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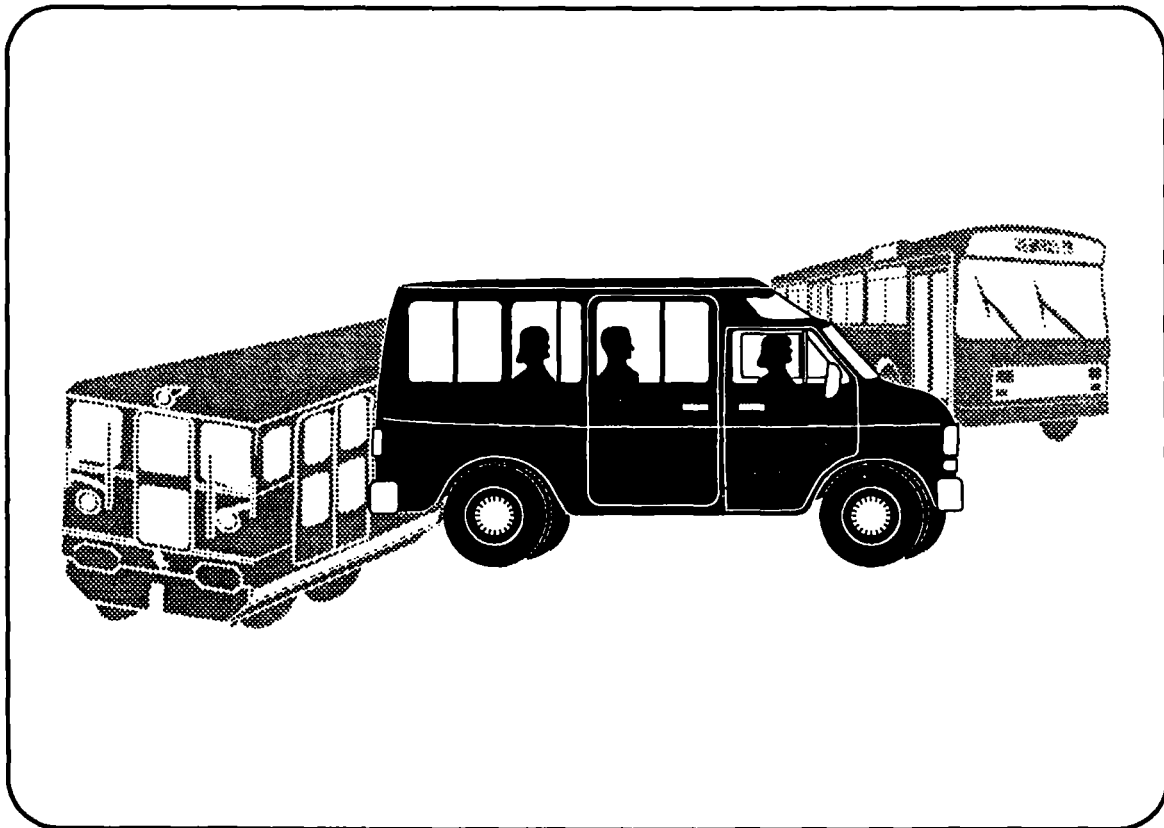


U. S. Department
of Transportation

Urban Mass
Transportation
Administration

ADA PARATRANSIT HANDBOOK:

Implementing the Complementary
Paratransit Service Requirements of the
Americans with Disabilities Act of 1990



September 1991

**Prepared for the UMTA Task Force on the
Americans with Disabilities Act**

Funded through the Office of Technical Assistance and Safety



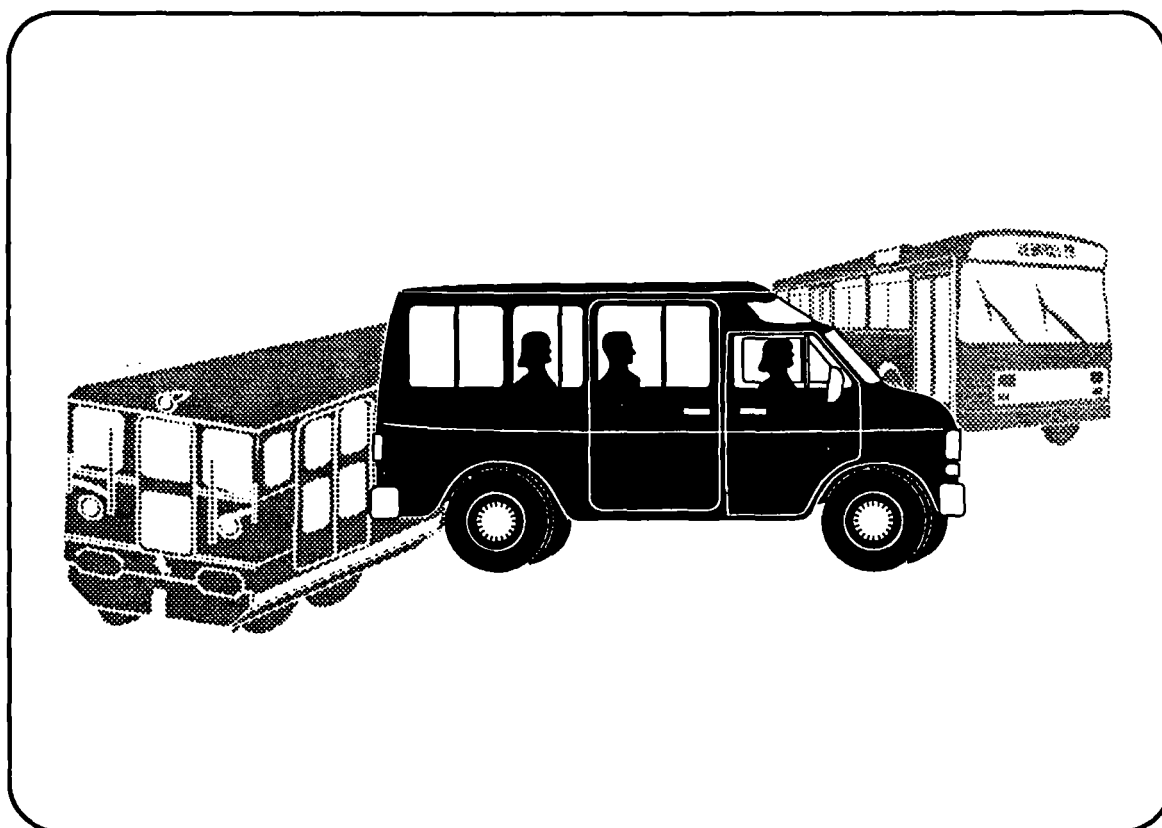
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16. Abstract This handbook provides guidance and practical information for implementing the complementary paratransit service requirements of the Americans with Disabilities Act of 1990 (ADA). A primary purpose of this handbook is to assist transit operators and planners with the preparation of required ADA paratransit plans. The first five chapters summarize the law and complementary paratransit service requirements. Eligibility determination, service criteria, and operating standards and requirements are analyzed in detail. The last four chapters discuss paratransit service models; ways to enhance fixed route service in order to reduce the need for paratransit; the preparation of paratransit plans, including a step-by-step planning methodology; and, key implementation issues such as scheduling, training, equipment specifications, and recordkeeping. Applicable regulatory text is included in an appendix. Other appendices include a sample eligibility form; suggestions for making communications and information accessible; a sample advisory committee Memorandum of Understanding; information about state-of-the-art computer- assisted scheduling; and, numerous references and sources of technical assistance.					
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METRIC / ENGLISH CONVERSION FACTORS

ENGLISH TO METRIC

LENGTH (APPROXIMATE)

1 inch (in) = 2.5 centimeters (cm)
 1 foot (ft) = 30 centimeters (cm)
 1 yard (yd) = 0.9 meter (m)
 1 mile (mi) = 1.6 kilometers (km)

AREA (APPROXIMATE)

1 square inch (sq in, in²) = 6.5 square centimeters (cm²)
 1 square foot (sq ft, ft²) = 0.09 square meter (m²)
 1 square yard (sq yd, yd²) = 0.8 square meter (m²)
 1 square mile (sq mi, mi²) = 2.6 square kilometers (km²)
 1 acre = 0.4 hectares (he) = 4,000 square meters (m²)

MASS - WEIGHT (APPROXIMATE)

1 ounce (oz) = 28 grams (gr)
 1 pound (lb) = .45 kilogram (kg)
 1 short ton = 2,000 pounds (lb) = 0.9 tonne (t)

VOLUME (APPROXIMATE)

1 teaspoon (tsp) = 5 milliliters (ml)
 1 tablespoon (tbsp) = 15 milliliters (ml)
 1 fluid ounce (fl oz) = 30 milliliters (ml)
 1 cup (c) = 0.24 liter (l)
 1 pint (pt) = 0.47 liter (l)
 1 quart (qt) = 0.96 liter (l)
 1 gallon (gal) = 3.8 liters (l)
 1 cubic foot (cu ft, ft³) = 0.03 cubic meter (m³)
 1 cubic yard (cu yd, yd³) = 0.76 cubic meter (m³)

TEMPERATURE (EXACT)

$$[(x - 32)(5/9)]^{\circ}\text{F} = y^{\circ}\text{C}$$

METRIC TO ENGLISH

LENGTH (APPROXIMATE)

1 millimeter (mm) = 0.04 inch (in)
 1 centimeter (cm) = 0.4 inch (in)
 1 meter (m) = 3.3 feet (ft)
 1 meter (m) = 1.1 yards (yd)
 1 kilometer (km) = 0.6 mile (mi)

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1 square centimeter (cm²) = 0.16 square inch (sq in, in²)
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 1 square kilometer (km²) = 0.4 square mile (sq mi, mi²)
 1 hectare (he) = 10,000 square meters (m²) = 2.5 acres

MASS - WEIGHT (APPROXIMATE)

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 1 kilogram (kg) = 2.2 pounds (lb)
 1 tonne (t) = 1,000 kilograms (kg) = 1.1 short tons

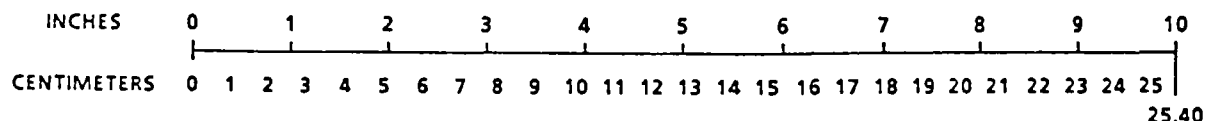
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1 milliliter (ml) = 0.03 fluid ounce (fl oz)
 1 liter (l) = 2.1 pints (pt)
 1 liter (l) = 1.06 quarts (qt)
 1 liter (l) = 0.26 gallon (gal)
 1 cubic meter (m³) = 36 cubic feet (cu ft, ft³)
 1 cubic meter (m³) = 1.3 cubic yards (cu yd, yd³)

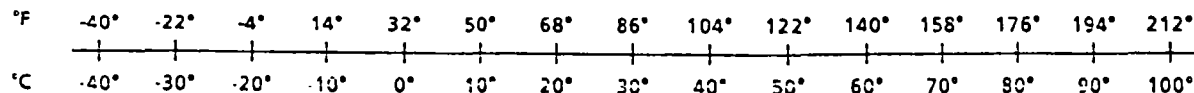
TEMPERATURE (EXACT)

$$[(9/5)y + 32]^{\circ}\text{C} = x^{\circ}\text{F}$$

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Introduction

On September 6, 1991, the U.S. Department of Transportation (USDOT) published final regulations implementing certain provisions of the Americans with Disabilities Act of 1990 (ADA). Included in these regulations was a requirement that public entities operating fixed route transportation service for the general public also provide complementary paratransit service to persons unable to use the fixed route system. The regulations specify: when this service is required; eligibility criteria for these paratransit services; the level of service which must be provided; and, standards for certain aspects of operation. The regulations also require that a plan for implementing complementary paratransit service be submitted by January 26, 1992 and service be in full compliance as soon as possible, but no later than five (5) years from that date.

This handbook is intended to provide public transportation agencies, decision-makers, and persons with disabilities with guidance on the regulations. It also is intended to assist public entities in preparing their paratransit plans and in implementing the required service. The first half of the handbook, Chapter 1 through Chapter 5, provides an overview of the ADA and the sections of the DOT regulation which pertain to complementary paratransit services. The complex issue of eligibility is discussed in Chapter 4. Service criteria and operating standards are explained in Chapter 5.

The second half of this handbook addresses the development and implementation of a paratransit plan. Options for providing paratransit service and for enhancing fixed route service are discussed in Chapter 6. A comprehensive planning process, including step-by-step instructions, is provided in Chapter 7. Suggestions for involving persons with disabilities in planning, service design, and evaluation are included in Chapter 8. Information about important operational issues, such as scheduling, training, and equipment selection is provided in Chapter 9.

This handbook is designed to be of assistance to public entities with limited paratransit experience as well as those who now operate extensive paratransit services. The text provides the reader with a basic understanding of operational issues. Numerous references and appendices are included to give more experienced readers state-of-the-art information. Additional sources of information are identified by the following symbol: ■

|| Legal citations are identified with a margin bar.

As reference tools, the various chapters of this handbook also have been written to be used independently. Decision-makers who need a general understanding of the law and regulations and how it relates to broader transportation policy can read Chapters 1, 2, and 3. Planners responsible for developing paratransit plans and for generating demand projections and other supporting information will find Chapters 6, 7, and 8 particularly helpful. Program managers and those involved in operations can get more detailed discussions of eligibility, service standards, and operating procedures in Chapters 4, 5, and 9. Persons with disabilities and agencies that represent them will find the discussion of eligibility in Chapter 4 to be of particular interest. Agencies that provide service to persons with disabilities and who are interested in coordination with public transit providers also are referred to Chapter 6.

To facilitate independent use of the different chapters, reference is made to other sections of the handbook when additional information is needed. In some sections, though, there is

ADA PARATRANSIT HANDBOOK

a certain amount of repetition of key information, such as eligibility requirements, when a simple reference to another section is not sufficient.

While this handbook provides a framework and methodology for developing and implementing a successful paratransit service, it is not intended to provide a precise policy or service design. Eligibility, coordination, and other important issues are affected by local factors. A planning process with strong consumer and public participation is of paramount importance. An ongoing planning and evaluation process, which will allow correction of initial plans and estimates and adjustments to changing conditions, also is necessary.

Acknowledgements

This handbook would not have been completed so soon after the publication of the regulations without the efforts of a number of individuals. The authors would like to gratefully acknowledge all those who contributed to this report and who provided support in its preparation.

UMTA's Task Force on the Americans with Disabilities Act provided project oversight. Susan Schruth, Mary Martha Churchman, Dan Harrant, Douglas Gold, Elizabeth Martineau, and Irv Chor provided guidance in the handbook's structure and development and spent countless hours reviewing and commenting on drafts. Dan Harrant also skillfully coordinated meetings and acted as liaison between the various offices. Patricia Cass and Franz Gimmler of the Office of Technical Assistance and Safety provided early assistance in project development.

A draft of the handbook also was distributed to the Federal Advisory Committee on the ADA. Their comments and advice as transit providers, consumers, advocates, and service providers representing persons with disabilities was invaluable.

Some of the text and much of the appendix material was contributed by others. Paratransit service information was developed using reports prepared by the Center for Systems and Program Development of Washington, D.C., Charles River Associates of Boston, Massachusetts, and Crain and Associates of Menlo Park, California. Additional service information was graciously provided by Kathy Cox of the Massachusetts Bay Transportation Authority, Clementine Newkirk of the Washington Metropolitan Area Transit Authority, and Nancy Senn of the Milwaukee County Department of Public Works. Jim Fleming of the National Easter Seal Society Project ACTION office brought the service route information to our attention. Catie Simpson of Independent Training Consultants, Pleasanton, California, provided the summary of travel training alternatives.

The thorough guidance on making information and communications accessible was developed by the National Center for Access Unlimited, a nonprofit collaboration of the United Cerebral Palsy Associations, Inc. and Adaptive Environments Center(AEC), Inc. of Boston. Elaine Ostroff and Nancy Goldman of AEC provided this information. Braille printer and software information was provided by Joe Lazzaro of the Massachusetts Commission for the Blind.

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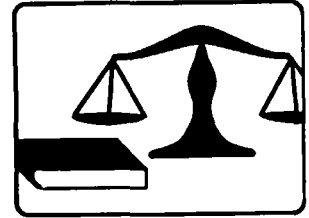
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1

The Americans with Disabilities Act of 1990 and Related Regulations



Section 1.

An Overview of the Law

The Americans with Disabilities Act of 1990 (the ADA) is the culmination of almost 20 years of debate on the issue of disability rights. It provides a comprehensive framework and approach for ending discrimination against persons with disabilities. The stated national goals of the ADA are identified in its preamble and include assuring that persons with disabilities have equality of opportunity, a chance to fully participate in society, are able to live independently, and can be economically self-sufficient.

The ADA has five sections, or **Titles**. The first four set out specific standards for nondiscrimination and equal opportunity in four key areas. Title V includes several administrative and miscellaneous provisions. Titles I through IV are summarized below.

Title I. Title I addresses employment. Discrimination against qualified individuals with disabilities is prohibited in all aspects of employment including hiring, advancement, discharge, employee compensation, and job training. Reasonable accommodation for qualified applicants or employees also is required unless it imposes an undue hardship on the operation of the business. Reasonable accommodations include making the job site accessible; providing employees with interpreters, readers, or communications equipment such as a telecommunications display device (TDD); partial restructuring of non-essential elements of the job;

modifying work schedules; or other changes that allow the person to fulfill the essential functions of the job. Employers with 25 or more employees must comply with this section of the law by July 26, 1992. Employers with 15 to 24 employees have an extra two years, or until July 26, 1994, to meet these requirements.

Title II. Title II addresses public services. Discrimination against persons with disabilities is prohibited in all services, programs, or activities provided by public entities.

It is important to note that this section also covers services provided by private entities under contract to public entities. A contract provider "stands in the shoes" of the granting agency. Public entities still are responsible for making sure that these services meet the requirements of the ADA even if they do not provide them directly.

A substantial part of Title II addresses transportation provided by public entities. In general, the law prohibits public entities from denying individuals with disabilities the opportunity to use public transportation services, if the individuals are capable of using the system. It also prohibits public entities from providing services which discriminate against persons with disabilities. Specific actions which must be taken by public transit agencies, commuter rail authorities, and AMTRAK to avoid discrimination are delineated. For example, the law requires that:

- all newly purchased or leased vehicles used in fixed route service must be accessible.

- public entities which provide fixed route public transportation service also must offer comparable paratransit service to individuals with disabilities who are unable to use the fixed route system.
- new or used vehicles purchased or leased for use in general public demand responsive service must be accessible unless it can be shown that equivalent service is provided to persons with disabilities.
- vehicles which are remanufactured (defined to include structural changes) to extend their useful life beyond a given number of years (5 years for buses, 10 years for commuter and intercity rail cars) must include accessibility features.
- new facilities must be accessible.
- alterations to transit facilities must include features to make them accessible. Alterations covered by the law include changes that affect or could affect the usability of the facility. Not covered are normal maintenance, painting, or changes to the electrical, mechanical, or plumbing systems.
- key stations in rail systems must be made accessible by July 26, 1993.
- One car per train in rapid rail and light rail systems must be accessible by July 26, 1995.

A chart of these requirements is provided as Table 1.1.

Title III. A significant difference between the ADA and past disability laws is that specific requirements for non-discrimination are extended to the **private sector**. Title III of the ADA addresses public accommodations and services operated by private entities. This section of the law provides for the full and equal enjoyment of the goods, services,

facilities, privileges, and advantages of any privately owned "place of public accommodation" by persons with disabilities. It is this section of the law that provides for access to hotels, restaurants, theaters, stores, professional offices, schools, museums, **terminals, depots, or other stations used for public transportation**, and a number of other privately owned places used by the general public. Barriers that can be eliminated without much difficulty or expense must be removed by January 26, 1992. Alterations to existing facilities must provide for access. New facilities constructed for first occupancy after January 26, 1993 also must include accessibility features.

In addition to requiring access to facilities, this section prohibits discrimination by private entities in the provision of services; the setting of policies; or other advantages, privileges and accommodations provided to the public.

This Title also includes requirements for the provision of public transportation by private entities. The law distinguishes between companies providing transportation as a **primary** business and companies, such as hotels or convention centers, which offer transportation as a **secondary** service. Companies offering transportation as a secondary service must purchase or lease vehicles which are accessible if these vehicles are to be used in fixed route service and seat more than 16 passengers (including the driver). If a fixed route service is offered using smaller vehicles, these vehicles also must be accessible unless it can be shown that equivalent service is provided to persons with disabilities.

Companies providing transportation as a primary service must purchase or lease new vehicles (except automobiles or over-the-road coaches) that are accessible if the vehicles are to be used in fixed route service and seat eight or more passengers (including the driver). If smaller vehicles

Table 1.1

A Summary of ADA Transportation Requirements for Public Entities

Type of Service	Requirements
All Types of Service	General nondiscrimination is required so that "...no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the (transportation) services..." provided by a public entity. (Section 202 of Title II).
Non-Rail Fixed Route Service	Vehicles purchased or leased after August 25, 1990, must be accessible. Vehicles remanufactured to extend their useful life by five (5) years or more must be made accessible to the maximum extent feasible. Before buying or leasing used vehicles which are not accessible, a "good faith effort" must be made to locate accessible vehicles. Comparable paratransit service must be provided to persons unable to use the fixed route system.
Demand Responsive Service for the General Public	Newly purchased or leased vehicles, ordered after August 25, 1990, must be accessible unless it can be shown that equivalent service is provided to persons with disabilities.
Rapid Rail and Light Rail	Key stations must be made accessible by July 26, 1993, unless a waiver is granted. Waivers can allow up to 30 years for the provision of access provided that 2/3 of key stations are accessible within 20 years. All new vehicles ordered after August 25, 1990 must be accessible. Before buying or leasing used vehicles which are not accessible, a "good faith effort" must be made to locate vehicles which are accessible. Vehicles remanufactured to extend their useful life by five (5) years or more must be accessible to the maximum extent feasible. One car per train must be accessible by July 26, 1995. Comparable paratransit service must be provided to persons unable to use the rail system.
Commuter Rail and AMTRAK	All new cars purchased on or after August 26, 1990, must be accessible. Cars remanufactured to extend their useful life by ten (10) years or more must be made accessible. A good faith effort must be made to locate used cars that are accessible. All new stations must be accessible. Key stations must be made accessible by July 26, 1993, unless a waiver is granted. Waivers can allow up to 20 years to make key stations accessible. Existing AMTRAK stations must be made accessible by July 26, 2010.
Facilities	Programs and activities provided in existing facilities must, when viewed in their entirety, be readily accessible to and usable by individuals with disabilities. All new facilities must be accessible. Alterations to existing facilities must be accessible. When alterations to primary function areas are made, an accessible path of travel to the altered area (and the bathrooms, telephones, and drinking fountains serving that area) must be provided to the extent that the added accessibility costs are not disproportionate to the overall costs of the alterations.

are used, the company must purchase or lease new vehicles that are accessible or provide service that is equivalent to that provided to the general public.

Both types of companies must purchase accessible vehicles used in demand responsive service unless the system, when viewed in its entirety, provides equivalent service to persons with disabilities.

Private airlines are exempted from the ADA (but must comply with provisions of the Air Carrier Access Act) and special provisions are made for intercity bus companies operating over-the-road coaches. The law calls for a study to be undertaken to examine the potential demand for accessible intercity bus service and the alternatives for providing this service.

Title IV. This section of the law addresses telecommunications access. Under this section, the nation's telephone companies are required to begin offering telecommunications relay services for individuals with hearing impairments or speech impairments by July 26, 1993. Relay services enable a person with a speech or hearing impairment to call an operator using a telecommunications display device (TDD). The operator, who also has a TDD, then relays the conversation by voice to a third party. Similarly, a person using the voice telephone system can converse with an individual with a speech or hearing disability through the same relay service.

Section 2.

Implementing Regulations

Many sections of the ADA, including the transportation provisions, are open to interpretation. This is not unusual for major legislation. The purpose of the law is to set goals, define general types of discrimination, and create a framework for addressing this discrimination. As with other civil rights legislation, specific definitions, interpretations, and

requirements are spelled out in regulations issued by the implementing agencies. Several regulations have already been issued to implement the ADA.

Regulations issued on July 26, 1991 by the Equal Employment Opportunity Commission (EEOC) implement the employment provisions of the ADA contained in Title I. The Department of Justice (DOJ) issued regulations implementing Title II and Title III and covering all public services and public accommodation issues *other than transportation* on July 26, 1991. The Federal Communications Commission (FCC) is responsible for implementing the telecommunications section (Title IV) and published its regulations in the *Federal Register* on August 1, 1991.

Regulations covering transportation services provided by both public entities (under Title II) and private entities (under Title III) were issued by the Department of Transportation (USDOT). Two sets of regulations have been issued to date. The first, contained in the October 4, 1990, *Federal Register*, implemented requirements for purchasing or leasing vehicles that are accessible. It also required public entities providing paratransit service to maintain present levels of service until their plans for complementary paratransit service are submitted. The second set of regulations was published in the September 6, 1991, *Federal Register*. This rule supersedes the October 4, 1990, rule and implements other provisions of the ADA.

☛ This second rule is contained in Appendix A of this handbook.

The USDOT regulations include design standards for both facilities and vehicles issued by the Architectural and Transportation Barriers Compliance Board (Access Board). Design standards for facilities are provided in Appendix A of the DOT rule. Vehicle design standards are included as Part 38 of the regulation

and are also included in Appendix A of this Handbook.

☛ Appendix K of this handbook contains the names and phone numbers of persons in each federal agency who can be contacted for further information about the implementing regulations.

Section 3.

Relationship to Section 504

Passage of the ADA and the issuance of implementing regulations changed many aspects of public dis-

ability policy previously established under Section 504 of the Rehabilitation Act of 1973 (Section 504). The ADA established clear national goals and a **specific and detailed course of action** required to meet those goals. Compared to Section 504, the ADA requires a much greater degree of "affirmative action" in employment, programs, services, and policies. As a civil rights law, the ADA also elevates the importance of access and nondiscrimination beyond eligibility for federal funding.

Several changes in transportation policy have been made. The ADA no longer allows public entities providing general public transportation the option either of making their fixed route systems accessible or providing separate paratransit service for persons with disabilities. Access to fixed route systems is required. Under the ADA, paratransit is not a substitute for fixed route service but a supplement for those who are unable to use the fixed route system.

The ADA is more extensive in its coverage of the various modes of transportation. Detailed requirements for commuter rail, rapid rail, and light rail vehicles and service are included. Another significant difference is that the ADA establishes, for

the first time, accessibility standards for vehicles and amends the standards for facilities previously used by Section 504.

While the ADA changed the approach to access and nondiscrimination, it did not replace Section 504. The general requirement of Section 504 - that entities not discriminate against persons with disabilities as a condition of eligibility for federal funding - still exists. Rather, the two laws are now interrelated. Compliance with the provisions of the ADA is now a condition of compliance with Section 504.

Access to fixed route systems is required. Under the ADA, paratransit is not a substitute for fixed route service but a supplement for those who are unable to use the fixed route system.

Many provisions of the ADA are not yet in force. Requirements for facility access and complementary paratransit service, for example, will not become effective until

January 26, 1992. During this transition period, the provisions of Section 504 still apply. Compliance with the facility access provisions of Section 504 is also still required.

The USDOT regulations also state that recipients of federal transit funding are expected to make decisions during this transition period that are consistent with the future requirements of the ADA. If a decision about the design of existing paratransit service will be made before January 26, 1992, it should be in the direction that will make compliance with the ADA's complementary paratransit service provisions easier to achieve. Similarly, modifications and alterations to facilities should include, whenever possible, the latest ADA standards, even if they are not yet required.

Finally, entities previously subject to the employment provisions of Section 504 must now comply with Title I of the ADA and with the regulations issued by EEOC. Compliance by these recipients of federal funding is required regardless of the number of persons they employ.

Section 4.

Enforcement

The ADA specifies the administrative processes that regulating agencies are to follow in enforcing provisions of the law. The powers, remedies, and procedures set forth in the Civil Rights Act of 1964 apply to the employment provisions of Title I and to the public accommodation and service provisions of Title III. Injunctive relief is also permitted under Title III. Enforcement of Title I is the responsibility of EEOC. Title III enforcement is to be provided by DOJ with the assistance of USDOT.

The remedies, procedures, and rights which exist under Section 504 (set forth in Section 505 of the Rehabilitation Act of 1973) apply to the requirements of Title II. Enforcement responsibilities under this Title are shared by USDOT and DOJ.

Public entities receiving federal financial assistance from USDOT are subject to the enforcement procedures of that agency. Other public entities are subject to the enforcement provisions in the DOJ regulations. DOJ and USDOT have coordinated their regulations so that all transportation-related complaints will be handled by USDOT.

Complaints concerning transportation under both Title II and Title III must first be filed with the USDOT Office of Civil Rights. USDOT will then investigate and, if violations exist, will attempt to resolve the problem. If violations are not corrected, USDOT will initiate proceedings to cut off federal funds. In addition, all entities subject to these regulations may be subject to further administrative or judicial action by DOJ.

The USDOT regulations state that enforcement of Title II will focus on ensuring that entities meet their

obligations, rather than on the imposition of sanctions. They also state that priority in enforcement will be given to situations where there is a "pattern or practice" of discrimination, rather than to isolated operational issues.

In addition to administrative enforcement, the ADA gives private individuals the right to initiate legal action against entities that violate the law. These private actions can be brought concurrent with any administrative action. Section 505 of the ADA also provides for the awarding of attorney's fees in any private action or administrative proceeding.

Where state or local laws conflict with provisions of the ADA, federal law applies. The same would apply to local agreements, including labor-management agreements. A local law or agreement that did not allow bus drivers to leave their

...priority in enforcement will be given to situations where there is a "pattern or practice" of discrimination, rather than to isolated operational issues.

seats, for example, would be preempted by §37.165 of the USDOT regulations. The ADA does not, however, preempt state and local laws or agreements

which have equal or additional requirements.

Section 5.

Important Definitions

Appendix B provides a comprehensive listing of terms and definitions used in the USDOT regulations and the sections of the ADA which relate to transportation.

Many of these terms and definitions also are explained as they are used in the various chapters of this handbook. A few key definitions and general concepts which affect many different aspects of the regulations are discussed below.

What is a "disability"? The term "disability" is defined to include any physical or mental impairment that substantially limits one or more major life activities, a record of such an impairment,

or being regarded as having such an impairment. Major life activities include caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working. The definition used in the ADA is similar to the one used in Section 503 and Section 504 of the Rehabilitation Act of 1973 and in the many regulations implementing that law with two additions: persons with cognitive disabilities and those with contagious or noncontagious diseases (including tuberculosis and HIV disease) are specifically included in the definition.

• A detailed discussion of specific disabilities and how they relate to the provision of complementary paratransit service is provided in Chapter 4 of this handbook.

What is a "public entity"? A public entity is defined as any State or local government, any department, agency, special purpose district, or any other instrumentality of a State or States or local government, the National Railroad Passenger Corporation (AMTRAK), or any commuter authority under the Rail Passenger Service Act.

What is the difference between "designated public transportation" and "specified public transportation"?

As noted earlier, the ADA contains requirements for public entities that are different than those for private entities. It also addresses modes of transportation differently. The terms "designated public transportation" and "specified public transportation" were created to distinguish between different modes and entities.

"Designated public transportation" refers to transportation provided by a **public entity** (other than public school transportation) by bus, rail, or other conveyance (other than transportation by aircraft or intercity or commuter rail transportation) that provides the public

with general or special service, including charter service, on a regular and continuing basis. Commuter and intercity rail services are excluded from this type of public transportation because they are treated separately by the ADA. Public school transportation is excluded because it is covered under the Rehabilitation Act of 1973.

"Specified public transportation" refers to transportation by bus, rail, or any other conveyance (other than aircraft) provided by a **private entity** to the general public, with general or special service (including charter service) on a regular and continuing basis.

Air service is excluded from both of these definitions of public transportation because, as mentioned earlier, it is covered under the Air Carrier Access Act of 1986 (P.L. 99-435).

These definitions are ADA specific and do not necessarily apply to other laws or to the federal mass transit program. Neither definition has the same meaning as the term "eligible mass transportation," used in

connection with programs funded under the Urban Mass Transportation Act of 1964.

Considering these definitions, it is clear that the ADA was intended to be comprehensive in its coverage of all types of transportation not already addressed by other laws.

