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Promoting Accessible Fixed-Route Transit: Strategies from *TCRP Report 163*

Developing an appropriate balance between accessible fixed-route transit services and complementary paratransit services has been one of the most challenging aspects of implementing the transportation provisions of the Americans with Disabilities Act of 1990 (ADA). Despite significant improvements in the accessibility of bus and rail transit systems, demand for complementary paratransit service, which was envisioned as a safety net for people with disabilities who could not use fixed-route transit, increased from about 15 million rides per year in 1991 to an estimated 67 million rides per year in 2008.

Both riders with disabilities and the transit industry benefit by seeing to it that all aspects of fixed-route transit are accessible and promoted widely. Unlike complementary paratransit, which typically requires trips to be reserved the prior day, fixed-route transit allows a person the opportunity for spontaneous travel and the ability to meet immediate travel needs. It is also less costly for riders, with fares typically half of what is charged for complementary paratransit and sometimes even less with reduced or free-fare incentive programs. For transit agencies, the cost differences are also significant.

The Transportation Research Board conducted a study to help determine if, how, and why people with disabilities are using fixed-route services and identify ways in which transit systems can or are encouraging and enabling such use. The result of the study was *TCRP Report 163: Strategy Guide to Enable and Promote the Use of Fixed-Route Transit by People with Disabilities (TCRP Report 163)*. This information brief provides an introduction to and highlights of *TCRP Report 163* based on the five *TCRP Research Briefs*.



See the www.trb.org/Main/Blurbs/170626.aspx for in-depth information and a link to the full report.

TCRP Report 163 is a comprehensive resource that provides useful information, practical steps, and logical strategies for public transit providers seeking to better serve people with disabilities through fixed-route bus and rail transit services. It summarizes the information collected through a study conducted in two phases.

Phase 1 included:

1. A review of the relevant literature concerning the use of fixed-route public transit service by individuals with disabilities.
2. Research and documentation of current use of fixed-route transit services by persons with disabilities.
3. Interviews of people with disabilities in selected communities across the country and a nationwide survey of people with disabilities to document the factors considered by people with disabilities when using fixed-route transit or ADA paratransit.

4. A nationwide survey to identify efforts by transit agencies to enable and promote the use of fixed-route transit services by persons with disabilities.

Phase 2 included:

1. Conducting case studies of selected efforts and programs to enable and promote increased use of fixed-route transit. Five full case studies and 28 mini case studies were conducted.
2. Designing methodologies for evaluating the success of efforts to enable and promote use of fixed-route transit service.
3. Preparing a Strategy Guide that can be used by practitioners to enable and promote increased use of fixed-route transit services.

Although any one of the strategy options that follow can be implemented alone, research suggests that transit agencies can improve their success in encouraging fixed-route transit service by using and integrating multiple efforts. Transit agencies are encouraged to consider all of the strategies and adopt a holistic, complete approach for encouraging and facilitating use of fixed-route transit services.

Current Use of Fixed-Route Transit Service by People with Disabilities

For TCRP Report 163, to develop an understanding of current use of transit services by people with disabilities, information on ADA paratransit ridership and fixed-route reduced-fare ridership was collected from seven transit agencies. Agencies from different geographic regions, as well as large, medium, and smaller communities were studied. To determine the relative use of fixed route transit and ADA paratransit by people with disabilities at each system where data was gathered, the ratio of trips made on each mode was calculated.

The study's findings suggested that:

- Fixed-route transit ridership by people with disabilities in many locations is two to six times higher than ADA paratransit ridership.

- People with disabilities are traveling more and many people with disabilities who are able to use fixed-route transit service appear to be doing so.
- Use of fixed-route transit service by riders with disabilities appears to be greater in the urban systems studied and lower in smaller city and rural systems studied, likely due to the greater availability of fixed-route transit service in urban areas.
- Similar to the growth in ADA paratransit ridership, fixed-route transit ridership by people with disabilities also appears to be growing. This suggests a general increase in public transit use by people with disabilities, not just an increase in ADA paratransit ridership.

TCRP Report 163 researchers also conducted an on-line national survey with people with disabilities about what modes of transit they use and why. Nearly 2,000 people completed the survey. Approximately two-thirds were individuals with disabilities providing their own experience and approximately one-third did so on behalf of a family member, spouse, or other close associate. Thirty-eight percent (38%) were people with mobility disabilities; 23% were people who are blind or have visual impairments; and the remainder was people with intellectual or cognitive disabilities, people with psychiatric disabilities, or people with other disabilities.

Thirty-one percent (31%) indicated that they use both the fixed-route transit service and ADA paratransit. Twenty-four percent (24%) indicated they use ADA paratransit service, but don't use the fixed-route transit service. Twenty-six percent (26%) indicated they use the fixed-route transit service but not ADA paratransit service, and 19% indicated they don't use either service. A strong 53% of respondents said they would like to use the fixed-route service more often than they use it now; 20% said they would not like to use it more; and 26% said they were not sure.

