works as a clearinghouse of information about all transportation services available locally. They may or may not directly operate all of these services, but they serve as a one-stop center providing guidance and information to consumers about existing options.

Table 3

Productivity – Troubleshooting Guide

1. Low Productivity

Problem	Potential Service Delivery Solutions
a. Too many long trips (large service area; too many vehicles scattered; too much deadheading)	Allocate fleet by service zone; convert to multiple-carrier, zone-based structure (if enough trips) create service zones with transfer requirements to reduce number of discretionary, longer trips initiate zone- or distance-based fares, if allowed feed long-distance trips to fixed-route transit use flexible capacity (e.g., taxi, for long-distance trips)
b. High cancellation rate of pre-scheduled trips (high no-show and/or late-cancellation rate)	Reduce advance-reservation period; introduce immediate-response requests; introduce (or follow) policy for customer abuse; develop appropriate policies for addressing late cancellations and/or no-shows; change definition of late cancellations; increase number of subscription trips (if limited)
c. Poor scheduling	Allocate fleet by geographic area or by service zone; change location or number of transfer zones; automate scheduling process; vest scheduling function with contractors
d. Too many poorly executed paratransit-to-paratransit transfers	Reduce/eliminate transfers, replacing with (limited) direct service; give dispatchers more tools (e.g., automatic vehicle location, mandatory driver call-ins)
e. Too many will-calls (call when ready)	Limit number of will-calls per day; replace with conservative pick-up times; schedule trips onto floaters; broker trips onto taxis (give taxis accessible vehicle); introduce hospital service route or shuttle
f. Too many idle drivers on dedicated vehicles	Enhance dispatch capabilities / radio infrastructure (more dispatchers, channels per area or sub-fleet; better match supply and demand with split shifts and/or ancillary carrier with undedicated vehicles; change driver early-wait time policy

Continued next page

Table 3 (Continued)

g. Too many lost drivers	Enhance dispatch capabilities / radio infrastructure; give dispatchers more tools (e.g., automatic vehicle location, mandatory driver call-ins); give drivers map books and instructions on use; print directions and/or nearest intersection on driver manifests; reduce driver attrition rate (e.g., via higher wages)
h. No incentive to improve productivity	Introduce/change incentives and penalties (e.g., including bonuses and deductions, and more or less business); be careful to balance productivity and service quality incentives; contract on a per-hour basis instead of a per-trip basis and set productivity standard

2.. High Operating Cost

Problem	Potential Service Delivery Solutions
a. One, high-cost operator (not enough competition; large service area; high risk factor in rates; higher driver wages (union); straight-shift policy; overtime policy—too much overtime (can't attract drivers))	If direct operation, consider use of contractors for all or part of the service; if contracted operation, convert to multiple carriers; infuse competition into the procurement by converting to multiple awards (50/30/20) and with realistic rate ceilings; use ancillary, lower-cost carriers; infuse competition into ongoing service delivery via performance-based incentives / penalties and work allocation adjustments; attract more drivers via higher wages; attract more part-time drivers with split shifts; revise overtime policy; reduce risk in procurement via hourly rates; vehicle and software provision / buyout; coordinate procurement with other paratransit sponsors or retain a broker
b. Low productivity	See above
c. Fraud	Improve report / manifest monitoring improve street supervision (key locations, dispatch points; secret riders, telephone follow-up); improve automated checks (time/location stamping and card readers); stronger contractual language and penalties regarding fraud

3. High (In-House) Administrative Costs

Problem	Potential Service Delivery Solutions
a. High eligibility determination costs	May be worth it in lieu of demand reduction contract with lower-cost vendor

Continued next page

Table 3 (Continued)

b. High reservation and scheduling costs	Review shifts to better match call demand; automate function to reduce staff requirements; if already automated with automated scheduling capabilities, switch to real-time or batch (depending on staff skills) to reduce staff / defray cost by coordinating with other sponsors; vest functions with broker or carriers

