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**HIGHLANDS COUNTY
TRANSIT DEVELOPMENT PLAN
(FY 2003/04 - 2007/08)**

USF

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URBAN
TRANSPORTATION
RESEARCH



**HIGHLANDS COUNTY
TRANSIT DEVELOPMENT PLAN
(FY 2003/04 - 2007/08)**

Prepared for:

Central Florida Regional Planning Council

Prepared by:

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CHAPTER 1

DEMOGRAPHIC DATA



INTRODUCTION

In order to plan for a public transportation system, it is essential to gain an understanding of the environment within which the system is operating. Following a descriptive overview of Highlands County, Chapter One analyzes the demographic and economic conditions of the county, as well as social and political conditions.

HIGHLANDS COUNTY: AN OVERVIEW

Highlands County is located in Central Florida and occupies a total area of 1,107 square miles (1,029 land; 78 water). It is located northwest of Lake Okeechobee and is bordered by Okeechobee, DeSoto, Glades, Hardee, and Polk counties. Highlands County was established from a portion of DeSoto County in 1921 and named for its rolling countryside. There are three incorporated areas in Highlands: Avon Park, Lake Placid and Sebring. Sebring is the county seat.

Their most well-known event is the “12 Hours of Sebring” auto race, which is the oldest major road race. It takes place at the Sebring International Raceway, located at the Sebring Airport. This race brings international recognition and is an annual March ritual.

Highlands County is also home to Highlands Hammock State Park, located west of Sebring. It provides visitors with a look at Florida in its natural state, as well as hiking and camping opportunities.

HIGHLANDS COUNTY DEMOGRAPHICS

Population

According to the 2000 U.S. Census, Highlands County has a population of 87,366, ranking it 34th in the State. The most populous city is Sebring (9,667 people), followed by Avon Park (8,542) and Lake Placid (1,668). Highlands County increased nearly 28% from its 1990 population of 68,432, compared with an overall State increase of 23.5%. (See Table 1.1.) It should be noted that the substantial increase in Lake Placid’s population is mainly attributable to the city’s annexation of unincorporated areas.

**Table 1.1
Population Growth and Density**

Area	Population (1990)	Population (2000)	Growth (1990-2000)	Density (2000) (persons/sq mile)
Highlands	68,432	87,366	27.7%	84.9
Avon Park	8,042	8,542	6.2%	na
Lake Placid	1,158	1,668	44.0%	na
Sebring	8,900	9,667	8.6%	na
Florida	12,938,071	15,982,378	23.5%	296.4

Source: U.S. Census Bureau

In 2000, the population density for Highlands County was 84.9 persons per square mile, quite a difference from Florida's average of 296.4 persons per square mile. (See Map 1.)

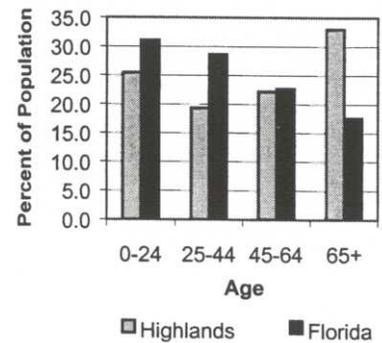
Figure 1.1 shows the age breakdown in Highlands County, and compares it to the population in Florida. Clearly demonstrated, Florida's largest age group is 0-24, but the largest age group in Highlands is 65 and over. Specifically, 17.6% of Florida's population is 65 and over; this same group represents 33.0% of the population in Highlands, nearly twice the State average. Likewise, the median age in Highlands is 50 years, ranking it the fifth highest in Florida. (Florida's median age is 38.7 years.) Interestingly, the age composition of Highlands County has remained constant over the past ten years, as seen in Figure 1.2. Because people under 18 years of age and over 65 years tend to be more transit-dependent, Maps 2 and 3 show these measures by block group.

Racial composition of Highlands County is demonstrated in Figure 1.3 and Map 4. Again, Highlands differs significantly from the State's racial composition, as seen in Table 1.2.

