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## MEETING USER NEEDS AND LIMITATIONS

### INTRODUCTION

Public transit systems can better serve the travel needs of older persons by recognizing and then meeting their needs and limitations. Such improvements focus on accessibility issues. They address the needs of older persons who may have physical, financial, or other limitations. These are not issues of preference (such as those addressed in the previous chapter); they are issues of ability and accommodation.

A wide range of user needs and limitations were discussed in transportation industry focus groups and interviews. This range of issues is shown in Table 24. Issue areas and potential solutions are noted. This chapter discusses some of the more fruitful techniques now being employed for dealing with the user needs and limitations of older travelers.

### PHYSICAL ACCESSIBILITY ISSUES

No matter how much a senior wants to ride a bus, if there are physical barriers preventing him or her from meeting or boarding the bus, that senior cannot ride. For some people, there can be barriers to reaching the bus stop or transit station, barriers to boarding the vehicle, and barriers to riding the vehicle in comfort and safety. Major ways of addressing these issues are improving transit vehicles, improving pedestrian travel, and offering door-to-door services.

#### Improvements to Transit Vehicles

Standard transit coaches can be readily reconfigured to provide easier access and

**Table 24****Potential Service Improvements Related to User Needs and Limitations**

<i>Challenges</i>	<i>Potential Improvements</i>
<b><i>Physical Limitations</i></b>	
Difficulties in boarding transit vehicles	Purchase low-floor vehicles; deploy ramps for boarding; construct raised platforms at major passenger boarding locations; have drivers assist in boarding/alighting as needed
Difficulties in traveling several blocks to access transit vehicles	Provide or contract for door-to-door service (priced at a fare consistent with recovering the full cost of service); make infrastructure improvements to walking environment (sidewalks, curb cuts); offer escort services; feeder service via paratransit, Service Routes, and contract service providers, including volunteers and taxi cabs; more extensive service coverage
Problems traveling from a building to the curb to board a vehicle	Provide passenger assistance from the doors of buildings to vehicles
Inability to wait for extended periods outside	Provide shelters and benches at transit stops; improve schedule reliability; increase service frequency; institute automated vehicle arrival and departure technologies; establish short waiting times for transfers
Difficulties in identifying destinations	Audio and visual announcements of stops within the vehicle; augmented signage at stops
Inability to ride comfortably on certain vehicles	Provide reserved seating for older persons; provide that seats are of appropriate materials and condition
<b><i>Financial Limitations</i></b>	
Difficulties in affording the cost of travel	Reduce fares for needy older persons; seek subsidies for certain older riders or all older riders from local and state governments, merchants, professionals (smart card technologies assist in implementing these subsidies); contract for services with agencies employing volunteers as drivers and other staff to reduce the costs of individual trips
Overall public transportation subsidies make it difficult to target cost reductions to those riders most in need	Look to human service agencies to identify and provide financial support for those specific individuals in need of assistance through tokens or vouchers
<b><i>Transit Knowledge of Older Persons</i></b>	
Lack of knowledge about and understanding of transit services by older persons	Expand outreach and education programs; look for models in other markets; develop affinity relationships; develop peer-to-peer training programs; create special incentives such as free fares for using fixed-route instead of paratransit service
Ineffective customer education	Reach outside the transit industry for advice, counsel, and professional services in developing better programs for reaching customers
Failure to communicate with potential customers to encourage trial use of transit	Develop special customer training programs targeted to the particular needs, concerns, and interests of older persons

use for many people, including those with some mobility limitations. Sweden and other European countries have made improvements to their transit vehicles such as easier entrance steps, good handrails, internal stanchions, and good color contrasts. Still, the most significant improvements to vehicle accessibility are likely to be gained from changing to low-floor vehicles.

