

Public Transportation and Demand Management

Introduction

Two important components of the County's multi-modal approach to transportation are public transportation and demand management. As discussed in this Chapter, public transportation includes the Pinellas Suncoast Transit Authority (PSTA) fixed-route bus system and paratransit service provided to the transportation disadvantaged community. Transportation demand management is a "demand-side" approach of relieving traffic congestion through strategies designed to reduce the incidence of single-occupant vehicles. These strategies include the use of alternative modes of transportation, such as buses and bicycles, telecommuting, flexing of regular eight-to-five work hours by employers and ride-sharing. In Pinellas County, TDM initiatives have centered on ride-sharing through car and vanpools for commuters. This Chapter also includes a discussion of the Pinellas Mobility Initiative (PMI) as it pertains to evaluating alternative transportation modes and strategies, including TDM and advanced technology public transportation (e.g., high-speed rail, bus rapid transit, guideway system) as well as existing transit services.

Public Transportation

In terms of reducing the demand for personal motorized travel in urban areas, public transportation has the highest potential of any alternative transportation mode. Transit services operating in areas such as Pinellas County typically provide extensive route coverage with a plentiful supply of capacity available for passengers. Regarding air quality, energy-saving and public cost advantages of transit service, the American Public Transit Association reports that over the past 30 years, the United States transit industry and its riders have prevented the following:

- The emission of 1.6 million tons of hydrocarbons, 10 million tons of carbon monoxide, and 275,000 tons of nitrogen oxides into the air;
- The importation of 20 billion gallons of gasoline; and
- The construction and maintenance of 20,000 lane-miles of roads and five million parking spaces to meet rush-hour demands, saving at least \$220 billion (as much as all Federal highway spending for the last 15 years).¹

Finally, public transportation is a lifeline to the economically disadvantaged citizen. For millions of Americans, public transportation provides a cost-affordable means to meet their basic sustenance needs (e.g., employment, medical treatment centers/doctors' offices, shopping, education, paying bills, etc.). Public transportation has been utilized extensively by economically disadvantaged individuals being served by Medicaid and the County's Transportation Disadvantaged Program.

Demographic and Socioeconomic Conditions Influencing Mass Transit in Pinellas County

A number of studies have indicated that transit ridership increases as residential or employment center densities increase. The increased traffic congestion generated by higher densities provides an incentive for switching to alternative transportation modes such as transit or walking. A widely-used study of urbanized areas in the United States reported that residential densities of at least seven dwelling units per acre were necessary to generate significant transit ridership.² In addition, a study of the Puget Sound Region in Washington State conducted by Frank and Pivo concluded that people do not shift from their vehicles to mass transit or walking until employment density reaches 50 to 75 employees per gross acre.³ Concurrently, transit service can be improved with higher densities. With higher densities, transit routes to a relatively large number of points can be offered, which leads to more frequent service (i.e., headways) and reduced cost per rider.⁴

Figure 5-1 illustrates existing densities within Pinellas County's census tracts. Figure 5-2 reveals the concentrations of the County's population over 65 and Figure 5-3 displays the percent of households within the County's census tracts where no vehicle is available. These maps reflect 2000 U.S. Census data. Figure 5-3 corresponds closely with 5-1. The tracts with the highest concentrations of households with no vehicles are also among the most densely populated. These tracts represent areas of the County (e.g., St. Petersburg, the Clearwater-Largo Area in Central Pinellas County and Tarpon Springs) where transit demand is most pronounced. High concentrations of elderly people shown in Figure 5-2 indicate additional areas where transit demand exists albeit to a lesser degree. Although elderly citizens represent a large portion of PSTA's passengers, most are of lower-income groups residing in areas with high densities and where percentages of households without vehicles are highest.

Transit service is also influenced by locations occupied by major trip generators and attractors. These include major employers, regional shopping malls, community shopping centers, government facilities, colleges, health care/medical services, sport and recreational complexes, and special event facilities, such as concert halls and museums (see Figure 5-4). Although the County's employment centers are widely dispersed, there are two major central business districts (CBDs) in downtown St. Petersburg CBD and Clearwater. In addition, with three of the largest manufacturing firms in Pinellas County, and the St. Petersburg-Clearwater International Airport within its boundaries, mid-Pinellas County is recognized as a regional center of commerce in the Tampa Bay Area. Transit providers typically structure their routes around major trip generators and attractors such as these.

Existing Transit Service

The Pinellas Suncoast Transit Authority (PSTA) is the primary provider of transit service in the County. They are responsible for the operations and planning of the fixed route bus system and paratransit service for Americans with Disabilities Act (ADA) eligible customers. Ridership on PSTA has risen steadily in recent years and rose to a record high of over 11 million in FY 2005/06. However, only 1.7 percent of workers in Pinellas County are using PSTA services to get to and from their job sites. To encourage more commuters to utilize the bus, PSTA has been aggressively pursuing new and/or enhanced express route service to expedite travel times for this market.