4. Poor Service Quality

Problem	Potential Service Delivery Solutions
a. One operator: attention to service quality is secondary	If contracted, meet frequently with management to resolve problems and ensure staff / drivers have proper training; if contracted, switch carriers and / or introduce more competition and / or multiple carriers; if contracted, bring in-house; if direct operation, privatize: nationals or locals?; for profit or non-profit?; with movement to multiple-carriers: user choice or carrier assignment?; broker or no broker?; if problem can be traced to quality of drivers, increase wages to attract better skilled labor
b. No incentives to improve quality of service	Include incentives and penalties for service quality in contract; revise pay structure (to hourly rates)
c. Poor on-time performance (scheduling too tight?)	Include incentives and penalties for service quality in contract; if contract includes productivity incentives and penalties in contract, are they realistic?; revise pay structure (to hourly rates)
d. User-choice is not working	See 4c comments above; eliminate user choice; change service delivery structure to service zone-based carriers with one carrier per zone

As a community outreach campaign, this service creates awareness of paratransit service and establishes a positive image within the community.

Local, regional and state transportation programs

Another opportunity rests in brokering senior transportation within a community. Local private and government agencies may be recruited to help fund such a program. A paratransit agency can serve as coordinator of several different transit programs, integrating traditional fixed-route, paratransit, shuttle and route deviation services. Another example of coordination opportunity includes involvement with government commissions that strive to ensure access to transportation services for individuals defined as being transportation disadvantaged. Services including fixed-route bus service, water ferries, community circulators, free shuttles and commuter transportation options can also be offered through such efforts.

Additional community outreach transportation programs

Several other programs can be implemented to reach transportation disadvantaged residents of many communities with varying degrees of involvement for the fostering paratransit system. Paratransit agencies can:

- Subsidize taxi service — Low-income residents, people with disabilities, the elderly or other eligible candidates can purchase taxi scrip books at a reduced rate. For example, each book might contain $10 of scrip at 50 percent of face value. Scrip can then be used to purchase transportation at standard meter rates from any of the taxi companies that participate in the program. Benefits include no trip-purpose limitations and same-day service that can be requested at any time where participating taxi service is provided.
- Provide retired vehicles and/or service — Paratransit or vanpool vehicles, replaced perhaps by new vehicles with lower maintenance costs, might be provided to agencies dedicated to providing limited transportation to clients. Free maintenance and limited operations funding can be allotted to local non-profit human service agencies interested in providing transportation directly for clients. Eligibility requirements might include evidence of regular transit service over a designated period of time, awarding those agencies providing the highest volume of service the retired vehicles, those providing slightly less service might receive maintenance waivers or limited operating support.
- Serve as a local transit information resource — Maintain or coordinate an expanded database that includes transportation information and options from several agencies in the region. Sell discounted transit fare tickets to city and county human service agencies, who then use the tickets at their discretion to support client transportation. The tickets can be used for travel on either fixed-route buses or the sponsoring agency's paratransit system.

Increase Efficiency

To focus demand on certain times and locations to create more efficient paratransit service, agencies can:

- Operate shopper shuttle service — In addition to regular paratransit service a shuttle could provide regular transportation from riders' homes to selected large grocery stores at set times.
- Coordinate guaranteed subscription service — Through the help of government aid, arrange for regular, guaranteed subscription transportation for riders as part of a special program. This service may be arranged through existing local human services agencies. Federal and state funding may be available to support the system.

- **Establish a travel host program** — Work with local non-profit job training and placement agencies that provide aid to people with disabilities to create a program. Travel hosts can provide assistance to a daily list of riders with special needs. Representatives meet these riders as they arrive and help them get to the next bus to complete their trips.
- **Establish a bus buddy program** — Local agencies can provide travel companions for seniors or other eligible clients. This program links volunteers who are familiar with the fixed-route service with others who want to travel on the buses. The volunteers serve as companions to assist these riders as well as to teach them how to use the service.