How are "fixed route service", "demand responsive service" and "paratransit" defined? The ADA broadly defines all types of transportation using these first two terms. **Fixed route** is defined as service provided along a prescribed route according to a fixed schedule. **Demand responsive** is any service which is not fixed route. The term **paratransit** is commonly used to describe certain types of demand responsive

Considering these definitions, it is clear that the ADA was intended to be comprehensive in its coverage of all types of transportation not already addressed by other laws.

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services. The USDOT's implementing regulations and this handbook use "paratransit" to describe the comparable transportation service that must be provided for individuals with disabilities who are unable to use fixed route systems.

Many types of transportation, such as route deviation systems and certain types of shuttle bus services, are not easy to classify using these broad definitions.

- ☛ Chapter 2 discusses several of these and clarifies whether or not complementary paratransit service is required in each case.

What makes a service "accessible"?

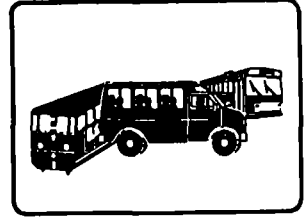
Access is often thought of as physical access to vehicles and buildings (i.e. lifts

and ramps). Ramps, lifts and other accessibility hardware need to be properly designed, however, to meet the needs of persons with disabilities and to accommodate different mobility aids. Access also involves proper training of personnel and proper maintenance of equipment. The operating policies and procedures adopted by transit agencies are also an important part of an "accessible" service. Finally, access means making public information and communications systems accessible to persons with vision and hearing impairments.

- ☛ Appendix E provides suggestions for developing accessible information and communications.

2

Complementary Paratransit Service Requirements



Section 1.

When Is Complementary Paratransit Service Required?

The underlying tenets of the ADA are equal opportunity, full participation, and independence. The law intends for persons with disabilities to have equal access to facilities and to be able to fully and equally participate in programs and services. Access to mainline, fixed route service is, therefore, to be provided.

While access to fixed route systems is the primary focus, the law acknowledges that some persons with disabilities are not able to use fixed route services even if these services are accessible. The law also acknowledges that until fixed route systems are made completely accessible, alternative means of transportation need to be provided to persons who are otherwise able to use accessible fixed route services. **Complementary paratransit service** is required in Section 223 of the ADA to serve those persons whose needs cannot be met by fixed route systems.

Complementary paratransit is not required in all cases where fixed route service is provided. Section 223 of the ADA applies only to **designated public transportation** as defined in Chapter 1. The USDOT regulations implementing this section of the law requires that, except for commuter bus, commuter rail, and intercity rail systems:

“...each public entity operating a fixed route system, shall provide paratransit or other special service to individuals with disabilities that is comparable to the level of service provided to individuals without disabilities who use the fixed route system.” (§37.121)

Commuter rail and intercity rail services are not subject to complementary paratransit service requirements because, like public school transportation and transportation by aircraft, they are not included in the ADA's definition of “designated public transportation”. Commuter bus service also is exempted. The regulations define commuter bus service as being predominantly in one direction during peak periods, having limited stops, using multi-ride tickets, and having routes of extended length, usually between a central business district (or other employment center) and outlying suburbs. Systems with limited route structures, limited stops, and a coordinated relationship to another mode of transportation also are defined as commuter bus services. A number of systems fall within this definition and are mentioned specifically in the regulations. They include:

- shuttle bus services operated by public airports, which connect terminals, parking lots, or a limited number of other local destinations (§37.33);
- Fixed route systems operated by public universities (§37.25);
- bus systems used to supplement intercity rail service which connect rail stations to a limited number of other points (§37.35); and,
- dedicated bus service to commuter rail systems which are available only to users of the rail system and which have through ticketing arrangements (§37.35).

A second important distinction is that complementary paratransit service is required only if the fixed route service is operated by a **public entity** (see definition in Chapter 1). The word "operate" is defined to include both direct operation and contracted operation. A contract is broadly defined to include any formal or informal arrangement.

Not all relationships are covered by this requirement. Complementary paratransit service does not have to be provided by public entities which only license or regulate an operator of fixed route service. Similarly, complementary paratransit

service is not required if a public entity provides capital assistance to a fixed route operator but is otherwise not involved in the design or funding of the operation. Nor

does the regulation require the private entity receiving the subsidy to provide paratransit service, since the complementary paratransit service requirements only apply to public entities.

States which pass-through Section 18 or Section 16(b)(2) funding to private, non-profit agencies are not responsible, solely by reason of awarding these funds, to also provide complementary paratransit service. It should be noted that, while complementary paratransit service is not required, for-profit and non-profit private entities must comply with all other applicable sections of the law.

As a general rule, service would be considered "under contract" to a public agency if the service would otherwise be operated by the public entity.

Third, complementary paratransit is required only if fixed route service is open to the general public. If fixed route service is available only to a defined group, such as employees, complementary paratransit service is not required. This also would apply to regularly scheduled transportation provided under contract to

human service agencies (e.g. a weekly "shopping shuttle" for a senior center). If this service is only provided to clients of the human service agency, complementary paratransit service is not required. If this service also is open to the public, however, complementary paratransit service must be provided.

A fourth factor in determining if complementary paratransit service must be provided is whether or not the service operated fits the definition of a **fixed route** service. The regulation addresses several types of systems that do not easily fit into the broad definitions of fixed route

and demand responsive service included in the ADA. Specifically mentioned are **vanpools**, which are designated as demand responsive services in

§37.31, and **airport jitney and shuttle systems**, which also are categorized as demand responsive in §37.33.

Case-by-case determinations will be needed for other systems which combine elements of both fixed route and demand responsive service. Appendix D of the regulation offers guidance on this issue. It states that a key factor to be considered is whether riders must request the service, typically by making a call. It further states that **route deviation systems**, in which rider requests determine the exact route, are considered demand responsive services.

☛ Route deviation and a similar type of service known as "point deviation" are discussed in more detail in Section 3 of Chapter 6. Guidance is offered on the design of these types of services.

A final clarification involves "unusual" fixed route systems, such as inclined planes and aerial tramways. For these types of systems, the feasibility of providing complementary paratransit must be evaluated on a case-by-case basis. The length of the system and the area in which it operates are factors to consider. If

As a general rule, service would be considered "under contract" to a public agency if the service would otherwise be operated by the public entity.

paratransit service as typically defined is not practical, reasonable efforts must be made to accommodate persons with disabilities. Providing an alternative which would duplicate the service as closely as possible (or provide improved service) is permitted.

Section 2.

To Whom Must Complementary Paratransit Service be Provided?

The regulations identify three categories of individuals who are eligible for complementary paratransit service. These persons are considered “**ADA paratransit eligible**”. Each public entity providing complementary paratransit service must establish a process for determining ADA paratransit eligibility.

The **first** category of eligibility includes:

“Any individual with a disability who is unable, as the result of a physical or mental impairment (including a vision impairment), and without the assistance of another individual (except the operator of a wheelchair lift or other boarding assistance device), to board, ride, or disembark from any vehicle on the system which is readily accessible to and usable by individuals with disabilities.”

Included in this category are individuals with mental or visual impairments who cannot “navigate the system”. Recognizing destinations, understanding transfers, and being able to distinguish between vehicles at busy transfer stations are all examples of navigating the system. With the exception of assistance provided by the driver or other employees of the service, eligibility under this category is based on a person’s ability to independently use the service. A person traveling with a friend or attendant is still eligible for paratransit service even if they would be able to use the fixed route system with this other person’s help.

The **second** category of eligibility includes:

“Any individual with a disability who needs the assistance of a wheelchair lift or other boarding assistance device and is able, with such assistance, to board, ride, and disembark from any vehicle which is readily accessible to and usable by individuals with disabilities if the individual wants to travel on a route of the system during the hours of operation of the system at a time, or within a reasonable period of such time, when such a vehicle is not being used to provide designated public transportation on the route.”

Eligibility under this category depends on the accessibility of vehicles and routes. A person is eligible for paratransit service if the fixed route on which they want to travel is not yet accessible. Guidance on exactly what constitutes an accessible fixed route is provided in the regulation and explanatory appendix. For example:

- An individual is eligible for paratransit if a vehicle’s lift or boarding device could not be deployed at the stop which they want to use;
- An individual is eligible if they use a “common wheelchair” but cannot be served by the fixed route system because the lift on the vehicle they need to use does not meet the equipment standards contained in Part 38 of the regulation. A common wheelchair is defined as one that can be accommodated by equipment meeting the standards;
- A person is eligible if the bus route on which they want to travel is not 100% accessible.
- Similarly, a person is eligible if they need to travel on a rapid or light rail system that is not yet in full compliance with the

regulation. Full compliance means that all key stations are accessible and one car per train is accessible. An individual would be eligible in this example even if accessible bus service is provided in the same area.

The **third** category of eligibility includes:

“Any individual with a disability who has a specific impairment-related condition which prevents such individual from traveling to a boarding location or from a disembarking location on such system.”

Two important qualifiers to this category are included in the regulations. First, the “specific impairment-related condition” must **prevent** the person from using the fixed route system. Conditions which make getting to or from stops/stations more difficult do not confer eligibility. Second, architectural barriers not under the control of the public entity (such as curb-cuts), and environmental barriers (such as distance, terrain, and weather) do not, when considered alone, confer eligibility. If, however, travel to or from a boarding location is impossible when these factors are **combined** with the person’s specific impairment-related condition, paratransit service must be provided.

Paratransit service also must be provided to a personal care attendant traveling with an eligible rider. In addition to a personal care attendant, the regulations require that service be provided to one companion accompanying an eligible rider. Other persons accompanying the rider are to be accommodated on a “space available” basis. Persons are considered to be accompanying the eligible rider if they are picked up and dropped off at the same locations as the eligible rider.

The needs of visitors with disabilities also are addressed. Complementary paratransit service must be provided to ADA eligible individuals who travel to areas outside of the region in which they

live. If these individuals have been certified as “ADA paratransit eligible” by another public entity, that certification must be honored for up to 21 days. If they have not been certified as eligible by another public entity but claim that they are ADA paratransit eligible, they are entitled to “presumptive eligibility” for up to 21 days. If service is needed beyond this period, they can be required to apply for eligibility in the area they are visiting.

Chapter 4 of this handbook addresses each of these eligibility issues in greater detail. It also provides guidance on establishing a determination process in compliance with the regulations.

Section 3.

What Level of Service Is Required?

Complementary paratransit programs must provide a level of service that is **comparable** to that provided on the fixed route system. Six criteria for determining comparability are included in the September 6, 1991 rule. These state that the paratransit service must:

- Operate in the same **service area** as the fixed route system.
- Have a **response time** (defined as the elapsed time between a request for service and the provision of service) that is comparable.
- Have comparable **fares**.
- Have comparable **days and hours of service**.
- Meet requests for any **trip purpose**.
- Not limit service availability because of **capacity constraints**.

In addition, the regulations establish requirements for several aspects of operation, including:

- no-show policies;

- types of service;
 - subscription service;
 - equipment specifications;
 - maintenance of access equipment;
 - the use of lifts and securement systems;
 - accommodation of mobility aids and life support equipment;
 - the provision of accessible information and communications; and,
 - employee training;
- ☛ The six service criteria and each of the operating standards listed above are discussed in Chapter 5.

Section 4.

How and When Must Service be Implemented?

A plan for providing complementary paratransit service must be submitted on or before January 26, 1992 by all public entities preparing

individual plans. An additional six months is provided if a **joint** plan is being prepared by two or more public entities with overlapping or contiguous service areas or jurisdictions and they find it impossible to complete the plan by the January deadline. In

these cases, all elements of the joint plan that can be completed should be submitted on January 26, 1992. Remaining elements of the plan must be submitted by July 26, 1992. If all elements of a joint plan are not submitted by January 26, 1992, each entity also must provide certification of their commitment to a joint service and that they will maintain current levels of service during the six month extension period.

Persons with disabilities and groups representing them must be consulted in **all phases** of the planning process. Outreach efforts are required to inform individuals who are likely to be affected that the plan is being prepared and to invite their input. Plans must be available for public review and comment **before they are finalized**, and must be provided in accessible formats upon request. At least one public hearing, with adequate notice, also must be sponsored.

Plans must indicate when full compliance with the regulation will be achieved. Full compliance is required **as soon as is possible**, but no later than January 26, 1997.

If paratransit services in full compliance cannot be implemented within one year, plans must include milestones which show "measured and proportional progress." In its review of plans, UMTA will determine, on a case-by-case basis, whether it believes that progress toward compliance can be achieved in a more expeditious manner. If it is determined that full compliance is possible in a shorter

Full compliance is required as soon as is possible, but no later than January 26, 1997. If it is determined that full compliance is possible in a shorter timeframe, plans will be rejected even if compliance is proposed in less than the maximum five year implementation period.

timeframe, plans will be rejected **even if compliance is proposed in less than the maximum five year implementation period.**

Implementation of each paratransit plan also must commence on January 26, 1992. An

UMTA decision on the plan is not required before service is initiated. If changes are required as a result of UMTA's review, service design and operating procedures can be adjusted as necessary.

In order to begin implementation, a process for determining who is "ADA paratransit eligible" must be a first priority. If a process is not in place on January 26, 1992, it must be developed as soon thereafter as is administratively possible.

UMTA will review plans and will provide written notice if a plan is disapproved. If a plan, or any portion of it, is disapproved, a revised plan must be resubmitted within 90 days of the receipt of a disapproval letter. The public participation process required for the development of initial plans must be used for any revisions.

☛ Chapter 7 provides guidance on developing a paratransit plan.

Section 5.

Undue Financial Burden Waiver Provisions

The law and regulations consider the financial realities facing public transit systems. Five provisions, listed below, were included to minimize the potential financial burden of complying with the requirements of the regulations.

- Service provided to ADA Paratransit Eligible individuals by other paratransit providers in the area can be counted as part of the total effort in the area.
- The service area that must be covered is limited to comparable fixed route corridors.
- Required eligibility is limited to those who cannot otherwise use the fixed route system.
- Fixed route bus systems are considered accessible if lift buses are available by advance reservation through Call-A-Lift-Bus or On-Call Bus programs.
- A phase-in period of up to 5 years is provided for full implementation of complementary paratransit service.

In cases where undue financial burdens will still occur, the regulations provide for waivers to be granted by the UMTA Administrator. It is important to note that waivers only apply to the six service criteria described in Section 3 of this chapter. Operating requirements included in the regulation must be met without exception.

An undue financial burden waiver can be requested either at the time initial plans are submitted or during the course of implementation. Waivers can only be requested on January 26, 1992, if it is determined that:

- full compliance by January 26, 1997 is not possible; or,
- measured progress cannot be made *in each year*. A waiver should be requested, for example, if it is determined that little or no progress will be possible in the first year.

Requests for waivers must demonstrate that an undue financial burden will result from the implementation of the required paratransit service. Only those costs associated with providing required services can be counted toward an undue burden.

Waivers can be requested during the course of implementation if circumstances assumed in the initial plan change and full compliance by January 26, 1997 is no longer possible.

Requests for waivers must demonstrate that an undue financial burden will result from the implementation of the ***required*** paratransit service. Only those costs associated with providing required services can be counted toward an undue burden. Costs incurred providing services to persons who are not ADA paratransit eligible or services which go beyond the required service criteria cannot be included.

The regulations identify several factors that will be considered by UMTA in determining whether or not an undue financial burden exists. Waiver requests

must contain information which will allow UMTA to evaluate each of these factors.

☛ Appendix F of this handbook provides a listing of these factors and other information concerning undue financial burden waiver requests.

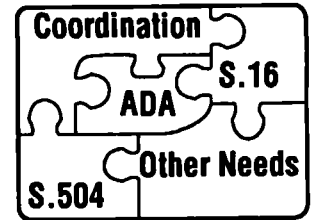
If a waiver is approved, the public entity may be asked to provide as much service as possible without incurring an undue burden. UMTA also may ask that the plan be changed if it feels that more efficient and effective ways to provide service exist. This can include a requirement to work more closely with other providers of paratransit service in the area. UMTA also can ask that complementary paratransit

service be provided along key routes (defined as routes that run at least hourly) during morning, noon, and evening peak periods, even if to do so would cause an undue financial burden.

Finally, it is important to note that *if waivers are granted, they will be for a limited and specified time period*. If a request is approved, a waiver will be granted for an amount of time beyond the allowed implementation period which is needed to achieve full compliance. This period of time will be determined from information contained in the plan and UMTA's evaluation of the public entity's financial and operating situation.

3

Complementary Paratransit Service Requirements as Part of a Broader Paratransit Policy



Paratransit is considered in the ADA from a narrow legal and civil rights perspective. The amount of service required is based on a minimum standard of comparability for those persons with disabilities unable to use fixed route systems. There are transportation needs which go beyond the scope and intent of the ADA. Planning for some of these needs is a requirement of Section 16(a) of the Urban Mass Transportation Act of 1964, as amended (UMT Act), which states that:

“...special efforts shall be made in the planning and design of mass transportation facilities and services so that the availability to elderly and handicapped persons of mass transportation which they can effectively utilize will be assured...”

Services provided beyond the minimum requirements of the ADA cannot be counted, however, in a calculation of undue financial burden. While it is important to consider and plan for other needs, you must ensure that ADA required service is provided. If you expect to face financial constraints during the implementation of your ADA paratransit plan, you may have to examine and prioritize your existing service. Some reduction in efforts not required by the ADA may be necessary. Major reductions in existing service can be considered a factor in deciding to request an undue financial burden waiver.

Needs not Addressed by the ADA

Some of the needs which are *not* addressed by the complementary paratransit service requirements of the ADA include:

- (1) *Persons with disabilities who reside outside of the defined service area or who need to travel to destinations outside of the service*

area. Nationwide, only five percent of all trips are made on public transit.¹ The vast majority of all trips are made in automobiles. This is due not only to the public's preference for private automobile travel but because public transit is often designed to meet travel needs to and from city centers. Transit is often not available to meet suburban and rural travel needs.

Private automobile travel, particularly independent auto travel, is not available, however, to many persons with disabilities. Adapted vehicles can cost twice or three times as much as a standard car. Many persons have disabilities which preclude the independent operation of an automobile. National studies suggest that forty-five percent of all persons with disabilities live in households without automobiles.² Thirty-nine percent of this population has only occasional access to an automobile through family or friends. Clearly, many individuals with disabilities who do not live in close proximity to public transit services have few or no transportation

There are transportation needs which go beyond the scope and intent of the ADA.

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options and need to be considered in an areas' overall transportation policy and plan.

(2) ***The growing population of older Americans.*** Between 1900 and 1980, the percentage of Americans 65 years of age and older grew from 4.1 percent to 11.3 percent.³ In actual numbers, there were 3.1 million older persons in 1900 and 25.5 million persons over 65 in 1980. As Table 3.1 indicates, there will be almost 35 million persons 65 years and older by the year 2000. Moreover, the fastest growing segment of the population are those persons over 85 who are likely to be most in need of transportation assistance. While the total U.S. population is projected to increase by 20 percent between 1990 and 2030, the 65-74 age group will increase by 96 percent, the 75-84 age group by 116 percent, and the 85+ age group by **150 percent**.⁴

As with the population of persons with disabilities, many older Americans live in areas that are not served or not served well by public transit. Transportation

plans should consider the needs of this population. Conventional fixed route service, even when fully accessible, will not be enough to meet the needs of this growing population.

(3) ***Persons living in poverty.*** A lack of transportation is often cited as a major problem by anti-poverty agencies and work training programs which serve low-income persons. Again, lack of independent access to an automobile is an obstacle to getting a job and becoming economically self-sufficient.

Coordination

If public paratransit services are narrowly defined and limited to only those persons who are ADA paratransit eligible, significant duplication with local human service transportation programs will likely be the result.

Coordinating paratransit services with human service agency transportation programs also remains a priority concern. The ADA paratransit eligible population overlaps with several

other segments of the general public. Many ADA paratransit eligible individuals are elderly. Many individuals are clients of mental health, mental retardation, or vocational rehabilitation programs. If public paratransit services are narrowly

Table 3.1

PROJECTED POPULATION OF OLDER AMERICANS
(in Thousands)

(in Thousands) Year	Total U.S. Population	65-74	75-84	85+
1900	250,410	18,373	9,933	3,254
2000	268,266	18,243	12,017	4,622
2010	282,575	21,039	12,208	6,115
2020	294,364	30,973	14,443	6,650
2030	300,629	35,988	21,487	8,129

Reprinted in part from "The Vital Link: Aging and Community Transportation", **Community Transportation Reporter**, February, 1991.
Source: Census Bureau, Current Population Reports, January, 1989.

defined and limited to only those persons who are ADA paratransit eligible, significant duplication with local human service transportation programs will likely be the result. These other programs may still have to operate separate services to meet the needs of clients who are not within the ADA service area or who are not ADA paratransit eligible. This type of fragmented approach can require more total public resources to meet the transportation needs of persons with disabilities, older Americans, and others.

Considering Service Change Impacts

Many existing paratransit systems currently are coordinated with other human service programs and serve a broader group of people than those who are ADA paratransit eligible. Many paratransit systems designed under Section 504 also cover a larger service area than the minimum area defined by the new ADA regulations. It is not the intent of the regulations to have these services rolled back to the minimum standards described. Rather, transit providers should ensure that within their total paratransit system, the level of service provided to ADA paratransit eligible persons meets the standards set forth in the regulations.

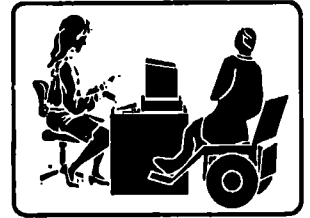
While providing a more comprehensive service should be a goal, priority must be

given to meeting the minimum requirements established under the ADA. Eligible individuals have a civil right to complementary paratransit service. Not providing this service in accordance with the regulations may not only jeopardize receipt of federal transportation funding but open transit agencies to potential legal action.

As part of the paratransit planning process, public entities should attempt first to meet ADA requirements in addition to other services which they have elected to provide. If it becomes necessary to reduce existing services in order to comply with ADA requirements, the impacts that a service change will have on present riders should be considered. Individuals may have made housing, employment or other decisions based on the availability of present transportation services. Efforts should be made to work with other agencies to develop transportation alternatives. Consideration also should be given to improving fixed route service to help meet this need. If other alternatives do not exist, consideration should be given to honoring past eligibility determinations as a way to make a transition to a new service policy. The public, consumers, and decision-makers at all levels also should be involved before existing levels of service are changed.

4

Determining ADA Paratransit Eligibility



The Americans with Disabilities Act and its implementing regulations establish categories of persons who are eligible to receive paratransit services complementary to fixed route services. These persons are functionally defined, based upon their inability to use existing fixed route service. Eligibility of an individual must then be applied to each trip request. The regulations also establish standards for the process of determining eligibility and require that an appeal process be established. The process for certification and for appeal must be published by the transit provider.

This chapter begins with a discussion of the importance of determining who is ADA paratransit eligible for complementary paratransit service and how this eligibility is applied to trip requests. Complementary paratransit service provided as a civil right by the ADA is specifically defined by the law. It will be important to understand this definition, and the reasons for it, in establishing an eligibility certification process.

Section 2 of this chapter will discuss *who* is eligible to receive the complementary paratransit service guaranteed by the ADA. The regulation establishes three categories of eligibility. Because eligibility is based upon functional considerations, relating the disability of the customer to the capacities and operation of the system in question, it is useful to consider eligibility through the operation of four “tests”. The “markers” provided by these tests can then be used to determine whether or not an individual’s eligibility for complementary paratransit generally is appropriately applied to a particular

trip request. These tests, and examples of how they may be applied, comprise Section 3. An effectively designed eligibility certification process will facilitate the trip-by-trip determination that will be required under the regulation.

Section 4 discusses a proposed certification process. Section 5 discusses the appeal process that is required under the regulation. Section 6 deals with reciprocal and presumptive eligibility. Section 7 discusses the provision of paratransit services to persons travelling with the eligible individual.

Section 1.

Who Are the “ADA Paratransit Eligible”

As a civil rights law, the ADA established a broad definition of those whose rights are protected. Upwards of 43 million Americans are estimated to be protected against discrimination by some aspect of the law — nearly one-in-five of the total population. The new law establishes a civil right to integrated, accessible fixed route transit service for persons with disabilities. As the various provisions of the law take effect, and as new equipment and facilities are put into place, it is expected that transit services for persons with disabilities will largely be provided by these fixed route services.

The new law recognizes, however, that in some locations a fully accessible fixed route service will take a number of years to put in place. To protect the rights of persons with disabilities during the transition to accessible fixed route services, the ADA requires that

paratransit service complementary to the fixed route system be put into place. Moreover, even when the fixed route system is fully accessible and complying with all applicable standards, some persons with disabilities still will not be able to navigate these systems. The right to paratransit, complementary to the fixed route service, for this small sub-group of the population with disabilities, will continue for the long-term, insofar as these persons are unable to use those fixed route transit services.

In establishing eligibility for complementary paratransit service under the new law, it is important to remember that the ADA makes no attempt to define the overall transportation needs of persons with disabilities. Nor does the ADA guarantee that these needs will be met.

These needs may be met by a variety of federal, state and local programs providing transportation services to persons with disabilities and are not directly affected by the new law. As a civil rights law, the ADA deals with transit systems and their utility for persons with

disabilities. The ADA's protection of a civil right to paratransit complementary to fixed route service is thus limited in its scope. Nothing in the ADA prevents or limits providing transportation services to others among the population with disabilities or more generally to the elderly or to others who are transportation disadvantaged.

Any discussion of ADA paratransit eligibility must be understood within this context. It is only for the provision of ADA paratransit eligible services that "undue financial burden" may be calculated. Services provided to other transportation disadvantaged individuals are at the

option of the provider and thus are unrelated to compliance with the ADA. Even if a provider decides to use statistical modeling for the purposes of determining undue financial burden, they will need to be able to identify those users of the paratransit service who are ADA paratransit eligible.

Where a transit provider now has no paratransit service in place, the law and its implementing regulations provide the baseline for creating the new service. Where paratransit now is in place, the persons described by the law as "ADA Paratransit Eligible" have rights to service that may be different from the service now in place. Such service may, for example, currently be restricted by trip purpose, which is not permitted for ADA complementary paratransit. This situation

would require some reconfiguration of these services, as noted in Chapter 5 of this handbook.

Section 37.125(a) of the ADA implementing regulations requires that each public entity "shall strictly limit 'ADA Paratransit

Eligibility' to individuals specified" in the regulations. This section of the regulations makes it clear that although the development of eligibility determination procedures are properly the subject of consultation with members of the disability community as part of the required public process, the definition of ADA paratransit eligibility cannot be modified. The ADA and its implementing regulations establish a right to paratransit only under a particular set of circumstances related to the individual and the transit system. Only with a clear definition of ADA paratransit eligibility can the delivery of those services, and compliance with the law, be demonstrated.

The ADA and its implementing regulations establish a right to paratransit only under a particular set of circumstances related to the individual and the transit system. Only with a clear definition of ADA paratransit eligibility can the delivery of those services, and compliance with the law, be demonstrated.

If a transit operator already provides paratransit services to a wider group of transportation disadvantaged persons, and already has a certification standard in place, it must still undertake the process of determining who is specifically entitled to service under the ADA and for what trips. The paratransit plan to be submitted by the transit provider must demonstrate how these minimum standards of the ADA will be met. Services provided to a broader group of persons with disabilities or to other transportation disadvantaged persons do not mitigate the requirements to meet these standards.

Section 2.

Regulatory Categories of Eligibility

Three categories of persons with rights to complementary paratransit are established by the ADA.

A transitional category will exist until and to the extent that the fixed route system is not capable of providing accessible service to persons with disabilities. Any person with a disability who can use an accessible vehicle, but for whom *any* desired trip cannot be made because the fixed route service they need to use is not yet accessible, is deemed eligible. ADA paratransit eligibility for members of this group is directly related to the accessibility and operation of the transit system in question, as well as the specifics of the individual's disability. This category includes persons who presently qualify under the 1986 Section 504 regulations for "special services" and includes persons who use wheelchairs, walkers or braces and others whose disabilities prevent them from utilizing an inaccessible vehicle or facility.

The other categories are made up of individuals who, because of the nature of their disabilities, cannot navigate even a transit system that is otherwise accessible. These categories are defined narrowly under the ADA. The first includes

individuals who because of their disability cannot independently board, ride and/or disembark from an accessible vehicle. The USDOT regulation assumes that an individual will not and need not be able to operate a boarding system such as a wheelchair lift, extendable ramp or securement device. Operator assistance with these specific functions is expected. The presence of a traveling companion does not effect the evaluation of the eligible individual's ability to independently utilize the transit service. A person traveling with a friend or attendant is still eligible for paratransit service even if they would be able to use the fixed route system with this other person's help.

Another category is made up of those who have impairment-related conditions that prevent them from getting to or from a boarding or disembarking location. The ADA legislative history indicates that this is intended to be a very narrow classification, relating to an individual's particular functional disability. Although this eligibility is most closely related to a diagnosis of disability, in many cases there will nonetheless need to be functional evaluation of its application to a particular system and a particular trip. Examples of eligibility based on this category would include severe, chronic fatigue related to HIV infection and AIDS, heat sensitivity due to cardiovascular disease and hypothermia due to quadriplegia.

Two additional groups are defined by the regulation. An individual who has been certified by another transit provider will be considered eligible by another system. A person traveling as a companion of a person who is ADA paratransit eligible is deemed eligible for that trip. The companion need not be a family member. Additional traveling companions must be accommodated on a space available basis only. Personal care attendants required by the eligible individual for travel are considered as mobility aids and not as companions for this purpose.

Persons in these last categories will retain ADA paratransit eligibility for the long term, even after the system meets all accessibility requirements for vehicles and facilities.

Note that place of residence does not enter into a determination of ADA paratransit eligibility. Individuals may request certification from a covered entity even though they do not live in the transit service area or even in a community in its service district. This would be the situation, for example, of a commuting wheelchair user who could drive to a parking facility from an outlying area, but who there is unable to board the vehicles providing service in the center city. Such an individual might have ADA paratransit eligibility certification from her home transit district, or may live in a region

without transit. Such an individual has the same right to use the transit system as any out-of-town commuter. ADA complementary paratransit is an integral part of that system.

Note also that the regulations make explicit the eligibility of persons whose disability is temporary. Although the disability is temporary, the standards that are applied are the same as those used generally. Certification of eligibility in such cases would properly carry a specific expiration date, differing from the usual period for recertification.

An individual may be eligible for ADA paratransit whose disability is intermittent. It is quite possible, for example, that an individual may be able to walk, if with difficulty, on some days or for some periods, but otherwise find it necessary to utilize a wheelchair. The intermittent disability would, of course, directly affect the ability to board certain vehicles or travel certain distances. Such individuals will need to be certified for eligibility based upon the most limiting

aspects of their disability (e.g., as if they used a wheelchair for all trips). Trip-by-trip determination would then be required.

Section 3.

Applying Eligibility to Trip Requests

The operational meaning of ADA paratransit eligibility is quite complex. ADA paratransit eligibility is based on a functional, rather than medical, model. Persons are not qualified or disqualified on the basis of a specific diagnosis or disability. An individual will be certified as ADA paratransit eligible if there is any part of the system in the designated service area which cannot be used or navigated by that individual because of a

disability. In operation, ADA paratransit eligibility will be based upon whether the fixed route transit system can provide its service to the particular individual for a particular trip. Even within a particular

system, eligibility will be applied, in most cases, on a trip-by-trip basis. The application of a person's eligibility will be determined by both the needs of that individual, as established by the eligibility certification process, and by the operation of the system along a specific route. Eligibility will effectively be determined by using a set of "tests", particularized to the transit system and its operation.

We will not consider in this section the question of whether a particular trip request is "eligible" in consideration of its beginning and end points. That question properly pertains to the definition of a service area and is discussed fully in Chapter 5.

The existence of three categories of customers who are eligible for certification as ADA paratransit eligible, categorized

Note that place of residence does not enter into a determination of ADA paratransit eligibility. Individuals may request certification from a covered entity even though they do not live in the transit service area or even in a community in its service district.

by four subsections of regulation and some of whose eligibility is transitional and others whose eligibility is conditional, may seem to make the certification process extremely difficult. An effective process can be developed, however, which will not only certify eligibility for the individual but also facilitate the application of that eligibility to a particular trip.

It will be necessary in the first place to determine whether or not an individual's disability prevents her from utilizing any of the services provided by a covered entity. This determination must be made in regard to each and every part of the system and throughout all the hours of its operation. The application of this eligibility to a particular trip is, thereafter, a functional one:

- Does the disability prevent the individual from getting to and from a station/stop at point of origin or destination? If so, then the trip is eligible.
- Can the individual board and utilize the vehicle at the station/stop? If the vehicle is inaccessible, the person is eligible.
- Can the individual independently recognize the destination and disembark? If not, the trip is eligible.
- If a trip involves transfers and connections, are the paths of travel between lines or modes accessible and navigable by the individual? If not, the trip is eligible.

