

# **Transit Cooperative Research Project B-40: Strategy Guide to Enable and Promote the Use of Fixed- Route Transit by People with Disabilities**

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## **Research Funding and Sponsors**

This national research is being conducted for the Transit Cooperative Research Program (TCRP), which is part of the Transportation Research Board (TRB) and the National Academy of Sciences (NAS). The research is supported by the U.S. Department of Transportation (USDOT). The primary contractor carrying out the research is TranSystems Corporation. Other members of the research team are The Collaborative, KFH Group, and the Disability Rights Education & Defense Fund (DREDF). Research activities are overseen and directed by a panel that includes representatives from the Federal Transit Administration (FTA), National Rural Transit Assistance Program (NRTAP), Community Transportation Association of America (CTAA), and transit system managers and representatives from Ann Arbor, MI, Baltimore, MD, Chicago, IL, Corpus Christi, TX, Tampa, FL, Odessa, FL, Philadelphia, PA, Portland, OR, Tulsa, OK, Washington, DC, and Willoughby, OH.

## **Research Problem Statement**

The purposes and goals of the Americans with Disabilities Act of 1990 (ADA) are set out in the preamble of the law (Section 2). The eighth paragraph of the preamble states:

*The Nation's proper goals regarding individuals with disabilities are to ensure equality of opportunity, full participation, independent living and economic self-sufficiency..."*

In keeping with these goals, a main tenet of Title II of the ADA is to provide services in the most integrated setting possible. Separate programs designed just for individuals with disabilities are permitted to achieve equal opportunity, but mainstream, integrated services are to be used to the maximum extent appropriate.

For public agencies that provide transportation services to the general public, the primary goal of the law is to make mainstream fixed route bus and rail systems accessible and usable by individuals with disabilities. The law recognizes, though, that some individuals with disabilities will not have an equal opportunity to benefit from public transit services even if bus and rail systems are fully accessible. To ensure equal opportunity for these individuals, the law requires that complementary paratransit service be provided.

To prevent complementary paratransit service from becoming the primary service for people with disabilities, eligibility for this service was defined in detail in the law and in the implementing regulations issued by the U.S. Department of Transportation (DOT). The DOT ADA regulations also require that public entities establish a process for

determining eligibility for complementary paratransit service and that this process “strictly limit ADA Paratransit Eligibility” to those individuals who meet the regulatory criteria. These provisions and requirements are intended to ensure that public transit be provided to individuals with disabilities using mainstream, integrated bus and rail systems to the maximum extent possible.

Developing an appropriate balance between accessible mainline transit services and complementary paratransit services has been one of the most challenging aspects of ADA implementation. For example, significant improvements have been made in the accessibility of bus and rail transit systems. In a 2010 paper marking the 20<sup>th</sup> anniversary of the passage of the ADA, the Federal Transit Administration (FTA) noted the following achievements in fixed route transit access<sup>1</sup>:

- 98 percent accessibility of the nation’s fixed route bus fleet
- Functional access to 648 of the 681 stations identified as “key stations” in the nation’s oldest rail systems
- Access to 76 percent of the nation’s intercity rail (Amtrak) stations that serve 97 percent of all boardings
- Access to 84 percent of the nation’s light rail stations and 100 percent access to new rail systems built since 1990

Despite these improvements, demand for complementary paratransit service has increased since the passage of the ADA. The 2010 FTA paper estimates that 15 million rides were provided on complementary paratransit services in 1991. This increased to 45 million rides by calendar year 2000. In 2008, it was estimated that 67 million rides were provided to individuals determined ADA paratransit eligible. And this trend appears to have continued through 2010.

There are likely many reasons for the growth in demand for complementary paratransit service despite the increased accessibility of the nation’s fixed route transit systems. First, a usable fixed route transit system requires more than just accessible vehicles and major facilities. Bus stops must also be accessible and riders with disabilities must be able to reach these stops and facilities. Some transit agencies have proactively begun to identify and upgrade older inaccessible bus stops, and are also working with cities and towns to improve pedestrian infrastructure. However, it is likely that the lack of accessible paths of travel to stops and stations still prevents many riders from using fixed route services.