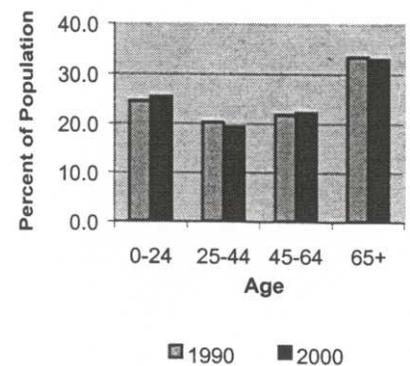
**Table 1.2
Comparison of Racial Composition**

Race	Highlands	Florida
White	83.5	78.0
Black	9.3	14.6
Asian	1.0	1.7
Other	4.3	3.3
Two or More	1.5	2.4

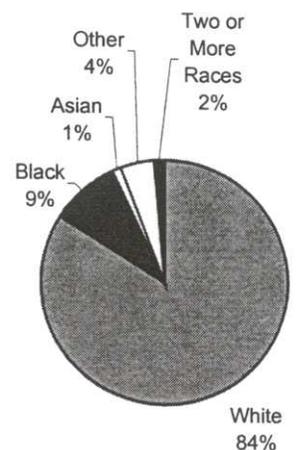
**Figure 1.1
Population by Age**



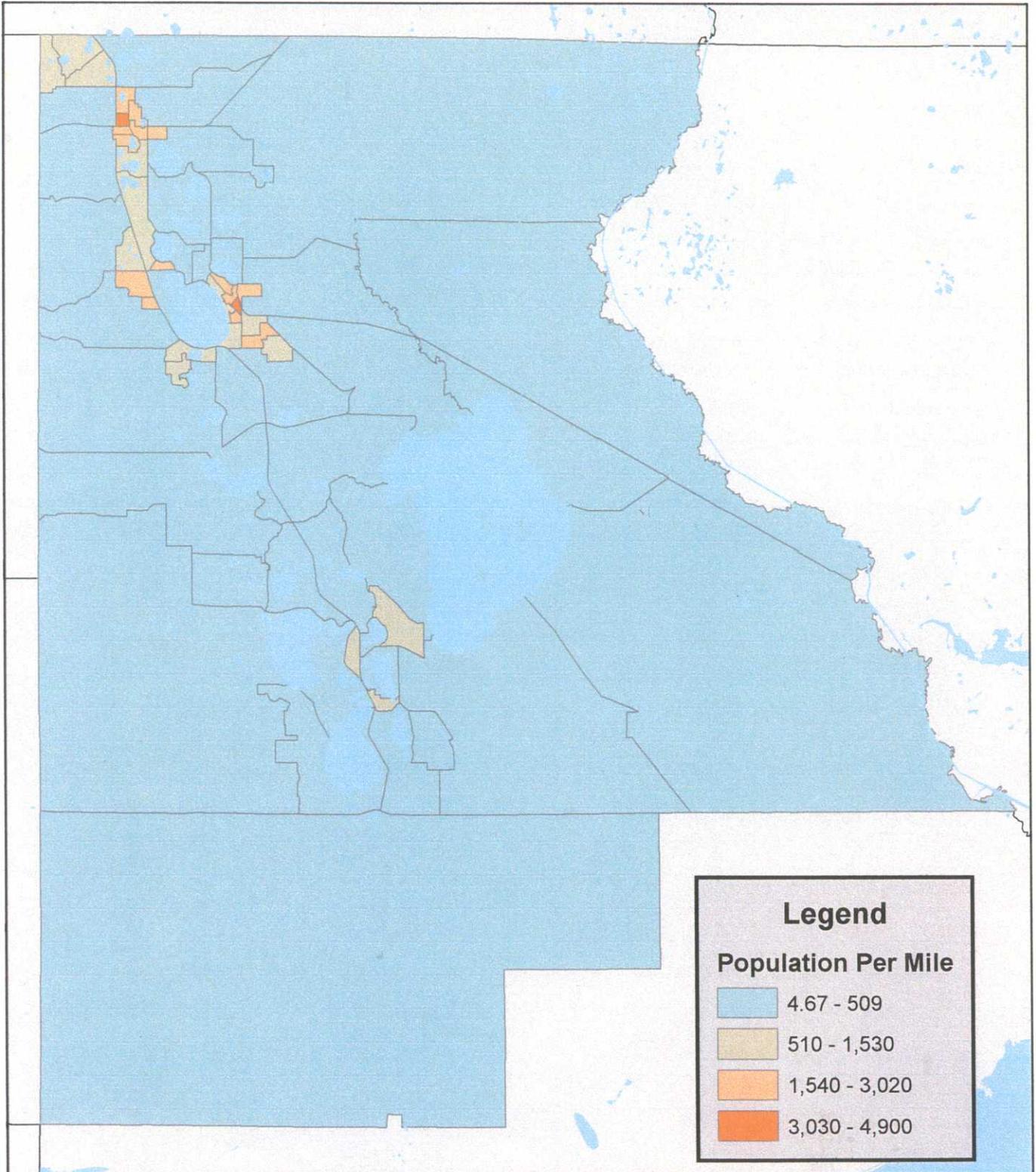
**Figure 1.2
Change in Population Age**



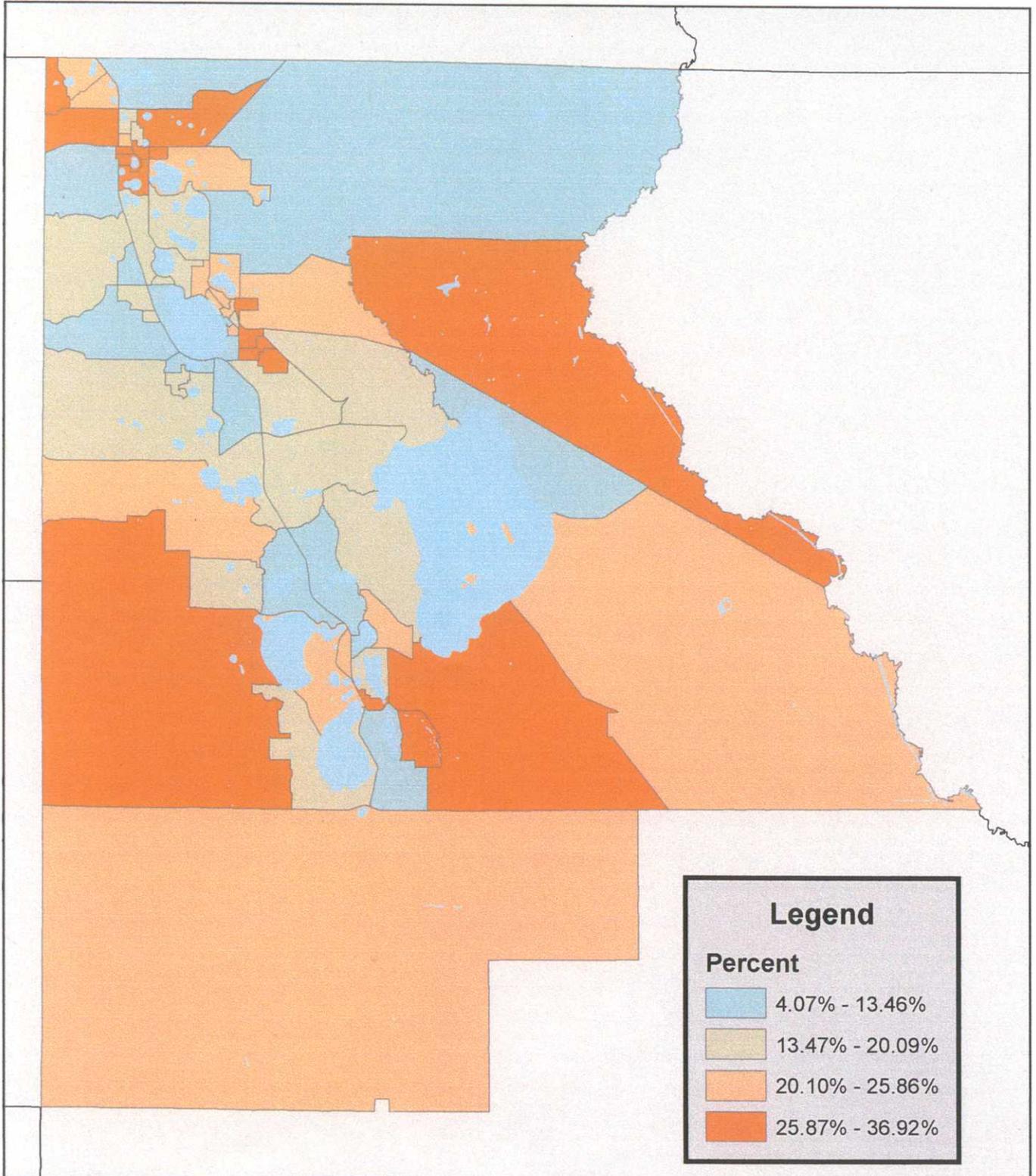