Improve Location Accessibility

- **Identification** — Focus effort to make bus stops throughout the local system as accessible as possible. Unique bus stop signposts can be mounted to allow for easy identification by people with vision disabilities.
- **Instruction** — Provide individual instruction in boarding and exiting buses for those not familiar with accessibility features of fixed-route buses. Training might be coordinated with knowledgeable volunteers from the local public transit system. Institute a volunteer driver program to support existing transit systems.
- **Equipment/Features** — Lead the charge in developing accessible features for existing systems. (Lane Transit District of Eugene, Oregon, has engineered a simple device that reportedly facilitates scooter securement. The securement system consists of a single strap that attaches to the floor on either side of the mobility aid. The strap is placed over the "floor" [footrest] area of the scooter and cinched tight. When not in use, the strap is detached from the aisle-side securement point and attached to the underside of the flip-seat in the securement area.)

Public Information

A simple, relatively inexpensive and effective strategy to create a more efficient transit system is the provision of transportation information throughout the local community. Often, transit agencies spend little time or effort marketing their ADA complementary paratransit programs, sometimes arguing that they don't want to generate additional demand. However, public information programs can be employed to both promote paratransit services and educate the public about them.

There are a multitude of possibilities to create a higher profile for any system to increase public awareness and knowledge, which in turn may help increase efficiency and productivity.

- Color-coordinated brochures that highlight all facets of the programs and services offered by the system provide easily identifiable information.
- A readily identifiable logo helps solidify an image of the system in the minds of potential clients.
- A newsletter that provides information about scheduling changes or concerns, trip routes, extended services and hours of operation, among other items can help reach clients.
- Advisory groups can provide valuable information regarding operation issues and specific needs of various groups.
- Community meetings can draw public interest and address common complaints, or garner praise.
- Highly integrated transit services backed by encouragement to customers to use the service that is most appropriate based on program eligibility and need can facilitate operation and improve productivity.

Of course, it is important to ensure that these and other publicity materials and outreach efforts are distributed throughout the entire region of service. Community and advisory group meetings should be held at various locations to allow representatives from every sector of the region to attend. Remember that educating the public and providing good public information materials will help customers to learn to use the overall system more effectively.

Fixed-Route Innovations

This section identifies innovative approaches to fixed-route service for people with disabilities. By enhancing access to fixed-route services, additional ADA complementary paratransit capacity will be available for those who really need it and are unable to use fixed route because of their disabilities. These innovations are important in that they may be sufficient to permit some ADA complementary paratransit riders to use fixed-route services, which are typically less costly and more responsive to spontaneous trip making. These innovations also support the spirit of the ADA, which is to include individuals with disabilities in all aspects of daily living.

Provision of Accessible Fixed-Route Information

The Bi-State Development Agency in St. Louis maintains a list of all fixed-route riders who have requested route and schedule information in accessible formats. The list identifies the routes that each individual uses and for which they have requested information. Each time the schedules are changed, the Customer Service Office sends updated route and schedule information specific to the particular needs of each person on the list. Information is sent in large print or in Braille as requested.

Many transit agencies now provide web sites compatible with text translation programs so that people with vision disabilities can directly access schedule and route information via their home computer.

Improving Bus Stop Accessibility

As mentioned above, some systems are using unique bus stop signposts to make bus stop signs more easily recognizable by people with vision disabilities. Solar-powered lights and integrated bus benches are available at some stops.

Automated Stop Announcements and Vehicle Identification

USDOT ADA regulations require that operators of fixed route vehicles announce stops at all transfer points with other fixed routes, at major intersections and destination points, and at intervals along the route to better orient people with vision impairments and other disabilities to their location. Additional stops also must be announced at the request of passengers with disabilities.

The regulations also require that methods of communication and/or systems of identification must be established at stops that serve more than one route to permit people with vision impairments or other disabilities to identify vehicles or to allow operators to identify potential passengers.

Intelligent Bus Systems will generate automated stop and vehicle identification announcements in compliance with the requirements of the USDOT ADA regulations. This technology will relieve drivers from having to make stop and vehicle identification announcements by voice or PA and should greatly improve compliance with the ADA requirements.

Kneeling Buses

Many transit buses are equipped with a kneeling feature, which lowers the bus making it easier for

passengers to board. Despite their prevalence, many drivers appear not to use them or offer them to passengers. A key aspect, according to both systems, is driver sensitivity training and proper maintenance of the kneelers. Trained drivers that offer the kneeler to passengers who appear to need assistance in boarding will help increase efficiency as well as service quality.

