

# **UPDATE METHODOLOGY FOR ADA DEMAND ESTIMATES: LESSONS LEARNED**

## **PROBLEM STATEMENT**

The current and accepted standard for determining local impacts of the Americans with Disabilities Act (ADA) is found in the *ADA Paratransit Handbook* published in September 1991 (UMTA-MA-06-0206-91-1). This methodology was developed from surveys taken in 1978 and 1987, along with 1980 U.S. Census data. The current methodology may represent the population that is potentially ADA-eligible; however, it does little to assist transit agencies in determining actual paratransit demand. Additionally, transit systems now have vehicles that can accommodate many disabilities, making it possible for many of the potential ADA-eligible population to ride the fixed route. Information regarding methodologies used to forecast ADA paratransit demand among transit agencies must be gathered in order to provide an understanding of certain practices and assess which methodologies may be considered best practices.

## **OBJECTIVES**

Many transit systems in Florida and across the country find themselves being overwhelmed by requests for ADA paratransit trips. As a result, they are being forced to reduce fixed route services in order to balance their budgets. The objectives of this project were to collect information on methodologies currently employed among transit agencies, and to document lessons learned from current/past ADA forecasting methods and methods for dealing with an overwhelming need for ADA paratransit services. The goal is to aid transit agencies to more accurately predict the need for ADA paratransit service and to budget appropriately.

Information on the number of certified ADA users and the number of ADA paratransit trips per year was gathered from 13 transit agencies, most of which are located within Florida. Information on users, trips, population, costs, and service hours was also gathered from transit agencies when the data was available.

## **FINDINGS AND CONCLUSIONS**

This study sought to separate the best practices for forecasting paratransit demand. However, very few cases were found in which transit agencies recorded the information necessary to conduct an evaluation sufficient to make a confident assessment regarding which methodologies should be used. In addition, while the majority of agencies reported their method of forecasting demand as analyzing historical data, a particular strategy for using this information was not provided. Consequently, it is difficult to assess the accuracy of the methodologies and their respective impacts on the agencies' planning processes.

Researchers found that a general assessment of the methodologies may not benefit every agency. For example, Sarasota County Area Transit (SCAT) reported that the demand for paratransit service increases by three to four percent annually, enabling them to apply a systematic percent increase to determine their forecasted demand. Further, the information provided by SCAT illustrates that their methodology is the most effective in determining accurate results. This methodology, however, would not be appropriate or effective for agencies that do not experience such regular annual increases.

Many transit agencies utilize historical data to forecast demand. The survey results, however, indicate that the type of historical data used varies by agency. Agencies variously reported using ridership trends, demographic information, and fare increases. Nevertheless, this study was limited by the general inability of transit agencies to report the methodologies that are being or that have been used forecast demand. Without the methodological information, analysis of the effectiveness of forecasted values cannot be conducted. These limitations should serve as a cautionary tale to transit agencies, and it may be hoped that the experiences and lessons generally learned as part of this effort will provide insight to other transit agencies contemplating changes in their current methods of forecasting demand.

## **BENEFITS**

Although it was difficult to determine an appropriate methodology to estimate the demand of paratransit services, the present study can be used to recommend factors that should be included in demand estimation, and agencies can look at alternative methods for forecasting demand from several of the examples provided.

This research project was conducted by Cheryl Thole of the Center for Urban Transportation Research, University of South Florida. For more information, contact Tara Bartee, Project Manager, at (850) 414-4500, [tara.bartee@dot.state.fl.us](mailto:tara.bartee@dot.state.fl.us)