**Figure 1.3
Racial Composition**



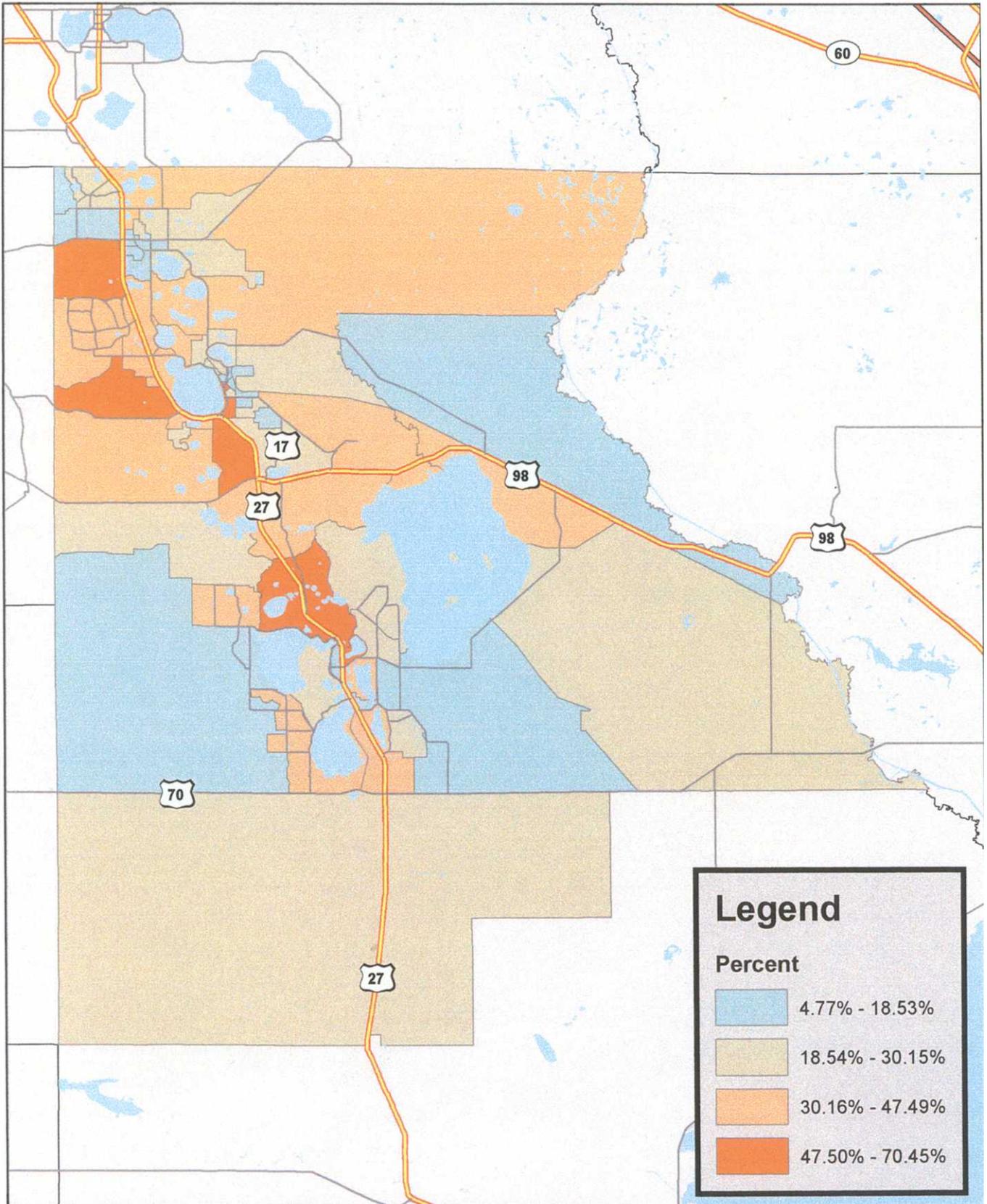
**Map 1 - Population Density
(People per Square Mile)
Highlands County Florida (Census 2000)**