Survey results showed that respondents rated the following factors (% = those who rated the factor as *Very Important*) as those that present the most common barriers to their use of fixed-route services:

- Barriers in the pedestrian environment on the way to and from stops/stations (48%).
- Distances to or from stops/stations (47%).
- Fixed-route service doesn't run often enough (46%).
- Complex or multiple transfers necessary on fixed-route service (45%).
- Fixed-route service doesn't run at the hours they need to travel (43%).
- Lack of information about potential barriers they may encounter getting to or from fixed-route stops/stations (39%).
- Concerns for their personal safety when using fixed-route service (35%).

How to Begin Ensuring Accessible Fixed-Route Service: Suggested Approaches

Assuring a fixed-route transit system is accessible and then promoting its use among people with disabilities begins with two important *first steps* that can be supported through several strategies.

Step 1: Develop an understanding of the current use of all transit services by people with disabilities by gathering ridership data on use of fixed-route transit and ADA paratransit services. Also establish system-wide goals to ensure that the entire organization is working toward the same end—enabling and promoting greater use of fixed-route transit services by people with disabilities.

Step 2: Ensure fixed-route transit service is accessible, useable, and reliable. Evaluate and monitor fixed-route transit services to ensure full compliance with ADA requirements. This includes buying vehicles that meet the ADA vehicle accessibility requirements, ensuring access to new or altered transit facilities, maintaining equipment in good working condition, providing back-up service if there are in-service failures, announcing stops and identifying routes, and training employees to proficiency.

To accomplish these two goals, the following strategies are suggested:

- Strategy A: Make bus stops and pedestrian environments as usable as possible.
- Strategy B: Develop marketing and public information materials and offer trip planning and travel training services.
- Strategy C: Consider fare incentives.
- Strategy D: Consider alternative transit service designs that are more inclusive and serve all riders.
- Strategy E: Use ADA paratransit eligibility determinations.

Strategy A: Make bus stops and pedestrian environments as usable as possible.

A survey of almost 2,000 people with disabilities conducted as part of the study for *TCRP Report 163* found that access to and from bus stops was the most important factor in determining whether or not they could use fixed-route transit. Improving the accessibility of bus stops and the surrounding pedestrian infrastructure is a key to enabling people with disabilities to use fixed-route transit. Transit systems should, therefore, implement programs that support and promote accessibility and include local, regional, and state agencies and people with disabilities in the planning and implementation processes.



The broader geographic scope—the bus stop and immediate connecting sidewalks, curb ramps, and crosswalks—is referred to as the *pedestrian infrastructure, pedestrian environment, and path-of-travel infrastructure*. These terms share a relationship with concepts underlying *walkable communities*,

livable communities, and *complete streets*, all of which feature design attention to creating communities that facilitate pedestrian travel with higher densities, mixed land uses, and street networks favorable to pedestrians as well as bicycles and transit. Every bus trip begins and ends with a pedestrian trip, thus an accessible pedestrian infrastructure is integral to increasing fixed-route transit use among people with and without disabilities.

One way to assess the results of transit agencies' or their communities' investments in accessibility improvements to the bus stops and, in some cases, the surrounding pedestrian infrastructure is to count and report the increase in boardings by riders using wheelchairs. The full *TCRP Report 163* provides data from several case studies that document such increases in fixed-route ridership as a result of transit agencies' efforts to improve bus stop and infrastructure accessibility. Another important positive outcome of increased number of riders with disabilities using fixed-route transportation may be a reduction in the operating cost per ADA complementary paratransit trip.

Strategy B: Develop marketing and public information materials and offer trip planning and travel training services.

Wholesale public information aimed at potential fixed-route transit riders is a necessary but not sufficient method of communicating benefits and *how-to-ride* information. To be effective, this basic information needs to be accompanied by one-to-one or small group contact by a representative who can *sell* the benefits of fixed-route transit and provide a seamless entry into travel training. In addition, develop and provide people with disabilities specific information about using fixed-route transit services. This includes public information and marketing materials, as well as providing trip planning services and travel training to those who are interested. Although it is not essential for the outreach representative to also provide the travel training, this is the most common approach among the agencies surveyed for *TCRP Report 163*.

Of the 135 respondents who provided information about their marketing materials, 85 agencies (63%) indicated that they have developed general marketing

materials that include riders with disabilities in an effort to educate the public about the accessibility of fixed-route transit services. Forty-five agencies (33%) developed marketing materials targeted just for people with disabilities. Fifty agencies (37%) indicated that they developed information that communicates the benefits of using fixed-route transit services.

Relationship building with community organizations and institutions strengthens the targeted outreach and makes it more efficient by leveraging the transit agency's efforts with those of the community organization. Finally, the ADA paratransit eligibility process is an opportunity to provide information on benefits of using fixed-route service and of travel training to applicants who receive conditional eligibility or who are found to be not qualified for paratransit at the time of the eligibility evaluation.

Strategy C: Consider fare incentives.

A primary purpose of the FTA half-fare requirement is to make fixed-route transit services more affordable for seniors and persons with disabilities. Many seniors and persons with disabilities have limited incomes, lack access to private automobiles, and rely on public transit services for mobility.