## **Low-Floor Buses**

For many older persons, the act of boarding a standard fixed-route bus is anything but routine. Most people would find climbing a few tall stairs to be as simple as walking a few short steps. For older persons with physical ailments and pain, it can be as difficult as climbing a mountain. A bus step of 12 inches or more in height without a handrail excludes 40 percent of the elderly population from boarding the vehicle (Mitchell, 1988). Furthermore, when there is a busload of passengers staring at a person struggling up the steps and a driver waiting impatiently for that person to finish the climb, it can be a traumatic and embarrassing experience. For this reason, many older persons who are ambulatory, but have minor mobility limitations, will not ride a traditional fixed-route bus, opting instead for either paratransit or other transportation. Making fixed-route services accessible to ambulatory seniors might save money that would otherwise be spent on the typically more expensive paratransit services, and it would also provide older persons with increased freedom and mobility.

For the purpose of serving older persons and people with disabilities, low-floor buses possess several advantages over conventional buses. The most important advantage is the difference in height for the first step. Typically, the first step onto a

conventional bus is between 9 and 12 inches above the curb. On the latest low-floor vehicles, the first step is less than 3 inches above the curb. Although a difference of a few inches may not seem like much, for an elderly person with hip and joint problems it is substantial. Many older persons who cannot board a regular bus can board a low-floor vehicle with less difficulty. Getting these older persons to use fixed-route service (rather than costly paratransit service) can easily offset the slightly higher cost of low-floor vehicles.

**Low-Floor Buses in the United States.** In the United States, low-floor vehicles have not been as widely adopted as they have in other parts of the world. Nonetheless, their use is growing rapidly. By the end of 1997, more than 2,800 low-floor buses were in use in transit systems in the United States and Canada, and more than 2,600 were on order (King, 1998). (The total in-use and on-order low-floor buses represented 9 percent of the total North American heavy-duty bus fleet.) Low-floor bus purchases in 1997 were

estimated to be between 30 to 40 percent of all heavy-duty buses purchased by transit agencies in North America . . . [and] three of the bus manufacturers projected that by the year 2000 that 50 to 90 percent of their sales would be low-floor models. (King, 1998)

Transit riders, especially older ones, prefer low-floor buses to conventional transit vehicles, and operators have reported generally positive experiences when using these vehicles.

Ann Arbor Transit was one of the first systems in the United States to deploy full-sized, low-floor vehicles. A 1994 on-board survey found that 89 percent of passengers

who experienced difficulty with boarding a regular bus found the low-floor vehicles easier to board. Of that same group, 75 percent found the low-floor vehicles easier to exit. Ann Arbor Transit also reports that boarding and exiting times are reduced with low-floor vehicles by approximately one-third of a second per passenger. Although it may not seem like a substantial reduction, over the course of a day the accumulated time saved can lead to greater on-time performance and schedule adherence.

In addition to helping ambulatory persons with mobility limitations, low-floor buses also provide for improved service to passengers using wheelchairs. The boarding time is greatly reduced using the ramp on a low-floor vehicle, as opposed to the hydraulic lift on a conventional bus. Passengers also prefer using the wheelchair ramp to using the lift. According to a 1992 survey of wheelchair passengers, 81 percent found the low-floor wheelchair access to be “very easy,” compared with only 28 percent of conventional lift users. Thirteen percent found the conventional lift to be “hard” or “very hard” to use compared with less than 2 percent of the low-floor users.

Low-floor buses are becoming a popular choice for fixed-route systems. One bus manufacturer estimates that low-floor bus sales accounted for 70 to 80 percent of the market in the year 2000. These vehicles are becoming especially popular in areas with a high concentration of older riders. Altoona Metro Transportation (AMTRAN) in Pennsylvania is purchasing low-floor buses exclusively. Capital Area Transit Authority (CATA) in Michigan purchased 10 New Flyer low-floor buses in 1996 and 48 more in the spring of 2001. Tri-Met in Oregon is purchasing 50 new low-floor buses each year, and its entire fleet should be low-floor

within 3 years. It is no coincidence that each of these systems transports a larger than usual number of seniors.

**Low-Floor Buses in Europe.** During the 1980s in Europe, when Germany started to introduce low-floor urban buses, a major change in attitude occurred toward transporting wheelchairs on urban bus services (Blennemann, 1992). The low-floor buses used by Germany have a level floor between the front and center doors at a height above the ground of about 12.5 to 13.5 inches. A slight slope at the entrance reduced the floor height of 13.5 inches to a step height of 12.5 inches. The entry step could be further reduced to about 10 inches by kneeling the bus. These low-floor buses were introduced to reduce stopped time and to make urban public transport more attractive to everybody. It was quickly realized that they were much easier to use for adults with children, people with walking difficulties, and passengers encumbered with luggage or shopping bags.