Each of these "tests" is examined below.

TEST ONE - Does the individual's disability prevent getting to and from a station/stop at point of origin or destination?

Much commentary, in the legislative history of the ADA and throughout the regulatory process, has been devoted to the situation of the individual who cannot, because of disability, successfully arrive at a station/stop or travel to a final

destination after disembarking. This category is meant to be narrowly defined. A distinction is made in the regulations between those who have difficulty (or simply find it unpleasant) to travel to or from a station stop and those whose disability *prevents* them from doing so. It does not include, for example, an elderly individual who finds it difficult to walk three blocks to a bus stop. A transit provider is not obliged to provide paratransit service to an individual because its service area is not fully built with curb cuts.

The specific impairment(s) of an individual must be considered. For example, although winter conditions of cold, ice and snow do not in themselves make a quadriplegic wheelchair user ADA eligible for paratransit, a highly elevated danger of hypothermia experienced by that individual would make her eligible during periods of very cold weather. The susceptibility to hypothermia is "an impairment-related condition" which establishes eligibility. Chronic severe fatigue related to HIV infection would establish eligibility but a diagnosis of AIDS by itself does not. An arthritic or cardiac condition which prevents boarding a vehicle or entering a station — as distinguished from a condition that merely makes such climbing difficult — establishes eligibility.

Included among the eligible under this test are those who, because of blindness or visual impairment, or because of a developmental or cognitive disability, would be unable to find their way to or from a station stop. Although many people with these disabilities have been trained to make specific trips using fixed route service, or to navigate the fixed route system under certain situations, this training may not be useful for a particular trip origin or destination. An individual who has been trained to use the system to travel to and from a particular destination independently and therefore can utilize the fixed route service for that purpose

(say, the daily commute to and from a place of employment) cannot apply eligibility to that trip. However, an exceptional trip (to a restaurant, for example) would be ADA eligible. In addition, if service disruptions, such as re-routing due to construction, make the training temporarily inappropriate, the customer is eligible for those trips.

TEST TWO - Can the individual board and utilize and disembark the vehicle at the station/stop?

For the most part, this test will be utilized during the transition to a fully accessible fixed route system. If a transit customer uses a wheelchair, and the system cannot guarantee that the customer will be able to board any vehicle, at any time, then that customer is ADA paratransit eligible generally. Note, however, that this eligibility cannot be applied to a trip on a route served by only lift- or ramp-equipped buses. A person who uses a wheelchair is not *on that basis* ADA paratransit eligible for trips served by an accessible, lift- or ramp-equipped bus. If not all the buses in a system, or all the buses on a particular route, are lift- or ramp-equipped, however, that individual is entitled to travel using paratransit when fixed route transit services are not accessible. This requirement for trip-by-trip analysis will become more limited as the system becomes fully accessible. The use of "on-call bus service", scheduling an accessible fixed route bus upon request, can be utilized to meet the requirement for paratransit services. A paratransit "feeder service" which connects with accessible fixed route stations could also be utilized in this situation but would need to be carefully coordinated with fixed route scheduling.

It should also be noted that if some operational factor prevents utilization of an accessibility feature and this situation excludes an individual with a disability from fixed route service, the trip is eligible for paratransit. This would be the case, for

example, when a bus lift cannot function at a stop where there is no raised sidewalk or in steep terrain. If bus lifts utilized by a transit system were installed before the effective date of USDOT regulations, and these lifts are unable to provide access for a particular sort of wheelchair that could be accommodated by a conforming lift, individuals using such wheelchairs in such situations are ADA paratransit eligible.

TEST THREE - Can the individual recognize the destination and disembark?

This test will form the basis of eligibility for many individuals with visual impairments and developmental and cognitive disabilities. Some persons with Alzheimer's disease will qualify under this test. To some extent, the same conditions discussed relating to Test One would apply. But it is certainly possible that an individual, who is trained to get to and from a transit stop, might nonetheless be unable to utilize the fixed route service because the system fails to reliably announce station stops. USDOT regulations provide for the announcement of stops on fixed route service. Even after this rule goes into effect, however, this would still be the situation in a subway system until all trains are equipped to permit such announcements to be made in compliance with ADA regulations. As with the first test, travel training may not be sufficient to permit independent travel to or from stops that are not standard for the individual.

TEST FOUR - If a system involves transfers and connections, are the paths of travel between lines or modes accessible and navigable by the individual?

This test for eligibility will be a transitional matter for some individuals, for others it may be a long-term basis for eligibility. An individual might, for example, be able to board a vehicle at each terminus of the trip, but be unable to make the level change between different platform levels. So long as this situation exists, that person will have ADA

eligibility. This eligibility would then be applied to a particular trip request if the fixed route alternative involves using such a facility.

A person with a cognitive disability might be able to handle each segment of the trip with little difficulty, but find it impossible to successfully wend her way through a complex and busy transit station. Although the application of this eligibility will also obviously be on a case-by-case basis, if conditions exist within the system where it is reasonable to assume that the individual can become disoriented and lost, then that individual will be ADA paratransit eligible for such trips for the long term.

Another example of eligibility based upon this test is an individual who, because of a cardiac condition, cannot traverse the distance between one vehicle and another. For example, transfers at an intermodal terminal might involve travel of hundreds of meters or more. Here again, application is on a trip-by-trip basis.

Table 4.1 relates a number of different types of disabilities to eligibility. It also identifies factors that must be considered in making trip-by-trip determinations. All of the "Determining Factors" listed must be considered for each type of functional impairment. Please note that this list is not intended to be exhaustive of all possible disabilities or situations. Nor can one assume that an individual is automatically eligible because she has a disability listed here. Rather, this chart is meant to list common sorts of disabilities and the functional impact the disabilities may have upon transit use. It is meant to suggest the sorts of functional considerations that need to be made for a variety of situations.

Section 4.

Certifying Eligible Individuals

A written explanation of each transit provider's ADA paratransit eligibility certification process must be prepared.

This explanation must:

- **BE AVAILABLE AND DISTRIBUTED TO ALL WHO REQUEST IT**
- **BE MADE AVAILABLE IN ACCESSIBLE MEDIA SUCH AS BRAILLE, LARGE PRINT AND AUDIO TAPE**
- **DESCRIBE THE PROCESS FOR APPEALING DETERMINATIONS OF NON-ELIGIBILITY**

In addition, the certification process must:

- **BE CONCLUDED WITHIN TWENTY-ONE DAYS OF THE SUBMISSION OF A PROPERLY COMPLETED APPLICATION**
- **PROVIDE INDIVIDUALS CERTIFIED AS ADA PARATRANSIT ELIGIBLE WITH DOCUMENTATION THAT MAY BE UTILIZED AS IDENTIFICATION FOR RECIPROCAL SERVICES**

As was discussed in the sections above, the ADA certification process also can and should provide evaluation and classification of eligible individuals, so that determination of trip eligibility can be facilitated. The certification process can be used to evaluate and classify the individual's abilities across a number of "fields" that can be encoded into the individual's record. The classification assigned to each individual will provide the paratransit scheduler the information needed to relate functional abilities to the requirements of fixed route travel for a specific trip request. This information also can be used to ensure that appropriate equipment is dispatched to meet the needs of the customer.

Table 4.1 - Eligibility by Functional Impairment/Disability

Functional Impairment/ Disability	Type of Eligibility	Determining Factors
Ambulatory Disability, Uses Wheelchair	Conditional (2,3)*	- Availability of accessible fixed route service - Distance to/from bus stop or rail station for trip requested - Environmental conditions (terrain)
Ambulatory Disability, Uses Walker	Conditional (2,3)	- Distance to/from bus stop or rail station for trip requested - Availability of accessible fixed route service - Environmental conditions (terrain)
Ambulatory Disability Uses Braces	Conditional (2,3)	- Distance to/from bus stop or rail station for trip requested - Availability of accessible fixed route service - Environmental conditions (terrain)
Ambulatory Disability, Uses Other Mobility Aid	Conditional (2,3)	- Distance to/from bus stop or rail station for trip requested - Availability of accessible fixed route service - Environmental conditions (terrain)
Temperature Sensitivities	Conditional (3)	- Distance to/from stop/station - Waiting time at Stop/station - Temperature
Cardiac Condition	Conditional (3)	- Distance to/from stop/station - Environmental conditions (temperature, terrain)
Pulmonary Condition	Conditional (3)	- Distance to/from stop/station - Environmental conditions (temperature/terrain)
Arthritis	Conditional (3)	- Distance to/from stop/station - Environmental conditions (temperature/terrain)

* Indicates category of eligibility. (1) = unable to board, ride, or disembark from an accessible vehicle; (2) = able to use accessible vehicle but accessible vehicle is not available; (3) = unable, due to impairment related conditions to get to stop/station.

Table 4.1 (continued)

Functional Impairment/ Disability	Type of Eligibility	Determining Factors
Conditions resulting in severe fatigue (HIV, radiation/chemotherapy, dialysis)	Conditional (1,3)	- Distance to/from stop/station - Environmental (temp./terrain)
Severe lack of coordination/motor function (e.g., cerebral palsy, brain/spinal/peripheral nerve trauma, neurological conditions)	In all cases (1,3)	
Moderate lack of coordination/motor function (e.g., cerebral palsy, brain/spinal/peripheral nerve trauma, neurological conditions)	Conditional (2,3)	- Distance to/from stop/station - Availability of accessible fixed route service
Profound or severe mental retardation	In all cases (1,3)	
Mild or moderate mental retardation	Conditional (1,3)	- Has person received travel training for trip requested?
Psychiatric disabilities causing disorientation (as distinct from behavioral)	In all cases (1,3)	
Visual impairments (blindness, restricted vision)	Conditional (1,3)	- Has person received travel training for trip requested? - Effective fixed route communications practices in place (announcements, card systems, etc.)? - Physical barriers in the environment
Hearing Impairments	Conditional (1)	- Effective fixed route communications practices in place (signage, card system, etc.)
Communication Disabilities (disability related speech or reading impairments)	Conditional (1)	- Effective fixed route Communications practices in place (signage, card system, etc.)

Alternative Procedures for Determining ADA Paratransit Eligibility

Because the factors needed for such classification are primarily of a functional nature, medical or diagnostic information by itself will, in most cases, provide little useful information. Few transit providers will be able to relate a diagnosis of a disability to the ability to use transit. Medical doctors, moreover, are rarely trained to make functional evaluations of their patients' abilities to undertake the activities of daily living. USDOT ADA regulations permit the requirement of medical certification in determining ADA paratransit eligibility. Transit providers may wish to consider whether such a requirement should be made a mandatory part of every ADA

paratransit eligibility certification. As an alternative, medical information could be obtained only on an "as needed" basis. Such documentation would be limited primarily to a specific impairment related to a disability. For example, a transit provider might wish

documentation of a tendency to hypothermia for an individual who uses a wheelchair, or of a disabling cardiac condition, when such are the basis of a request for eligibility.

Documentation from sources such as an independent living or rehabilitation counselor, physical therapist or other such professional, would prove more useful in establishing an individual's ability to utilize transit services and should certainly be considered as an alternative to documentation from a physician. Such evaluations can be expensive, however, and many persons with disabilities do not participate in such programs. If a transit provider plans to require documentation of

a functional analysis, it may want to consider retaining one or more professionals in the field to whom applicants can be referred for certification and classification. In any case, providers must not establish any documentation requirement which will place a significant financial burden upon an individual attempting to access transit.

In evaluating the application of a wheelchair user, whose basis for ADA paratransit eligibility is the inaccessibility of the buses in service, medical or functional evaluation is expensive and superfluous at best. The claim of eligibility by a person who is known to be blind, based upon the inability to safely navigate the system, hardly seems to require third-party documentation. For these reasons, transit providers could utilize an

Documentation from sources such as an independent living or rehabilitation counselor, physical therapist or other such professional, would prove more useful in establishing an individual's ability to utilize transit services and should certainly be considered as an alternative to documentation from a physician.

ADA eligibility process which generally relies on self-certification of a person's functional abilities, supplemented by additional documentation only as is required to effectively evaluate and classify an individual's specific impairments.

Documentation would also appropriately be

required if a particular claim appeared to be unsupported by the information provided in the application or to be fraudulent.

The sample "Request for Certification of ADA Paratransit Eligibility", provided in Appendix D, will allow transit providers to obtain the information necessary to establish eligibility and to apply it to particular trip requests. Although a question is asked regarding the nature of the disability — a "diagnostic" question — the bulk of the form requests information regarding the functional abilities of the applicant. Note that the questions must be generalized to the situation that prevails in any and every part of the system. If a

transit provider operates inaccessible buses or light or rapid transit lines, it is necessary to know how this could impact the applicant. A system that operates only accessible buses would not need to ask questions regarding a wheelchair user's ability to board a bus. As noted above, the application of ADA paratransit eligibility to a particular trip will be made on a trip-by-trip analysis.

Cost, both for the transit agency and for paratransit customers, also will need to be considered in determining requirements for periodic recertification. Such recertification requirements are permitted under USDOT

regulations, on a "reasonable" basis. This recertification could take place annually, but this would place obvious burdens upon both customers and providers. If routine recertification is required, a three-to-five year period is suggested. Policy regarding recertification can be flexible, scheduling recertification for persons whose functional abilities are likely to change while providing no recertification for those whose functional abilities are not expected to change over time. The situation would be similar to that of certifying persons with temporary disabilities.

The sorts of documentation that will be required, alternative resources that may be available for evaluation, and requirements for recertification should be determined through the public process required by the regulations and discussed in Chapter 8 of this handbook. If the transit provider decides to utilize an outside agency or consultant for the provision of certification and evaluation, it still must ensure that the procedures to be used are fully considered through the public process.

Analyzing ADA Paratransit Eligibility for Trip-by-Trip Evaluation

Many transit systems will utilize the information gathered in the certification process to create files regarding each paratransit customer. Such files may be computerized to allow expeditious review of trip-by-trip eligibility and assignment of

appropriate vehicles. The answers provided to each functional question on the "Request" can be encoded in an identification number assigned to the individual. This coded information would then be applied by

paratransit schedulers and/or dispatchers to each of the four tests described in section 3 to determine trip-by-trip eligibility.

For example, if a paraplegic wheelchair user applies for ADA paratransit eligibility solely on the basis of an inability to board an inaccessible vehicle, she will be eligible if any bus utilized by the system is inaccessible. That information is encoded into her identification number. If she then requests a trip that is on a route exclusively serviced by accessible buses, she will be advised that the trip is not eligible and that she can use fixed route transit. If the route in question is not 100% accessible (e.g., if only every other bus or only particular scheduled runs are lift equipped), that route is not considered accessible. Note, however, that if the system has the capacity to schedule an accessible bus for the requested trip, and the trip is thereby made accessible, such an arrangement would meet the requirement for the provision of paratransit.

The sorts of documentation that will be required, alternative resources that may be available for evaluation, and requirements for recertification should be determined through the public process required by the regulations.

In another case, a person certified as eligible because of a cognitive disability may routinely utilize fixed route transit for trips to-and-from a place of employment. If that person wishes to make a trip which would involve a transfer at a busy terminal, the data encoded into their identification number would alert the scheduler to the fact that such a trip using fixed route transit is inappropriate and that paratransit must be scheduled.

A person certified as eligible because of severe chronic fatigue would be eligible if the requested point of origin or destination, while within the service area of fixed route service, is nonetheless farther than the individual can safely travel. Such a request would also be appropriate if the terrain involved hills unmanageable by the person with this disability. A trip to-and-from points located directly at a bus stop would not be ADA eligible in this case. If, however, the person's certification indicated that she could not safely stand at a bus stop through the headway used at that time on that route, or could not do so in extremely cold conditions then prevalent, paratransit must be provided. It would be possible to schedule paratransit as feeder service to accessible fixed route service, although the utilization of such feeder service is somewhat problematic and is not required by the regulation. Feeder service is a service option discussed in "Types of Service" in Chapter 5 of this handbook.

As indicated in the last examples, the conditions upon which the application of ADA eligibility to a particular trip are made can be multiple and quite specific. It is for this reason that the original certification process must thoroughly evaluate and classify the functional situation of the applicant.

Documenting ADA Paratransit Eligibility

A person determined to be eligible for ADA paratransit services must be provided some form of documentation that can be used as identification when the person travels to another transit area. A simple letter stating eligibility is acceptable. This documentation must include the name of the eligible individual, the name of the certifying transit provider and telephone number of the provider's paratransit coordinator, an expiration date, if any, and any conditions or limitations on eligibility. If the individual has indicated a need for a personal care attendant, this must be noted. Figure 4.1 provides a sample identification card that could also be used for this purpose.

Required Documentation of ADA Paratransit Eligibility

- **Name of the eligible individual.**
- **Name of the certifying transit provider.**
- **Telephone number of the provider's paratransit coordinator.**
- **Expiration date (if any).**
- **Any conditions or limitations on eligibility.**
- **Need for a personal care attendant.**

Figure 4.1
Sample ADA Paratransit Identification Card

Security Seal
(public entity logo)

FRONT

Photograph 	Certificate of Eligibility for ADA Paratransit Service	
	Name _____	
I.D. # _____		
Signature _____	Date Issued _____	Expiration Date _____
Eligibility Conditions _____		Travel with PCA Yes ☐ No ☐

BACK

The person identified on this card has been determined "ADA Paratransit Eligible" in accordance with the provisions of 49 CFR Part 37 and may be entitled to receive complementary paratransit service subject to the provisions thereof.

(signature of public entity representative)

(name of issuing public entity)

(city/town)

(state)

Paratransit Coordinator's
Phone #: _____

Section 5.

Appealing a Determination of Non-Eligibility

This chapter began with a reminder that the ADA establishes a civil right to paratransit for individuals who cannot, whether because of their disability or because of the inaccessibility of the fixed route system, otherwise utilize the transit system. Because complementary paratransit is deemed to be a civil right, inappropriate denial of such service is a serious matter. A fair and effective review and appeal process is required by the regulations and is in the interests of all parties. Public involvement in the development of the review and appeal process is required, and a description of the process to be utilized must be part of the paratransit plan to be submitted to UMTA.

Because ADA paratransit eligibility is established as a civil right, there is for the transit provider a special obligation to ensure that "due process" is observed.

Therefore every decision to deny ADA paratransit eligibility should be reviewed in the first instance by a supervisor familiar with the requirements of the ADA and its operation in the system. The appropriate place for this initial review will, of course, vary with the size and organization of the system.

If the decision to deny is confirmed, the notice of denial sent to the applicant must include the reasons for the denial and the procedures which may be utilized to appeal the decision. Any and all notices sent to the applicant must be in a format that can be utilized by the applicant (e.g., a braille letter to a blind applicant who utilizes braille). If a limitation on the time period permitted for appeal has been established, this should be clearly stated.

In any case, the period permitted for appeal cannot be less than sixty days. Note, however, that subsequent new requests for a determination of ADA paratransit eligibility will need to be considered at any time, since the functional impairments associated with an individual's disability may be expected to change over time.

The USDOT regulations establish standards for the appeal of a determination of non-eligibility. An individual has the right to an appeal before a person and office other than those who made the initial determination. The individual making the appeal has the right to be heard in person and to have necessary support, such as a sign language interpreter.

No service need be provided while the appeal is heard. If, however, an appeal has not been decided within thirty days,

presumptive eligibility applies until a final decision is reached.

Note that there are certain circumstances under which an individual, otherwise

eligible for ADA paratransit, may be denied those services. A person whose behavior threatens or has threatened the safety of paratransit personnel or other customers, may be denied the service. Additionally, persons who demonstrate a consistent pattern of missing scheduled paratransit trips, "no-shows", may lose their eligibility for a reasonable, specific period of time. Such temporary suspensions of eligibility, as well as permanent loss of eligibility because of violent or threatening behavior, may be appealed through the administrative procedure set up under this regulation. In the case of temporary suspension of "no-shows", suspension of service must not begin until the appeals process is complete.

Because ADA paratransit eligibility is established as a civil right, there is for the transit provider a special obligation to ensure that "due process" is observed.

The determination made upon appeal will, like the initial determination, need to be in writing (and in an appropriate medium, if requested) and must state the basis for the determination. A transit provider could, theoretically, establish an additional level of appeal, but this is not required or recommended. In any case, the denial of ADA paratransit eligibility can become the subject of a civil rights complaint and ultimately be reviewed by the courts. Full documentation of the process is essential. There is, however, no requirement for transcribing any part of the determination process, nor is this recommended.

Note that throughout the appeals process, as with the initial determination of eligibility, an individual may be represented by an individual of her choice. This representative may or may not be a lawyer and might appropriately include an independent living or rehabilitation counselor, or other such professional.

Section 6.

Presumptive and Reciprocal Eligibility

The right to paratransit under the ADA cannot be restricted by any tests other than the ability to utilize available fixed route services. Residency in a service area or political jurisdiction of the transit system is not required for ADA eligibility. There are two circumstances in which a transit provider will need to deal with the requests for paratransit service from individual's living outside of the local community.

An "out-of-town" individual seeking to utilize the ADA paratransit service may be certified by another transit system. When a specific trip request is made, the scheduler may ask if the person making the request has such certification. If so, that certification must be honored by the

host jurisdiction. The limitations placed upon a certification of ADA eligibility may be observed. For example, if the certification indicates that the individual can utilize accessible vehicles, and the host system runs accessible vehicles for the trip requested, no paratransit need be provided on that basis.

Eligibility must be presumed and reciprocally provided if an individual presents certification from another system. If an out-of-town individual does not have such certification, but makes a claim of eligibility in a host system, that claim must be honored on a presumption of eligibility. In such cases, transit providers may require proof that the individual is, in fact, not a resident of the local transit district and, if the request for service is based upon a hidden impairment (e.g., a cardiac condition), medical documentation may be required. Such a presumption of eligibility, for a period of twenty one days, is required by the regulations. Service must be provided on the same basis as for locally certified individuals.

When an out-of-town customer first makes a request to use paratransit on the basis of presumptive or reciprocal eligibility, it is suggested that she be advised of the provider's eligibility policy and process.

A system may, however, require such an individual to make a request for ADA paratransit eligibility certification through that system if the individual plans to use the system for more

than twenty-one days. Thus, for example, if an individual regularly resides in a community where there is no transit system, but vacations for several months in a community with transit, that individual is entitled under the ADA to appropriate paratransit services in the vacation community. The host community may, however, require that this individual obtain local certification if she plans to use the system beyond twenty-one days. During the period while the certification is being processed, up to the twenty-one day limit, the individual will be entitled to

presumptive eligibility. When an out-of-town customer first makes a request to use paratransit on the basis of presumptive or reciprocal eligibility, it is suggested that she be advised of the provider's eligibility policy and process. Local providers will want to determine how to deal with the situation of the occasional visitor who may, over time, accumulate twenty-one days of paratransit use. Such a policy should be designed to reduce the possibility that a visiting paratransit customer will suddenly and unexpectedly find that the service is no longer available. For example, an occasional visitor to a city might be advised that if she expects to utilize the paratransit service more than twenty-one days in a one year period, she should apply for local certification of her eligibility.

Privacy Regarding Medical Information

The ***medical information*** that may be gathered as part of the ADA para- transit eligibility determination process should not be shared with any other party. Transit providers may, however, share information regarding the ***functional ability*** of an individual to utilize transit services with another transit system if this is required to determine eligibility in that system. The staff of the transit provider, as well as any outside agencies that may be utilized to perform eligibility reviews, should be carefully instructed to respect the privacy of persons seeking ADA paratransit eligibility certification.

The staff of the transit provider, as well as any outside agencies that may be utilized to perform eligibility reviews, should be carefully instructed to respect the privacy of persons seeking ADA paratransit eligibility certification.

Section 7.

Guests Traveling with an Eligible Customer

USDOT regulations guarantee that an eligible individual may travel with at least one guest. A person employed by the ADA eligible customer as a personal care attendant is not considered a guest. The personal care attendant may be a friend or family member or may be a paid employee of the eligible person. In a very real sense, a personal care attendant is a "mobility aid" to the eligible person, similar to a wheelchair or cane. Transit providers may want to require that eligible individuals indicate the need for a personal care attendant at the time of eligibility certification.

The fare for a guest will be the same as for the ADA eligible customer. There is no charge for a required personal care attendant.

Additional guests may accompany the customer with ADA eligibility on a space-available basis. Confirmed reservations for such additional traveling companions would

properly be made only after the time period provided for advance booking. Thus, confirmed reservations made for additional guests would be restricted to the day of the trip. Providers are encouraged to allow for advanced booking requests for such guest trips, in order to allow for the reasonable planning needs of the ADA eligible customer and their companions.

5

The Service Criteria and Required Operating Standards



When your complementary paratransit service plan is fully implemented, the level of service provided to persons determined “ADA Paratransit Eligible” must be **comparable** to service provided on the fixed route system. Six service criteria, which define the level of paratransit service that is considered comparable, are included in the regulations. The regulations also set minimum standards for certain operating policies and procedures such as driver training, equipment maintenance, and passenger assistance. Vehicle and equipment standards also must be met. This chapter explains each of the service criteria and operating standards.

Paratransit and fixed route are, by nature, very different services. Certain aspects of each operation, such as the area served, the fares charged, the trip purposes accommodated, and the days and hours of operation, can be closely equated. Other measures of service, such as response time and capacity issues must be made comparable giving consideration to the characteristics unique to each operation. The differences in each type of operation are acknowledged in the legislative history. House Report 101-485 states that:

“Since the operation of fixed route and paratransit service differ so markedly, levels of service must only be comparable - not identical”. (H. Rep. No. 485, 101st Cong., 2d sess., pt. 1 at 28).

As discussed in Chapter 3, you are not prohibited from providing service that

exceeds any one of the service criteria. However, if additional service is provided and an undue financial burden waiver is requested, only those costs associated with the provision of the required service can be included in the request.

The regulations also do not prohibit you from providing a different level of service to non-ADA eligible users of your paratransit system. For example, you may be required to operate complementary paratransit service six days a week from 6 a.m. until 10 p.m. to provide ADA paratransit eligible persons a level of service comparable to fixed route service in your area. Beyond this required service, you can provide, for example, medical and shopping transportation to older persons and operate this program only Monday through Friday from 9 a.m. to 5 p.m. This additional program also can require longer advance notice than your ADA service and have capacity constraints such as waiting lists or trip limits.

Section 1.

The Six Service Criteria

Service Area

Complementary paratransit service must be provided to all origins and destinations within service areas defined by the regulations. Service areas are defined differently for fixed route bus systems and rail systems. As noted in Chapter 4, ADA paratransit eligible individuals do not need to live in these areas to be eligible for service as long as they make trips within the area.

For **bus systems**, the basic service area is a corridor centered on the fixed route and extending 3/4 of a mile to either side of the route. Corridors can be extended up to 1 1/2 miles on either side of the fixed route. The exact width should be determined through the public participation process. The service area at the ends of each route would be a semicircle connecting each side of the corridor. Figure

5.1 illustrates how basic service corridors are to be developed.

For more extensive fixed route systems, the regulations define a "core service area" and establish slightly different service

area requirements. A core service area is defined in §37.131 as:

"...that area in which corridors with a width of three-fourths of a mile on each side of a fixed route merge together such that, with few and small exceptions, origins and destinations within the area would be served."

For bus systems, the basic service area is a corridor centered on the fixed route and extending 3/4 of a mile to either side of the route.

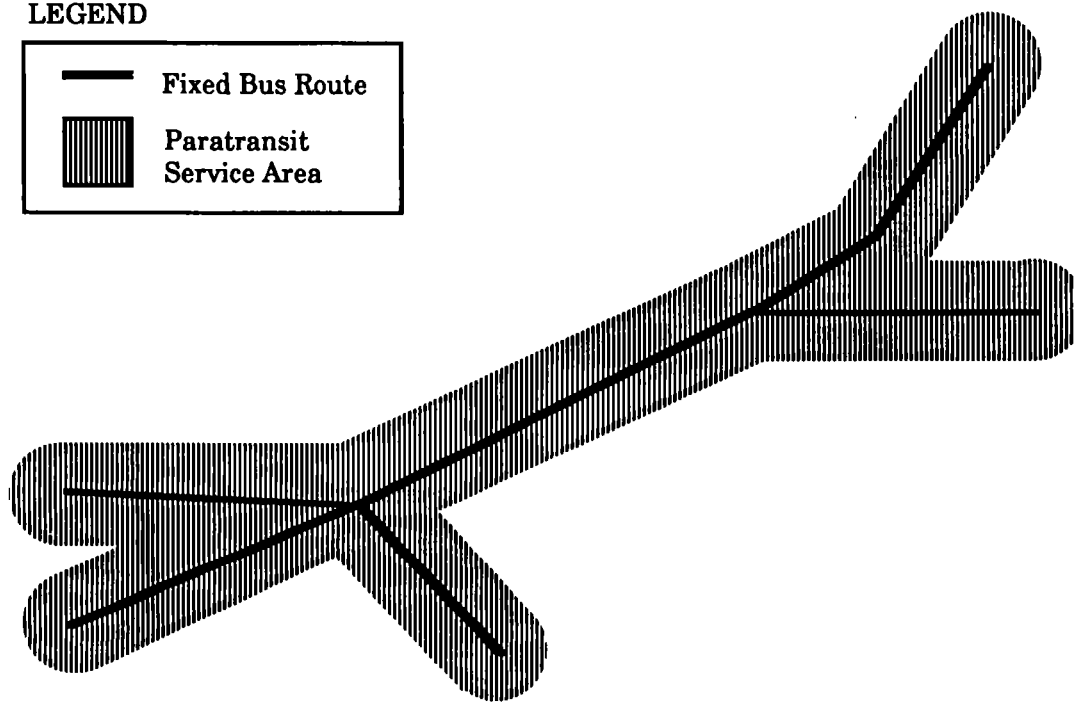
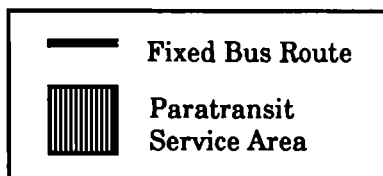
Paratransit service must be provided to all origins and destinations in core service areas. This includes any small areas not within the corridors but

surrounded by corridors.

Figure 5.1

Illustration of Bus Route Service Corridors

LEGEND



Outside the core service area, corridors can extend up to one and one-half miles on each side of the fixed route (i.e. up to 3 miles in total width). The exact width of corridors outside the core area should be established as part of the planning process. They should be wider than the minimum if you determine that users of your fixed route service typically travel more than $\frac{3}{4}$ of a mile to get to bus stops.

Figure 5.2 illustrates a complementary paratransit service area for a fixed route bus system that includes a core service area.

For *rapid rail and light rail systems*, service area is defined as a series of circles, $\frac{3}{4}$ of a mile in radius, centered on each station. At end stations and stations in outlying areas, the service area around each station can have a radius of up to one and one-half miles. Key stations are not to be treated differently unless they are an end station or are in an outlying area. As with fixed route bus systems, the exact size of the area at these stations should be determined as part of the planning process.