Low-Floor Buses and Universal Design

In recent years, many bus systems have moved toward low-floor buses and other strategies that make their vehicles more accessible to a variety of customers. For example, while low-floor buses allow the use of ramps instead of hydraulic lifts for boarding passengers who use wheelchairs, they also make it easier for passengers with baby strollers, luggage and packages to board as well. Larger destination signs are now easier for everyone to read. These and many other so-called "universal design" elements are becoming more commonplace. It is important to note that bus specifications should be developed in consultation with the local disability community and ADA advisory committee. Some low-floor buses have been found to be too tight for wheelchairs to be maneuvered into position.

Wheelchair and Scooter Securement

Securing some wheelchairs and particularly three- and four-wheel scooters has proven to be a significant challenge for transit operators. Some securements systems (e.g., clamp or claw devices) simply cannot be used on certain types of mobility devices. Others including the popular four-point securement systems can be somewhat time consuming in fixed-route applications. In recent years, several new restraint systems have been developed to improve wheelchair and scooter securement. Noted in this report is the simple strap system developed at Lane Transit District and pictured in the LTD case study. Others include a new four-point system that is permanently anchored to the floor.

Passenger Assistance

As noted throughout this handbook, the human element remains a key factor in the successful use of fixed-route services. Some of the programs that come to mind include various peer-to-peer or bus buddy programs that pair prospective transit riders with volunteers who teach them how to use the system. Other agencies use a timed-transfer system where all the buses arrive at the main transfer center at about the same time. Drivers are then able to actively assist passengers who need help finding their buses.

Another issue that often surfaces has to do with passengers traveling with service animals on public transportation. ESPA has a training publication prepared by Multisystems that describes how drivers should assist passengers traveling with these animals. The U.S. Department of Justice (DOJ) also has issued guidelines for business owners dealing with this topic. The April 2002 DOJ brief is included in Attachment 2A.

Summary

The intent of this handbook is to provide insights into innovative ideas that can be implemented when creating or updating an existing paratransit system. As described in the introduction, not all of these innovative ideas will work in every community and, in some cases, the benefits may not be easily measured or quantified. Nonetheless, these innovations have been found to be effective where they were tried and many may be transferable to other systems. The next section of this report provides a detailed account of the five case studies conducted as part of this project.

Easter Seals Project ACTION
ACCESSIBLE COMMUNITY® TRANSPORTATION IN OUR NATION

Federal Transit Administration ADA Information

www.fta.dot.gov/ada

Published by the Office of Civil Rights

Volume 1: Questions and Answers Concerning Common Wheelchairs and Public Transit

What is a "common wheelchair?"

Section 37.3 of the DOT's regulations implementing the Americans with Disabilities Act of 1990 (ADA) (49 CFR Parts 27, 37, and 38) defines a "common wheelchair" as a mobility aid belonging to any class of three or four-wheeled devices, usable indoors, designed for and used by individuals with mobility impairments, whether operated manually or powered. A "common wheelchair" does not exceed 30 inches in width and 48 inches in length measured two inches above the ground, and does not weigh more than 600 pounds when occupied.

Is an electric scooter or other mobility device a common wheelchair?

If an electric scooter or other mobility device meets the physical specifications of a common wheelchair as defined by the DOT's ADA regulations, it must be treated as a common wheelchair.

May a transit operator require common wheelchairs be secured to the vehicle?

Yes, provided that the transit operator has established such a policy. Section 37.165(c)(3) of the DOT's ADA regulations allows a transit operator to establish a policy that requires all riders to have their common wheelchairs secured while aboard a transit vehicle. Therefore, the operator may decline to provide service to a rider who refuses to allow his or her common wheelchair to be secured.

Alternatively, transit operators may adopt a policy that allows common wheelchairs to ride unsecured. If the rider wishes his or her wheelchair to be secured, however, the operator's personnel must provide the requested assistance.

What kinds of securement equipment must be provided?

Section 38.23(d) of the DOT's ADA regulations requires all ADA-compliant vehicles to have a two-part securement system, one to secure the common wheelchair, and a seatbelt and shoulder

harness for the wheelchair user. Section 38.23(a) requires vehicles over 22 feet in length to have enough securement locations and devices to secure two common wheelchairs, while vehicles 22 feet and under must be able to accommodate at least one common wheelchair.