As soon as low-floor buses entered service, it became clear that they could accommodate passengers in wheelchairs, and boarding aids were added. These were initially lifts, but the transit industry has now settled on ramps, almost always at the center door. This provides easier access and is also a more protected position for the ramp. The passenger in a wheelchair travels facing backwards, with the wheelchair backed against a soft bulkhead. In Germany, this wheelchair place is opposite the center door, a space that has traditionally been for standing passengers, luggage, and baby strollers. In Britain and France, a number of alternative wheelchair locations have been used. One real problem is that many buses have only a front door, which makes the wheelchair space and route from the entrance difficult to provide.

The dimensions and layout of the space for wheelchair passengers have been recommended by the European Community Cooperation in Science and Technology (COST) Action 322 “Low-floor buses” (COST, 1995; Dejeammes, 1996). Britain and France (but not Germany) use a stanchion between the wheelchair position and the aisle to prevent the wheelchair from moving sideways in turns. Studies on unrestrained wheelchairs in urban buses in both France (Dejeammes and Bonicel, 1993) and Germany (Kastern, 1991) have shown that the arrangement recommended by COST 322 prevents the wheelchair from moving or overturning during normal transit operations. Tests of simulated collisions show that the rearward-facing position is safe, provided the wheelchair is against the bulkhead rather than some distance from it because of luggage on the back of the wheelchair or because the wheels of the chair have encountered a seat pedestal.

Urban bus services have been opened to people in wheelchairs by the introduction of the low-floor bus with a simple ramp at one door and the ability of transportation services to safely carry a passenger in an unrestrained wheelchair. The ramp is helpful for many people who have walking difficulties, and the boarding time for wheelchairs is little longer than for other passengers. The driver does not need to leave his seat to attend to passengers in wheelchairs. Boarding times for passengers in wheelchairs are sufficiently short (usually less than 1 minute) that they can be carried in significant numbers without substantially delaying the bus.

Many cities are improving bus stops by building out the curb to prevent parking and to allow the bus to dock parallel to the curb (Institution of Highways and Transportation, 1999). This then allows

the sidewalk at the stop to be built up to a height of 7 to 10 inches, allowing level or almost level boarding. Low-floor buses have allowed faster boarding and alighting (though only if ticketing is off bus), and ridership on low-floor services has increased (York and Balcombe, 1997).

In most European urban areas, almost all new buses are low floor. Many cities are also introducing low-floor trams. In 1996, low-floor buses accounted for between 75 and 85 percent of all new urban buses in Germany. Low-floor buses are also in service in Britain, France, the Netherlands, and Scandinavia.

Where the vehicles on a route have been replaced completely by low-floor buses, with no other changes to the service, ridership has increased. In Edinburgh, the Access Officer reports that in the 2 years after low-floor buses were put onto one service route in April 1997, ridership increased about 30 percent, with a particular increase among blind passengers. The parallel route, using traditional double-deck buses, lost ridership, but the total on the two routes increased about 2 percent.

The Transportation Research Laboratory in England monitored the introduction of low-floor buses in London and Tyneside, with no other changes to the service (York and Balcombe, 1997). The increase in ridership was modest—a few percentage points. Much of the increase came from people with baby carriages who had previously been unable to use the bus service. There was a small increase in the number of older passengers.

## **Improvements to Pedestrian Access**

All journeys involve an element of walking or assisted walking, and many local journeys

can be made wholly on foot or in a powered wheelchair. Pedestrian infrastructure that is easy to use is fundamental to independent mobility. This infrastructure includes paths and sidewalks, ramped curbs, protected street crossings, resting places, and access to buildings. Routes must be continuous, with resting places (seats or benches) at least every 330 feet and gradients or ramp slopes limited to 5 percent, if possible.