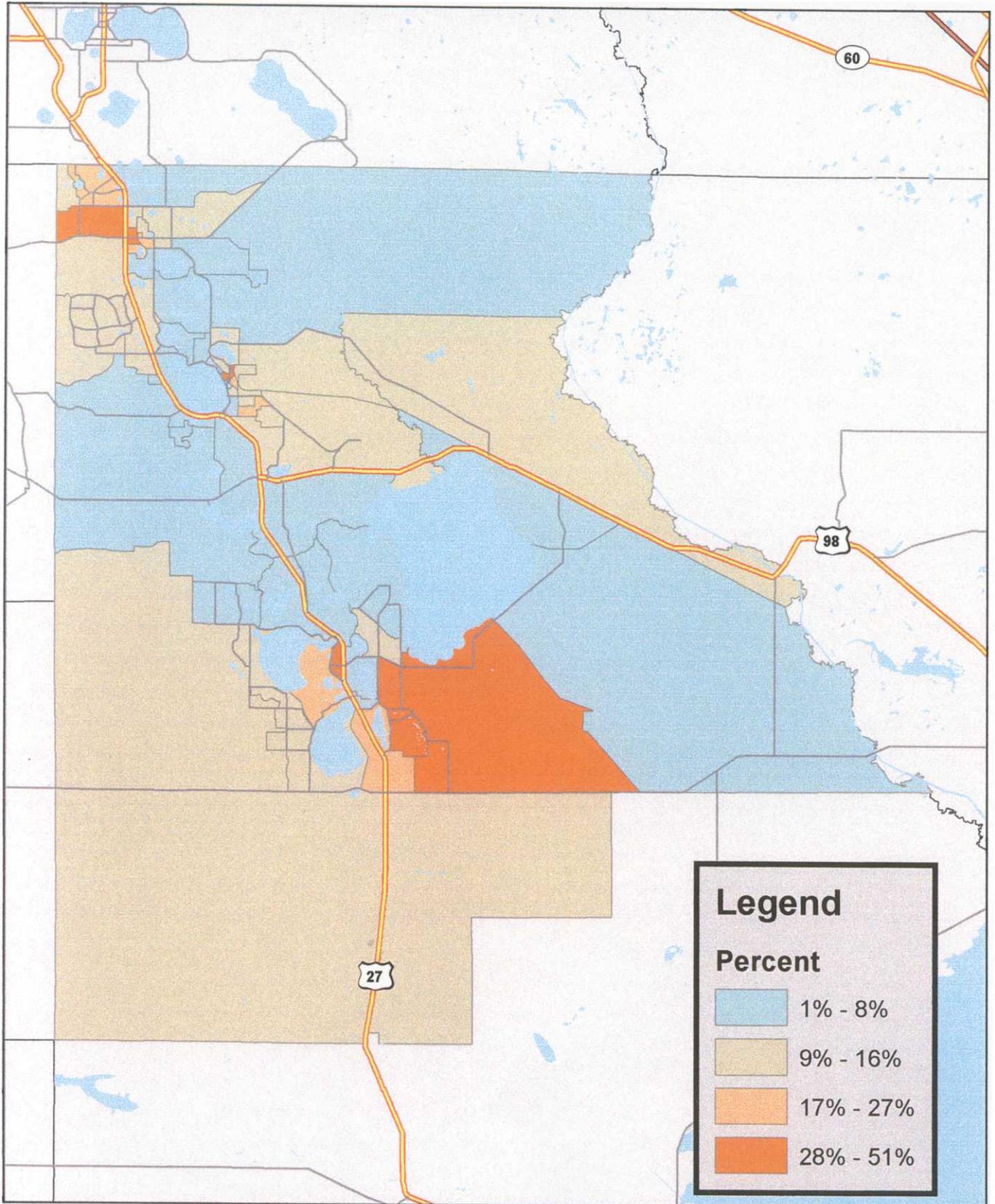
Map 2 - Percent of Population Under Age 18 Highlands County Florida (Census 2000)