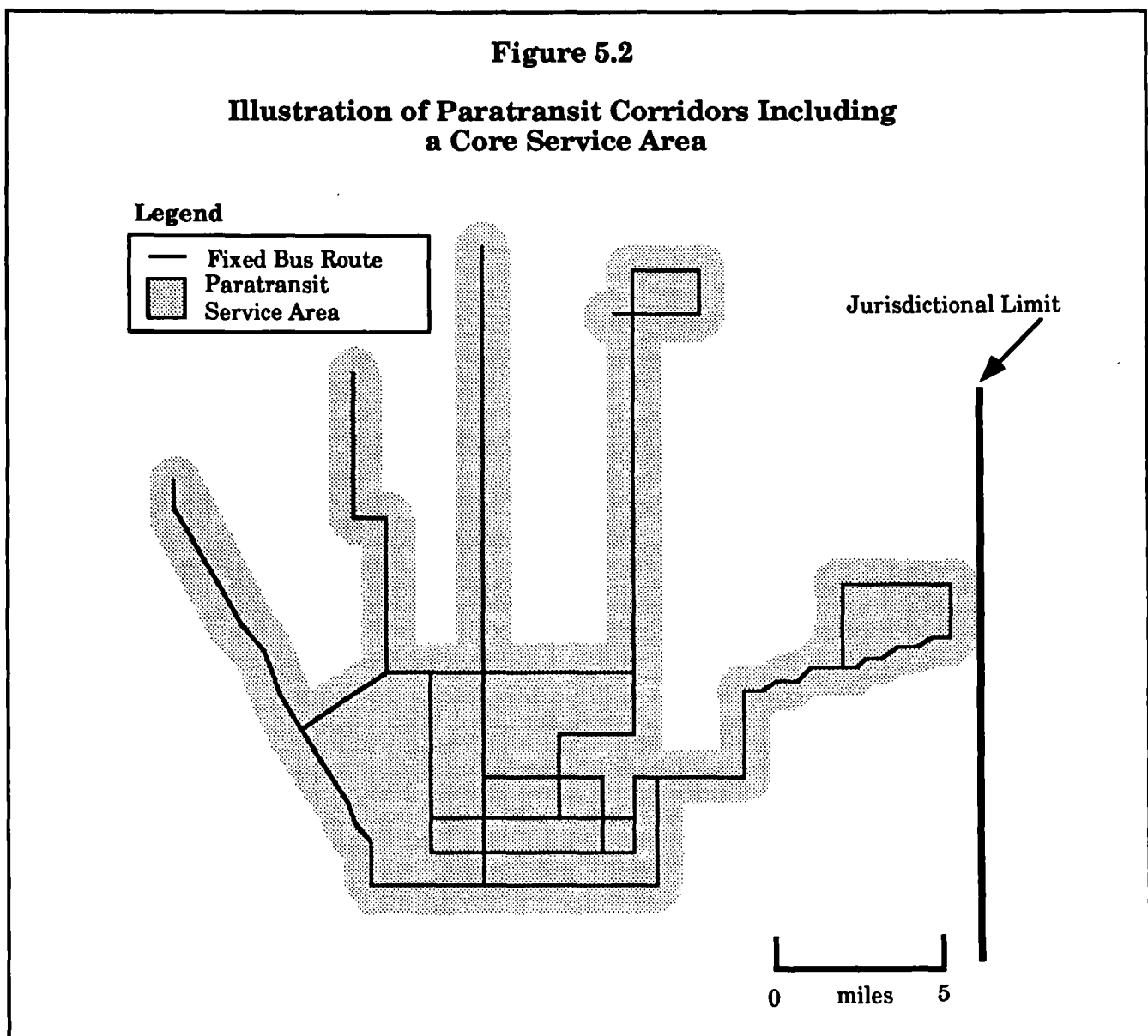


Figure 5.3

**Illustration of Paratransit Service Area
for a Rapid Rail or Light Rail System**

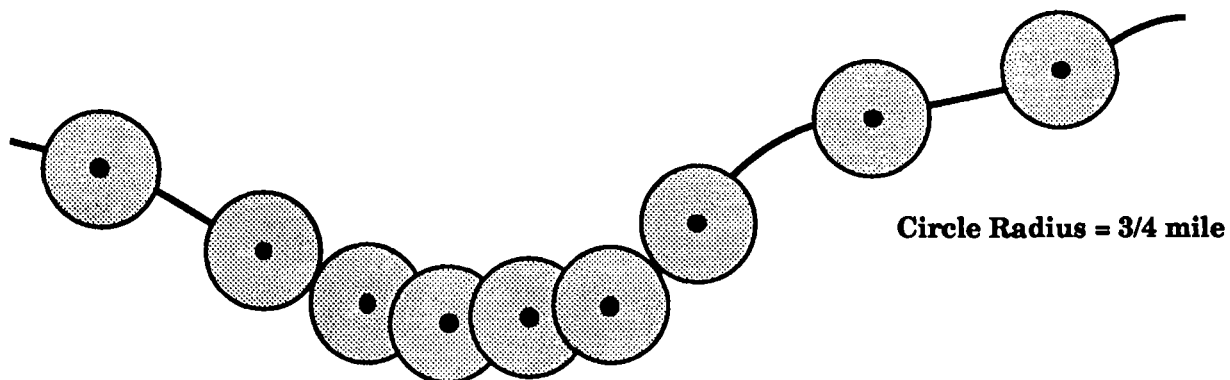


Figure 5.3 illustrates a service area for a rail system. Complementary paratransit service must be provided from any point in one circle to any point in any other circle. Service is not required within the same circle since such a trip would not require use of the rail service. Service also is not required to or from any areas that are not within one of the circles.

In areas where bus and rail service areas overlap, the existence of an accessible bus system does not necessarily relieve the rail operator from responsibility for the provision of complementary paratransit service. Rail service is often quicker and more direct. A similar trip on a bus system can sometimes require one or more transfers. Rail operators can only refer ADA paratransit eligible individuals to accessible bus service if the trip by bus is comparable.

These minimum requirements do not prohibit you from providing service in a

broader area. Many paratransit systems set up in response to the Section 504 regulations offer area-wide service. While you can establish a larger service area, the costs associated with providing this additional service cannot be included in the calculation of undue financial burden should you apply for a waiver.

As noted in Chapter 2, complementary paratransit service does not have to be provided along fixed routes that provide only commuter service - such as commuter bus routes or commuter rail lines.

You also are *not* required to provide service in areas where you do not have legal authority to operate. For example, if one of your bus routes runs within 1/4 mile of the county border and you are legally prohibited from operating outside your county, you are not required to provide service into the next county.

This exception does not apply to political boundaries where there is no legal restriction. If operating within these boundaries is strictly a matter of local policy, such policies must be revised.

If jurisdictional boundaries limit the provision of paratransit throughout the service area, efforts must be made to resolve the problem. You should work with state and local authorities to have your operating rights amended. Agreements with bordering

jurisdictions also should be pursued to prevent these boundaries from limiting travel by persons with disabilities. Whenever possible, establish operating agreements to facilitate

travel between regions. Such agreements will not only make travel easier for riders but will improve the efficiency of paratransit operations.

In many places, the fixed route service areas of public entities overlap. In these cases, each entity is responsible for making sure that complementary paratransit service is available, but separate paratransit services are not required. To the extent possible, coordinate the provision of paratransit service. One agency can contract with the other, or a coordinated brokerage system can be jointly established.

If you collaborate with other entities to provide coordinated service in overlapping or contiguous areas, the level of service provided by the coordinated system must equal the level of service that would exist if separate services were to be operated. For example, if your fixed route service operates on weekends and the other entity's does not, the paratransit service provided in the area of overlap between your systems must operate on weekends. The same approach is to be used for each of the required service criteria described in this chapter. Financial mechanisms for

prorating costs can be established to account for differences between systems.

Response Time

Response time is defined as the elapsed time between a request for service and the provision of service, where the provision of service is measured as the time the vehicle arrives to pick-up the passenger. The regulations require that "**next day service**" be provided. This means that you must accommodate requests for service for

a particular day made anytime during the preceding day.

Requests for service must be taken during those hours that your administrative offices are open (Monday -

Friday from 8-4 or 9-5 for example).

Reservations do not have to be accepted during all of the hours that the system is in operation if service begins very early in the morning or runs late into the evening. You also must arrange to accept reservations on days that the administrative offices are closed if service is provided on the following day. For example, if service is provided seven days a week, but the administrative offices are only open Monday - Friday, provision must be made to accept requests on Saturday for Sunday service and on Sunday for Monday service. Reservation service on these days must be available during hours comparable to normal office hours. The use of answering machines, answering services, or other arrangements is permitted to meet this requirement as long as all scheduling needs of users can be met.

The regulations also require that riders be permitted to place trip requests up to 14 days in advance. This requirement does not preclude you from accepting reservations even further in advance. For certain types of trips, such as subscription trips for work, or trips that have an appointment time known well in advance,

The regulations require that "next day service" be provided. This means that you must accommodate requests for service for a particular day made anytime during the preceding day.

it may be advantageous to do this. The amount of last-minute scheduling can be reduced and riders can conveniently make reservations when appointments become known rather than having to remember to call within a certain timeframe. You should be aware, however, that until you reach a point where capacity constraints are eliminated or are minimal, requests made well in advance can limit your ability to meet needs that are more immediate.

Pick up times also can be negotiated with riders to make scheduling more efficient. Changes in requested departure times of up to one hour can be required. Changes

beyond an hour must be agreed to by the rider. For example, suppose a rider requests an 8:30 a.m. pick up to be at work at 9:00 a.m. and a 5:00 p.m. pick up to return home. You can negotiate a morning pick up between 7:30 and 8:30 a.m. In the afternoon, a pick up between 5:00 and 6:00 p.m. can be negotiated if this would assist in scheduling.

Negotiation of pick up times should consider the rider's schedule and desired arrival and departure times. In the above example, suggesting a 4:00 p.m. pick up knowing that the person works until 5:00 p.m. would not be in keeping with the concept of comparable service.

While not required, the regulations permit and encourage the type of "real time" scheduling used in the taxi industry. The flexibility that users have with this method of operation is much more conducive to the many unscheduled travel needs that are a large part of daily life. Look carefully at this type of scheduling to see if it can work in your area for all or part of your paratransit program. Try scheduling return trips using this method or conduct a limited demonstration during

weekend hours to determine impacts on productivity, demand, and cost.

Fares

Fares charged for complementary paratransit service can be no more than twice the fare for a comparable trip made by a person without a disability on the fixed route system. The comparable fixed route fare is defined as the **full** fare. It is not based on the discounted fare available to persons with disabilities and elderly persons or on any other discounts which may be offered (such as student discounts).

If the fares on the fixed route system vary by zone or length, or by time of day or day of the week, complementary paratransit service

fares can change correspondingly. Similarly, if the same trip on the fixed route system involves a transfer to another line or mode and a "transfer fee," that trip on the paratransit system can include this additional amount. Premium fixed route fares also can be considered.

If it is possible to make the same trip on more than one fixed route mode, the fare for paratransit service is to be set using the mode that would most likely be used by the individual. In determining which fixed route mode would apply, service factors such as schedule availability, trip time, convenience, and transfers must be considered.

Fares cannot vary based on a rider's disability or the mobility aid used. Contracts with providers can specify different rates of reimbursement for different levels of assistance, but the fare charged must not vary from rider to rider.

Fares paid by companion(s) are to be calculated in the same way. Personal care attendants (PCAs) traveling with ADA paratransit eligible riders cannot be

Fares charged for complementary paratransit service can be no more than twice the fare for a comparable trip made by a person without a disability on the fixed route system.

charged. As discussed in Chapter 4, PCAs provide assistance to the rider and are not considered "companions".

Following are examples that illustrate the calculation of paratransit fares:

Example 1: Suppose that the comparable trip on fixed route involves travel on two bus routes and that there is no transfer policy. If the full fare for each bus is \$1.00, the total fare for this trip on the fixed route bus by a person without a disability is \$2.00. The maximum complementary paratransit fare, therefore, is \$4.00.

Example 2: Suppose that the comparable trip on fixed route involves the use of two rapid transit lines. The subway fare is \$1.00 and there is a transfer fee of \$.50.

In this case, the total fare for this trip by a person without a disability is \$1.50 and the maximum allowable complementary paratransit fare is \$3.00.

Example 3: Suppose that rapid rail service is provided from a suburban community to the urban center and that the fare is \$2.00. Bus service is also available for \$1.00 but a trip by bus involves two transfers and takes much longer. Few people use the bus service to travel to the urban center. The complementary paratransit fare can be up to \$4.00 since the likely fixed route mode that would otherwise be used is the rail system.

Fares can vary among different types of paratransit service as long as the highest fare is no more than twice the fixed route fare. For example, if you sell vouchers for immediate response taxi service as a supplement to your "next day" shared-ride van service, vouchers can be priced higher. The shared-ride van fare could be equal to the fixed route fare and a taxi voucher

could be twice the fixed route fare.

The regulations do not preclude you from charging higher fares for paratransit service provided to persons who are not ADA paratransit eligible. You also can develop full-cost rates or other rates of reimbursement for transporting human service agency clients that are higher than complementary paratransit service fares. Informal referrals by human service agency staff should not, however, be treated the same as contract services. For example, a request for service might be made by an agency on behalf of an eligible rider with a cognitive or communication disability. In this case, the complementary paratransit service fare must be used.

Trip Purposes

Requests for all types of trip purposes must be accepted and handled on an equal basis... Complementary paratransit service must be offered during the same days and hours that the fixed route system is in operation.

Requests for all types of trip purposes must be accepted and handled on an equal basis. Prioritizing trips - meeting demand for certain types of trips before accommodating others - is not

permitted.

While this criteria requires different trip purposes to be handled equally, it does not prohibit you from offering "subscription" service. Special provisions for subscription service are discussed in Section 2 of this chapter.

Hours and Days of Service

Complementary paratransit service must be offered during the same days and hours that the fixed route system is in operation. This includes times when the fixed route system is on a limited schedule, such as Sundays, holidays, or late evening or early morning hours.

If more than one type of fixed route service is provided in a given area, the paratransit service must match the days and hours of the more extensive service. In many cities, for example, the subway or

light rail system operates longer hours than the fixed route bus service. Paratransit service must match these longer hours in the area served by the subway or light rail system. It can operate fewer hours in outlying areas which have only fixed route bus service.

Working with other providers, particularly private taxi and van operators, can help you provide this service.

- ☛ Options for brokering portions of your service or operating a user-side subsidy program to meet certain demands are discussed in Chapter 6.

Capacity Constraints

This provision of the regulations prohibits public entities from limiting the amount of complementary paratransit service provided to ADA

paratransit eligible persons. Because of the basic differences between the way that fixed route and paratransit services are provided, it is perhaps the most difficult criterion to understand and “equate”.

Actions and situations that are considered to cause limitations, or constraints, include:

- Policies that restrict, or “cap”, the number of trips provided to an individual;
- Maintaining waiting lists for (non-subscription) trip requests that cannot be accommodated. This includes having a “stand-by” list and either calling individuals on the list when there are cancellations or asking riders to call back on the day of service to see if there were cancellations;
- Operational patterns or practices that significantly limit the availability of service. This includes operating a system in such a way that there are a

substantial numbers of: ***untimely pickups; trip denials; missed trips; or, excessively long trips.***

To determine whether or not your system is capacity constrained under the third category, look for ***patterns and practices*** rather than individual, one-time incidents. You are not responsible for operational problems caused by circumstances beyond your control. Trips provided late or missed because of unanticipated weather or traffic problems would not, for example, constitute a pattern or practice. Repeated incidents caused by poor maintenance or excessively tight scheduling would, however, trigger this provision.

Operational problems also must be ***substantial***. In any paratransit service,

given the complexity of the operation, there are trips that are missed and times when vehicles break down or run late, even with the best management. Occasional late trips or trips that are only late by a small amount of

time would not be counted under this provision. Denying a limited number of trips due to an ***unanticipated*** rise in demand also would be acceptable.

Even after complementary paratransit service has been fully implemented, you may face end of the year budget realities which will lead to capacity constraints that you had not anticipated. Estimates of demand made at the beginning of the fiscal year may be below actual ridership. Trip denial rates may have to increase at year's end if additional funding cannot be provided. In such cases, be prepared to show that a “good faith effort” was made in the original estimation of demand and in seeking additional funding. Also notify the agency to whom you submitted your ADA paratransit plan (your UMTA regional office or state administering agency).

In order to determine whether capacity constraints exist, you need to define what constitutes a "missed" trip, what "on-time" performance means, when a trip has been "denied", and when travel time is too long. For example, is service "on-time" if the pick-up and drop-off are within fifteen minutes of the scheduled time? half an hour? At what point in time does a trip go from being late to "missed"? And, if travel time is twice that of a fixed route trip, is it too long?

The regulations permit pickups to be scheduled up to an hour before or after the requested time. Offering a trip beyond this time should therefore be considered a "denial" of service if the proposed pickup time is unacceptable to the individual.

Other definitions should be developed with the input of persons with disabilities. Table 5.1 offers ways to measure each of these "level of service indicators". It also provides suggested standards that would be comparable to similar service measures on a fixed route system.

Section 2.

Other Equipment and Operating Requirements

In addition to the six service criteria listed above, there are several operating and equipment standards included in the USDOT regulations. Undue financial burden waiver provisions do not apply to these requirements. Compliance is required without exception. Each standard is described below.

No-Show Policies

Section 37.125(h) of the regulations allows the provision of complementary paratransit service to be suspended, for a reasonable period of time, in cases where an individual consistently misses scheduled appointments. This provision does not apply to trips that are missed for reasons that are beyond the individual's control. Scheduling problems, late pickups, and other operational problems must be considered beyond the rider's control.

Table 5.1

Possible Paratransit Capacity Constraint Indicators

Level of Service Indicator	Measure	Standard
Travel time	Time between pick-up and drop-off	Compare to fixed route travel time (same, twice, etc.)
Missed trips	Percent of one-way trips canceled by the provider plus trips provided too late for rider to meet appointment.	Compare to percent of fixed route runs canceled.
Trip denials	Number of one-way trips unable to be scheduled.	Compare to "unmet" fixed route need; potential trips on routes that could be justified by projected fare recovery but are unfunded.
On-time performance	Percent of trips provided within a given window of time (± 15 minutes, ± 30 minutes, etc.)	Compare to fixed route schedule adherence, or define the "window" as a percent of fixed route headway (eg. half the headway).

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You also should differentiate between “no-shows” and canceled trips. If notice is given by the rider far enough in advance to allow you to re-route the vehicle, the trip should be recorded as being canceled.

Persons with disabilities should have input into the development of your no-show policy. Their experience as users of your system will be important in addressing details such as:

- the number and frequency of no-shows that justify a suspension of service;
- the amount of advance notice that riders must give if they want to cancel a trip; and,
- the length of time for which service can be suspended.

Other incentives and disincentives also should be considered. For example, charge individuals (or sponsoring agencies) the amount of the fare or marginal cost of service. Contact individuals if they begin to miss trip appointments to determine if there is a service problem that needs to be corrected. Be sure they understand the no-show policy. Regularly notify all riders through a newsletter or flyer of the importance of canceling trips they do not intend to take.

Before you can suspend service, the regulations require that you notify the individual, in writing, of your intent to suspend service. This notification must cite, in detail, the basis for the proposed suspension and the exact sanctions that will be imposed. Individuals also must be given an opportunity to be heard and to present information and arguments. The availability of this appeal should be explained in the initial notice that is given. The same appeal process used to review eligibility determination denial should be used.

☛ The appeal process is described in Section 5 of Chapter 4 of this handbook.

Types of service

The appropriate use of “on-call bus service” and “paratransit feeder service” is addressed by §37.129 of the regulations. On-call bus service, also known as Call-A-Lift-Bus service, allows a rider to make an advance reservation for an accessible fixed route bus.

☛ Section 3 of Chapter 6 describes this type of service in more detail.

Paratransit feeder service refers to providing an individual with paratransit for only that portion of their trip which they cannot manage.

Paratransit service is to be provided for the entire trip (*i.e.* origin-to-destination) in all but the following cases:

- If an individual is able to use an accessible bus, but the fixed route on which they want to travel is not accessible, on-call bus service may be provided;
- If an individual is able to use an accessible bus, but the closest fixed route is not accessible, feeder service may be provided to another accessible fixed route;
- If a person is not able to get to a station or stop because of a “specific impairment-related condition” (eligibility category 3), feeder service may be provided.

On-call bus service must meet all of the paratransit service criteria, except for the criterion concerning fares. On-call bus service fare must be equal to fixed route bus fares (including discounts).

When feeder service is provided, the rider cannot be double charged for the trip. The total fare cannot exceed the equivalent origin-to-destination paratransit fare. Feeder service can be used as a connector to either end of a fixed route trip. Total travel time, operational feasibility, and inconvenience to the rider should be considered if feeder service is employed. For some trips, it may be more convenient

and less expensive to simply provide origin-to-destination paratransit service. These factors are particularly important if feeder service at both ends of the trip is being considered.

Subscription Service

Subscription service is the practice of providing repetitive trips over an extended period of time without requiring that individuals call to request each trip.

Typically, subscription service is provided for trips to work, work training, education, specialized medical care, or other regular travel needs.

Subscription service has a number of benefits. To the provider, it is a way to more efficiently and appropriately handle repeat trips. To users, it provides the reliability of service they need to be able to make long term commitments - particularly if capacity constraints exist. An inability to request subscription service can be a substantial barrier to employment, continuing education, and job training.

Until capacity constraints are removed, allowing unlimited subscription service can restrict the number of single trip requests that you can accommodate. For this reason, the regulations place a limit on the provision of subscription service. Section 37.133(b) states that:

“Subscription service may not absorb more than fifty percent of the number of trips available at a given time of day, unless there is excess non-subscription capacity.”

This limitation applies to all times of the service day. Subscription service must not exceed half of the trips provided at *any time*, unless all non-subscription requests can be met. In deciding what level of subscription service to provide, you can consider past trip patterns to determine your total capacity and the expected level of non-subscription service requests.

Adjustments are not required on a daily basis. The explanatory section of the regulations offer the following example regarding subscription service:

If, at 8 a.m., a system can provide 400 trips, no more than 200 of these can be subscription trips. If over a long enough period of time to establish a pattern, there were only 150 non-subscription trips requested at 8 a.m., you can begin to provide 250 subscription trips at that time. If non-subscription demand increases over a period of time, such that 50

additional trips are needed to satisfy this demand, and overall capacity has not increased, subscription service must be reduced by 50 trips.

Requests for subscription service can be limited to specific trip purposes. Waiting lists, caps on the number of trips, and other forms of capacity constraints are permissible for subscription service.

Services provided outside the scope of the ADA are not subject to this 50% limit. Transportation provided to human service agency clients as part of a coordinated transportation program, for example, would not have to be restricted if this program was supplemental to the ADA paratransit service.

As discussed in the “Response Time” section of this chapter, adjustments in actual trip time can be negotiated with riders. This is one way to handle capacity problems during peak subscription hours. If acceptable to the rider, non-subscription trips can be moved to times when there is excess capacity.

Because subscription service is not required by the regulations, certain restrictions on its use may be established. Requests for subscription service can be limited to specific trip purposes. Waiting lists, caps on the number of trips, and other forms of capacity constraints are permissible for subscription service.

Equipment Specifications

Part 38 of the USDOT regulations incorporates the "Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles" developed by the Architectural and Transportation Barriers Compliance Board (ATBCB). Subpart B of these specifications establishes standards for vans and buses.

☛ Appendix A of this handbook includes a copy of the standards for vans and buses. Section 5 of Chapter 9 also offers suggestions for purchasing equipment in compliance with the regulations.

Maintenance

Another important aspect of operation is the proper maintenance of access-related equipment. The ADA requires that vehicles be accessible to ***and usable by*** individuals with disabilities. Two sections of the regulations address this issue. Section 37.161 requires that all access-related features, including lifts, ramps, securement systems, signage, and communications systems, be maintained in operating condition. This equipment must be repaired promptly if it is damaged or breaks down.

Section 37.163 requires regular and frequent maintenance checks of lifts. Drivers are required to report lift failures as soon possible. Every effort must be made to repair lifts before the next day of service. If the lift cannot be repaired before the next day of service, the vehicle can be placed back in operation only if a spare is unavailable. Vehicles with inoperable lifts can be kept in service for no more than three days (if the service area population is more than 50,000) and five days (if the service area population is 50,000 or less).

All "common wheelchairs" and their users must be transported. A common wheelchair is a wheelchair that 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.

Have drivers test lifts and inspect securement systems and other access-related features as part of their daily "circle check". Include lift and securement systems in your regular vehicle maintenance program. Pay particular attention to any service and repair information provided by the manufacturer. This information typically specifies key parts that need to be regularly inspected for wear.

Be sure that you or your maintenance contractor have an adequate supply of spare parts readily available. Also maintain an adequate ratio of spare vehicles within your total fleet. One spare for every five or six vehicles is typical, but may vary depending on the age or repair record of equipment you have purchased. Factor vehicle "downtime" into your calculation of the proper percentage of lift-equipped vehicles needed in your fleet to ensure a comparable level of service to those persons who require the use of a lift.

Lift and Securement Use

Section 37.165 establishes the policy regarding the use of lifts and securement devices, accommodation of mobility devices, transfers, and driver assistance. Subsection (b) requires that all "common wheelchairs" and their users must be transported. A common wheelchair is a wheelchair that 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. Wheelchairs are defined to include both three-wheeled and four-wheeled mobility aids. Three-wheeled "scooters" and other non-traditional designs that fit within these standards must be transported.

Most mobility devices fit within these standards. There are some, however, such

as very large or heavy wheelchairs or stretchers, that exceed the weight limit and dimensions set forth in the guidelines. In these cases, the regulations allow you to refuse service regardless of other qualifying functional limitations that the user may have.

Subpart (c) requires that wheelchairs be secured during transport. Use of the securement system can be required as a condition of receiving service. If your vehicle has a securement system which meets the new standards of Part 38 of the regulations, wheelchair users must be transported in a forward-facing or rear-facing position. Wheelchair-users can be transported facing the aisle only on vehicles that are not yet equipped in compliance with the standards in Part 38.

Complementary paratransit service cannot be denied on the grounds that a mobility device cannot be secured to your satisfaction. You should make every effort to obtain state-of-the-art securement systems that accommodate all types of wheelchairs.

You also can contract with area providers who have this type of equipment.

When transporting users of three-wheeled wheelchairs or other mobility devices that pose securement problems, you can **request** that the user transfer to a vehicle seat. The regulations do not, however, allow you to require such a transfer. For some users of these devices, transfers pose a safety risk. Vehicle seats also are not always designed to provide the specific support that an individual may need. You can explain to riders your reasons for requesting a transfer but you must allow them to make the final decision on whether a transfer is appropriate given their particular disability. The proper techniques for assisted transfers also should be part of the training provided to

your drivers.

Finally, the regulations require that a person who cannot enter a vehicle using the stairs but who does not use a wheelchair must be allowed to enter the vehicle using the lift. Equipment specifications included in the regulations require handrails on both sides of the lift for this reason. Also consider keeping inexpensive manual wheelchairs on your vehicles. This will give the rider the option to either stand on the lift or ride in the wheelchair provided.

Accommodating Other Mobility Aids and Life Support Equipment

Two additional requirements concerning mobility aids and life support equipment are contained in §37.167. First, your

When transporting users of three-wheeled wheelchairs or other mobility devices that pose securement problems, you can request that the user transfer to a vehicle seat. The regulations do not, however, allow you to require such a transfer.

operating policies must permit ADA paratransit eligible riders to travel with service animals trained to assist them. Service animals include guide dogs used by persons with vision or hearing impairments, and dogs and other

animals that provide aid to persons with mobility impairments.

Second, persons must be permitted to travel with respirators, portable oxygen, and other life support equipment. Travel with this equipment can only be denied if it would violate rules concerning the transportation of hazardous materials (49 CFR Parts 100-199).

In general, the transport of common types of portable life support equipment is not prohibited. Cylinders of oxygen used by passengers for health reasons, for example, are not subject to the Hazardous Materials Regulations.

☛ For guidance on other types of equipment, contact the USDOT's Office of Hazardous Materials Regulation at (202) 366-4479.

Attendant Policies/Refusing Service

As noted in Section 7 of Chapter 4, personal care attendants (PCAs) must be permitted to accompany ADA eligible riders and are not considered companions. The regulations permit you to require individuals to indicate the need to travel with a PCA when they request eligibility certification.

You cannot require that an individual travel with an attendant. If you feel that a rider would benefit from the aid of an attendant, this can be suggested.

Service cannot be refused, however, if the person decides to continue to travel independently.

Service can only be re- fused if a rider engages in "violent, seriously disruptive, or illegal conduct" [§37.5 (h)]. Seriously disruptive conduct does not include behavior or appearance that only offends, annoys, or inconveniences other riders or employees. In keeping with the concept of comparability, your fixed route and paratransit policies in this area should be consistent.

Communications and Public Information

Requirements for communications and information are contained in §37.167(f). Adequate telephone capacity, both voice and TDD, must be provided to enable users to schedule service and obtain information. Phone lines that are constantly busy or require users to hold for long periods of time could be construed as a limitation on service and a form of capacity constraint. All material made available to applicants and users of your paratransit service, including general information brochures, application forms, rider handbooks, and occasional bulletins, must be available in accessible formats

such as large print, tape, and braille.

Accessible information must be available ***upon request***. Work with your consumer advisory committee or local agencies to determine the formats that will be most helpful. Try to anticipate the demand for different types of material. Keep a regular

supply of frequently used public information available in these formats. Accommodate requests for other information or formats as soon as possible.

This requirement also applies to marketing and public information programs. Utilize closed captioning when

advertising on television. Radio advertising should be used to reach individuals who are vision impaired.

Reservation offices and administrative office should be equipped with a telecommunication display device (TDD) to enable persons with hearing or speech impairments to request trips, cancel or update requests, or obtain other information or assistance. Be sure that any alternative scheduling arrangements you make to meet the "next day" response time criterion can be used by persons with hearing or speech impairments.

☛ Independent Living Centers (ILCs), associations for persons with visual impairments, and vocational rehabilitation offices can help you get information prepared in braille. Braille printers and computer software that converts wordprocessing files to braille symbols are available at a reasonable cost.

☛ ILCs and associations for persons with hearing impairments are a good source of information about TDDs and can help train your staff in their proper use. Companies that sell hearing aids also often sell TDD equipment.

☛ Appendix E of this handbook contains information about braille software and printers and tips for making voice and print material accessible. Information about ILCs and associations for the vision and hearing impaired in your area can be obtained by calling the national organizations listed in Appendix K.

Training

Section 37.173 of the regulations establishes a training requirement for all ADA related transportation services, including paratransit and fixed route services provided by public as well as private entities. It states that:

“Each public or private entity which operates a fixed route or demand responsive system shall ensure that personnel are trained to proficiency, as appropriate to their duties, so that they operate vehicles and equipment safely and properly and treat individuals with disabilities who use the service in a respectful and courteous way, with appropriate attention to the differences among individuals with disabilities.”

Adding lifts and other equipment to vehicles is only the first step in providing transportation service that is truly accessible. A well-trained workforce is essential to ensure that this equipment is used correctly and that a good level of service is provided.

Adding lifts and other equipment to vehicles is only the first step in providing transportation service that is truly accessible. A well-trained workforce is essential to ensure that this equipment is used correctly and that a good level of service is provided.

As the regulatory language indicates, training is to be appropriate to the duties of each employee. For example, drivers, dispatchers, and administrative personnel will need more extensive instruction in understanding different types of disabilities than mechanics.

Training is to be provided “to proficiency”.

This suggests that your training programs must be comprehensive and that you must establish methods of testing each employee’s understanding of the material to ensure that they are fully qualified to serve passengers

with disabilities.

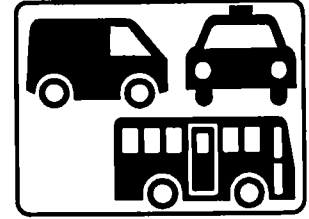
It is strongly recommended that you involve persons with disabilities and disability organizations in the development of your training programs. In addition to being an excellent source of information, this involvement will improve the working relationship and level of understanding between your agency and the disability community.

Given the differences that exist in the size and type of transportation programs across the country, the regulations leave the exact design of training programs to each entity. There are, however, several types of training that need to be considered.

☛ Section 2 of Chapter 9 recommends elements of a training program and provides references for training material.

6

Service Models and Options



There are many different ways that paratransit service can be provided. This chapter provides a basic understanding of these various models. Recommended sources for more detailed information also are included.

Before presenting the different service models, the important issue of coordination with other agencies and providers is discussed. Section 1 discusses coordination with other public entities in your area who also are responsible for the provision of complementary paratransit service. Section 2 offers suggestions for coordination with human service agencies.

Having an understanding of all of these options is important for both new and existing systems. If you will be starting a new paratransit service to meet the complementary paratransit service requirements, you should select a model that best suits your local conditions and needs. You need to consider the various options if you are facing an undue financial burden and will be submitting a request for a waiver as part of your plan. UMTA's review of your waiver request will include a review of the service model you have selected, the level of coordination you have achieved, and the operating procedures you have established. If it appears that alternative approaches can be taken to lower costs or to increase the level of service provided, your request for a waiver may be rejected.

Section 1.

Coordination with Other Providers of Complementary Paratransit Service.

Many public entities which operate federally-funded transit systems now meet Section 504 requirements by operating only accessible fixed route service. Other public entities which operate fixed route services without USDOT funding (such as public hospitals, or cities and towns) also may be considering paratransit services for the first time.

As the number of entities responsible for providing paratransit service increases, so does the likelihood that service areas will overlap. To avoid costly duplication of effort, the regulations strongly encourage public

entities to coordinate the provision of complementary paratransit service.

If your agency does not receive federal transit assistance and will be starting a new paratransit service, contact the public transit agency in your area. Explore options for purchasing service through their paratransit program or otherwise combining efforts.

If your agency does not receive federal transit assistance and will be starting a new paratransit service, contact the public transit agency in your area. Explore options for purchasing service through their paratransit program or otherwise combining efforts.