May a transit operator deny boarding to a rider whose common wheelchair is difficult to secure?

No. If the transit operator has a policy that requires securement, or if a rider asks that the wheelchair be secured, Section 37.165(f) of the DOT's ADA regulations requires transit personnel to use their best efforts to secure any mobility device that meets the regulatory definition of a common wheelchair. Section 37.165(d) states that transit operators cannot refuse to accommodate a common wheelchair – including a scooter or other specialized mobility device that complies with the ADA regulation's specifications -- because the wheelchair cannot be secured to the driver's satisfaction. Given the diversity of "common" wheelchairs, transit operators should consult with the manufacturers of securement devices and wheelchairs, as well as the owner of the wheelchair, to determine the best means of securement.

Does a wheelchair user have to use the seatbelt and shoulder harness?

Under the broad non-discrimination provisions in Section 37.5 of the DOT's ADA regulations, a transit operator is not permitted to mandate the use by wheelchair users of seatbelts and shoulder harnesses, unless the operator mandates the use of these devices by all passengers, including those sitting in vehicle seats. For example, on fixed route buses, if none of the other passengers are required to wear shoulder belts then neither can the person in the mobility device be required to do so.

Transit operators may establish a policy that requires the seatbelt and shoulder harness to be used by all riders, including those who use wheelchairs as well as those who use vehicle seats, if seatbelts and shoulder harnesses are provided at all seating locations. In some cases, state law could require an operator to adopt such a policy.

What kind of services must transit personnel provide?

Because safe and nondiscriminatory transportation is the responsibility of the transit operator, Section 37.173 of the DOT's ADA regulations requires transit operators to train their personnel to properly assist and treat individuals with disabilities with sensitivity, and to operate vehicles and equipment safely. This includes training personnel to use the accessibility equipment and to accommodate the different types of common wheelchairs.

Attendant-type services (e.g., carrying passengers, personal baggage, or suitcases) are not required, but assistance with boarding and disembarking, including pushing a manual wheelchair up a particularly steep ramp, is required.

What if the accessibility equipment is missing or not working?

Section 37.161 of the DOT's ADA regulations requires transit operators to maintain and repair the accessibility equipment. Section 37.163 requires public transit operators to establish a schedule or system to ensure regular and frequent maintenance checks and to take a vehicle out of service to repair or replace any broken or missing equipment before returning the vehicle to service. In some instances, a transit operator must provide alternative accessible transportation if the accessibility equipment is not present or not working.

Does a common wheelchair need brakes in order to use public transit?

No. The DOT ADA regulations' definition of a common wheelchair does not include a requirement for brakes or any other equipment.

A transit operator may not deny transportation to a wheelchair user because the wheelchair does not have brakes or the user does not choose to set the brakes.

Can an operator refuse to carry a person with a disability, especially a person using an electric scooter that meets the definition of a "common wheelchair," because of higher insurance rates or liability concerns?

No. Section 37.5(g) of the DOT's ADA regulations prohibits an operator from denying service to an individual with a disability because its insurance company conditions coverage or rates on the absence of individuals with disabilities or persons who use common wheelchairs.

Can a transit operator require a person to transfer from a wheelchair to a vehicle seat?

No. Section 37.165(e) of the DOT's ADA regulations allows persons who use wheelchairs to transfer to a vehicle seat, if one is available. Such a move is the rider's decision and the transit operator cannot force a rider to transfer to a vehicle seat, although the transit operator can suggest a transfer in a non-coercive way.

For more information on this and other topics related to the ADA and public transit, contact:

Federal Transit Administration
Office of Civil Rights
400 7th Street, SW
Room 9102
Washington, DC 20590

Volume 2: "Premium Charges" for Paratransit Services

Is a transit operator permitted to establish "premium charges" for complementary paratransit services that exceed the minimum requirements established by the Department of Transportation's ADA regulations?