A variety of strategies can be used to make streets more pedestrian-friendly. These include sidewalks that are large enough, amenities for pedestrians, priority lanes for transit vehicles, and traffic-calming measures for automobiles. (See Project for Public Spaces, Inc., 1998, which includes case studies of transit-friendly streets in the United States and abroad.)

Most countries have standards or codes of practice for infrastructure. The British guidelines listed in *Reducing Mobility Handicaps* (1991), by the Institution of Highways and Transportation, have been found to work well. They include a checklist for auditing the accessibility of pedestrian infrastructure.

### ***Pedestrian and Wheelchair Routes to Support Bus Services***

Pedestrian routes from residential areas to local centers or town centers are essential if older persons are to make local journeys on foot. In Britain, 35 percent of all journeys by people age 70 and older are on foot. For people of all ages, 80 percent of journeys of less than 1 mile are made on foot (DETR, 2000). The same network of pedestrian routes should serve bus stops to make the use of bus services easier.

Pedestrian routes need to be accessible. But they also need to be reasonably direct, monitored for security, well surfaced and drained, and lit. The requirements for pedestrian routes to bus stops and local centers are set out in several references from the United States and abroad (Project for Public Spaces, Inc., 1998; Institution of Highways and Transportation, 1999). It is not realistic to expect people to walk more than about 1 mile one way, and most walking trips are shorter than this. In Britain, the average one-way walk journey has been steady at 0.6 miles since 1975. In the United States, most transit patrons are found within  $\frac{1}{4}$  mile of a bus stop or transit station.

Most European countries have national standards or guidelines on urban infrastructure that is accessible to elderly and disabled people. Many of these guidelines have been summarized by the Institution of Highways and Transportation (1991). This publication gives extensive advice on how to build and maintain an environment that is barrier free for the whole population. Information is available, for example, on curb cuts, stairs, and precautions to prevent people from walking into obstacles. The document includes a checklist for accessibility that has proved useful.

Guidelines also exist on making transport terminals available. The British Railways Board (1989) lists specific requirements for the design and execution of facilities for disabled passengers at British Rail passenger stations. Barham and colleagues (1994) provide design guidelines for public transport infrastructure with particular emphasis on bus stations and bus stops. Balog and colleagues (1992) have produced an accessibility handbook for transit

facilities that puts particular emphasis on the requirements of the ADA. As more accessible buses are introduced, either low floor or lift equipped, the accessibility of bus stops has proved to be a significant problem.

Ramped curbs began to be introduced in European countries in the early 1980s to make it possible for people in wheelchairs to use sidewalks to reach accessible buildings. In the United States, ramped curbs were introduced in 1970 in San Diego, California, when it was realized that inaccessible sidewalks were one of the barriers to the use of lift-equipped buses. In Britain, conflict between the requirement of people in wheelchairs for sidewalks without curbs and the requirement of people with impaired vision for curbs (to be warned of the edge of the sidewalk) led to the development of textured paving. Textured paving marks the edge of a sidewalk where there is no curb. Traffic signal controlled pedestrian crossings and junctions with pedestrian phases provide the pedestrian with an audible signal when the lights are in their favor. Since 1994, tests have been under way of pedestrian crossings with infrared detectors to extend the time for pedestrians if people are still on the crossing at the end of the normal pedestrian phase. This helps elderly and ambulatory disabled pedestrians, who often do not walk quickly enough to cross during the time allowed for pedestrians. The same equipment cancels the pedestrian phase if no one is waiting.

### ***Independent Mobility***

People who can no longer drive to town centers, or choose not to drive, are increasingly using low-speed, powered wheelchairs, scooters, and golf-cart-like vehicles for local journeys. Under the right

conditions, they can work as feeders to public transportation. A small survey of users of these vehicles (Mitchell and Smith, 1998) shows that in good weather 26 percent of users make journeys involving round trip distances of more than 5 miles. Suitable infrastructure is necessary because powered wheelchairs are not really compatible with road traffic, even if they are used on roads where there is no alternative. Most journeys are made on sidewalks, but, as numbers increase, it may be necessary to provide a dedicated lane or path so that these vehicles are separated from pedestrians.