As reported in PSTA's latest Transit Development Plan, later evening service was introduced to routes 11, 18, 38, 52, 59, 61, 62, 66, 74 and 79 in 2007. In addition, 20 minute headways were implemented during peak periods on routes 59 and 74 and 15 to 20 minute headways were implemented during weekday service on routes 4 and 60 in 2007 as well. The higher fuel costs motorists have faced in recent years has boosted these efforts.

Land Use Patterns and Site Design

A major impediment to transit in Pinellas County is the prevalence of low density, strip commercial development patterns that are designed for convenient use of the personal automobile. To allow transit service to be a more viable form of transportation in the County from the standpoint of reducing automobile dependence, more mixed-use concentrated urban communities are needed to support it.

The livable community amendments to the Land Development Code scheduled for 2009 will introduce provisions requiring development projects to make accommodations for transit users and walkers, including sidewalks that connect proximate bus stops to building entrances, orienting building entrances closer to the street and providing buffered and landscaped walkways through parking areas. Some development projects have added amenities such as this to meet their concurrency management requirements. But the livable community amendments will require transit oriented design as conditions of site plan approval. Supporting transit use as well as other alternative travel modes is a key element in developing and sustaining a livable community.

Ride Sharing and Commuter Assistance

In terms of ride sharing, Bay Area Commuter Services (BACS), a non-profit agency based in Tampa, was established in 1992 to promote transportation alternatives to the single-occupant vehicle in the Tampa Bay area. They are funded by FDOT. BACS' activities involve the promotion of car/vanpools, telecommuting and variable work schedules and, to a lesser extent, bicycling, walking and transit use. Their efforts are targeted toward major employers and the reduction of commuter trips. As with PSTA and transit, much of the County's efforts with regard to commuter assistance, ride sharing and vanpooling is in support of BACS' programs.

Incentives for businesses to implement commuter assistance programs will be included with the livable community land development code provisions. Transportation Element policy also directs the County to work toward increasing participation among employees in ride-sharing activities, which has not been actively promoted since the adoption of the Element in 1998. With over 3,000 workers in the downtown Clearwater area, there is significant potential for more ride sharing activity among County employees. In addition to savings in fuel and vehicle maintenance expenses, another benefit to employees that should be considered is for the County to provide some incentive based on the reduction in demand for parking which is a capital improvement expenditure that needs to be accounted for in planning for facilities housing County staff. An effective ride sharing program could result in substantial cost savings to the County based on the reduction of parking spaces needed to provide for the workforce in the Clearwater area.

The policies also address the need for greater involvement by the private sector in commuter assistance and ride sharing programs. The County has sought to encourage private companies to implement these programs through the application of the Concurrency Management System, but has had limited success in this effort.

Pinellas Mobility Initiative

Pinellas County has been actively involved with the MPO in discussions regarding the Pinellas Mobility Initiative (PMI) effort, which is evaluating long-range options for mass transit, including monorail and bus rapid transit (BRT). The current PMI plan adopted by the MPO in 2004 includes a monorail system alignment that connects northwest St. Petersburg with downtown St. Petersburg, the St. Petersburg-Clearwater International Airport, downtown Clearwater and Countryside Mall. Corridors such as McMullen Booth Road/East Lake Road, US Highway 19, Ulmerton Road and 4th Street are identified in the PMI plan for enhanced bus service, which may involve bus rapid transit or express bus service.

More recently, the MPO has launched a countywide BRT study to identify corridors/routes most suitable for establishing BRT service. In May 2007, the PMI Steering Committee approved eight priority routes. The criteria used to rank the routes included 1) market/ridership potential, 2) travel flows/patterns and connectivity, 3) running way conditions (i.e., current on-street conditions relative to transit operations) and 4) accessibility. The selected corridors/routes in order of their ranking are listed below.

1. 4th Street
2. US Highway 19/Roosevelt Boulevard/Ulmerton Road/Interstate -275
3. US Highway 19
4. Ulmerton Road/Walsingham Road
5. Gulf to Bay Boulevard/Courtney Campbell Causeway
6. Bryan Dairy Road Extended Corridor
7. Belleair Causeway/West Bay Drive/East Bay Drive/Roosevelt Boulevard
8. Alternate US Highway 19 Corridor – Bay Pines Boulevard to Pasco County

The top two selections as approved by the MPO will be the subject of detailed implementation plans for BRT service. In addition, the City of St. Petersburg is currently working with PSTA on the implementation of BRT service connecting the downtown area from Central Avenue to Treasure Island, St. Pete Beach or to Tyrone Square Mall by way of Tyrone Boulevard.