If you are the public transit agency for your area, identify other public entities providing fixed route service in your area as part of your planning process. Consider preparing a joint plan that meets all of the requirements within your region.

The provision of coordinated services is often more cost-effective than the operation of separate services. Duplication of scheduling and administrative functions is eliminated. Fewer total vehicles are required as opportunities for grouping trips increase. Coordination also leads to the provision of better service to persons with disabilities. Transfers between service areas are more easily arranged and confusing service boundaries and restrictions are eliminated.

One approach to coordination where

service areas overlap is to have a "lead" agency (e.g. the public transit agency) operate the service and have other entities purchase service. The amount of financial support provided by each participating agency could be determined by the number of vehicle miles of fixed route service provided by each in the area where services overlap.

Another approach is to clearly delineate areas of service and then develop effective methods for handling travel between these regions. Each agency would be responsible for meeting all service requests within its area under this approach. Regular communication between scheduling offices can be used to arrange for out-of-area travel.

Section 2.

Coordination with Human Service Agencies

Human service agencies spend far more on client transportation each year than transit agencies spend on public paratransit services.⁵ You should involve

these organizations, as well as cities and towns or other entities now providing transportation to persons with disabilities, in your ADA paratransit service plan.

You do not need to duplicate services that are already being provided. A key provision of the ADA (Section 223) allows you to include the transportation services provided by other entities in your paratransit plan. You only need to supplement existing services where they do not comply with the service criteria for comparability.

For example, a community action agency may already be providing demand responsive transportation in the area served by your fixed route system. This existing service may meet all of the paratransit service criteria but may be

capacity constrained. Your ADA paratransit plan would not need to propose a new service. Instead, you could describe this existing program and indicate your intent to supplement their funding to allow for

unconstrained travel by ADA paratransit eligible persons.

If other transportation programs are included in your plan, you must ensure that service continues to be provided in compliance with the regulation. An ongoing relationship, which would allow for continuing oversight and help avoid unexpected changes in service design, is recommended.

Benefits of Coordination

While the regulations do not ***require*** that you develop your plan in cooperation with other agencies, doing so can be helpful in a number of ways. Coordination with other agencies and providers can reduce the cost to your agency of providing required services. Transportation services that are coordinated are also easier for consumers to understand and use.

If you are the public transit agency for your area, identify other public entities providing fixed route service in your area as part of your planning process. Consider preparing a joint plan that meets all of the requirements within your region.

Coordination also eliminates costly duplication of services. The ADA paratransit eligible population overlaps with many other populations. Many persons are elderly. Others are clients of vocational rehabilitation programs or programs for persons with cognitive disabilities. Agencies which serve these other populations very often provide transportation services to their clients. If your paratransit service focuses only on a small part of each of these client groups and is not coordinated with the larger agency transportation program, duplication of services

may result and public resources may be wasted.

Finally, developing a cooperative working relationship with other funding agencies will increase the chance that

existing providers will maintain their level of effort. If you begin duplicating other services and do not involve other providers in your planning efforts, it is very likely that clients of other programs will be referred to your system.

Ways to Coordinate

Coordination of services can be achieved in many different ways and at many different levels. It can be as simple as a well organized information and referral network with each party committed to meeting certain needs. It can involve cooperative efforts in specific operating functions such as driver training or vehicle maintenance in order to ensure a consistent level of quality service. More formal efforts can include jointly setting up a "brokerage" service to coordinate the activities of each operator and direct trips to the most appropriate provider. Or it can involve consolidation of services with one agency assuming a lead operating role and other agencies purchasing service from this provider.

Selection of the appropriate model for your area will depend on a number of factors.

A consolidated operation with purchase of service agreements is appropriate if the bulk of services are presently being provided by a large and capable provider. Brokerage may be appropriate if several capable providers exist and a decision is made to maintain independent operations. Less formal information and referral networks may be appropriate for smaller agencies which lack the resources to buy into a central system or share the cost of a broker.

In developing plans for coordination, you should distinguish between programs that

have a longstanding commitment to transportation (and possibly a requirement or mandate that transportation be provided) and those programs that are

more local and discretionary in nature. Examples of formal, longstanding programs include: Title XIX (Medicaid) transportation for medically-related trips; Head Start transportation; Vocational Rehabilitation transportation for work training and education; and, in some states, the transportation of persons who are mentally retarded to day programs. Less formal programs include transportation services for older persons operated by councils on aging, or transportation provided by individual community residence programs.

Availability of funding and maintenance of effort are typically less of a concern for formal, longstanding programs. It is often possible to achieve coordination with these funding sources by simply qualifying as a vendor to provide the service (or having your operator apply and qualify) and billing the agency once service has been provided. The major issues when working with these funding sources tend to be regulatory issues and process issues such as recordkeeping and billing. Because these programs represent large dollar expenditures and are likely to continue, be

sure to pursue these resources at a minimum.

Working with less formal, discretionary local programs can be more difficult. Many of these programs utilize general staff, part-time workers, and volunteers to operate their transportation services. Administrative costs and overhead expenses may be built into the agency's total budget and may not be readily identifiable as transportation expenditures. Savings from coordination can be hard for such programs to identify. Instead, pursue coordination with these agencies as a way to improve the level of service to clients or reduce the administrative burden to the agency. The provision of transportation by these agencies is also often a political "turf" issue.

Keys to Coordination

There are several keys to developing coordinated transportation services. It is important to:

(1) ***Develop political support for coordination.*** Other agencies are more likely to respond to the idea of coordination if local political consensus has already been developed. Agencies also are less likely to reduce their efforts and support for client transportation if there is a public recognition that everyone needs to participate and do their fair share. If this support does not already exist, work with state, county, and local officials and stress that a cooperative approach to meeting the transportation requirements of the ADA is in the public interest as well as the interest of human service agencies and their clients.

(2) ***Develop a working relationship with human service agencies.*** A recent report which examined coordination efforts in Alabama, Georgia, and North Carolina noted the importance of developing trust and lines of communication between agencies.⁶ Regular meetings to discuss the transportation needs of clients can build important personal and institutional relationships.

(3) ***Consider the total transportation needs of other agencies.*** Don't approach coordination as a way to meet just *your* transportation requirements. A coordinated system must consider the total transportation needs of all participants. Another agency's client population, service area, or hours of service may be broader than your own. There may be little reason to become involved in a coordinated service if participants will still need to operate a separate service to meet remaining needs.

Expanding the system to meet these other needs does not necessarily mean that the entire service must be expanded. Broader eligibility standards, service area, hours or other policies can apply only to contracts with particular agencies.

(4) ***Be flexible in the design of contract services.*** The procedures you employ in the operation of your general public service may not always be appropriate for client transportation services. Agencies may need the flexibility to make last-minute changes in the schedule or add-ons on the day of service. They may need guaranteed/dedicated hours, group

Keys to Coordination

1. Develop political support for coordination
2. Develop a working relationship with human service agencies.

3. Consider the total transportation needs of other agencies.
4. Be flexible in the design of contract services.

5. Be flexible in developing rates.

services, or monitors to travel with certain clients. Keep in mind that as a contractor paying for the full cost of service, agencies should be able to set service standards and procedures that best meet their needs. Also keep in mind that while agency staff may not be transportation professionals, they do know their clientele and their needs. Be open to accommodating these needs in contract negotiations. Certain special requests may not always fit well into your coordinated service plan and may be more expensive to meet. In these cases, calculate the extra cost involved and let the agency decide if the special requests are worth the price. You may then be able to offer alternative approaches that are more in keeping with your standard service plan.

(5) *Be flexible in developing rates.*

There are many different ways to calculate rates. The most common are cost/trip, cost/hour, cost/vehicle-mile, and cost/passenger-mile. Not all of these methods for calculating cost are appropriate to all types of service. Offering agencies rates that are appropriate for their type of service and which equitably allocate total costs will increase your chances of developing coordinated services. Cost/hour and cost/vehicle-mile are more appropriate for contracts where vehicle time is dedicated. Cost/trip and cost/passenger-mile should be used in shared-ride services. Rates also will change depending on the type of service. The cost/trip of group transportation will be much lower, for example, than the cost of individual service. There are a number of good publications which describe different approaches to coordination and offer other more detailed suggestions.

☛ Several are included in "Sources of Information and Technical Assistance" which is Appendix K.

☛ Best Practices in Specialized and Human Services Transportation Coordination (Report # DOT-T-89-20), prepared by the Center for Systems

and Program Development, Inc. and jointly funded by the U.S. Department of Transportation and the U.S. Department of Health and Human Services is a recent publication that may be particularly helpful. In addition to describing several successful programs, it provides a list of federal human service funding for transportation.

Section 3.

Service Models

There are a number of ways in which paratransit services can be provided. In general, you can provide service by:

- operating your own paratransit fleet (***direct operation***);
- setting up a ***brokerage system*** that utilizes providers in the area;
- establishing a ***user-side subsidy*** program; or
- creating a system that is a ***combination of the above models***.

There are also options for making your fixed route service more accessible to persons with disabilities. A "Call-A-Lift-Bus" program can provide an alternative for persons able to use accessible buses in cases where the routes are not yet accessible. ***Service routes*** can be designed to better target your fixed route system to the needs of persons with disabilities.

Services also can be developed that combine the regularity of fixed route operation with the flexibility of demand responsive service. ***Route deviation*** and ***point deviation*** systems, in which rider-initiated requests determine exact routes, are two examples. Route deviation systems are considered demand responsive service by the USDOT regulations.

Following is a brief description of each of these paratransit and fixed route service models.

Direct Operation

Direct operation is perhaps the most common type of paratransit service. Vehicles can be operated ***in-house***, or by another public agency or private company ***under contract*** to you. Depending on the size of the service area and the total population to be served, the fleet can be either centrally controlled or scheduled and dispatched from sub-area offices. If "satellite" centers are employed, the operational issue of transfers between these areas should be addressed.

With direct operation, coordination is usually handled by having other agencies purchase trips or hours of service from you or your provider.

An ability to adjust the supply of service is a major consideration if a direct operation model is selected. Seasonal fluctuations in demand, as well as general trends in ridership, need to be carefully recorded so that an adequate supply of drivers and vehicles are available. If the service is contracted out, the contract must be flexible enough to allow supply to be adjusted throughout the term.

☛ A case study of direct operation is provided in Appendix G.

Brokerage

The second alternative, brokerage, is becoming more popular as a way to effectively organize the transportation services provided by existing agencies and operators into a single, coordinated system. Brokerage usually involves establishing a central administrative entity, the broker, which matches individual service needs as well as agency funding and contracts with providers in the area. By centralizing the administrative function of contracting for service, similar or complementary needs can be matched and duplication of effort

minimized. The broker can, for example, combine the mid-day nutrition transportation needs of a senior service program with a work training program that requires morning and afternoon service. Similarly, the broker can arrange for evening or weekend transportation by identifying providers whose vehicles are available at those times.

In brokerage programs, eligible riders can either be instructed to call designated operators or can have their requests channeled through a central scheduling office.

The broker also can ensure consistent driver training, monitor other aspects of service quality, and centralize billing and recordkeeping activities.

Another advantage of brokerage is that a number of local providers can be involved in the provision of service. As the demand for service increases or decreases, the supply of service can be adjusted. Involving a number of providers also maintains a level of competition that can act to help control costs.

Coordination of service can be achieved in a brokerage program by either getting other agencies to also channel their services through the broker or by involving human service transportation providers as operators in the system.

☛ Several examples of brokerage projects are described in Best Practices in Specialized and Human Services Transportation Coordination which is cited in Section 1 of this chapter. One of these case studies is included in Appendix G. Other references are contained in Appendix K.

User-Side Subsidy

User-side subsidy represents a third type of service. Like brokerage, user-side subsidy utilizes existing transportation providers in the area.

Trip tickets or vouchers, which are used in place of a cash fare, are sold to eligible users of the service. Riders then can call participating transportation operators. Often, a number of operators are involved, including taxi companies and private van operators, as well as public or non-profit providers. Riders call the provider of choice and pay for service using their trip tickets or vouchers. Provider agencies then redeem vouchers with the administering agency for payment.

A recent review of paratransit systems across the country found that many user-side subsidy programs are substantially less expensive than conventional paratransit models, particularly in larger urban areas.⁷ By utilizing private taxi and van providers, you also can benefit from the extended hours of operation and minimum advance notice requirements that these systems typically employ.

User-side subsidy programs also are well suited to handle fluctuations in demand. Because the public transit service is often part of a larger general public taxi or van operation, the number of vehicles dedicated to the service can be quickly adjusted depending on the expressed demand.

If strict ADA paratransit eligibility standards are used, however, and individuals are eligible for certain trips and ineligible for others depending on the availability of accessible fixed route service (see Section 3 of Chapter 4), a user-side subsidy model will require voucher systems or eligibility verification systems that are more complex than have typically been used to date. Operators will need to be able to determine whether or not a requested trip is eligible. This additional administrative expense may off-set some of the cost advantages that have been associated with this model.

Appendix G describes the user-side subsidy program operated in Milwaukee, Wisconsin. Additional information about user-side subsidy programs and how to plan and operate them is available in *User-Side Subsidy Programs for Special Needs Transportation: A Planning Handbook* (see Appendix K).

The Public Private Transportation Network (PPTN) program is also a good source for assistance for developing user-side subsidy programs utilizing private providers. The PPTN can be contacted by calling 1-800-522-PPTN.

Combined Models

Finally, services can be provided by

By utilizing private taxi and van providers, you also can benefit from the extended hours of operation and minimum advance notice requirements that these systems typically employ.

developing a system that combines the above models. For example, trip requests that cannot be accommodated by a direct operation can be brokered to other local

providers. In this way, fluctuations in demand can be met without maintaining a high ratio of spare vehicles. Direct operation or brokerage systems also can be supplemented by user-side subsidy programs to provide late night or weekend service or to take advantage of inexpensive taxi service for those eligible individuals who are ambulatory (accessible taxi programs using low floor, ramp-equipped minivans also should be considered).

Selecting an appropriate model for your area will depend on a number of local conditions and factors. Direct operation may be most appropriate if few other providers exist or if other agencies are unable to share the cost of a broker. Brokerage may be best if a number of well-established human service transportation providers exist or if your agency does not wish to assume the administrative responsibilities associated

with a direct operation. A user-side subsidy program may be most appropriate in larger urban areas where numerous taxi and other private providers are available.

Call-A-Lift-Bus Service

Several operational improvements are possible which allow fixed route services to better meet the needs of persons with disabilities. It is recommended that you consider these improvements as an integral part of your complementary paratransit planning process. Making your fixed route service more available to and useable by individuals with disabilities will reduce reliance on your paratransit system.

One possible improvement is on-call fixed route bus service, also commonly referred to as Call-A-Lift-Bus service. These services are meant to maximize the availability of lift-equipped buses before the fixed route fleet is fully accessible. Basically, Call-A-Lift-Bus programs allow individuals to call ahead to request that an accessible bus be used on a particular route at a time when they need to travel. Following is a brief description of two established and successful programs:

Washington, D.C. - The Washington Metropolitan Area Transit Authority (WMATA) has been providing On-Call lift bus service since 1982. The program was started at that time using 149 accessible buses out of a total fleet of about 1,200 vehicles. Individuals who do not live on one of WMATA's 16 "dedicated" routes (on which all vehicles are accessible), can call and request an accessible bus any time up to 3 pm on the day before service. Calls are received by the Metro-Bus On-Call Service Office, which was created to administer the program. This office is part of the Department of Bus Services, the office within WMATA which is responsible for fixed route bus operation. At 3 pm each

day, the supervisors of WMATA's 10 bus garages are notified by phone of all requests for service on routes covered by that garage. This telephone notification is followed-up with written notification by 5 pm each day. WMATA presently provides about 3,100 on-call lift-bus trips each month using a fleet of 555 accessible buses.

Boston, Massachusetts - The Massachusetts Bay Transportation Authority (MBTA) began offering Call-A-Lift-Bus service in 1986 using 200 accessible buses (or about 20% of the total fleet at that time).

Requests for service are taken by the Office of Transportation Access, which also manages the local paratransit service and works on other access issues

within the MBTA. This office is part of the MBTA's Operations Directorate. Calls must be received by 1 pm on the day before service. As request forms are completed, they are FAXed to the District Supervisors at one of the MBTA's 7 bus garages. An accessible bus is then dispatched at the time requested. The following bus on that route is also accessible in case the person misses the first bus or the lift on the first bus malfunctions. Approximately 250 rides are provided per month on the system using 473 accessible buses. The MBTA also has 32 "dedicated", fully accessible routes in its system and reports that on-call use has decreased as the number of dedicated routes has increased.

Both of these systems reported that data from their Call-A-Lift-Bus programs helped them select new "dedicated" routes as additional lift-equipped buses were added to the fleet.

➤ Appendix G includes a brochure that describes the MBTA's Call-A-Lift-Bus program.

Making your fixed route service more available to and useable by individuals with disabilities will reduce reliance on your paratransit system.

Route Deviation and Point Deviation Services

Reviewing fixed route alternatives may be particularly important in rural and small urban areas. It may be cost-effective in some areas to consider replacing existing fixed route service with a general public demand responsive service. Another alternative which may be appropriate in these areas is route deviation or point deviation service. In route deviation systems, vehicles operate along a fixed route and follow a set schedule. Vehicles can deviate from the set route, however, if a request is made by a rider. After deviating from the route, vehicles return to the same point to continue their run. Point deviation systems are similar but are even more flexible. In these systems, specific stops (pick-up and drop-off "points") are established and the vehicle arrives at these stops at designated times. There is no set route between these stops, however, and the vehicle operates in a door-to-door mode as required to meet passenger needs.

The amount of deviation from routes and schedules permitted in these systems can vary. The USDOT regulations do not specify what level of user-initiated flexibility is needed for these systems to be considered demand responsive rather than fixed route service. Several issues that should be considered, however, include:

- permitting vehicles to deviate far enough from either side of the fixed route to meet the needs of riders;
- allowing vehicles to leave the route for pick-ups as well as drop-offs. This may require advance reservations or a communication system that would permit rider requests to be transmitted to the driver en route;
- establishing other service policies that provide equivalent service. For example: allowing user-initiated deviations during all days and hours of operation and for all trip purposes.

Service Routes

The development of "service routes" is another alternative that can enhance conventional fixed route operation. Service routes are designed specifically to reduce the distances that elderly persons and persons with disabilities must travel to get to bus stops. Particular attention is given to the travel patterns of persons with disabilities. Routes are designed using information from existing paratransit service, accessible housing information, and other available data. While routes are designed around the travel needs of persons with disabilities, they are open to the general public. Service routes can be overlaid on the existing fixed route network or conventional routes with low ridership can be replaced with service routes. Smaller accessible vehicles are used on these routes which can be operated either as conventional fixed route or as route deviation service. Service routes also can be designed to provide feeder service into the rest of the fixed route network.

In Boras, Sweden, where the concept first was developed, the introduction of service routes reduced the use of the local paratransit service by 40-50%.

☛ An article about this concept, which recently appeared in a *Project ACTION Update*, a newsletter of the National Easter Seal Society, is included in Appendix G.

Travel Training

Use of accessible fixed route services also can be greatly improved by consumer travel training programs. Training can be offered by employees of your agency or you can work with or contract with local disability groups to provide this service. Peer training, where experienced riders of the fixed route system train other persons with disabilities has been found to be particularly effective.

☛ An overview of different types of travel training programs is provided in Appendix G.

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Twelve grants to develop local travel training efforts were recently funded through Project ACTION, an UMTA-funded program administered by the National Easter Seal Society. One goal of this program is to develop materials that can be used by transit providers nationwide. A list of these projects is contained in Table 6.1.

Projects are scheduled to be completed in early 1992 and a national conference to present results is planned.

☛ If you are interested in establishing a travel training program in your area, you can contact Project ACTION by calling:

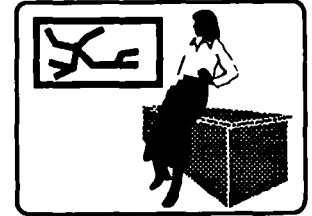
**(202)347-3066, or
TDD (202)347-7385.**

Table 6.1

Consumer Travel Training Projects Funded by UMTA and the National Easter Seal Society as Part of Project ACTION
• Massachusetts Coalition of Citizens with Disabilities, Boston, Massachusetts. • Buckeye Paralyzed Veterans of America, Euclid, Ohio. • San Antonio Independent Living Services, San Antonio, Texas. • Regional Transportation Commission, Reno, Nevada. • Ecosometrics, Bethesda, Maryland. • Goodwill Industries of Mid-Eastern Pennsylvania, Shillington, Pennsylvania. • Access-A-Ride, New York, New York. • League of Human Dignity, Omaha, Nebraska. • The Kennedy Center, Bridgeport, Connecticut. • Focus on Community Understanding and Services, Columbus, Ohio. • Easter Seal Society of Utah, Salt Lake City, Utah. • Community Council of Phoenix, Phoenix, Arizona.

7

Developing Your Plan for Complementary Paratransit Service



As noted in Chapter 2, each public agency that operates a fixed route public transit service is required to develop and submit a plan indicating how and when complementary paratransit service requirements will be met. This chapter offers guidance on the preparation of paratransit plans. Regulatory requirements are presented and a methodology for developing plans is suggested.

Section 1.

When and Where to Submit Plans

Individual Plans

Plans that apply to only one entity must be submitted by January 26, 1992. Plans must be submitted to the UMTA Regional Office for the area or the state administering agency (DOT or other designated state agency) as indicated in Table 7.1.

- ☛ A list of the UMTA Regional Offices is provided in Appendix K.

Plans must be updated annually and submitted by January 26 of each year to the appropriate agency.

Joint Plans

Where the service areas of two or more public entities overlap or are contiguous, a coordinated planning process is encouraged. A single plan may be developed and submitted as a joint effort. All elements of the plan that can be developed by January 26, 1992 should be submitted at that time. Portions of the

plan that cannot be completed by that time must be submitted by July 26, 1992. If a complete plan is not submitted by January 26, 1992, the following certifications *from each entity* must be included with the incomplete plan:

- (1) A certification that the entity is committed to providing ADA paratransit service as part of a coordinated plan; and,
- (2) A certification that it will maintain current levels of paratransit service until the coordinated plan goes into effect.

☛ Copies of these certifications are provided in Appendix C of this handbook.

Joint plans also should be submitted as indicated in Table 7.1.

Table 7.1

Instructions for Submitting Paratransit Plans

Type of Agency	Submit Plan to:
A Section 18 recipient.	State Administering Agency
A small urbanized recipient of Section 9 funds administered by the State.	State Administering Agency
Participants in a joint plan in which all participating entities are eligible to submit their plans to the State.	State Administering Agency
Participants in a joint plan not covered above.	UMTA Regional Office
A direct recipient of Section 9 funds.	UMTA Regional Office
Any public entity that is not an UMTA recipient and is not covered above.	UMTA Regional Office

Section 2.**Survey of Existing Services**

Each entity submitting a plan must conduct a survey to identify all paratransit or specialized transportation services for ADA paratransit

eligible individuals in the area. This includes services provided by individuals; other public entities; private, for-profit companies; and, private, non-profit organizations.

Section 5 of this chapter offers suggestions for conducting this survey.

Section 3.**Public Participation**

Plans must be developed *and* implemented in close cooperation and consultation with persons with disabilities and local disability groups and organizations. The regulations require

public participation *in the development of the plan* and the establishment of a mechanism for *ongoing participation*.

Five requirements for participation in the development of the plan are listed in §37.137. First, *outreach* efforts must be

made to let persons who will be affected know about the planning process and to invite their participation. Key individuals and organizations in the

area must be identified. Mailing lists and other appropriate means of notifying these persons and groups must be developed.

Second, *consultation with individuals with disabilities* must begin at an early stage of the planning process and must continue throughout the development of the plan. The exact method used to consult with individuals is not specified. You can work with an existing consumer advisory committee, establish a new working group or committee, or use a less formal means

of reviewing planning documents. If a formal committee or working group is used, your outreach efforts should include providing widespread notice of these meetings. If a less formal method is used, individuals should be kept informed as the plan develops and should be instructed on how to offer their comments. All planning information not protected by privacy laws must be available for review throughout the process.

Third, an **opportunity for public comment** must be provided before the plan is finalized. The draft plan should be available in accessible formats upon request.

Fourth, at least one **public hearing** is required. Adequate notice of the hearing must be given. Local newspapers, radio stations, consumer newsletters, and other special interest information outlets must be used to ensure that consumers, including those who have vision or hearing impairments are notified. To meet the public comment requirement described above, include in your notice of public hearing a statement that the plan is available for review. Have an adequate supply of large print, tape, and braille versions available **prior** to giving this notice.

If your plan proposes an implementation period greater than one year, there is a **special public hearing requirement**. In this case, input must specifically be requested on the phase-in of each required service criteria. Information which clearly describes the proposed implementation of milestones should be presented at the public hearing for comment.

Public participation must continue after the plan is submitted. Individuals with disabilities and disability groups should remain involved in the implementation, assessment, and revision of plans. The exact form of this ongoing participation is not specified in the regulations.

Section 4 of Chapter 8, "Keys to a Successful Public Process", presents

several options. This chapter also offers a number of suggestions for making your public process positive and productive.

Section 4.

Contents of the Plan

Section 37.139 of the regulations provides a detailed listing of items that must be included in each paratransit plan. Eight general categories of information must be provided. These are:

- (1) General information about the entity or entities submitting the plan;
- (2) A description of the fixed route system as of January 26, 1992;
- (3) A description of existing paratransit services;
- (4) A description of the proposed complementary paratransit service;
- (5) Information about the proposed eligibility determination process;
- (6) A description of the public participation process used to develop the plan;
- (7) A discussion of efforts to coordinate the provision of service with other public entities in overlapping or contiguous areas; and,
- (8) the certifications and resolutions contained in Appendix C of this handbook.

The above information must be provided whether or not you request an undue financial burden waiver. If a waiver is requested, documentation showing that an undue financial burden does or will exist must be included in the plan. A description of the paratransit service that will be provided if the request is denied also must be included.

☛ Guidance on the preparation of waiver requests is provided in Appendix F of this handbook.

Table 7.2 provides a detailed listing of the required contents of paratransit plans.

Table 7.2: Paratransit Plan Contents

Section 1 - *General Information about the Entity or Entities Submitting the Plan*

- Name and address of each entity.
- Contact person for each entity with a telephone number (and a FAX number).

Section 2 - *Description of the Fixed Route System*

- Population served, service area, route structure, days and hours of service, and fare structure (include maps and tables, as appropriate).
- Number of vehicles in service (including contracted service).
- Percentage of fleet that is accessible and percentage of routes that are accessible (distinguish between vehicles meeting Part 38 specifications and those which do not).
- Any other information relevant to comparing fixed route and paratransit service.

Section 3 - *Description of Existing Paratransit Services*

- Service provided by the submitting entity (eligibility requirements, service area, response time, fares, restrictions on trip purpose, hours and days of service, capacity constraints, fleet information, ridership information).
- Service provided by others in the area (same information as above).

Section 4 - *Description of the Proposed Complementary Paratransit Service.*

- An estimate of demand and a brief description of the estimation methodology.
- Analysis of differences between current service and required service.
- Description of planned modifications to existing paratransit and fixed route service.
- Description of how the proposed paratransit service will meet each of the six service criteria.
- Timetable for implementation, including milestones that can be objectively measured each year.
- A five year capital and operating budget.

Section 5 - *Description of the Proposed Eligibility Determination Process*

- Availability of application materials and information in accessible formats.
- Description of the determination process, including method of notifying individuals about determinations.
- System and timetable for processing applications and allowing presumptive eligibility.
- Documentation that will be provided to persons determined ADA paratransit eligible.
- Description of the administrative appeals process.
- A policy for visitors.

Section 6 - *Description of the Public Participation Process Used to Develop the Plan*

- Outreach efforts, process used to consult with persons with disabilities, notice given of the opportunity for public comment, date(s) of completed public hearings, and availability of the plan in accessible formats.
- Summary of significant issues raised in the public comment period, a response to each, and a discussion of how the issues were resolved.

Table 7.2: Paratransit Plan Contents (Continued)

Section 7 - *Efforts to Coordinate the Provision of Complementary Paratransit Service with Other Public Entities in the Area or in Contiguous Areas who are Responsible for Developing Plans.*

Section 8 - *Certifications and Resolutions (by each public entity involved in the plan).*

See Appendix C of this handbook for copies.

- Resolution by the board of directors or chief executive authorizing the plan as submitted
- MPO certification of compliance with joint planning requirements.
- Certification that a survey of existing paratransit service was conducted.
- Joint plan certifications, if applicable (required only if full plan not completed by 1/26/92).
- Certification regarding other paratransit services included in the plan.

Section 9 - *Request for a waiver (if applicable)*

- Information sufficient for UMTA to consider the request (see Appendix F of this handbook for additional information).
- Description of the paratransit service that will be provided if the waiver is denied and a timetable for implementing these services.

Section 5.

A Proposed Planning Process

The flow chart provided as Figure 7.1 identifies a suggested sequence of major activities that must be undertaken to develop a paratransit plan in compliance with the above noted requirements. This planning process has three parts. The first part (STEPS 1 - 4) involves the collection of information and the establishment of a consumer advisory process.

The second part involves setting service parameters, reviewing alternative models for providing the desired service, and determining service costs. On your first pass through this stage of the process, set parameters for a paratransit plan that is in full compliance with the regulation within the allowed implementation period. Also establish a first set of service parameters which do not include any reductions in other existing paratransit efforts which you may now be providing above and beyond ADA requirements. Look first at the possibilities for providing the full range of paratransit service

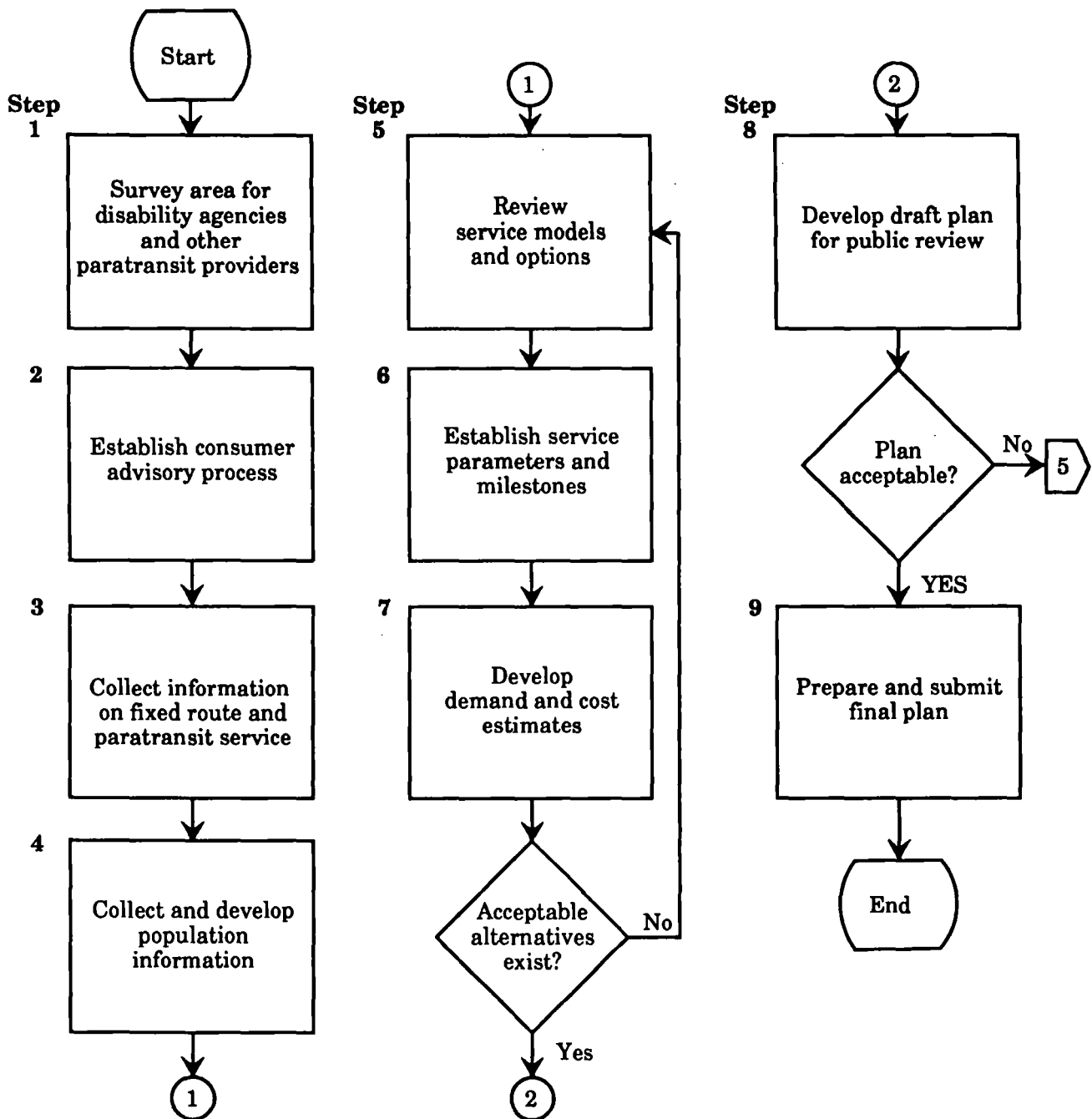
needed in your area. Examine reduced levels of effort only if providing the ideal service is found to be infeasible.