Second, while many people with disabilities may have the ability to use fixed route services, at least for some of their trips, they may have very limited experience (or none at all) traveling by bus or train. Prior to the passage of the ADA, some transit systems opted not to provide accessible fixed route service and instead provided only demand responsive service for persons with disabilities. In some areas, these demand responsive programs were in operation for decades. Even though it has been more than

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<sup>1</sup> Hershey, Cheryl L., et al, “Accessible Public Transportation in the United States: Twenty Years After Passage of the ADA,” 12<sup>th</sup> International Conference on Mobility and Transport for Elderly and Disabled Persons, June 2010.

21 years since the passage of the ADA, it is likely that making the transition from demand responsive service to fixed route service is still difficult for many. To assist in this transition, some transit agencies have implemented travel training programs and others have provided fare incentives to encourage use of fixed route services. Studies have shown that travel training programs are effective, but participation may not be required and getting current paratransit riders to participate can be a challenge. Fare incentive programs have also been effective in encouraging greater fixed route use, but have sometimes been found to have other impacts, such as increased demand for ADA Paratransit Eligibility in order to qualify for the reduced fares. It seems clear, though, that more must be done to facilitate and encourage greater use of fixed route services.

Third, implementing effective ADA Paratransit Eligibility determination processes has been a challenge in many areas. Determining whether individuals with various types of disabilities and different levels of ability can, with a reasonable level of effort and risk, perform all of the tasks needed to use fixed route transit services is difficult. Each applicant is unique and there is no simple “checklist” that can be used to make accurate and thorough decisions. Given that many applicants can use fixed route services only under certain conditions, decisions must be detailed enough to allow these conditions to be identified and assessed. For several years after the passage of the ADA, most transit systems continued to rely on paper applications. The majority of the largest public transit systems have more recently transitioned to in-person processes, but some still rely solely on paper applications. And because of the cost of in-person processes, many public transit systems in small urban and rural areas continue to use only paper applications, with the vast majority of applicants determined “unconditionally eligible.” Successful implementation of trip-by-trip eligibility continues to be a challenge. There still appear to be only a small number of systems that actually apply conditions of eligibility to individual trip requests.

Finally, more needs to be done to provide positive experiences to riders with disabilities who elect to use fixed route buses and trains. Vehicle operator training and consistent assistance with boarding, alighting and securement appear to be ongoing issues. Properly accommodating all mobility aids in a safe and timely way also continues to be a challenge in various communities. Another issue for some riders with disabilities is the attention and perceived disruption to the service that results from inefficient or problematic boardings and securement. And more could probably be done to educate riders with disabilities about the increased accessibility and usability of fixed route services. Without a concerted effort to provide public information and to reach out to riders with disabilities, past experiences and outdated perceptions are likely still keeping some from using buses and trains.

Recognizing the importance of this issue, the American Public Transit Association’s (APTA) Transit Board Members ADA Subcommittee and Access Committee initiated this research project. They desire to assist their member agencies and other providers of public transit to better understand how transit providers can encourage and promote the use of fixed route service by people with disabilities. They envision a strategy guide that will provide this understanding and the tools, including strategies, incentives,

practices and more, that transit agencies can use to build fixed route ridership among their riders with disabilities. This is an important objective with the opportunity to not only assist public transit agencies but also people with disabilities who may benefit from the mobility offered by fixed route transit for some or all of their trips.

## **Research Goal and Approach**

The goal of this research is to:

***Provide a practitioner's strategy guide to enable and promote the use of fixed route service by people with disabilities.***

The research will be conducted in two phases. The specific objectives and tasks of each phase are detailed below.