### **Door-to-Door Service**

Ambulatory seniors with severe mobility limitations cannot be expected to ride fixed-route buses, no matter how accommodating the service. For these seniors, paratransit services are an important option. Most publicly funded paratransit service is provided on a “curb-to-curb” basis, that is, passengers are picked up at the curb in front of their residence and dropped off at the curb at their destination. For many paratransit passengers, this is sufficient. However, some passengers require an even greater level of accommodation. Door-to-door service provides extra assistance to elderly passengers: helping them get to the bus and helping them get from the bus to their final destination. This is especially important in areas with harsh climates and icy winters. Some transportation systems provide “door-through-door” service, which adds an extra level of assistance for very frail seniors. With door-through-door service, the passenger receives assistance with getting ready (e.g., putting on a coat, collecting a handbag, walking out the door and down the steps, and locking the door), getting to the bus, getting off the bus, and getting

inside at the destination. The passenger is then “handed off” to someone at the destination.

These higher levels of paratransit service come with additional costs. Trips take longer, drivers need extra training with assisting passengers, and fewer trips can be provided over the course of a day. There are several excellent examples of how door-to-door paratransit service can be provided cost-effectively, some of which rely on automated or semi-automated dispatching systems to assist in scheduling.

The scheduling efficiency provided by the automated or semi-automated dispatching systems and the planning capabilities offered by features such as demographic tracking systems have been able to increase productivity without additional vehicles or personnel. Examples of high-quality paratransit services are discussed in subsequent chapters.

## **FINANCIAL LIMITATIONS**

If the traveler cannot pay the required fare, financial limitations can be just as limiting on travel as any physical limitations. The majority of seniors now and in the near future will probably not find that financial limitations are their primary obstacle or deterrent to transit use. Still, for those with fixed incomes or serious income limitations, cost can be an overwhelming barrier to travel. Several options are available to assist seniors with the cost of transportation services.

### **Co-Payment Sources**

Various sources, often referred to as co-payment sources, can be used to help pay passenger fares and other expenses. Federal

funds provide significant revenues for local transit operations, and state and local tax revenues are also significant. Human service agencies often pay substantial portions of the fares of their clients, up to and including 100 percent of the cost. Corporate sponsorships and third-party payments are also possible but less frequent. With SmartCard technologies, which allow a fare to be recorded on a fare card, a business like a grocery store can provide a customer incentive by underwriting some of the cost of customers’ trips to their store. A shopping mall or medical facility can provide a similar incentive.

### ***Pennsylvania’s Transit Programs for Seniors***

Pennsylvania pays for two special transportation programs for older citizens: the Free Transit Program for Senior Citizens and the Shared-Ride Program for Senior Citizens. Established in 1973 and 1980, respectively, both programs are funded through the Pennsylvania State Lottery. Together, these two programs fund transportation for older persons in all of Pennsylvania’s 67 counties with public transportation systems. The lottery-funded programs involve substantial coordination among the state Department of Transportation, the state Department of Aging, seven other state agencies, local governments, and local public transportation operators. Other state agencies work closely with the Pennsylvania Department of Transportation (PennDOT) and local public transit providers to minimize duplication and overlap and to maximize cost-effectiveness of specialized transportation services (Burkhardt, 2000).

Through the Free Transit Program for Senior Citizens, people 65 years of age and older can ride free on local fixed-route bus, trolley,

commuter rail, and subway elevated systems during off-peak hours on weekdays and all day on weekends and designated holidays. To participate in this program, an older person merely shows identification to the transit operator when boarding. Valid forms of identification include a Commonwealth Senior Citizen ID card (provided by PennDOT and issued locally by participating transportation providers), Medicaid card, or Railroad Retirement Card. There are no trip purpose restrictions.

The Shared-Ride Program is a paratransit program. People age 65 and older must register with the Shared-Ride transit operator to use the Shared-Ride Program. Trips must be reserved at least 1 day in advance. Anyone using this service must be willing to share the vehicle with other passengers. Door-to-door service is usually available. Riders generally pay 15 percent of the fares charged to the general public. Some local Area Agencies on Aging will pay the rider's portion of the paratransit fare. There are no restrictions on trip purpose or time of day of travel during regular system service hours.