In the second stage of the process, determine the amount of funding that would be required to fully implement complementary paratransit services while maintaining other paratransit and fixed route programs and whether or not this level of funding can be provided. If not, examine alternatives for either reducing other existing services or applying for an undue financial burden waiver.

The third phase of the process involves the preparation of a draft plan, the public review process, and the revision of the draft plan in response to public comment.

While this process is presented as a way to develop the initial paratransit plan, planning should be an ongoing activity. Update population information and demand estimates throughout the implementation period as actual service information becomes available. Adjust your system design and service parameters as travel patterns and local

Figure 7.1
Proposed Planning Process



financial situations change. Monitoring and evaluation of services, including evaluation by a consumer advisory committee, should also be an ongoing activity.

Following is a brief description of each of the steps in the process:

STEP 1: Survey the Area

Your success in developing a plan that is both workable and acceptable to consumers will depend to a great degree on your ability to identify and involve those individuals and organizations affected. The first step suggested, therefore, is a survey of the area to identify disability groups, human service agencies, and key consumer advocates to be involved in the planning process. This survey will help you establish a consumer advisory process that is inclusive and representative. It also will make the collection of population information and other service information easier if key providers and agencies are involved.

☛ Chapter 8, "Keys to a Successful Public Process", offers suggestions for identifying and involving persons with disabilities and consumer organizations.

☛ Appendix K lists national organizations that can be contacted for information about local, regional, and state offices.

Also identify newsletters, publications, and other media that disability groups are now using. Commissions for the blind, community centers for the hearing-impaired, and independent living centers often provide information to clients and members. Developing a list of these methods of communication will help facilitate outreach efforts.

As noted in Section 2, a survey of existing paratransit providers is a required part of the planning process. This survey also should be completed at the start of your planning process. Many human service

agencies in your area, such as councils on aging, community action agencies, independent living centers, mental health centers, local Red Cross chapters, and workshops and day treatment programs may fund or operate paratransit services. A listing of all non-profit agencies in your area who have received federal Section 16 (b)(2) vehicles can be obtained from your State Department of Transportation.

Independent living centers are also a good source of information about transportation services available for persons with disabilities.

Your survey of providers also should identify private providers, including taxi and van companies. Taxi companies are typically licensed by each local community in which they operate. Information about taxi services, including the number of vehicles operated and approved fares can be obtained from each city or town in your area. Private van companies usually contract with state and local welfare offices and vocational rehabilitation agencies. These agencies should be contacted as part of your survey. Finally, check the "Bus", "Taxicab", and "Limousine" listings in the Yellow Pages of local telephone directories.

STEP 2: Establish a Consumer Advisory Process

Although the regulation does not require a formal consumer advisory process, consider creating a formal committee if you anticipate that meeting complementary paratransit service requirements will result in significant changes to your existing program. This approach also is recommended if you currently do not provide paratransit services.

As an alternative to a formal committee, develop a list of advocates and disability groups and consult informally with them throughout the process. Be sure, if you use this more informal method, to consult with a broad cross-section of persons with

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various types of disabilities. Supplement this informal consultation with open meetings at key points in the planning process. Provide notice of these meetings using the mailing lists developed in STEP 1.

Plan an initial meeting of your committee or working group to begin your consumer advisory process. If you have an ongoing consumer committee, set aside a regular meeting time or set up a special meeting to focus on ADA paratransit issues. To accommodate the schedules of people who are working, consider holding this initial meeting in the evening (assuming that adequate transportation is or can be provided). Invite agencies identified in your area survey and utilize media sources, including sources accessible to persons with vision and hearing impairments, to announce the meeting and invite public participation. Include in your meeting notice a description of the kind of accommodations that will be available, such as interpreters, large print, braille, or taped material, or transportation to and from the meeting. Invite participants to contact your agency if any other accommodations are needed. Making this and other meetings physically accessible and communications accessible (see Appendix E) is important to demonstrate good faith effort on your part.

At this first meeting, explain the relevant portions of the regulations and describe the planning process, including points at which input will be most important. Invite questions about the regulations and suggestions on the planning process. Establish common goals. Explain your outreach and survey efforts and invite additional references and information, particularly if there is not good cross-disability representation.

Involve consumers in all stages of the planning process. There are several key points at which consumer input is particularly important. These include:

- Before beginning STEPS 4 and 7. Describe to consumers the

methods you intend to use to generate population and demand information and invite suggestions and assistance.

- Once STEPS 4 and 7 have been completed. Attempt to develop consensus on the population and demand figures that form the basis of cost estimates. If developing accurate estimates proves difficult, consider an agreement to use the best numbers available at the time, to continue to pursue better estimates, and to alter the plan if better information is developed.
- To establish desired service parameters and select service models to be evaluated (STEP 5 and STEP 6).
- Once costs of alternatives have been developed and preliminary decisions on their affordability have been made. This part of the input process - reconciling consumer desires with the funding realities of your organization - can be the most difficult. In doing this, it is important to openly present and discuss budget and financial considerations to dispel any feeling that paratransit services are not receiving fair and equal treatment.
- To evaluate service parameters if initial alternatives are not affordable.

As noted earlier, plans must include specific eligibility guidelines and a process for determining who is ADA Paratransit Eligible. Consider setting up a subcommittee or identifying a subset of your advisory group to assist you with this portion of the plan. Begin a discussion of eligibility early in the process. Decisions about eligibility will need to be factored into STEP 6 as one of the parameters of the service.

As discussed in Chapter 8 of this handbook, it is important that your working group or advisory committee not function in isolation from other advisory or decision-making bodies within your organization. Top level staff, board members, and other officials should be encouraged to participate in the process. This will create an understanding of the issues at all levels of your agency. It also will demonstrate the commitment of your agency to the process. Additional suggestions for developing a successful consumer advisory process are contained in Chapter 8.

STEP 3: Collect Information on Fixed Route and Paratransit Service

One required element of the plan is a comparison of existing fixed route service and paratransit service. This comparison must clearly identify areas in which the paratransit service is and is not **comparable** to fixed route service. Comparability is based on the six service criteria listed in the regulations and described in Chapter 5 of this handbook.

Because your paratransit plan will be implemented over a period of time, information collected to make this comparison must include present service characteristics as well as planned service changes. For example, expected fixed route bus purchases or route changes must be part of your information base. Changes in the level of service of other paratransit programs also should be considered.

If service characteristics vary by area, these differences also need to be captured in your review.

If feasible, include in your plan a map of your fixed route system showing present routes and stations, and planned changes. Identify those routes in the system which are considered solely commuter routes.

Other **fixed route** information to be collected includes:

- **Days and hours of operation.** Chart the differences in service days and hours by area, indicating where weekend and evening service exists.
- **Fare information.** Tabulate fares by zone, including any discounts provided.
- **Total number of buses.** Using approved capital replacement plans, tabulate changes in fleet size based on expected purchases and retirement schedules.
- **Number and distribution of accessible buses in the fleet.** Tabulate the number and percentage of buses that will be accessible over time. Map routes that are accessible currently and those that are planned. Your inventory of lift and ramp equipped buses should take the Part 38 specifications into consideration. Identify those buses that meet the specifications versus those that do not.
- **Rail stations and fleet information.** Map routes and stations and identify those that are now accessible and those that will be made accessible. Also identify bus-rail transfer stations and those portions of the service area that are inaccessible because a transfer is required and one mode is not accessible.
- If a request for a waiver is included in the plan, **ridership and population information** will be needed. This includes the total population served by the fixed route system and the daily or annual ridership, excluding ridership on solely commuter services.

...it is important that your working group or advisory committee not function in isolation from other advisory or decision-making bodies within your organization.

Additional information that may be helpful in making a comparison of fixed route versus paratransit capacity constraints includes any measures of unmet demand such as the number of missed runs or the number of additional trips that could be provided on the fixed route system with reasonable increases in service levels.

Information about *paratransit* services must include basic information which relates to the required service criteria, such as the *service area* covered, the *days and hours of operation* by area, *advance reservation requirements*, *fares*, and *trip priorities*.

Information needed to determine the severity of capacity constraints in the system includes the number and percentage of *trips that are refused*. This includes not only individual trip denials but a calculation of unmet requests based on any waiting lists for subscription service. Review the number and percentage of accessible vehicles in the fleet. Determine if the fleet mix adequately serves persons who require accessible vehicles by comparing refusals for this population with the total eligible paratransit population. If the refusal rate is consistently higher for persons who use wheelchairs, increase the percentage of accessible vehicles in your fleet.

Additional paratransit information that will be helpful in developing demand and cost estimates includes:

- The number of *registered riders*. To assist in estimating the ADA Paratransit Eligible population, analyze present rider records and estimate the number of persons who qualify under each of the ADA eligibility categories. This information will help you to develop estimates of the percent of eligible persons who will be using your service - part of STEP 7.
- The number of one-way *passenger trips* provided. If

possible, estimate the number of trips made by persons who will qualify for ADA complementary paratransit service and those who will not. This information will help you develop baseline trip-making rates for your present and projected riders - also part of STEP 7.

- *Cost* information, including cost/trip, cost/hour, and cost/mile. This information will be useful in reviewing service options and in calculating the cost of compliance once demand estimates are made.

Also collect information about other paratransit systems and funding. Agencies identified in your survey of the area (STEP 1) can be helpful in getting this data. Tabulate the amount and type of service provided by other entities. Sources of funding used to support this service, and the likelihood of its continuation, is also important. This information will be needed in STEPS 5 to determine what type of coordination is possible. It will also help you develop "mode split" estimates in STEP 7.

If you will be citing other services in your paratransit plan as meeting part of the need, you will need to be sure that these other services are transporting individuals who qualify as "ADA Paratransit Eligible". Work with these agencies to review client records and determine under which category of eligibility each person would be certified.

Finally, collect cost and capacity information from potential paratransit contractors in your area. Capacity information includes days and hours of operation, fleet information, scheduling capabilities, and driver training.

STEP 4: Collect and Develop Population Information

As noted in Chapter 4 of this handbook, complementary paratransit service must be provided to the following three general groups of persons with disabilities:

(1) Persons who are unable to board, ride, or disembark from a vehicle even if they are able to get to the stop and even if the vehicle is accessible;

(2) Persons who cannot use vehicles without lifts or other accommodations. These persons are eligible for paratransit service if accessible fixed route vehicles are not available on the route on which they need to travel when they need to travel; and,

(3) Persons with specific impairment related conditions who cannot travel to a boarding location or from a disembarking location to their final destination.

Those individuals who are certified under the first or third categories will remain eligible even after your fixed route system is made fully accessible. The second group of eligible persons will become smaller over time as the fixed route system becomes more accessible.

In any system that is less than 100% accessible, therefore, estimating the ADA paratransit eligible population will involve collecting information on all three groups. It also will be helpful to develop population estimates for those eligible under the second category to facilitate demand estimations later on in the planning process. As your fixed route system becomes more accessible, the demand from persons in this category will be reduced.

One way to estimate the population, if you will not be able to conduct a local study is to apply the results of other studies to your area. The 1978 National Survey of Transportation Handicapped People estimated that 5% of the total population had difficulty using fixed route public transportation.² It also estimated that approximately 50% of these individuals either could not use transit at all or could use transit only with great difficulty. While

these measures are not exactly related to the categories of ADA paratransit eligibility, they suggest that approximately 2.5% of the total population is ADA eligible.

A comprehensive recent survey of New York City conducted by KETRON, Inc. (perhaps the most extensive such study since the National Survey) estimated that approximately 2.2% of the total population is eligible for paratransit service being provided by the city.⁸ Again, while the criteria used do not exactly reflect the ADA criteria, the types of functional disabilities used are similar.

Table 7.3 summarizes estimates of the number of individuals who are eligible under the first and third categories made by James F. Hickling Management Consultants as part of the "Preliminary Regulatory Impact

Analysis of Transportation Accessibility Requirements for the Americans with Disabilities Act".⁷ Using this information together with the information from the National Survey and the New York City study suggests that:

- Approximately 1.5% of the total population is ADA paratransit eligible under categories 1 & 3; and,
- Between .7% and 1% of the total population is eligible under category 2. This figure is the difference between estimates of the total population from the National Survey and New York City survey and the estimate of persons in categories 1 and 3 made by Hickling.

These rates will vary, of course, by region and by community. One way to apply these general rates to your area is to weight them using information contained in the 1980 Census.

Approximately 1.5% of the total population is ADA paratransit eligible under categories 1 & 3. Between .7% and 1% of the total population is eligible under category 2.

Table 7.3

**ESTIMATED PERCENT OF TOTAL U.S. POPULATION
ELIGIBLE FOR ADA COMPLEMENTARY SERVICE
BASED ON PROPOSED RULE REQUIREMENTS**

	% of Total Population
Persons physically unable to board, ride, or disembark from an accessible bus	0.07
Persons unable to use the system due to visual or mental impairments	0.99
Persons unable to reach boarding locations or destinations due to specific impairment related conditions	0.42
TOTAL	1.48

Source: James F. Hickling Management Consultants. Data compiled from Canadian Health and Disability Survey and applied to the U.S. population.

☛ The *General Social and Economic Characteristics* reports prepared as part of the 1980 Census identify the number of individuals living in the community who report having a "public transportation disability".

Use of 1980 Census information is suggested because this question about "public transportation disability" was not included in the 1990 Census.

Recent studies have found that while the number of persons reported to have a "public transportation disability" by the census will vary by area, the types of disabilities within this population is fairly constant.⁹ Census information can therefore be used to adjust the general rate of disability by area. For example, if the number of persons identified in the Census with "public transportation disabilities" in your area is 20% higher than the national average, you can assume with some accuracy that the number of ADA paratransit eligible persons is approximately 20% higher than the general estimates provided above. Using this methodology, it is relatively easy to

develop estimates of population by census tract!

Table 7.4 illustrates this method of estimating the population. The national percent of persons reporting a "public transportation disability" - 3.5% - is used to adjust the Census information for each area. Community A, for example, has a lower than (national) average of persons who reported a disability. Community C has a higher percent. The estimated number of persons with disabilities, based on national studies, is correspondingly adjusted to reflect these differences.

☛ Appendix H contains national and state-by-state public transportation disability data from the 1980 Census. Local data will, of course be needed to complete the procedure described above.

Before you can apply these estimates, you will need to know the total population in your paratransit service area. Depending on how you define your service area, this can be a tedious manual process. If you have computer capability, you may find it helpful to purchase a Geographic Information System (GIS) and utilize the

Table 7.4

Adjustment of National ADA Population Information Using Census Data

Area	Total Population Year 19XX	Estimated ADA Eligible Cat. 1 & 3 (1.5%)	Estimated ADA Eligible Cat. 2 (1.0%)	Population Percent from 1980 Census for Persons with Public Transit Disabilities	Weight Factors	Estimate of ADA Eligible Population (Cat. 1 & 3)	Estimate of ADA Eligible Population (Cat. 2)
Community A	50,000	750	500	2.5	$2.5/3.5 = 0.7$	536	357
Community B	150,000	2250	1500	3.5	$3.5/3.5 = 1.0$	2250	1500
Community C	650,000	9750	6500	4.2	$4.2/3.5 = 1.2$	11700	7800
Tract 1	5200	78	52	2.1	$2.1/3.5 = 0.6$	47	31
Tract 2	3300	50	33	4.8	$4.8/3.5 = 1.4$	68	45

Census Bureau's geographic-based files (TIGER files) to map out your bus routes and estimate populations within a given distance of these routes.

☛ A detailed description of GIS applications in transportation is included in *Current Uses of Geographic Information Systems in Transit Planning* (see Appendix K).

☛ Appendix H contains general information about the TIGER files which includes a phone number for further information. Your regional Census Bureau office can also provide assistance. Regional offices also are listed in Appendix H.

If you presently provide paratransit service to other populations, such as the elderly, or if you want to pursue a broader paratransit policy in your area, information on these other populations also should be developed. Local human service agencies probably will have this information readily available. Table 3.1 of this handbook also provides some general information about the expected growth of the older population.

Because your complementary paratransit service will likely be implemented over a

number of years, your population information should include growth projections over the next several years. You can develop estimates using the following information:

- the total population growth projected for your area. This information may be available from your local regional planning council;
- total population growth by age group. If information specific to your area has not been developed, you can apply national projections (see Table 3.1) to your total population growth data;
- the distribution of persons with public transportation disabilities by age. Table 7.5 provides information recently developed by Crain & Associates and the California Department of Finance on the present and projected distribution of persons with transportation disabilities by age. This information is consistent with the estimate made in the 1978 National Survey of Transportation Handicapped People which estimated that 47%

Table 7.5

Changes in Age Composition of Transportation Disabled Persons

Age	Estimated Percent of Population in the Year 1990	Estimated Percent of Population in the Year 2000
< 65	51%	55%
65 - 74	21%	16%
75 +	28%	29%

Source: California Department of Finance and Crain & Associates as presented in San Francisco Bay Area Regional Paratransit Plan, Metropolitan Transportation Commission, November, 1990.

of persons with transportation disabilities were 65 years of age or older.

By knowing the projected growth of the elder and non-elder populations and the distribution of persons with disabilities by age, you can develop projections in the growth of the population of persons with disabilities which factors in age. Factoring age into your projection is important because of the high incidence of disability among older persons.

Using these methodologies will give you a quick way to estimate the population of ADA paratransit eligible persons. Supplementing these calculations with more detailed studies and surveys of your area can, however, produce a more accurate paratransit plan. Even if such studies and surveys cannot be accomplished as part of the development of your initial ADA paratransit plan submitted on January 26, 1992, consider developing additional population information during the implementation period and using this data to adjust and update your plan. Developing population information specific to your area is important because ADA paratransit eligibility is functionally-defined and is related to the service area you select, your local environment, and the complexity of your fixed route system.

☛ ***Planning Services for Transportation-Handicapped People: Data Collection Manual*** (see Appendix K) provides detailed guidance on conducting local surveys.

Also identify accessible housing, community residence programs, independent living centers, work training centers and other origins and destinations that will generate or attract a higher than average number of trips by persons with disabilities as part of this step. Local agencies such as independent living centers, commissions for the blind,

associations for retarded citizens, and mental health agencies can provide you with information about specific disability groups.

STEP 5: Review Service Models and Options

The next step in the process involves reviewing alternatives for providing service.

☛ Fixed route and paratransit service options are discussed in detail in Chapter 6.

This review includes looking at:

- fixed route service options;
- paratransit service models; and,
- possibilities for coordination.

It is recommended that all agencies review Call-A-Lift-Bus and service route options. Route deviation and point deviation services are more applicable in small urban and rural systems. In some rural and small urban systems, replacing fixed route service with a general public paratransit system may even be appropriate, and would eliminate the need to meet the service standards.

Fixed route options also include improvements in related services such as travel training, marketing, driver training, and equipment maintenance that can improve the effectiveness and use of the system.

Paratransit service models include direct operation, brokerage, user-side subsidy, or a combination of these approaches.

Developing specific plans for coordinating with other agencies and providers in your area also is a part of this step. The extent to which other agencies get involved in funding and providing services will be a major factor in selecting an appropriate paratransit service model.

One final note on this step in the process: As will be discussed next, predicting demand for paratransit service is difficult at best. Be sure that the model you select is flexible enough to allow the supply of service to be adjusted if your predictions of demand are too high or too low.

STEP 6: Establish Service Parameters and Milestones

Once population and service information has been collected, you need to work with your consumer advisory committee to develop exact eligibility criteria and service parameters so that demand estimates can be made and costs can be calculated. This step begins the second part of the planning process. In this part, different paratransit alternatives are developed, demand and cost estimates for each are calculated, and the feasibility of each is evaluated.

As indicated by Figure 7.2, a number of service factors will need to be considered. Each of these factors are interrelated and therefore must be considered simultaneously.

For example, the design of the fixed route system will impact trip eligibility.

Accelerating the purchase of accessible fixed route buses or the addition of access features to rail systems will decrease the number of ADA paratransit eligible trips. The introduction of an advance reservation (or Call-A-Lift-Bus) service will make the entire bus system accessible and further reduce reliance on the paratransit system. Travel training programs also will enable individuals with visual-impairments or cognitive disabilities to use the fixed route system.

Fixed route system design also will affect paratransit service parameters. A more extensive fixed route system will require expanded complementary paratransit efforts and vice-versa.

If you presently operate paratransit service which is open to more people than the groups defined in the proposed regulation, give careful consideration to your future eligibility criteria. In general, you can:

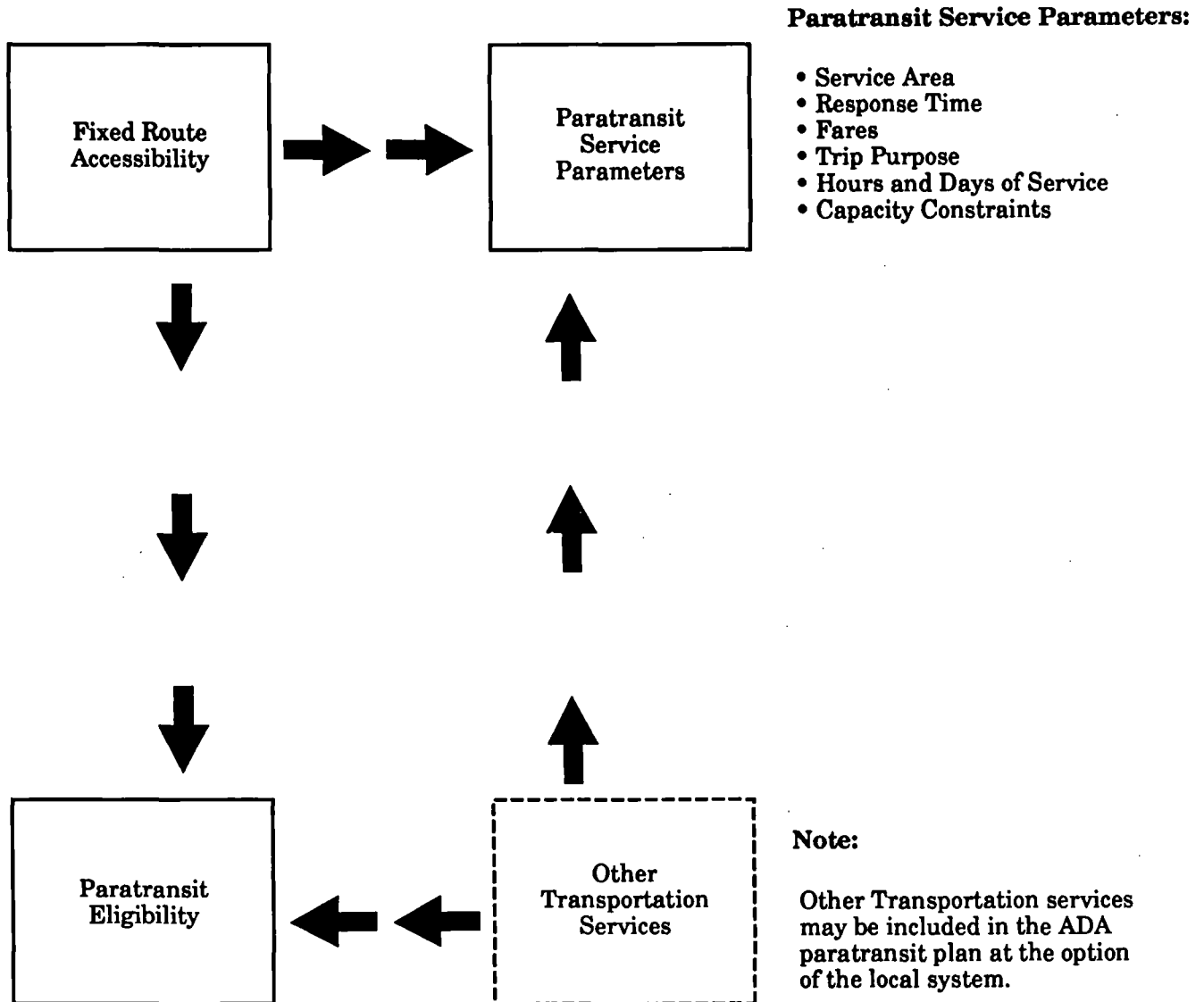
- (1) Restrict paratransit service to only those persons meeting the narrow eligibility standards defined in the regulations. Keep in mind that this option may cause disruptions in the lives of people who have come to rely on your existing service. The availability of alternatives, particularly accessible fixed route service, is an important consideration if this approach is used;
- (2) Maintain or establish a broader eligibility standard but limit the provision of "comparable service", as defined by the six service criteria, to the subset of people who are ADA paratransit eligible; or
- (3) Provide a single, consistent level of "comparable service" to all persons in your area who are "transportation-disadvantaged". In many areas, particularly larger urban areas, the involvement and financial support of human service agencies will make this option more feasible.

Finally, the inclusion of other paratransit services will impact your service design. Because you only need to supplement existing services, coordination will allow you to focus your paratransit efforts on unmet demand.

Identify specific dates (milestones) during the implementation process when each of the six service criteria will be met and when other important parts of the plan will be achieved. ***If your plan will be implemented in more than one year, milestones are a required part of the plan.*** For example, indicate when the service area will be expanded, advance notice requirements reduced, capacity constraints eliminated, important

Be sure that the model you select is flexible enough to allow the supply of service to be adjusted if your predictions of demand are too high or too low.

Figure 7.2
Inter-Relationships of Service Parameters



coordination arrangements initiated, or other facets of the service adjusted to meet the regulations. These milestones will trigger increases (and decreases in the case of coordination) in demand and service cost that will need to be calculated in STEP 7.

Given all of the parameters involved, there will be numerous possible service designs. In order to compare these alternatives, develop several sets of parameters with varying milestones for evaluation in STEP 7. Develop a first set of parameters and milestones that do not exceed the five year implementation period. Also include in this set of alternatives an option which maintains the level of other, non-ADA, paratransit service you are now providing. An initial evaluation of this "total" service will allow you to determine what level of additional funding and/or service cutbacks is needed to comply with the regulations. This information will be vital if you eventually apply for an undue financial burden waiver.

Tables 7.6 and 7.7 provide an example of setting service parameters and milestones based on a hypothetical example. This example is not meant to include all of the potential issues and parameters you may need to address. It does, however, illustrate several important considerations about establishing parameters.

(1) Note that services to elderly persons have been maintained in this example. The level of service to non-ADA eligible riders can, however, be different.

(2) In this example, a decision is made to serve a slightly larger area than is required by the regulations. Communities are included in the service area if a significant portion of the population and area is covered by a service "corridor". As noted in Chapter 3, this type of decision is a matter of local policy. If an undue financial burden waiver is requested, it will require that a recordkeeping system be established to differentiate between

trips that are in the required service area and those that are not.

(3) Establishing a working group on coordination is set as an early milestone. Because coordination may take time to develop, begin early if you want your efforts to be of benefit within the allowed implementation period.

(4) A brokerage system is used to expand system capacity. As discussed in Chapter 6, brokerage (and user-side subsidy) programs can be used to supplement existing operations. Doing this can make it less critical that you obtain new vehicles each time you want to improve service.

(5) Instituting accessible fixed route bus service before expanding paratransit service area or hours will help avoid the problem of getting riders to use fixed route service after paratransit has been provided.

(6) If you find it necessary to impose capacity constraints, ***do so by design rather than by default***. It will be easier for riders to accept rational constraints developed in a public process than constraints which are unplanned, such as excessive denials, unreliable service, or excessively long trips. Section 37.153 of the regulations requires consideration first of a trip cap per ADA paratransit eligible person if you find compliance with all of the service criteria impossible.

(7) Establish milestones that will bring full compliance as soon as possible. Do not establish milestones based on the maximum implementation period if it is possible to come into full compliance sooner. In the example, compliance is planned within 4 years.

Staged implementation, combined with increased fixed route accessibility and coordination with other agencies should allow you to fully implement complementary paratransit service requirements within the allowed period of time.

Table 7.6: An Example of Setting Service Parameters

Hypothetical Service Information	
<u>Existing Paratransit Service:</u>	Direct operation; service available to elderly persons and persons with disabilities; service available in 2/3 of required ADA service area; hours of operation are Monday - Friday, 9am - 5pm; 2 day advance notice requirement; medical and employment trips given priority; fare is one-half of "single zone" fixed route fare; no contracts with human service agencies.
<u>Existing Fixed Route Service:</u>	Twenty percent (20%) of fleet accessible; accessible buses deployed on a limited number of designated routes; hours of operation are Monday - Saturday, 6am - 10pm and Sunday, 8am - 6pm; no travel training program.

Sample Service Parameters Developed in Cooperation with Consumer Advisory Committee

- Maintain service to elderly persons but give priority in scheduling to ADA Paratransit Eligible individuals. Maintain a medical trip priority for elderly riders. Keep present service hours for elderly riders.
- Set the paratransit fare to be equal to comparable fixed route fare, including zonal increases.
- Define a service area that is slightly broader than that required. Include all areas of a community if more than half of the area and half of the population are within the defined corridors established in STEP 3. Establish data collection procedure for differentiating between eligible and non-eligible trips.
- Use "next day" scheduling in first year. Test immediate response service in year 2 or 3.
- Establish contracts with area providers and supplement direct operation of service with a limited brokerage service in year 1 in order to increase the supply of service prior to the purchase of additional in-house paratransit vehicles. Include taxi providers in brokerage to meet low-productivity, short length trips.
- Establish a working committee with area human service agencies. Consider expanding the first year brokerage during the implementation period to include other human service client needs.
- Institute a Call-A-Lift-Bus program and travel training program for fixed route service as soon as possible in year 1. Explore service route options in years 2 and 3.
- Eliminate trip purpose restrictions for ADA Paratransit Eligible riders in year 1.
- Bring existing service area into compliance with all service criteria in years 1 and 2 before expanding to remaining service areas. Expand hours of operation only after Call-A-Lift- Bus program has been established.
- If capacity constraints cannot be eliminated in the existing area in the first two years, institute limited restrictions to allow service expansion to remaining areas in year 3. If capacity constraints are necessary, they should be trip limits for non-employment, non-education, and non-medical trips. Determine exact constraints through public participation process at that time.

Table 7.7: An Example of Milestones

Jan. 26, 1992:	- Implement ADA eligibility determination process. - Solicit proposals for supplemental brokerage contractors. - Establish human service working group
May, 1992:	- Begin brokering trips to supplement direct operation. - Eliminate trip purpose restrictions.
June, 1992:	- File capital grant request for fixed route bus replacement, additional paratransit vehicles and computerized scheduling/recordkeeping system that includes Geographic Information System (GIS) capability and ability to identify fixed route options as part of the paratransit scheduling process.
July, 1992:	- Approval of FY'93 operating budget. Paratransit budget increased to \$____. - Delivery of 10 new paratransit vehicles under previous year grant award. - Prepare RFP for paratransit computer system.
Sept., 1992:	- Approval of grant request for fixed route buses, paratransit vehicles, and paratransit computer system. - Delivery of 10 new fixed route buses under previous year grant.
October, 1992:	- Award paratransit computer system contract.
Nov., 1992:	- Implement Call-A-Lift-Bus program and "peer guide" travel training program.
Dec., 1992:	- Expand hours of operation in existing service area. - Install paratransit computer system.
Feb., 1993:	- Institute "next day" scheduling procedures. - Increase paratransit fares.
March, 1993:	- Develop contract for T.XIX (Medicaid) brokerage and reimbursement. - Begin brokering work training and off-site employment trips for local/state developmental disabilities program.
July, 1993:	- Approval of paratransit budget increase to \$____ - Delivery of 10 new paratransit vehicles.
Sept., 1993:	- Approval of capital grant request. - Delivery of 10 new accessible fixed route buses. Examine service route options.
March, 1994:	- Expand full service to remaining service area. Institute limited capacity constraints, if necessary.
July, 1994:	- Approval of paratransit budget increase to \$____. - Delivery of new paratransit vehicles.
Sept., 1994:	- Delivery of new accessible fixed route buses.
March, 1995:	- Expand brokerage to include other human service agencies. - Test immediate response scheduling.
July, 1995:	- Approval of paratransit budget increase to \$____.
January, 1996:	- Eliminate remaining capacity constraints. <i>Achieve full compliance with regulation.</i>

STEP 7: Develop Demand and Cost Estimates

Using the population information developed in STEP 4, and the service parameters and models established in STEPS 5 and 6, develop demand and cost estimates for each year of the implementation period.