### **Phase 1**

1. Identify and review the relevant literature concerning the use of fixed route public transit service by individuals with disabilities. The findings and recommendations from the existing literature will be summarized and will serve as a baseline for this research. The research will build on this past research and will provide additional insights, findings and recommendations.
2. Research and document current use of fixed route services by persons with disabilities. While ADA complementary paratransit ridership is well documented, less is known about the use of fixed route services by persons with disabilities. Researching and documenting fixed route use is an important factor that helps provide a baseline for the research.
3. Conduct outreach to get input from persons with disabilities on the factors that influence decisions to use fixed route service and complementary paratransit service. This outreach and the resulting findings will supplement the understanding of factors documented in the existing literature and are key to helping identify and document strategies that encourage fixed route use by people with disabilities.
4. Prepare and conduct a brief and straightforward nationwide survey to identify efforts by transit systems to enable and promote the use of fixed route services by persons with disabilities. Use the results of this survey to identify efforts by transit systems across the country (of varying sizes, in various regions of the country, and operating a full range of service modes) and to select systems for more detailed study in Phase 2.
5. Design methodologies for evaluating the success of efforts to enable and promote use of fixed route service for use in the Phase 2 case studies.
6. Prepare an interim report summarizing Phase 1 efforts. Describe the key findings and recommendations from the current literature. Provide data on current use of fixed route in selected systems and compare this to complementary paratransit use by persons with disabilities. Summarize and assess the input received from individuals with disabilities on the factors that influence mode choice. Present the results of the nationwide survey and summarize current efforts by transit

systems. Use the information from the literature search and survey to select types of efforts and specific transit systems for more detailed study in Phase 2. Include the proposed methodologies for evaluating the success of selected efforts. Include a detailed approach for Phase 2 activities.

## **Phase 2**

7. Examine the issues of eligibility determination, conditional eligibility and trip-by-trip eligibility determinations in more detail through follow-up contacts and case study research. Use the information from Phase 1 to identify systems that are doing conditional and trip-by-trip eligibility. Gather additional information from selected systems on strategies employed. Evaluate the efforts using the methodology developed in Phase 1. Summarize successful examples and develop detailed guidance for inclusion in the final report.
8. Examine in more detail through follow-up contacts and “mini-case studies” incentives used to attract people with disabilities to use fixed route services. Use the information from Phase 1 to identify systems. Gather additional information from selected systems on the types of incentives offered and the strategies used. Evaluate the efforts using the methodology developed in Phase 1. Summarize successful examples and develop detailed guidance for inclusion in the final report.
9. Examine in more detail, again through case study research, efforts made by selected transit systems to improve the paths of travel to and from bus stops and rail stations. Use the information from Phase 1 to identify systems that have improved the pedestrian environment and then gather additional information. Document funding used, cooperative partnerships with local jurisdictions, and other key strategies. Evaluate the efforts using the methodology developed in Phase 1. Summarize successful examples and develop detailed guidance for inclusion in the final report.
10. Identify other efforts from the Phase 1 work that appear to have been particularly effective and that respond to factors influencing mode choice by riders with disabilities (obtained in 3. above). Gather additional information from selected systems, evaluate the efforts using the methodologies developed in Phase 1, and summarize successful examples. Develop detailed guidance for inclusion in the final report.
11. Develop methods to assess the benefits to riders of use of fixed route services. Also develop methods for communicating these benefits to riders and practitioners.
12. Based on the detailed case studies of each type of effort, revise the methodologies for evaluating success and effectiveness. Develop metrics, measures and criteria for evaluating each type of effort, including determining the cost savings and/or cost avoidance from greater fixed route use.
13. Prepare a final research report summarizing all research efforts and findings. Also prepare a strategy guide for use by transit agencies and other practitioners for selecting, implementing and evaluating appropriate efforts. The strategy guide will be usable by transit systems of various sizes, systems operating various modes, and systems with varying levels and types of resources.

In addition to examining individual efforts and approaches for encouraging and facilitating increased use of fixed route services, the study will look at the benefits of combining multiple approaches. Systems that have been most successful in encouraging fixed route service employ and integrate multiple efforts. For example, travel training efforts tend to be more effective when integrated with eligibility determination processes. Fare incentive programs also can be more cost effective, and the unintended consequences limited, if implemented along with more thorough eligibility determination processes. And efforts to improve the pedestrian infrastructure can be more effective when priority stops are identified using information from travel training and eligibility determination processes. The study's final report and strategy guide will present and stress a holistic approach to encouraging fixed route use.