Older riders have reported substantial economic benefits; in addition to saving the costs of the fares, more than one-half of the older riders in a 1977 survey (Millar et al., 1977) reported being more able to shop around and take advantage of lower-priced goods and services. The Free Transit Program increased mobility and decreased dependency on friends and families for rides. Human service programs with elderly clients have also benefited from lower transportation costs (Burkhardt, 2000).

### ***Governmental Subsidies in Local Areas***

A number of localities provide transit services for no fare. Older persons are often

seen as a group that receives substantial benefits from such a program. Communities in the state of Washington have the ability to use tax revenues to support programs such as transit. Several are offering what has been termed "pre-paid transit service" under the concept that payment has been made through tax dollars, and the service is available without paying a fare. Logan, Utah, instituted a free transportation service in the late 1990s, which is now recording 40 passengers per hour, a relatively high utilization rate for a community of this size (a population of 43,928 in 2001).

## **LACK OF TRAVEL INFORMATION**

As the physical accessibility of vehicles and infrastructure has improved and the financial resources available to elderly and disabled people have increased, it has been better appreciated that there are barriers to accessibility other than physical and financial ones. Elderly and disabled people may not know of the existence of services that they could use; they may not know how to use services, even if they know that they exist. Elderly and disabled people may be reluctant to delay other passengers by the time they take to board or alight, embarrassed to reveal their inexperience, or afraid of not being able to manage the journey. There is a growing trend in Europe to provide much better information about all aspects of transport to elderly and disabled people and their friends, families, and caregivers. This includes information on the existence of services, contacts with organizations that can help with journey planning, and real-time information at terminals, at bus stops, and in vehicles, to help select the correct vehicle and to monitor progress. Operators

are taking care to display information in formats that are easy to read and understand.

## General Strategies

External signs on buses have been improved to make them easier to read and to assist in identifying the service desired. Bus operators in a number of Scandinavian towns have equipped buses with internal signs that display the name of the next stop and whether a stop has already been requested. These are normally associated with public address announcements of the next stop and often with name signs at bus stops that can be read from inside the bus. Real-time information on the waiting time until the next train and its destination has been shown on dot matrix displays on the London Underground for some years. Similar displays at bus stops are beginning to appear in many European cities and some U.S. communities. These systems help all travelers but are likely to be particularly helpful for people who are uncertain of the system or require frequent reassurance. In Southampton, England, people with visual impairments can use a proximity transponder to make a display at a bus stop announce the information audibly. There is a great deal still to do in applying the technology available, but already the potential benefits of that technology can be seen.

Several case study systems have experienced success with marketing efforts designed to attract seniors to transit. Comments from focus groups and transit system interviews frequently mention that elderly clients were pleasantly surprised to learn about a particular service or destination. The most common marketing tactic was the dissemination of transit materials (such as maps and schedules) at senior centers, assisted living facilities, and departments of

motor vehicles. Altoona Metro Transportation (AMTRAN) in Pennsylvania has some of the most advanced and successful marketing techniques. In addition to the above-mentioned tactics, AMTRAN also places radio advertisements on senior radio stations (Big Band, Oldies). AMTRAN advertises in the publications distributed by Blair Senior Centers, which have a circulation in excess of 25,000. AMTRAN has also had success targeting seniors with advertisements in the Penn State alumni publications.

Travel training efforts (discussed in the previous chapter as a means of promoting rider comfort with transit services) are another outstanding way of getting the word out to seniors. Travel training programs are also an excellent way of promoting “word of mouth” marketing.

## Marketing Techniques

Transit marketing strategies abound, but it is important to sort out those that have special appeal to older transit users. Some of these are the following:

- **Pay stub or utility bill insertions** to reach massive populations in a geographic region.
- **Regular announcements by corporate email** to reach working caregiver populations so adult children are equipped to engage in discussion on transportation options.
- **Visibility events** for both older adults and adult children in relevant locations for each population (workplaces, senior housing, medical facilities, meal sites, malls, etc.).
- **Creative use of community leaders** the Independent Transportation Network (ITN) in Portland, Maine, uses community leaders as volunteer drivers

with whom seniors could secure a ride (see Chapter 12).