The PMI evolved from the Pinellas Major Investment Study which was initially funded through the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) legislation. It was established to provide a framework for informed decision-making involving major capital investments for transportation projects. The intent of the PMI is to consider all available transportation alternatives through a collaborative process involving local citizens, members of the business community, government officials and transportation providers before committing to invest in a major transportation infrastructure project.

Transportation Disadvantaged Services

Many Pinellas County residents who face adverse economic conditions or who are physically or mentally impaired are reliant on public transportation to meet their daily needs. Many of these individuals access transportation through friends or neighbors or through PSTA. Others who have no access to personal transportation and who are in low-income brackets are provided subsidized transportation services through the Pinellas County Transportation Disadvantaged Program.

As it is currently structured, the Pinellas County Transportation Disadvantaged (TD) Program was established in 1989 as a result of the amendment of Chapter 427, F.S., which created the Transportation Disadvantaged Trust Fund. The Trust Fund was set up to provide community transportation coordinators (CTCs) with the financial means to provide low-cost transportation to the disadvantaged within their communities. In 1990, the State Commission for the Transportation Disadvantaged designated the MPO as the CTC for Pinellas County in addition to its duties as the designated official planning agency for transportation disadvantaged services in Pinellas County. As defined by Chapter 427, F.S., “transportation disadvantaged” includes people who are unable to transport themselves or purchase transportation, because of a physical or mental disability, income status, or age. Individuals who meet these criteria, but whose transportation is provided by a sponsoring agency such as Medicaid do not qualify for TD Program services paid for with Trust Fund monies. The State Trust Fund allocated \$1.66 million to the Pinellas County TD Program in FY 2007/08.

Through the TD Program, qualified individuals are provided subsidized transportation in taxi sedans or wheelchair-equipped custom vans to anywhere in the County for purposes of health care, employment, education, shopping, social activities, or other life-sustaining activities. Children who are handicapped or “high-risk” or “at-risk”, as defined in Chapter 411, F.S., are also eligible. Through the TD Program, individuals can also receive unlimited transportation throughout the County, regardless of the trip purpose, from PSTA using a 31-day bus pass. Transportation Disadvantaged Program services are provided through a network of for-profit and non-profit transportation providers (including PSTA) and Greater Pinellas Transportation Management Services (GPTMS), a ride-scheduling service agency that coordinates trips. In addition to providing trips funded through Trust Fund monies, the CTC also schedules and assigns rides to Medicaid-sponsored individuals. In 2007, the CTC provided nearly 2 million trips to over 30 thousand transportation disadvantaged citizens through the TD program.

Transportation Disadvantaged Population

The number of persons estimated to be transportation disadvantaged in Pinellas County is 123,221, approximately 13 percent of the County population.⁵ This includes low-income (at or below 200 percent of the Federal Poverty Level) persons with no access to an automobile. Figure 5-6 depicts high concentrations of transportation disadvantaged residents expressed as percentages of the total population for census tracts within the County. The transportation disadvantaged population is widely dispersed throughout the County, with the highest concentration located in the Greater St. Petersburg Area. Tracts with high concentrations of transportation disadvantaged individuals correlate closely with the location of persons with no automobiles shown in Figure 5-3 and the population

densities shown in Figure 5-1. This would indicate that a major portion of the demand for TD services can be served effectively and efficiently by PSTA.

Pinellas County routinely works with the MPO to identify individuals needing transportation assistance who are not currently participating in the TD Program through a sponsoring agency or as a non-sponsored customer. While continuing to assist the MPO in identifying unmet needs of the transportation disadvantaged community, the county shall also help the MPO in its effort to improve the coordination of transportation disadvantaged services among social service and non-profit agencies.

Endnotes

Chapter Six

1. Jack R. Gilstrap, "The Changing Federal Role in Support of Public Transportation," Journal of Public Transportation, Vol. 1, No. 1, (University of South Florida, Tampa, Florida: Center For Urban Transportation Research, Fall 1996), p. 2.
2. Boris S. Pushkarev and Jeffrey M. Zupan, "The Role of Density in Development," Public Transportation and Land Use Policy, (Bloomington, Indiana: Indian University Press, 1977).
3. Lawrence D. Frank and Gary Pivo, Relationships Between Land Use and Travel Behavior in the Puget Sound Region, Final Summary Report, prepared for the Washington State Transportation Commission, September 1994.
4. Marya Morris, Editor, Creating Transit-Supportive Land-Use Regulations, American Planning Association, Planning Advisory Service, Report Number 468, 1996, p.41.
5. Pinellas County Transportation Disadvantaged Service Plan 2004-2007, prepared by the Pinellas County Planning Department, September, 2003, p. 13.