A secondary purpose of fare incentive programs is to encourage riders with disabilities to use more cost-efficient fixed-route transit services when possible. In the *TCRP Report 163*, a fare incentive program is defined as a set of policies that allows persons with disabilities to ride fixed-route transit service for a lower fare than the fare for the general public. Fare incentives can lead to increased use of fixed-route transit. The challenge for transit agencies is to design programs that will attract new riders, particularly those riders who may now be using ADA paratransit service. *TCRP Report 163* provides specific examples of systems that have instituted fare incentives and descriptions of the resulting savings.

One type of fare incentive is offering free fares on fixed-route transit services to people with disabilities. A survey of 163 transit agencies identified 36 agencies that had implemented free-fare programs for riders with disabilities. An analysis of seven selected programs indicated significant savings from trips taken on fixed-route transit rather than ADA paratransit,

even with conservative assumptions about the percent of free-fare rides that were diverted.



TCRP Report 163 identifies several implementation issues that should be considered, for example:

- Clients may need help understanding the requirements for receiving eligibility for reduced-fare service.
- Given the high proportion of the free fare riders who use wheelchairs, fixed-route transit bus drivers will need proper training in passenger sensitivity and use of the lift/ramp and securement system.
- Transit agencies will have to be vigilant about abuse of the paratransit ID.

Findings of the study include:

- The cost of implementing and managing a fare incentive program appears to be small.
- Even if it is assumed that only 25% of the total free-fare trips are trips diverted from ADA paratransit, the analysis suggested savings ranging from \$8,283 per year for the smallest transit systems, to over \$9 million per year for the largest system.

- At transit agencies that used in-person interviews and functional assessments to determine ADA paratransit eligibility, free-fare programs did not appear to have a significant impact on the number of applications or determinations.

Strategy D: Consider alternative transit service designs that are inclusive and serve all riders.

Alternative designs include flex-route services, community bus services, paratransit-to-fixed-route feeder services, and general public dial-a-ride services. Each of these designs serves all riders in an integrated way. These more inclusive service designs can be used to supplement traditional fixed-route transit and complementary paratransit services.

Strategy E: Use ADA paratransit eligibility determination process.

The process used to determine eligibility for ADA paratransit services can be used to enable and promote the use of fixed-route transit. Develop an eligibility determination process that stresses ability rather than disability. The research identified four approaches for doing this.

1. Emphasize ability and travel options rather than limitations.

- Adopt process goals and develop a mission statement that reflects this approach.
- Develop public information about the full range of accessible transportation services.
- Develop a Transportation Resource Center and provide information about all travel options available to applicants for ADA paratransit eligibility.
- Call the process a *Transportation Assessment*, which better reflects broader goals, rather than an ADA Paratransit Eligibility Assessment.
- Rephrase questions in application forms to emphasize ability rather than limitations.

- Use letters of determination to emphasize abilities.

2. Thorough determination processes that identify when applicants can use fixed-route transit.

A growing number of transit agencies are including in-person interviews and functional assessments in the eligibility determination process to better identify when applicants are able to use fixed-route transit services. The research found that processes that rely on paper applications alone are able to make broad determinations of eligibility, but do not provide the detail needed to understand when, and under what conditions, people with disabilities might be able to use fixed-route transit. Interview and functional assessment costs were found to range from \$50 to \$200, with typical costs running \$100 to \$150 per applicant. Case studies suggest, though, that these costs are more than offset by the benefits of increased travel by fixed-route transit.

3. Link the process to travel training programs.

Many transit agencies provide information about travel training as part of the eligibility determination process. This is sometimes done by including information about travel training in application packets. Agencies that conduct in-person interviews often discuss travel training services with applicants as appropriate. While travel training cannot be required, and determinations of eligibility must be based on current, not potential, abilities, it is a good practice to ask applicants if they have successfully completed travel training to use fixed-route transit services.

4. Implement trip eligibility.

Identifying the conditions under which applicants can use fixed-route transit and communicating these in determination letters can, by itself, encourage some to use fixed-route transit when they are able. For riders with little fixed-route transit experience and may not be inclined to begin using these services, it may be necessary proactively to apply conditions of eligibility to trips that are requested or are currently being made. Applying conditions of eligibility to specific trip requests is known as *trip-by-trip*

eligibility. Responsibility for determining if a particular trip can be made by fixed-route transit rests with the transit agency, not riders. It would not be appropriate to make applicants conditionally eligible, require that they identify the specific trips that they cannot make on fixed-route transit, and limit their eligibility to trips that they identify.

Before the ADA paratransit eligibility process is used to direct people to these services, it is important to ensure that fixed-route transit services are accessible and people with disabilities can use them. If this is not the case, the eligibility process could inappropriately conclude that applicants can use fixed-route transit when, in fact, the services are not really accessible and usable.

Meaningful public involvement is also important before significant changes to eligibility processes are made. The goals and benefits of promoting greater fixed-route transit use through the eligibility process should be discussed and the specific approaches for doing this should be developed with community input.



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