STUDY OF POTENTIAL TDM AND TRANSIT TO SERVE SEASONAL RESIDENTS

PROBLEM STATEMENT

There are two general methods for identifying temporary residents: direct and indirect. The census count, state collected data, data collected by civic, business and trade groups, and surveys are all examples of direct data collection types. Indirect methods include estimations of the fluctuation in seasonal usage of electricity from active residential electric companies, water customer data, traffic counts, tax receipts, hotel/motel occupancy data, and local post office records. After assessing all of these methods, it becomes clear that there is no standard method for estimating seasonal residents. Because the data comes from a variety of independent, unconnected sources, it is not collected in a consistent way, and the different sources are likely not to have a high level of agreement. A model predicting the number of seasonal residents present in the Tampa/St. Petersburg area, during the time of the 2000 census, was constructed and tested.

OBJECTIVES

The objective of this project is to identify and summarize methods for estimating, locating, and forecasting seasonal residents, and then to provide recommendations for a unified method based on the literature review and easily available data. The method for estimating and forecasting residents is applied to all Florida counties for the year 2000, using 2000 census data. In addition, travel data was collected from seasonal residents of the Tampa/St. Petersburg area. Analysis of these data sets is used to investigate and suggest transportation systems improvements that could reduce vehicle needs for seasonal residents.

FINDINGS AND CONCLUSIONS

Diary data revealed that most (87%) seasonal residents arrive between October and January, and most depart between March and May. The mean length of stay for most seasonal residents is 118.5 days. Most reside in Hillsborough, Pasco, and Pinellas counties and tend to stay in mobile home parks or apartments/condominiums. The top five migratory origination states/providences are New York, Ontario, Michigan, Pennsylvania, and Massachusetts. Only 2 percent of seasonal residents are under the age of 55—the majority (75%) is 65 years or older. Most seasonal residents state that their main reason for visiting the Tampa/St. Petersburg area is the good weather.

Nineteen categories of activities were established, of which the most frequent were shopping, socializing, and dining. One-half of the out of home activities begin by noon, while only 10% begin after 6:00 pm. The top places for out of home activities include (1) stores, (2) locations within the neighborhood, and (3) restaurants. Most respondents drive to get to their activities, the most frequent of which (per driving, in particular) were to go (1) to the doctor, (2) to the flea market, and (3) shopping. The most frequent activities that engage residents to walk are (1) exercise, (2) socializing, (3) work/volunteer activities, and (4) recreation. Bus or shuttle services are utilized for entertainment activities and to go to the state fair. Other modes include bicycling, traveling by golf cart, and carpooling.

Reducing congestion caused by seasonal residents should follow a multi-pronged approach that would include (1) reducing the need for the automobile as an every day requirement for simple chores, (2) encouraging alternative auto ownership models such as carsharing to reduce the financial burden of car ownership, and (3) finally, developing financially sustainable transportation systems (shuttles and charter buses) to service seasonal resident needs.

In the current study, shopping trips and doctor visits required a median trip of 5 miles (average of 10 miles). The percentage of trips that were walkable or bikeable (3 miles or less) was 37%. In order to encourage more biking and walking to allow seasonal residents to be less automobile dependent, perhaps even to the point of not owning an automobile, the following steps should be taken:

1. Survey areas that have high proportions of seasonal residents (identifiable through census tract-level data on seasonal home vacancies and with cursory research into facilities that primarily serve seasonal residents) for levels of sidewalk connectivity and bike paths

2. Improve connectivity so that there are continuous walking and biking facilities from (and through) major residential areas to shopping and medical facilities.

3. Examine required crossings and signal timings. Investigate increasing allowed walk time for requested crossings and eliminating right-turn-on-red during those crossings.

4. Examine level of sidewalk lighting to ensure the adequacy of the facility for use after dark.

A second method for reducing automobile dependence for these types of trips involves the use of smaller low-speed motorized vehicles such as golf carts, motorized scooters or three-wheeled vehicles. These vehicles involve an additional expense on the part of the user. To the extent that they would be used on roadways (likely for golf carts and other relatively large vehicles), they would not provide much in the way of congestion relief and might even add to it. To use the vehicles off-road might require sidewalk improvements, particularly when pedestrians also use the facility.

In enclosed areas, or neighborhoods where the speed limit is low, golf carts are a viable option. Since 37% of trips are 2 miles or less, and given the appropriate road conditions, golf carts might work for these and longer trips. However, they are not suitable for driving on public roads—driving in traffic reintroduces stress that is removed in the absence of driving autos. However, golf carts could be driven on special paths or sidewalks, off of the roads. Implementation strategies might include the following:

1. Examine pedestrian facilities to determine if sidewalk characteristics allow for off-road use of golf carts.

2. Develop some type of trade-in incentive for people to replace automobiles with motorized vehicles that can be used on sidewalk and bike path facilities

3. Analyze crossing intersections to ensure safety, although there are considerably fewer problems for users of small motorized vehicles than for elderly pedestrians.

A final method of reducing senior dependence on automobiles is to employ concierge services that have a financial interest in reducing the amount of time spent fulfilling multiple tasks with minimum travel. The net results could be fewer shopping-type trips and less corresponding traffic.

Charter Buses for Special Attractions have the potential of being a very popular option amongst seniors, because, as indicated in the analysis of the activity diary, a primary activity of seasonal residents is socializing. As a social activity in itself, the bus ride could encourage some people to ride rather than drive. At Lake Towers, in Sun City, one man even mentioned that he did not replace his car after it was stolen, because he made more friends using the transportation services offered by Lake Towers. Charter buses would allow for large groups of friends to travel together and for people to make new friends. The driver is charged with the responsibility of driving and can assist passengers if needed; therefore, riding a charter bus should be a stress-free experience for riders.

Local shuttles that run within a community to shopping areas, post offices, and banks would also allow seniors to travel in groups. If they transported riders to the places where they needed to run their daily errands, this option would likely be popular. Shuttles from hospitals or doctors' offices may provide a partnership opportunity. Hospitals or medical office complexes may be willing to subsidize the cost of shuttle service, if it would draw patients to their facility. Also, local businesses may wish to partner in providing shuttle service to draw customers to those businesses.

BENEFITS

Implementation of this research would lay the foundation for the development of sustainable transportation services, such as local shuttles and charter buses, that would help to provide (1) coverage for both short and long trips and (2) efficient, convenient service for seasonal residents around seasonal resident communities.

One of the major challenges in implementing these solutions is that seniors have very strong feelings about maintaining their independence, and, in the car-dependent living designs that characterize most of Florida, independence is difficult to achieve without the use of a personal vehicle. Infrastructure redesigns of the sort described in the preceding pages could go a long way to alleviating this concern and reducing seniors' perceptions that owning their own vehicle is a requirement for maintaining independence.

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