



Florida Department of Transportation Research

Forecasting Paratransit Services Demand: Review and Recommendation

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In 2012, the Government Accounting Office reported increasing demand for paratransit services, public transit for those unable to operate a motor vehicle. In Florida, this demand is based on a growing number of people with disabilities or low incomes and on the growth of the over-65 population, among which many stop driving. Floridians 65 and older represent a significant portion of the state population, 17.4% in 2010, estimated to almost double by 2030.

Paratransit services will be more important to Floridians in the future, but planning for these services is rooted in the past, in 1993's *Methodology Guidelines for Forecasting Transportation-Disadvantaged (TD) Transportation Demand at the County Level*. Based on even older

data, such as the 1990 U.S. census and trip rates from the San Francisco 1980s, these guidelines cannot account for 20 years of progress in how agencies have adapted fixed route services to better serve TD persons or other changes in American society that facilitate access.

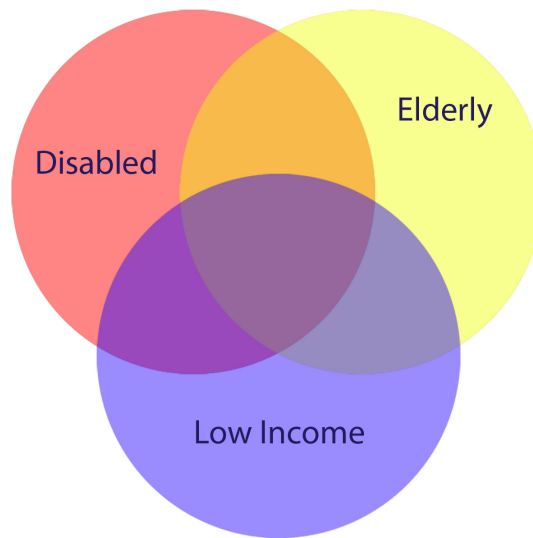
With Florida's growing TD population seeking more mobility opportunities, transportation planners and mobility service providers must be able to interpret demand to project the operating and capital needs required to address program priorities. Therefore, University of South Florida researchers were contracted by the Florida Department of Transportation to assess current Florida and national methodologies for analyzing paratransit service demand. The researchers

developed a new analytical tool for forecasting demand for TD services – methods useful for forecasting needs in other specialized service markets, as well.

Researchers examined data sources that were newly available since the 1990s. They found that key statistical measures, such as elderly and low income population, persons with disabilities, automobile ownership, and others, which were once measured every ten years by the U.S. Census Bureau, are now measured annually, potentially allowing planners to keep up with growth and anticipate changes. Also, they found changes in funding formulas and mechanisms that must be part of planning decisions. Their review found little research on paratransit service forecasting relevant to Florida. Most of what they found were non-computer methods, unable to use modern forecasting tools, such as simulation.

Based on their findings, the researchers designed a new paratransit service demand estimation tool that takes advantage of the U.S. Census Bureau's American Community Survey, taken annually rather than every ten years. The tool, based on a spreadsheet, takes users through calculation of TD demand step by step, asking for information in stages, until a complete picture of community need and available services is built. Users access the census data from within the tool. The result is a series of tables summarizing populations, needs, and service forecasts.

This updated estimation tool will help assure that funds for TD transportation are well targeted and that services keep up with growth. In this way, all of Florida's citizens will be better served.



This model of the TD population shows how the needs of different groups can combine. Each of these groups is growing in Florida.