Forecasting Demand

Table 7.8 provides a summary of the type of population and demand information that is needed. As indicated, separate your estimates for eligible and non-eligible services so that, if it becomes necessary, an accurate calculation of undue burden can be made. Note that demand estimates for persons whose trip eligibility depends on fixed route accessibility (category 2) should be developed separate from those who are eligible in the long-term (categories 1 and 3). Service for persons eligible under category 2 will decline as your fixed route system is made accessible. Developing separate estimates will allow you to factor this into your analysis.

If your system design includes contract service to agency clientele, the elderly, or other populations, develop separate demand estimates for this portion of your program. Work with local human service agencies to determine their future needs for transportation. As indicated in Table 7.8, some clients will be considered ADA eligible.

As shown in Figure 7.3, each of the service parameters set in STEP 6 will affect demand for your paratransit service. Eligibility criteria and the existence of other transportation services will have obvious effects. The success of your fixed route program also will affect ridership on the paratransit system. Attention to marketing, employee training, consumer travel training, and lift maintenance efforts will make fixed route service a more attractive alternative for many potential paratransit users. An advance reservation, or Call-A-Lift-Bus, program

also will promote increased use of the fixed route system.

Implementing each of the six service criteria will also affect demand. Reducing advance notice requirements to "next day" service may increase demand (although the regulatory impact analysis preformed by James F. Hickling Management Consultants indicated that demand does not increase substantially until response time is reduced to 4 hours or less).⁷ Eliminating trip priorities will obviously increase demand, as will increasing days and hours of service, expanding the service area, or eliminating capacity constraints. Changing fares also will affect demand. The analysis performed by Hickling, based on a survey of 160 systems, found that a 10% change in fare could be expected to change paratransit demand by 1.9% to 3.9%.

Figure 7.4 offers a methodology for developing demand estimates. Start with the total eligible population estimated in STEP 4. Determine how many of these eligible individuals will apply for and use your paratransit service. This percent will depend on: how well you market your service; what other options are available, including the use of private automobiles and other human service transportation programs; and, the perceived quality of your service (particularly factors such as capacity constraints, advance notice requirements, and trip purpose restrictions). If you are presently operating a paratransit service, you can easily calculate the percent of total eligible individuals who are using your system. If you will be starting a new service, you can base your estimate on the experience of other areas with similar populations and service characteristics. If you are starting a new service, also keep in mind that demand traditionally grows slowly in the first year or two of a program. Many persons will not start using the service until it has a reputation for safety and reliability.

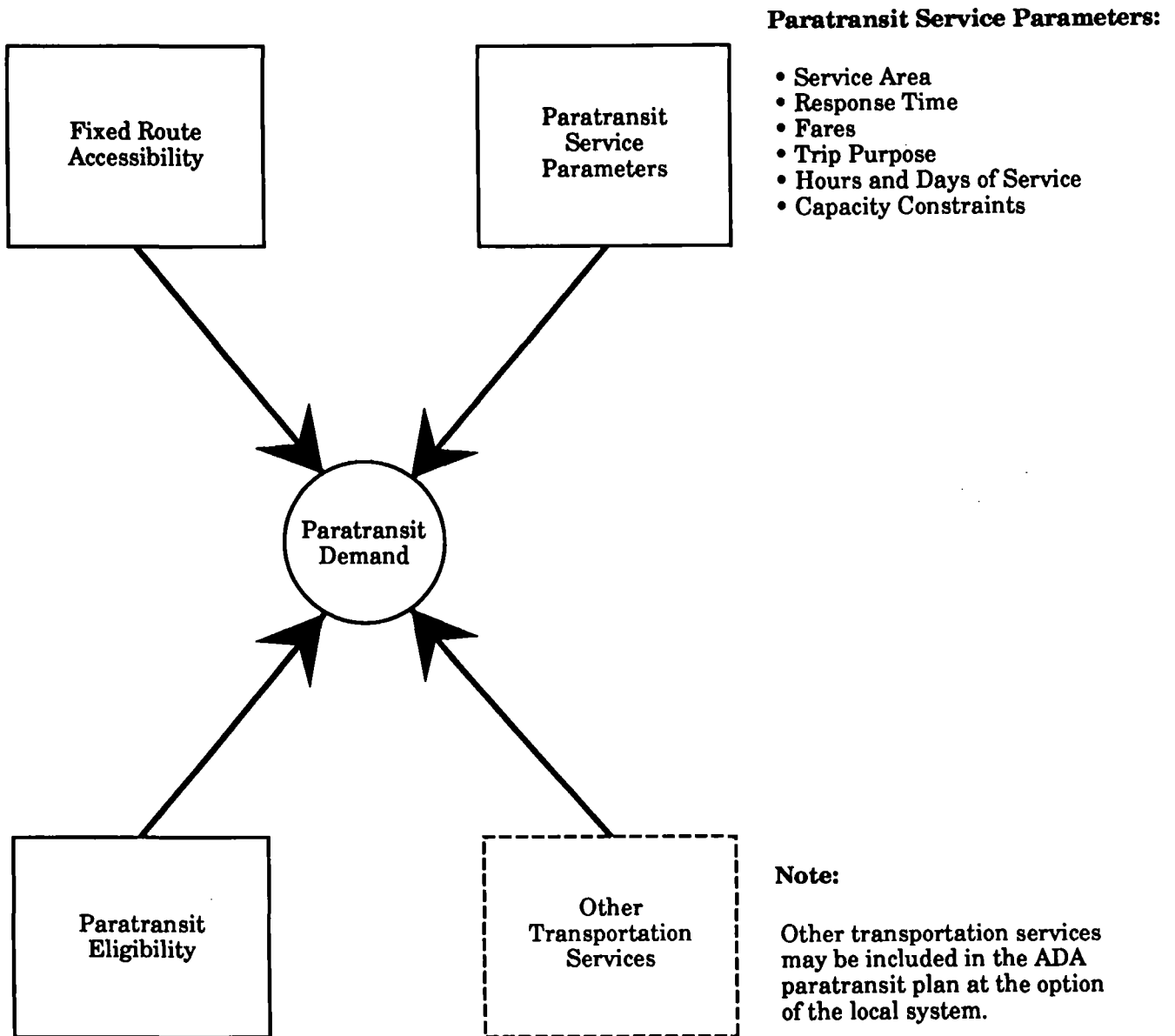
Table 7.8

Summary Chart of Population and Demand Analysis

		Year 1			Year 2			Year 3			Year 4			Year 5		
		Total Elig. Pop.	Persons Cert. for Para-transit	One-Way Trips	Total Elig. Pop	Persons Cert. for Para-transit	One-Way Trips	Total Elig. Pop	Persons Cert. for Para-transit	One-Way Trips	Total Elig. Pop	Persons Cert. for Para-transit	One-Way Trips	Total Elig. Pop	Persons cert. for Para-transit	One-Way Trips
ADA Para-transit Eligible Persons	Cat. 1 & 3															
	Cat. 2															
	Human Service Program Clients															
Persons Not ADA Para-transit Eligible	Elderly															
	Non-ADA-Eligible Persons with Disabil.															
	Human Service Program Clients															

Figure 7.3

**Relationship Between Service Parameters
and Paratransit Demand**



Next, you need to determine how many trips this user population makes and what percent of these trips will be made on your system. National studies estimate that persons with transportation disabilities make, on average, 1/4 to 1/2 as many trips as the general population. In numbers, this means between 15 and 33 one-way trips per month.² This number can be expected to change as socio-economic factors change, such as the high rate of unemployment among persons with disabilities. It also will change as the availability of transportation options improves. For your estimates, you can either use national data or develop local trip-making rates by surveying your present riders.

The percent of trips that registered users make on your paratransit system, the "mode split", is the last factor in the methodology. It depends on: the quality of your service; the accessibility of the fixed route system; and, the quality of other travel options. Present mode split can be estimated by dividing the average number of trips on your system per user by the estimated trip-making rate. Mode split can also be determined by surveying existing riders to determine what percent of all trips are made on the paratransit system.

A sample calculation based on 1,000 total eligible persons, 20% of these individuals registered for the paratransit service, a trip-making rate of 20 trips/month, and a mode split of 40% would be:

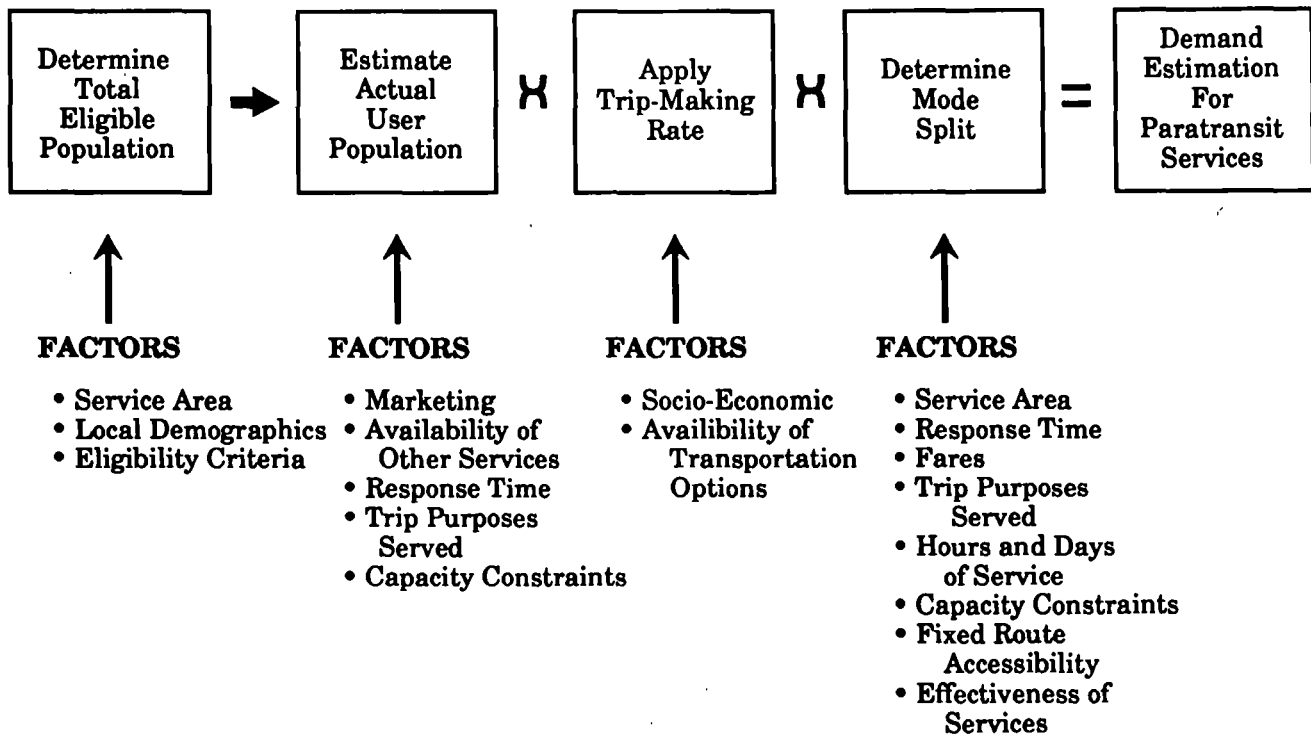
$$\begin{aligned} &(1,000 \text{ persons}) \times (.2) \\ &\times (20 \text{ trips/month}) \times (.4) \\ &= 1,600 \text{ trips/month,} \\ &\text{or 1.6 trips/month for each eligible user} \end{aligned}$$

Present demand can be used to calibrate the model for existing service characteristics. As service changes each year, based on the parameters and milestones set in STEP 6, each factor in the model can be adjusted and changes in

demand predicted. Expanding the service area will increase the total eligible population. Increasing days and hours of service will allow users to make trips at those times on your system and thereby increase your mode split. Expanding hours and days will also affect the trip-making rate by providing a new travel alternative. Eliminating capacity constraints will both encourage more eligible users to register for your service *and* increase the mode split factor. Figure 7.4 lists the service criteria and other factors that are most likely to impact each portion of the model.

An alternative method for estimating demand, if you have limited baseline information, would be to eliminate the estimates of "market penetration" and "mode split" and develop a general trip-making rate for the total eligible population. This approach was used in the *San Francisco Bay Area Regional Paratransit Plan*, a comprehensive plan completed in November, 1990.¹⁰ A "low" estimate of trip-making rate was developed by surveying seven paratransit systems across the country believed to be providing "exemplary" service. This analysis resulted in estimates of 1.0 trip/month per eligible person in urban areas and 1.2 trips/month per eligible person in rural areas. This number of trips was suggested for existing service given capacity constraints and other service limitations. A "high" rate, reflecting potential demand with improved service, was then developed. An estimate of 4.4 trips per month per eligible person was suggested based on information from several demand studies. Using this approach, a demand of 1,000 - 1,200 trips per month per 1,000 eligible individuals could be expected if service is constrained. As many as 4,400 trips per month per 1,000 eligible persons could be expected once all ADA service requirements are met. This maximum demand probably would not be expressed until some time after services are in full compliance and individuals are able to make lifestyle changes.

Figure 7.4
Paratransit Demand Estimation Methodology



Another useful demand estimation procedure involves comparing trips by trip purpose. Table 7.9 shows the types of trips made on several model paratransit services. These systems do not limit trips by trip purpose. If you will be starting a new paratransit program, a distribution of trips similar to this can be expected.

The systems described in Table 7.9 do, however, report capacity constraints. Capacity constraints will cause a higher percent of advance reservation trips to be provided (note the high number of medical trips). More immediate, unplanned trips may not be able to be accommodated. Capacity constraints will also make service less

reliable. Many people may find alternative means for important regular needs such as travel to work.

Table 7.10 shows estimates of the distribution of all trips made by persons with disabilities. Over time, as capacity constraints and trip purpose limitations are removed and response times lowered, you can expect your service to provide trips more closely resembling this distribution.

Records of unmet trip requests, waiting lists, and other operational data can also be used to predict growth in demand. In smaller systems or systems with established paratransit programs, it may be possible to develop accurate demand

In smaller systems or systems with established paratransit programs, it may be possible to develop accurate demand estimates using existing records.

Table 7.9

Percentage of Trips by Trip Purpose for Paratransit Services ¹⁰

Trip Purpose	Spokane	Ben Franklin	Chicago	Milwaukee	Pittsburgh
Medical	34	38	66	19	24
Work	2	0		15	28
Eductional	14	9	7	5	9
Shopping/Personal Business	49	14	22	23	23
Leisure/Recreation/Other		39	5	38	16
Total	*100	100	100	100	100

* May not total 100% due to rounding

Table 7.10

Percentage of Trips by Trip Purpose for All Modes

Trip Purpose	New York City ⁸ (Actual Trips)	New York City ⁸ (Actual Plus Latent Trips)	National Study ²
Medical	16	16	11
Work	13	12	18
Eductional	6	6	9
Shopping/Personal Business	44	41	34
Leisure/Recreation/Other	22	26	28
Total	*100	100	100

* May not total 100% due to rounding

estimates using these existing records. This information also can be used to adjust national data to your specific situation and double-check the predicted results obtained using the methodologies described above.

Predicting demand is difficult and will require careful and innovative local analysis. Given that predicting demand is an inexact science at best - particularly for a population with a large latent demand - you will need to closely monitor ridership

and make adjustments in your forecasts throughout the implementation period.

Developing Cost Estimates

Once annual demand projections have been made, you are ready to develop cost and funding estimates. You will need to develop estimates for ***operating costs***, ***administrative costs***, and ***capital costs***.

Provider information collected in STEP 1, including unit rates and productivity, will be helpful in developing ***operating costs***.

Table 7.11

Vehicle Productivity by Population Density and Type of Eligibility

Eligibility	Population Density					
	500 persons/ sq. mi.	1000 persons/ sq. mi.	1500 persons/ sq. mi.	2500 persons/ sq. mi.	3000 persons/ sq. mi.	4000 persons/ sq. mi.
ADA Paratransit Eligible persons only	1.39* (0.30)**	1.64 (0.35)	1.80 (0.39)	2.03 (0.43)	2.11 (0.45)	2.25 (0.48)
"Transportation- Disadvantaged" (approx. 5% of the population)	2.02 (0.43)	2.37 (0.50)	2.61 (0.56)	2.94 (0.63)	3.05 (0.65)	3.26 (0.69)

* Average one-way passenger trips per vehicle hour.

** Deviation from the mean.

Source: James F. Hickling Management Consultants. Data compiled from survey of 160 U.S. paratransit systems.

The procedure for estimating annual operating costs will vary depending on the type of operation. In a user-side subsidy program, service is usually purchased by the trip. Cost estimates can be developed by simply multiplying the number of trips expected by the average per trip cost charged by providers. To arrive at an accurate estimate of the cost per trip, providers will need to know what percent of the service will be "group" trips versus individual trips. They will also need to know the service area size and (if possible) the average trip length. This information can be developed from existing service information appropriately changed to reflect your new service design.

For a direct operation, you will need to estimate the hourly cost of operating a vehicle and the expected productivity of the service (defined as the average number of trips that are provided per vehicle-hour of operation). Table 7.11 provides typical productivities developed by Hickling Management Consultants from a survey of 160 demand responsive systems across the country. Productivity is given as a function of **total** population density in the service

area and eligibility for the service. Two options for eligibility are used - strict ADA paratransit eligibility and a broader eligibility including approximately 5% of the total population. With a higher population density and a greater number of potential users, opportunities for grouping trips increase and productivity increases. Using this chart, if your service is open to a broader population and your service area has a population density of 1000 persons per square mile, a productivity of 2.37 trips per hour is predicted. The numbers in parenthesis below each estimate of productivity indicate the possible "deviation from the mean". In the example above, productivity would typically vary from 1.94 trips per hour to 2.8 trips per hour. Given this range, past experience and input from local operators should be used to help estimate productivity for your area.

To calculate the estimated annual cost of service, divide the expected number of trips per year by the estimated productivity. This will give you the number of vehicle-hours of service needed. Then, multiply the annual vehicle-hours of service by the estimated cost per hour.

For example, if the average cost per hour is \$30.00, the estimated annual demand is 100,000 one-way trips, and the expected productivity is 2.5 trips per hour, the estimated annual cost would be calculated as follows:

$$100,000 \text{ trips} / 2.5 \text{ trips/hour} = 40,000 \text{ vehicle-hours/year}$$
$$40,000 \text{ veh-hrs} \times \$30/\text{veh-hr} = \\ \$1,200,000$$

In brokerage programs, service can be purchased from providers by the trip, by the hour, or by the mile. You will need to estimate how many trips will be purchased by each method and then calculate costs as described above.

If you intend to operate your own vehicles, or provide equipment to your operator(s), you will need to estimate the number of vehicles needed and the cost per vehicle (your **capital costs**). To get the number of vehicles needed, divide the estimated number of trips by the expected productivity and then divide by the number of hours each vehicle will be in operation. You would then add a reasonable number of spare vehicles to this figure.

For example, given estimates of 100,000 one-way trips per year, a productivity of 2.5 trips/vehicle-hour, a 10 hour operating day six days per week, and a desired spare ratio of 15%, the number of vehicles needed would be calculated as follows:

$$100,000 \text{ trips} / 2.5 \text{ trips/veh-hr} = 40,000 \text{ veh-hrs/year.}$$
$$40,000 / 52 \text{ weeks} / 6 \text{ days} \\ = 128 \text{ veh-hrs/day.}$$
$$128 \text{ veh-hrs} / 10 \text{ hrs per vehicle} \\ = 13 \text{ vehicles}$$
$$13 \text{ vehicles} + 2 \text{ spares} \\ = 15 \text{ total vehicles.}$$

Information on the cost of vehicles can be obtained from local dealers.

☛ The **Vehicle Catalog** published each year by the Ohio Department of Transportation (see Appendix K), is also an excellent source of cost information for paratransit vehicles.

Additional **administrative costs** can be developed by carefully reviewing the staffing needs associated with the service model selected. Case studies and information from peer systems can be helpful in determining administrative needs and costs.

Evaluating Alternatives

Following the development of alternative system designs and costs, determine if the service proposed is affordable. As shown in Table 7.12, three outcomes are possible. First, the service plan could provide for compliance within the allowed implementation period and be found to be affordable. In this case you are ready to proceed to STEP 8. Second, compliance within the allowed time period could be found to be too costly given the parameters, milestones, and service options selected, but costs and service reductions are not significant enough to qualify you for an undue financial burden waiver. In this case, you should return to STEP 5 and examine alternative service options, parameters, and milestones. Third, you could find that compliance within the allowed time would result in costs and/or reductions in other services that support an undue financial burden waiver request. In this case, return to STEP 5, review service options, develop affordable and acceptable parameters and milestones which extend beyond the implementation period, and prepare a waiver request. As noted in STEP 6, §37.153 of the regulations requires that you "...consider first a reduction in number of trips provided to each ADA paratransit eligible person per month, while attempting to meet all other service criteria."

Table 7.12

Possible Evaluation Outcomes and Required Actions

OUTCOME	ACTIONS
Compliance within the allowed implementation period is affordable.	Proceed to STEP 8. No waiver necessary.
Compliance within the allowed implementation period is not affordable. Costs and service reductions do not support a waiver request.	Return to STEP 5. Examine alternative parameters, milestones, and service options.
Compliance within the allowed implementation period is not affordable. Costs and/or service reductions support a waiver request.	Return to STEP 5. Prepare your waiver request. Include proposed service and alternative plans should waiver be denied.

Be sure to involve your consumer advisory committee in any adjustments of service parameters and milestones, if this becomes necessary.

Keep in mind that in calculating costs for the purpose of applying for an undue financial burden waiver, you can only count the cost of service provided to ADA paratransit eligible individuals required by the regulations. The cost of service to other populations, or service beyond that required by the six criteria (such as covering an extended service area) cannot be included in your undue financial burden waiver calculations.

Also, as noted earlier, before deciding to apply for a waiver, be sure that all service options, particularly any possibilities for coordination, have been examined.

If your service plan involves making changes to the fixed route system, make a special effort to determine the public and political reaction to these changes before proceeding to a public hearing. Fixed route bus constituencies may not have been represented in the advisory process employed to this point.

STEP 8: Develop a Draft Plan for Public Review

The final phase of the process will begin with the preparation of a draft plan for public review. Be sure that all of the required elements of a plan, noted at the beginning of this chapter, are included.

Whether or not you request an undue financial burden waiver will affect the design of your plan. If a waiver is requested, your plan must contain documentation showing that an undue financial burden does or will exist. The level of paratransit service that will be provided if the request is denied also must be included in the plan.

Even if a request for an undue financial burden waiver is included, your plan also must define how and when complementary paratransit service, in full compliance with the regulation, will be implemented. Inclusion of an undue financial burden waiver request does not relieve you from the requirement to plan to provide the required level of service.

Pay particular attention to the physical and communications accessibility of your public hearing. Your draft plan should be available in large print, braille, and tape ***before*** the hearing. Persons with communications disabilities must have equal time and opportunity to review and comment on the plan.

☛ Section 5 of Chapter 8 of this handbook offers guidance on holding accessible meetings and hearings.

Depending on the public input received, you may need to return to earlier steps in the process to revise your service parameters or look at alternate service models. If comments can be addressed without major revisions to your draft plan, you are ready to prepare your final plan.

STEP 9: Prepare Your Final Plan

A summary of all comments received in the public review process must be prepared and added to the final plan. A discussion of how each of the issues raised has been addressed and resolved also must be part of the final plan.

If your plan includes service in an urbanized area, it must be submitted for MPO review and endorsement. A certification that the plan is in conformance with the transportation plan developed under 49 CFR part 613 and 23 CFR part 450 (the joint UMTA/FHWA regulation) must be included. Several other certifications are also required.

☛ Sample certifications are provided in Appendix C.

8

KEYS TO A SUCCESSFUL
PUBLIC PROCESS

Section 1.

Outreach

Many if not most transportation providers have already established a relationship with some elements of the disability community in their service areas, and may have established a formal relationship with an access advisory group, or with an access subcommittee to its larger consumer advisory

board. If this is the case in your service area, it is important that this group remain involved in the paratransit planning process. Even if this is the case, however, it will be necessary to review the membership in the committee and to take special steps to include persons with disabilities who may not have participated in the past. The new requirements of the ADA will effect many who have not considered transit to be an option for themselves or may not have been aware of paratransit as an option. Others may simply take such service for granted if it is already provided. Special outreach to the community of persons with disabilities must be undertaken as part of ADA paratransit planning [§37.137(b)(1)].

The beginning of the ADA paratransit implementation process offers an opportunity to review and strengthen such advisory processes. Section 4 of this chapter discusses some ways to develop a productive on-going public process.

The new requirements of the ADA will effect many who have not considered transit to be an option for themselves or may not have been aware of paratransit as an option.

State and local commissions on disability and organizations such as independent living centers, local chapters of the Association for Retarded Citizens, United Cerebral Palsy, Easter Seals, etc., (see the listing provided on the following page), may be involved in this process as important elements in the community. Many older Americans, who might not necessarily identify with the disability community, will

nonetheless be eligible customers of this service and groups such as the local chapter of the American Association of Retired People and local councils on aging

should also be contacted. Organizations serving the parents of children with disabilities and the children of elders with disabilities exist in many communities. Most localities have directories of service agencies that work with people with disabilities, often published by the United Way or Community Chest. These organizations can provide an invaluable source of contacts and may have newsletters or mailing lists that can be utilized to reach persons with disabilities. As part of the planning process, the transit provider already will be in contact with many of these organizations to determine levels of existing service and need.

Table 8.1

**A REPRESENTATIVE LISTING OF
ORGANIZATIONS THAT SHOULD BE INVOLVED IN YOUR PLANNING PROCESS**

- Independent Living Centers and state Independent Living Councils
- State or local disability coalitions
- Associations for Retarded Citizens
- Local community residence programs
- Mental Health Associations or Centers
- Commissions for the Blind and Visually-Impaired
- Commissions for the Deaf and Hearing-Impaired
- State, regional, or local Commissions on Disability
- United Cerebral Palsy Councils
- Paralyzed Veterans Associations
- Local chapters of the National Easter Seals Society
- Local chapters of Americans Disabled for Attendant Programs Today
- Developmental Disabilities Councils
- Vocational Rehabilitation agencies
- Councils on Aging
- Home Care Corporations
- Area Agencies on Aging
- Local chapters of the American Association of Retired People
- Other agencies providing direct services to persons with disabilities and consumer groups of persons with disabilities

Transit providers should, however, avoid thinking of the community of persons with disabilities as a monolith, or as a collection of social services agencies, each representing a particular disability or need. Such organizations cannot by themselves represent the disability community. Large parts of this population have no relationship with service organizations and their interests may not coincide. It also should be remembered that clients of a particular agency may find it difficult to comment freely on the transportation services on which they have been dependent. Transit providers may wish to establish a goal that most of those involved in the consultative process be individuals with disabilities, possibly but not necessarily representing an organization or constituency. Including these people in the consultative process will have important implications for outreach and the planning of meetings.

Outreach through service agencies must be supplemented by the use of the general media — newspapers, radio and television — to reach a broader population. Opportunities for involvement in the consultative process outside of normal working hours, evenings or weekends, should be considered: many of the people who will wish to be involved have jobs and would find it awkward to request time-off to attend such meetings. Local access cable television and telephone connection may allow input from persons not now able to leave their homes (persons likely to care very much about paratransit). Even with this accommodation, however, transportation arrangements will need to be made for those who wish to attend the meetings directly. All announcements of meetings, agendas, draft and final paratransit plans — whatever is presented in published form to the public — should be available in alternative media for

persons who are blind or have visual impairments. At a minimum, large print and taped versions should be available; braille versions are most highly valued by some blind individuals. Whenever television is used, provisions should be made for captioning or signing the audio message. A fuller discussion of holding accessible meetings follows.

Section 2.

Developing Trust and Common Goals

The involvement of persons with disabilities in the development of transit services and facilities that will meet their needs is an integral part of the ADA;

Transit providers should avoid thinking of the community of persons with disabilities as a monolith, or as a collection of social services agencies, each representing a particular disability or need.

implementing regulations reflect this legislative commitment. The experience of transit providers that have provided paratransit in the past indicates that such public

participation also facilitates the development of a service that most effectively meets the needs of its customers. Within the parameters established by the legislation and its implementing regulations, these customers will provide the critical input as to what does and does not work, how standards and priorities can be established and in measuring progress in meeting the ADA's goals. A community convinced of your commitment to provide accessible services also can prove an invaluable ally in obtaining the necessary funding for implementation.

It is likely that the implementation of these regulations will involve people who heretofore have not been involved in the transit planning process. Indeed, one of the goals of the ADA is the development of this involvement. A frank history of the provision of transit services to customers with disabilities would reflect a good deal

of suspicion and misunderstanding — and often confrontation — over issues of access. Especially if a transit provider has not provided paratransit service in the past, it may have little or no contact with the population to be served by this new requirement. Where paratransit has provided much or all of the services available to customers with disabilities, implementation of the ADA may be seen as a threat to established levels of service. Expectations raised by the passage of the ADA are tempered by the frustration many customers with disabilities — or would-be customers — have experienced in past dealings with transit agencies. Nonetheless, effective implementation of the requirements of the ADA, as well as efficient delivery of the services it promises, requires that transit providers work to establish new levels of trust in their dealings with the disability community.

Three key factors can help establish mutual trust and ensure a successful public process. These factors are discussed more thoroughly in the sections that follow.

First, all participants should understand the process, its goals and its limitations.

Second, the process must be genuinely consultative. More is expected than just an opportunity to comment on a fully elaborated plan for the provision of paratransit services. Decision-makers need to be open to this input and to have direct involvement with the process as it develops. The regulation requires that consultation begin at an early stage in plan development and involve persons with disabilities in all phases and aspects of the plan's development.

Third, a mechanism for on-going input from the community will help ensure that problems are dealt with early, before they can become embedded in the system and before community dissatisfaction can grow. This will prove particularly valuable as paratransit plans are updated annually. Such an ongoing process is required by the regulation.

Section 3.

Timely and Meaningful Input in the Initial Planning Process

In calling for a collaborative process between transit providers and the disability community, USDOT regulations leave the format to be utilized in the consultation to be chosen locally. More or less formal access advisory committees have been established in a great many localities, and the form of these committees is discussed in the section which follows. Although the deadlines for establishing complementary paratransit may seem quite challenging, it is important to note that the benchmark date of January 26, 1992 involves the submission of an acceptable plan to USDOT and the initiation of its implementation, not the creation of a fully complying paratransit service. The regulation applies this requirement for consultation to the annual updates of the paratransit plan. Compliance with this requirement for consultation will be greatly facilitated by the creation of an established and ongoing paratransit access advisory body. On-going consultation facilitates understanding by both parties and can prevent the annual plan development from becoming bogged down with accumulated grievances.

Whatever venue is chosen for this consultation (a permanent accessibility advisory committee or subcommittee of a larger consumer board, a series of specially called meetings, etc.), it will be essential that the process begin with a full discussion of what the ADA requires regarding complementary paratransit, and of the transit agency's good faith and commitment to meet these requirements at every step of the process. The relationship of these requirements to existing fixed-route and paratransit services should be carefully presented. Understanding of these underlying points will help ensure that the discussion is focused and meaningful. It is inevitable

that at least some of those participating in this process will want to discuss current transit services and their dissatisfaction with them. A mechanism for dealing with these concerns, separate from this process, should be available and announced at these meetings. Participants should, however, be encouraged to focus on what a complying complementary paratransit program will look like in their community and to avoid discussions merely of what is wrong with currently available services. A trained facilitator well-regarded by all elements of the community may prove helpful to that end.

The initiation of this public process provides an important opportunity for the transit provider to articulate, from the highest levels of the organization, the commitment to achieve full compliance with the ADA. Attendance by the chief executive and/or members of the corporate board of the provider will help demonstrate that commitment to the community. Such participation will also inform senior personnel of the issues surrounding paratransit and will send an important signal throughout the organization of the significance attached by management to this process and to compliance with the ADA.

It also can be expected that this discussion will go beyond the kind of complementary paratransit required by the ADA. The ADA sets a minimum level of required complementary paratransit service while encouraging the widest possible availability and use of accessible fixed-route services. As noted elsewhere, the ADA is not meant to preclude a wider paratransit service if this meets the needs of a particular locality. Transit providers

may wish to consider these other needs even as they ensure compliance with the ADA's minimum standards.