- **Public Service Announcements** that target particular media outlets favored by older persons and their adult children.

A long list of transit-oriented marketing strategies is available in *A Handbook of Proven Marketing Strategies for Public Transit* (Texas Transportation Institute et. al., 1999). (See also OECD, 2001, Chapter 9.)

## Applied Marketing Techniques in Great Falls, Montana

Great Falls Transit District (GFTD) provides an interesting example of a multifaceted marketing program that pays special attention to older riders. The system directly operates fixed-route and demand-response service (via contract with Diamond Cab) within the transit district service boundaries. Service is provided 5:15 a.m. to 7:15 p.m., Monday through Friday, and 9:00 a.m. to 6:30 p.m. on Saturdays.

The state of Montana has the fourth fastest-growing senior population in the United States, with an annual 23 percent increase in the state's elderly population. In response to this dramatic increase, the state legislature recently passed a bill requiring the state Department of Health and Human Services to report annually on the aging population. Cascade County, which contains the city of Great Falls and GFTD, has a population of more than 78,000 (according to 1999 Census estimates) of which 14 percent are over the age of 65.

Elderly persons do not automatically qualify to ride the GFTD paratransit system. They must fill out an application, have a doctor

verify a disability, and complete an interview with GFTD staff. Because of these restrictions, many seniors ride the regular fixed-route service. GFTD officials estimate that between 11 percent and 15 percent of their fixed-route riders are over the age of 65. Because the maximum length of GFTD fixed routes is only 30 minutes, it may actually be easier for some older persons to ride the bus, rather than use the dial-a-ride service.

In order to assist older persons with riding fixed-route service, GFTD has several programs in place. GFTD officials will bring a bus to senior centers and retirement facilities and demonstrate how easy it is for them to ride. They will take large groups of seniors on trips with a group leader, helping them to overcome any fears or apprehensions. They have also made their route maps easier to understand, added an indoor transfer station, and made improvements in their bus shelters. In addition, drivers have received extra training in assisting elderly passengers. All of this effort adds up to a significant reduction in cost for GFTD, as every elderly fixed-route passenger saves the system \$15 in paratransit costs. With an estimated annual elderly ridership of more than 50,000, the annual cost reduction amounts to well over \$500,000.

GFTD's involvement in their community has also been a strong component of their marketing program. They have worked closely with local groups and officials on various issues and projects. Their proactive approach has helped GFTD integrate themselves into every aspect of community transportation. (See Chapter 11, "Improving Community Relations," for a more detailed discussion of GFTD's community involvement.)

The system's general manager reported that a greater level of collaboration between GFTD and the local Area Agencies on Aging will be essential in providing the best possible service to older persons in the service area in the future. He felt that the Area Agencies on Aging were under-utilizing their vehicles in some cases and that these vehicles could be used in other areas. The general manager wants to move to a fleet of smaller vehicles, such as lift-equipped minivans, and extend service hours into the evening. This would allow seniors to go out to movies and attend symphony concerts in the park. These improvements and expansions will require additional funding. The general manager feels that most seniors have substantial amounts of disposable income because of savings and that the key to funding expanded senior services is tapping into those funds. The main difficulty will be in handling the disparity in treatment between the elderly "haves" and "have nots." A key question will be how to subsidize the trips of the

35 percent of seniors who have difficulty paying for these trips.

## CONCLUSION

Recognizing and meeting the needs and limitations of older travelers will be an important strategy in addressing the travel needs of older persons in the future. The key accessibility issues are physical, financial, and other limitations. Major ways of addressing physical accessibility issues are improving transit vehicles, improving pedestrian travel, and offering door-to-door services. Co-payment options will probably become more widely used to meet financial limitations; governmental subsidies may continue to be used but will probably become more targeted to individuals with specific needs, rather than older persons as a group. Enhanced marketing efforts that target senior citizens will be required to introduce those who have never ridden public transit services to the benefits of this mode of travel.