In general, any paratransit services that a transit operator provides above and beyond its regulatory obligations, including service to individuals who do not fall under one of the three categories of eligibility established under the ADA, are not subject to the service criteria for ADA complementary paratransit (i.e., service area, response time, fares, trip purpose, hours and days, and capacity constraints). Transit operators may therefore elect to establish "premium charges" for such services.

Under the ADA, paratransit functions as a "safety net" for people with disabilities who are unable to make use of the fixed-route — e.g., "mainstream" — transit system (bus or rail). It is not intended to be a comprehensive system of transportation that meets all of the travel needs of persons with disabilities. As such, the level of service is required to be comparable to the fixed-route system, and service is required only for individuals whose disability — permanent or temporary — prevents them from using the fixed-route system. The eligibility requirements are incorporated into §37.123 of the Department's regulations, and the service criteria are established by §37.131.

Section 37.131 establishes the *minimum* requirements for complementary paratransit provided under the ADA; transit operators are free to provide any level of additional service that they or their communities find necessary. This could include providing paratransit service to individuals who do not meet the eligibility criteria, operating paratransit service beyond the fixed-route service area, providing service when the fixed-route system is not running, or by exceeding the basic next-day service requirement. In such cases, the operator would not be bound by the service criteria for ADA complementary paratransit, including the requirement that limits the fare to no more than twice the fare for a comparable trip on the fixed-route system.

While "premium charges" would therefore be permitted for such services, transit operators who wish to do so are strongly advised to thoroughly review Subpart F of the Department's ADA implementing regulations before making any changes to the operations, eligibility, or fare structure of their existing ADA complementary paratransit systems. Not only must transit operators ensure that any proposed changes are consistent with the basic ADA requirements, but they must also meet the applicable public participation requirements.

With regard to public participation, §37.137(c) requires a paratransit operator to create an "ongoing mechanism" for the participation of individuals with disabilities in the continued development and assessment of services to persons with disabilities. While this provision does not require a transit operator to conduct a public hearing for minor adjustments to its ADA paratransit service, the use of some form of public participation process in the establishment of "premium services" is strongly advised.

A public hearing *is* required, however, for changes to the paratransit reservations system. Under §37.131(b)(4), any changes to the reservation system must comply with the public participation requirements in §§37.137(b) and (c) of the Department's ADA implementing regulations.* These require that public participation include: outreach, consultation with individuals with disabilities, opportunity for public comment, a public hearing and the creation of a mechanism for continued participation of persons with disabilities in the development and assessment of services to persons with disabilities.

Transit operators are also advised that they must still meet the basic ADA paratransit service criteria, and should avoid any practice by which eligible riders are "steered" into a service category to which "premium charges" are applied. Furthermore, transit operators should not look to "premium services" as a means of relieving demand for ADA complementary paratransit services by eligible riders.

*Note: §37.131(b)(4) of the Department's ADA regulations, as amended, contains a typographical error; reference to §37.131(b) and (c) should read "37.137 (b) and (c)."

U.S. Department of Justice
Civil Rights Division
Disability Rights Section

Americans with Disabilities Act

ADA Business BRIEF:

Service Animals

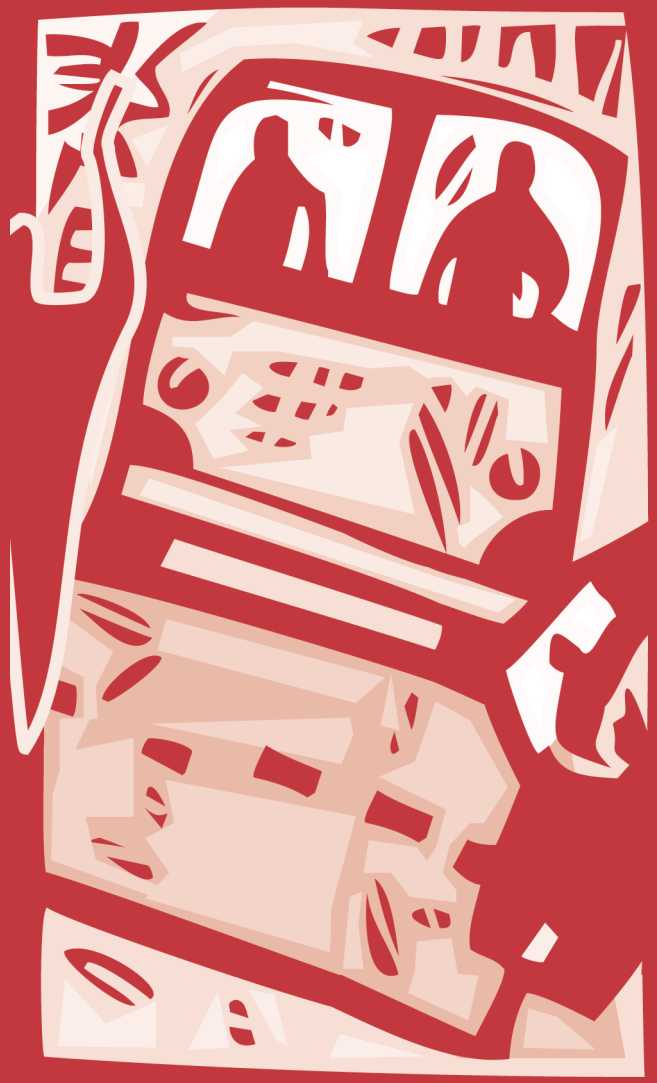
Service animals are animals that are individually trained to perform tasks for people with disabilities — such as guiding people who are blind, alerting people who are deaf, pulling wheelchairs, alerting and protecting a person who is having a seizure, or performing other special tasks. Service animals are working animals, not pets.

Under the Americans with Disabilities Act (ADA), businesses and organizations that serve the public must allow people with disabilities to bring their service animals into all areas of the facility where customers are normally allowed to go. This federal law applies to all businesses open to the public, including restaurants, hotels, taxis and shuttles, grocery and department stores, hospitals and medical offices, theaters, health clubs, parks, and zoos.

- Businesses may ask if an animal is a service animal or ask what tasks the animal has been trained to perform, but cannot require special ID cards for the animal or ask about the person's disability.
- People with disabilities who use service animals cannot be charged extra fees, isolated from other patrons, or treated less favorably than other patrons. However, if a business such as a hotel normally charges guests for damage that they cause, a customer with a disability may be charged for damage caused by his or her service animal.
- A person with a disability cannot be asked to remove his service animal from the premises unless: (1) the animal is out of control and the animal's owner does not take effective action to control it (for example, a dog that barks repeatedly during a movie) or (2) the animal poses a direct threat to the health or safety of others.
- In these cases, the business should give the person with the disability the option to obtain goods and services without having the animal on the premises.
- Businesses that sell or prepare food must allow service animals in public areas even if state or local health codes prohibit animals on the premises.
- A business is not required to provide care or food for a service animal or provide a special location for it to relieve itself.
- Allergies and fear of animals are generally not valid reasons for denying access or refusing service to people with service animals.
- Violators of the ADA can be required to pay money damages and penalties.

If you have additional questions concerning the ADA and service animals, please call the Department's ADA Information Line at (800) 514-0301 (voice) or (800) 514-0383 (TTY) or visit the **ADA Business Connection** at **www.ada.gov**

Duplication is encouraged. April 2002



Easter Seals Project ACTION
700 13th Street, N.W., Suite 200
Washington, D.C. 20005
(202) 347-3066 • (800) 659-6428
TDD (202) 347-7385 • Fax (202) 737-7914
www.projectaction.org

Easter Seals Project ACTION

Project ACTION offers these FREE resources to the disability community and transportation industry:

- Toll-free Information and Referral line **1-800-659-6428**
- Quarterly newsletter with information on funding, publications, research, and upcoming trainings and conferences
- Website at **www.projectaction.org**
- Training and technical assistance on a variety of topics
- Clearinghouse with over 100 free print, video and audio resources on:
  - Consumer education
  - Transit personnel training
  - Outreach & marketing
  - Technology
  - Paratransit eligibility
  - Other topic areas

Easter Seals Project ACTION
ACCESSIBLE COMMUNITY® TRANSPORTATION IN OUR NATION

Easter Seals®

Creating solutions, changing lives.