Ideally, this initial discussion will be reflected in a draft plan for ADA compliance which would be discussed at subsequent meetings. Planners should be prepared to explain at this meeting why specific suggestions were not included in the plan and how the alternative approach chosen will meet a particular need. If a plan relies on the utilization of existing paratransit services, it is essential here to demonstrate how these services meet their mission: the customers of these services will have much to say on this point. It is also important to make clear that the

The initiation of this public process provides an important opportunity for the transit provider to articulate, from the highest levels of the organization, the commitment to achieve full compliance with the ADA.

development of complementary paratransit is a process that will occur over time to a set of specific goals and timetables. The selection of these benchmarks and

service standards is an important element for consideration in the consultative process and may alleviate the need for a request for an undue financial burden waiver. If such a waiver request is planned, the details of its scope and duration should be thoroughly assessed and explained.

A final draft plan reflecting this input must be the subject of a public hearing [§37.137(b)(4)]. Opportunity for public comment other than through the occasion of the public hearing is also required [§37.137(b)(2)]. The plan will need to be available in alternative media (large print, braille and tapes) for the blind and visually impaired and well advertised in general circulation and specialized publications and broadcasts.

Section 4.

Creating an On-going Consultative Process

The regulations adopted by USDOT do not specify the structure of the consultative process which is required to take place in the planning process for paratransit and other accessible services. This is appropriately a local question, to be determined within the context of the provider's overall relationship with the disability community. Many transit providers already have in place some form of access advisory process and certainly that process should be used here so long as special steps, described in the sections

above, ensure that the necessary outreach for this particular purpose has taken place. If an access advisory committee exists, the

consultation described above could take place through its auspices, with a special meeting or part of the meeting set aside for discussion of ADA-related paratransit issues. If such an advisory committee does not exist, transit providers may find this a useful time to establish such a body.

The on-going requirement for consultation in USDOT regulations as well as the obvious interest of all parties in achieving an effective and efficient paratransit service, suggests that a formal access advisory committee be established. Where a larger customer service advisory committee exists, it may be useful that this group be a subcommittee of the larger group. In any case, the paratransit committee should be truly representative of the users of the service and open to participation by the public. Appointed committees, named by the transit provider, may be inclined to represent organizations more than consumers and can place the provider in a difficult political thicket. A more open arrangement, nonetheless providing structure for its process, may be more

useful in meeting the needs of the community and the transit provider.

It must be expected that the consultative process will grow and evolve as time goes on. Where no such process currently exists, the arrangements made for this consultation will necessarily be interim, and should be acknowledged as such. The chairperson or staff member of a state or local office on disability (handicapped affairs, etc.) might appropriately serve as an acting chairperson or facilitator in the early stages of the consultation. The requirement that a workable paratransit plan be submitted by January 26, 1992 means that the final development of a more formal consultative body, with an

elected chairperson, may best be put off for a short period of time. It is important, in that case, that the interim nature of this

A structure whose membership is self-selecting will, in the long term, probably prove the most viable.

arrangement is clearly stated so that the process of consultation regarding paratransit can move forward. For now, the goal should be to be inclusive of all who wish to participate with the clearly stated goal of timely production of a workable paratransit plan.

A structure whose membership is self-selecting will, in the long term, probably prove the most viable. In smaller communities, simply showing up for a well-advertised meeting may be enough to allow participation in all the processes of the committee. A committee with defined membership and leadership can, however, prove an important asset in achieving common goals. Some established access advisory committees define as a member any individual who has attended three monthly committee meeting within the last year; such members can vote on policy recommendations and for an executive committee. The long-term structure of an access and/or paratransit consultative committee, its membership, and its formal relationship to the transit provider are themselves natural parts of the planning

process and the paratransit plan and should be addressed as such.

Establishing a formal relationship can be achieved by developing a "Memorandum of Understanding" (MOU).

☛ A sample MOU used by the Massachusetts Bay Transportation Authority (MBTA) in Boston and other regional transit authorities in Massachusetts, is provided as Appendix I.

Section 5.

Holding Accessible Meetings and Hearings

A truly accessible, barrier-free meeting is not difficult to arrange, even for the first time, and will contribute greatly to establishing a sense of the transit provider's good faith from the start of the process. Successful access does, however,

require attention to detail. Specific accessibility standards such as doorway widths and ramp slopes are not included here but can be found in the Access Board (ATBCB) standards that are incorporated as Appendix A in the USDOT final regulations. Even if you use a facility that has been utilized for meetings of persons with disabilities in the past, do not take it for granted that the facility is fully accessible. Many buildings can be used by persons with disabilities, if only uncomfortably, even though they could not be called accessible. An on-site preview of the meeting place should certainly be conducted. Attention to the true accessibility of your meeting place will help ensure safe and productive meetings for all participants.

An accessibility checklist is provided as Table 8.2 on the following page.

Table 8.2

AN ACCESSIBILITY CHECKLIST FOR MEETINGS AND HEARINGS

Have meeting notices been published in several formats so that those with communications disabilities - the deaf and hard of hearing, the blind and visually impaired - know about the meeting?	
Has all published material been made available in a timely way in alternative media: large print, taped and braille?	
Have arrangements been made for transporting those with disabilities, using available fixed route and paratransit vehicles?	
Have extra parking spaces for persons with disabilities been set aside at available lots or garages?	
Is the accessible route to the meeting clearly designated and marked?	
Are the primary entrances to the meeting place accessible, not requiring persons with disabilities to use rear doors or circuitous routes? If inaccessible entrances to the meeting place exist, is there signage directing persons with disabilities to an accessible entrance?	
Have sign language translators and oral interpreters been engaged to make the proceedings accessible to persons with hearing disabilities?	
Are sound amplification systems such as FM amplifiers and receivers and induction loops available to improve the quality of verbal communication?	
If there is fixed seating in the meeting place, is there sufficient space throughout, and particularly near the front of the room, for persons using wheelchairs?	
Is the air circulation system in the meeting place adequate to reduce the effects that foreign substances may have on persons with environmental illnesses?	
If microphones are being used, are they at appropriate heights for both persons using wheelchairs and ambulatory individuals?	
Are drinking fountains, rest room facilities and public telephones accessible to persons using wheelchairs?	
Are public telephones accessible to persons who use wheelchairs and those with hearing impairments: are an adequate number of phones amplified and is at least one phone equipped with a TDD?	

9

Implementing the Plan



This chapter offers guidance on the implementation of complementary paratransit service programs. Three important aspects of operation - scheduling, training, and vehicles and equipment - are discussed. Suggestions for ongoing evaluation of services and updating of paratransit plans also are provided.

Section 1.

Scheduling and Dispatching

Scheduling and dispatching are a crucial part of paratransit operations. Schedulers and dispatchers must make rapid decisions based on complex sets of known and unknown variables. A balance must be maintained between the quality and level of service and system efficiency and productivity.

ADA complementary paratransit requirements will add an additional level of complexity to this function. As the fixed route system becomes more accessible, schedulers will need to have full knowledge of fixed route travel alternatives. More exact geographic information also will be needed.

While schedulers may have had a general idea of the location of origins and destinations based on street names, they now will need to know precise distances from origins and destinations to fixed route transit stops. This information will be needed to determine if individual trips can be made on the fixed route system given the rider's particular disability.

More detailed rider information also will need to be readily available. Eligibility limitations will have to be known and

applied to specific trip requests. Extremes in weather also will have to be considered in conjunction with rider needs.

In addition to efficiently assigning trips to vehicles, schedulers will be making complex decisions on trip eligibility. Depending on an individual's disability, they will need to ascertain if the person can get to and from transit stops, if accessible fixed route service is available for the trip, and if the person can use the fixed route alternative including any transfers that may be required. Given the complex nature of the job and the potential consequences of discriminatory trip eligibility decisions, a system of checks and balances is recommended. For example, have a second person check all trip denials given to ADA paratransit eligible persons to be sure that appropriate fixed route alternatives exist. Give particular attention to any subscription requests that are made by eligible individuals. If denied, allow the

Given the complex nature of the job and the potential consequences of discriminatory trip eligibility decisions, a system of checks and balances is recommended.

individual to appeal the scheduling decision to a third party. You also may want to periodically check trip records to be sure that schedulers are not

overcompensating and providing paratransit service when fixed route alternatives exist.

Methods of Scheduling

While many different methods of scheduling have been developed, there are three general types of systems that are used. Most methods of scheduling are a variation of one of these general types. Each has its advantages and disadvantages as described below.

Advance Reservation/Call-Back Systems. Under this system, riders call the reservation center in advance of their desired travel time and place a request for service. Requests are sorted by day (and in some cases by time). One or two days before the day of service, vehicle schedules are developed based on the requests received and any subscription lists that are maintained. Once vehicle schedules have been developed, riders are called-back (usually the day before service), trip requests are confirmed, and pick-up times are given. Typically, a maximum advance notice is also specified (for example, requests will be taken no more than 14 - 30 days before the trip). Many programs also will take requests on a "space available" basis even after schedules are developed.

Some modifications to this type of scheduling procedure will be needed to meet the regulatory requirement for "next day" service. Trips can still be reserved days in advance and schedules can be developed a day or two in advance of the day of service. However, other trip requests, placed up to the close of business on the day before service by persons who are ADA paratransit eligible for trips that are eligible, will have to be accommodated **on an equal basis**. Meeting these requests on a "space available" basis after a specified cut-off time is not permitted. Such a procedure would make these trips less likely to be scheduled and would not provide for true next day service. Requests made on the day of service could still be accommodated on a "space available" basis, however, without violating this requirement.

A major disadvantage of this method of scheduling is that riders do not receive trip confirmations until call-backs are made. In systems that are severely capacity constrained, riders are often denied service on the day before their planned trip. To protect against last minute trip denials, users often search for other travel alternatives after placing

their trip request with the paratransit service. High cancellation rates are often reported by paratransit systems that use this method of scheduling. The removal of capacity constraints in response to the regulation will diminish this concern (at least for ADA eligible trips). Call-backs will eventually serve primarily to communicate exact pick-up times rather than to confirm or deny these trip requests. Call-backs to confirm trips may still be needed, however, if it is not possible to determine whether or not trips are eligible at the time they are received.

Another disadvantage of this method is that the functions of scheduling and recording trip requests are usually separated. Direct communication between the scheduler and the rider, which is often helpful in negotiating alternative trip times that are acceptable to the rider, is cumbersome.

The major advantage of this method is that most trip requests are known before vehicle schedules are created. This allows for the development of efficient routes and permits more exact pick-up times to be given to riders. As noted above, though, efficiently planned vehicle routes can become inefficient if there are a significant number of cancellations.

Advance Reservation/Immediate Confirmation Systems. Similar to the first method noted above, riders place requests in advance. Again, a maximum advance reservation period is typically specified. Unlike call-back systems, vehicle schedules are developed over time as requests are received rather than at one time after all requests have been made. Requests are confirmed as they are placed. Call-backs are made only if there is a significant change to the schedule. Communication with the rider at the time that trip requests are made also makes minor adjustments possible that can increase vehicle productivity.

Because not all requests are known at the time that trips are confirmed, riders are

asked to be ready a certain amount of time before and after the scheduled pick-up time (typically 10 to 30 minutes). If you use this method of scheduling, be sure that the "window" of time used for pick-ups does not result in unreliable service that could be construed as a capacity constraint. A possible variation on this method that would reduce this inconvenience would be to combine immediate confirmation with call-backs to give riders more exact pick-up information.

This method works best if the scheduler has experience in predicting the demand for service and is able to envision how each vehicle schedule should be developed. It is also more appropriate in small urban and rural areas where the number of vehicles in any given part of the service area is limited and individual vehicle schedules are therefore easier to predict. Pre-scheduling subscription trips also helps to define vehicle tours.

Given the added complexities of ADA eligibility, paratransit systems which use this type of scheduling will need to provide schedulers with immediate access to detailed rider information and fixed route information.

Fully implemented ADA complementary paratransit services which provide "next day" service will likely employ a scheduling method which combines the two systems described above. Determining trip eligibility will be the first scheduling task. If adequate information is available, eligible trip requests could be confirmed as they are placed. Call-backs would then be used to notify riders of exact pick-up times. If it is not possible to quickly determine trip eligibility, a call-back system could be employed to notify individuals of accessible fixed route alternatives for their travel needs. These call-backs could be made as soon as

eligibility is determined (if a trip request is made days in advance, it would be helpful to the rider not to wait until the day before service to make these call-backs).

Immediate Response Systems. Unlike the above two systems, this method of scheduling does not require advance reservations. Trip requests only need to be made a reasonable period in advance of the desired pick-up time. As requests are received, the scheduler assigns them to an available vehicle in the area. Immediate response scheduling is used by many user-side subsidy programs which utilize taxicabs. Some advance reservation paratransit operations also use this method of scheduling for return trips if the pick-up time on the return trip needs to remain flexible.

Immediate response scheduling offers the highest level of service to riders and a response time most identical to fixed route service. Studies indicate that immediate response scheduling can be done in urban areas without affecting vehicle productivity.

While requests do not need to be made in advance, reservations made in advance can be accepted. It is often convenient for riders to make travel arrangements when appointments are made or trips are planned

rather than to wait until the day of service. These requests simply need to be recorded, recalled on the day of service, and scheduled along with other requests that are received.

This type of scheduling is most appropriate in urban areas with a high level of demand, where average trip distances are relatively short, and where the density of vehicles in the service area is high. Achieving reasonable vehicle productivity is possible under these conditions without grouping rides.

Immediate response scheduling offers the highest level of service to riders and a response time most identical to fixed route service. The flexibility offered by this method of operation is much more conducive to the many unscheduled travel needs that make up a large part of daily

life. You should look carefully at this type of scheduling to see if it can work in your area for all or part of your paratransit program. Try scheduling return trips using this method or conduct a limited demonstration during weekend hours.

Studies indicate that immediate response scheduling can be done in urban areas without affecting vehicle productivity. Demand for service will increase, however, with advance notice requirements of less than four hours. If you decide to test or adopt this method of scheduling, plan in advance to accommodate this extra demand.

Computer-Assisted Scheduling

Computerization in paratransit operations has become widespread with the availability of low-cost, powerful microcomputers. Numerous software packages exist which can assist with one or all of the following tasks:

Recording Rider Information. Most programs include a client file which contains important information about the rider. Detailed eligibility and disability information as well as location relative to fixed route services can be added easily to these files. By computerizing this information, it becomes readily available to schedulers and dispatchers.

Recording and Routing Subscription Trip Requests. Again, most programs allow you to enter and periodically update ongoing, or subscription, trip requests. Lower-cost software packages ask you to assign a subscription trip to a specific vehicle when the request is entered. Some programs will evaluate and offer daily routing changes to obtain the most efficient schedule.

Recording and Routing Non-Subscription Trip Requests. Lower-cost packages will display vehicle schedules, including any subscription requests that have been added, and allow you to select the most appropriate vehicle. More expensive packages will suggest

vehicle assignments based on existing schedules and any service conditions (such as maximum travel time, pick-up or drop-off "windows") which you have specified.

Routing of Vehicles. As noted above, many computer programs integrate routing with other functions. Some programs are available, however, which provide routing assistance as a separate function. These types of programs are particularly helpful in periodically evaluating subscription trip assignments.

Developing Reports and Billings. Fully integrated software packages, which combine rider records with trip requests, allow you to edit schedules for cancellations, no-shows, etc. and to then generate reports and invoices. Detailed reports and cross-tabulations are possible which can be invaluable in planning and service evaluation.

Computerized recordkeeping is possible even if scheduling is not fully automated. Simple relational database software can be used to create a file of completed trip information, to relate trips to rider records, and then to generate service reports and invoices for funding agencies.

Advanced Geo-Based Computer Scheduling Systems

A few scheduling programs have been developed which are geographically based. These programs integrate street networks such as the Census' TIGER files into the scheduling process. They are capable, therefore, of combining fixed route bus information and exact distances from stations/stops with paratransit scheduling.

☛ A recent report, titled ***Advanced Public Transportation Systems: The State-of-the-Art***¹¹, describes one such system used by taxi contractors to the Metro-Dade Transit Agency in Miami, Florida.

A second system is being developed for use by Tri-Met in Portland, Oregon. The

Tri-Met system is particularly relevant. When fully operational, it will look first at client registration information to see if the person is registered for and eligible for paratransit service. It then will check the client's address in relation to accessible fixed route bus service to determine if fixed route service can be used for the complete trip or if feeder service is possible.

☛ An excellent source of additional information about both public domain and proprietary software that is currently available for paratransit operations is the PC-TRANS Resource Center at the University of Kansas Transportation Center.

Information about PC-TRANS and a table summarizing currently available software based on their most recent catalog - *PCs in Transportation Software Directory* is provided in Appendix J.

Section 2.

Employee Training and Public Information

Employee Training

Quality paratransit service cannot be provided without a thorough employee training program. Training is important at all levels - for board members, employees in administration, and those in operations.

Involving persons with disabilities and local disability groups and agencies in the development of employee training programs is **strongly** recommended. Invite organizations to review material you have developed or obtained. Make sure to get input on all types of disabilities. Independent Living Centers, which provide cross-disability services, can be particularly helpful. Associations for persons with vision, hearing, or cognitive impairments can offer suggestions for those particular disabilities.

Training is important at all levels —for board members, employees in administration, and those in operations.

Union involvement in the development of training programs is recommended also. Increased awareness of disability issues among union representatives can help avoid resistance to any work rule changes that may be necessary. Unions also can be an important ally in efforts to ensure that employees properly follow operating procedures.

Following is a list of seven recommended types of training:

(1) Provide all employees and board members with an understanding of the ADA and related regulations. It is important that all persons understand the goals of the law and the responsibilities that your agency now has. The first several chapters of this handbook can be used to provide this instruction.

☛ The National Easter Seal Society (Project ACTION) in cooperation with the American Public Transit Association (APTA), the Community Transportation Association of America (CTAA), and the International Taxi and Livery Association (ITLA) plan to sponsor a series of workshops in the Fall of 1991 to offer training on ADA requirements.

Table 9.1 provides a workshop schedule. To contact these organizations, see Appendix K.

(2) Provide all employees with instruction on the general operating procedures and plans that you have adopted for your particular service. Explain your plans for meeting the complementary paratransit service requirements of the ADA and how these plans relate to other services you may be providing.

(3) Train all employees to understand the different abilities of persons with disabilities. This training is important as a way to change the stereotypes and discriminatory attitudes that people in your organization may have.

**Table 9.1:
Project ACTION/CTAA/APTA/ITLA Workshops**

Dates	Location
November 14, 1991*	Las Vegas
November 17-18, 1991	Chicago
December 8-9, 1991	Seattle
December 8-9, 1991	Atlanta
December 15-16, 1991	Washington, D.C.

* In conjunction with the ITLA Annual Convention and Trade Show.

☛ As part of the Rural Transit Assistance Program (RTAP), a multimedia training module titled "Understanding the Capabilities and Needs of Special Passengers" was prepared and several copies distributed to each state RTAP program manager. Copies are also available (for \$80.00 per copy) by calling 1-800-527-8279.

(4) Provide drivers, schedulers, and dispatchers with more detailed training in understanding disabilities, the various types of mobility aids that riders will be using, and in providing assistance to riders.

☛ **Passenger Assistance Techniques**, a training manual and course of instruction developed by Transportation Management Associates, has become the standard in the industry for this type of training. Your state RTAP Program Manager can assist you in getting information about this course, and other similar programs.

(5) Be sure that drivers, dispatchers, and schedulers are versed in the *specific* as

well as general operating policies of your program. Develop *written* policies which address travel by companions, "no-shows" and service denial guidelines, levels of assistance to be provided, guidance on transfers, and other key issues. Prepare a "Driver's Manual" or more general "Operations Manual" that includes these written policies and provide a copy to each driver or employee.

☛ Paratransit operating policies are discussed in UMTA/RTAP Technical Assistance Brief Number 3, titled ***Special Policies for Special Passengers***. Copies are available through the CTAA (see Appendix K).

(6) Provide drivers and mechanics with instruction in the safe and proper use and maintenance of access related equipment. Tailor this instruction to the specific requirements of your lifts, ramps, securement systems, public address systems, and other accessibility equipment. Develop this training in close cooperation with equipment manufacturers.

(7) Instruct drivers and dispatchers in handling emergency situations and in proper vehicle evacuation techniques.

☛ A training package called ***Evacuating Elderly and Disabled Passengers from Public Transportation Vehicle Emergencies*** was recently prepared with UMTA funding by Senior Services of Snohomish County, Everett, Washington. Copies are available by calling Senior Services at (206)355-1112.

The above recommendations are intended, of course, to be offered in addition to training in other areas such as defensive driving, first aid, CPR, handling accident and other incidents, or passenger relations which you may now be providing.

☛ The UMTA RTAP National Program recently released a third edition of ***Training Resources Catalog for Rural and Specialized Transit Systems***. This catalog provides the latest information on training packages, audiovisual material, and publication. Copies of the catalog can be obtained by calling the National Resource Center at (800)527-8279.

Rider Information

In addition to employee manuals, develop a "Rider's Manual" for users of your paratransit service.

Include in this manual a summary of service policies covering issues such as transfers, no-shows, companions, attendants, subscription service, and accommodation of mobility aids. This manual also

can include detailed information about using the service including advance notice requirements, service area, days and hours, and fares.

Service can be provided more efficiently and with fewer complaints if riders know what to expect and what is expected from

them.

Also work with local agencies to develop public information about the ADA and your particular service. Current and potential riders may have many misconceptions and unrealistic expectations about the service that is required by the ADA. Human service agencies can help by notifying their clients and by joining with you to sponsor public information campaigns.

☛ A good source of information about outreach and public information is the National Easter Seal Society's Project ACTION office. They can be reached by calling (202)347-3066 (Voice), or (202)347-7385 (TDD)

Section 3.

Vehicles and Equipment

As you obtain new vehicles for use in your complementary paratransit service, be sure that your specifications comply with all of the standards included in the regulations. These ADA Accessibility Specifications for Transportation Vehicles are contained in Part 38 of the USDOT regulations.

Many of these standards, such as lift platform size, design weight, and emergency back-up systems, are fairly common in the industry. Most current

...work with local agencies to develop public information about the ADA and your particular service. Current and potential riders may have many misconceptions and unrealistic expectations about the service that is required by the ADA.

manufacturers will be able to meet these specifications. Some of the standards, however, such as the performance standard for the lift platform barriers (or end gate) are not common in the industry. Only certain

select companies have designed ***and tested*** their products to this standard. It is therefore recommended that you not only include the actual standards in your specifications but also ask bidders to certify that their lifts (or securement systems) have been tested to meet the

ATBCB standards. Until you become familiar with a company's product line, you also may want to review copies of the test results.

The regulatory requirement that you accommodate all types of mobility devices within certain size and weight limits suggests the use of floor-mounted belt securement systems. Several manufacturers presently make belt systems which meet the regulatory standards. Again, require that equipment be tested. In addition to the ADA standards, a common performance specification used is to require that securement systems be tested to meet the "30mph/20g standard" developed at the University of Michigan.

While belt systems are versatile and provide excellent securement, they will require special driver training. These systems can be unsafe if belts are not attached and tightened properly. Also, given the number of belts that are usually involved, it is recommended that your vehicles be equipped with belt cutters to facilitate emergency evacuation.

☛ Revised "guideline specifications" for lifts and securement systems are being prepared by UMTA. These specifications, which will incorporate ADA standards, will be available in the fall of 1991.

There are many other good sources of technical assistance on vehicle and equipment specifications. Because the ADA standards are new, however, past reports and specifications should be carefully checked for compliance with Part 38 of the regulations. General vehicle specifications are available through the RTAP program.

☛ The National Resource Center, cited above, maintains current copies of proven specifications for a variety of different sizes and types of vehicles. CTAA and APTA (see Appendix K for addresses and phone numbers) also can provide you with technical assistance

about vehicles, lifts, and securement systems. A number of good publications on small transit vehicles are also available and are listed in Appendix K.

Section 4.

Ongoing Evaluation

Equally as important as developing a good initial paratransit plan is a process for monitoring and evaluating service and adjusting your original plan and estimates. Accurately forecasting demand for service is difficult. Much of this demand is unexpressed, latent demand. Baseline trip information on which to develop estimates may not exist. Adjustments in your estimates will need to be made using actual service information. Predictions about the actions of other transportation providers cited in your plan and the level of funding available for your service also will likely need to be adjusted as you implement your plan.

Table 9.2 suggests a number of service statistics that can help you monitor and evaluate your paratransit service. Those that are marked with an asterisk are more difficult to collect (unless your service data and client records are computerized). You may want to consider periodically sampling your records to develop estimates for these items. Appendix F includes a methodology for developing estimates that are statistically valid. Other statistics, not marked with an asterisk, should be collected monthly.

Tracking the number of trips denied, missed, or provided late will help you understand the level of capacity constraints that remain in your service. As explained in Section 2 of Chapter 5, you should develop definitions of "late trips", "missed trips", and trips that are "denied" in cooperation with your consumer advisory committee.

A detailed analysis of unmet trips requests, in particular, can be helpful. Tabulate unmet trips for ADA paratransit

**Table 9.2:
Suggested Paratransit Service Statistics**

Monthly Trip Statistics:

Total one-way trips requested	_____
Total one-way trips scheduled	_____
Total unmet trip requests	_____
*Unmet ADA paratransit eligible requests	_____
*Other unmet requests	_____
Total one-way trips canceled	_____
Total no-shows	_____
Total one-way trips provided	_____
*Subscription trips	_____
*Non-subscription trips	_____
Missed trips	_____
Late trips	_____

Monthly Service Statistics:

Total vehicle-hours of service	_____
Total vehicle-miles of service	_____
Productivity (trips provided/vehicle-hours)	_____
Average trip length (trips provided/vehicle-miles)	_____

***Trips by Type of Rider:**

Total one-way trips by ADA-eligible riders	_____
Total one-way trips by non-ADA riders:	_____
Trips by elderly riders	_____
Trips by agency clients	_____
Trips by others	_____

***Trips by Area:**

Trips originating in community A	_____
Trips originating in community B	_____
Trips within ADA service area	_____
Trips outside the ADA service area	_____

***Trips by Trip Purpose:**

Employment	_____	Education	_____
Shopping	_____	Medical	_____
Social/Recreational	_____	Nutrition	_____
Personal Business	_____	Other	_____

***Unduplicated Riders:**

ADA-eligible riders	_____	Avg. trips/month	_____
Non-ADA riders	_____	Avg. trips/month	_____
Elderly	_____	Avg. trips/month	_____
Agency client	_____	Avg. trips/month	_____
Others	_____	Avg. trips/month	_____

* Items that are difficult to collect manually and can be developed through sampling.

eligible and non-ADA paratransit eligible riders. Review unmet trips by time of day, by day of the week, and by area. This will help you identify when and where the most serious capacity constraints exist. It will also help you identify times when subscription trips may be causing the schedule to be "closed" to other requests.

Recording the number of cancellations and no-shows will help you evaluate the effectiveness of your scheduling system. As discussed previously in this chapter, certain types of scheduling procedures can increase the number of cancellations and no-shows. Recording this information also will let you know if the incentives and disincentives you use to reduce no-shows are effective.

Delineate between subscription trips and non-subscription trips provided to ADA paratransit eligible riders. Periodically review the mix of trips by time of day to determine if subscription service exceeds 50% of the total.

Collecting information on trips by type of rider is important for two reasons. It can help you adjust your demand estimates. It also will enable you to calculate those costs associated with the provision of ADA-required service. This information will be important if you have to apply for an undue financial burden waiver.

Determining the number of trips wholly within the ADA-service area is only necessary if you may need to request an undue financial burden waiver and have elected to provide service in a larger area than that defined by the regulation.

Trip purpose information can help with demand projections. Social, recreational, and personal business trips will increase as response time is reduced and as

capacity constraints or trip purpose limitations are removed. The number of employment trips also can be expected to increase as the provisions of the ADA are implemented. The mix of trips by purpose will tell you if advance reservations are too large a percent of your service. If a relatively small number of trips for social, personal business, or other such needs are being provided, you may need to examine your advance reservation policy.

Finally, periodically counting the number of unduplicated riders by type and calculating the average number of trips per registered rider can again help you with your demand estimates. It can help you revise your estimates of "market penetration" (the percent of eligible persons registered for your service) and the "mode split" (the number of trips made on your paratransit service versus other means).

Fixed route service information also should be collected. If you plan to operate a Call-A-Lift-Bus service, track requests by route to help you determine which routes to make 100% accessible when additional buses are purchased.

Paratransit service information also can be used to plan accessible routes and to design service routes or route deviation systems.

It is important that you include consumers in the monitoring and evaluation of service. Provide a monthly operations report, including the above suggested statistics, to your consumer advisory committee.

It is important that you include consumers in the monitoring and evaluation of service. Provide a monthly operations report, including the above suggested statistics, to your consumer advisory

committee. Riders will be able to help you interpret these statistics and identify service design problems. Making this information available will help focus the meetings on important "system" issues and avoid discussions of individual problems and complaints.

Section 5.

Updating the Plan

A revised plan, based on the latest service and budget information must be submitted to your regional UMTA office or state administering agency as indicated in Table 7.1.

Annual updates must address each of the items contained in the initial plan. Current information about your fixed route and paratransit services must be included. New

information about other paratransit services in the area and any additional efforts to coordinate with other agencies and providers also should be described.

If your initial plan proposed implementation in more than one year, your update(s) must state whether or not previously approved milestones have been achieved. If any milestones have not been achieved, your update must provide reasons for the slippage and a description of all actions being taken to compensate for these delays. Updates which substantially alter the initial plan are subject to UMTA disapproval. Substantial changes would include extending the implementation period (e.g. from three to four years) or delaying milestones such that "measured progress" is no longer demonstrated.

Annual plan updates also must describe how the requirements for ongoing participation by persons with disabilities contained in §37.137(c) have been met. Participation is required in the ongoing development and assessment of services, in the development of annual updates, and in any request for an undue financial

burden waiver (if applicable).

More frequent internal evaluation and revision is recommended. To avoid end of the year problems, evaluate your service monthly after critical service changes are implemented. An internal "updating" of your plan is suggested every 3-6 months

during the implementation period.

If conditions cause you to extend your planned implementation beyond January 26, 1997, you will need to request an undue

financial burden waiver. If the situation warrants, don't wait until your next scheduled official plan update to request a waiver. Before a waiver is requested, thoroughly review your entire plan. Conditions may have changed enough to warrant a review of the service model selected or the level of coordination with other agencies and providers. Keep in mind that waivers will only be granted if every possible effort is made to achieve compliance and an undue financial burden exists.

The submission of an annual plan is an ongoing planning requirement. Updates must be provided even after full compliance with the complementary paratransit service provisions are achieved. At that point, your paratransit service should be well established. Annual updates need only state what service is offered and point out any ongoing fixed route or paratransit improvements or changes that have occurred or are anticipated.

If your initial plan proposed implementation in more than one year, your update(s) must state whether or not previously approved milestones have been achieved.

FOOTNOTES

- (1) Fielding, Gordon J., "Transit in American Cities", ***The Geography of Urban Transportation***, The Guilford Press, New York, N.Y., 1986.
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- (3) Margolis, R. and Price, B., "The vital link: Aging and Community Transportation", ***Community Transportation Reporter***, February 1991.
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- (5) Center for Systems and Program Development, Inc., ***Best Practices in Specialized and Human Services Transportation Coordination***, prepared for the U.S. Department of Health and Human Services and the U.S. Department of Transportation, July, 1989 (DOT-T-89-20).
- (6) Erskine S. Walther, Transportation Institute, North Carolina AT&T State University, ***Coordination of Rural Public Transportation Services in Three Southeastern States***, prepared for the Urban Mass Transportation Administration, USDOT, June, 1990 (DOT-T-90-17).
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- (8) KETRON, Inc., ***Market Survey - Planning, Development and Implementation of a Paratransit Program for the Transportation Disabled Residents of New York City, Volume 2***, prepared for the Office of Management and Budget, New York City, September, 1987.
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- (10) Crain & Associates, Inc., Pat Piras Consulting Services, Nelson/Nygaard Consulting Services, "Working Paper 6: Service Needs Analysis, ***San Francisco Bay Area Regional Paratransit Plan***", prepared for the Metropolitan Transportation Commission, January, 1990.
- (11) Robert F. Casey, Lawrence N. Labell, Simon P. Prensky and Carol L. Schweiger, ***Advanced Public Transportation Systems: The State of the Art***, prepared for UMTA, April 1991, DOT-VNTSC-UMTA-91-2.