Map 3 - Population Age 65 and Older Highlands County Florida (2000 Census)



Map 4 - Hispanic Population Percent Highlands County Florida (2000 Census)



For information purposes, 12.1% of the population in Highlands County identifies its ethnicity as Hispanic, compared to 16.8% of Florida's total population. Dispersion is shown in Map 4.

Housing

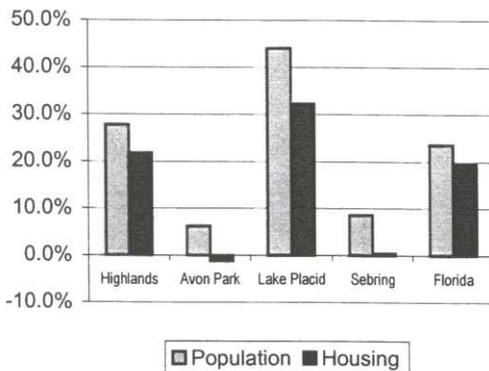
Available housing is another indicator of population growth and a measurement of economic growth. One way to look at it is to compare population growth to housing growth, by dividing the actual population increase by average household size. In Highlands County, the population increased by 18,934 (27.7%) between 1990 and 2000. The average Highlands County household in 2000 consisted of 2.3 people, resulting in an increase of 8,232 households. The actual increase in housing units was 8,732, for a total of 48,846 or 21.8%. Florida experienced an increase of 19.7% in housing units.

A look at these statistics for each municipality, as shown in Table 1.3, can provide more detailed insight regarding growth.

**Table 1.3
Housing Units**

Location	1990	2000	Change
Highlands County	40,114	48,846	21.8%
Avon Park	3,964	3,916	-1.2%
Lake Placid	587	776	32.2%
Sebring	4,999	5,024	.5%
Florida	6,100,262	7,302,947	19.7%

**Figure 1.4
Change in Population and Housing
(1990 - 2000)**



As shown in Figure 1.4, Lake Placid experienced the highest population growth rate (44%), and accordingly, experienced the highest increase in housing units (32.2%). At the same time, Avon Park saw nominal population growth, and actually had a decrease in housing units.

It is also helpful to review housing occupancy rates for monitoring efficiency. (See Table 1.4.)

**Table 1.4
Housing Occupancy Rates**

Location	1990	2000	Change
Highlands County	73.7%	76.7%	3.0%
Avon Park	79.6%	82.2%	2.6%
Lake Placid	78.4%	83.2%	4.8%
Sebring	79.7%	79.0%	-0.7%
Florida	84.2%	86.8%	2.6%

Income and Labor

The compilation and reporting of 2000 Census information is currently incomplete. As such, it is necessary to rely upon other sources for information, albeit less detailed. Information regarding income and labor was obtained from the Bureau of Economic Analysis. This information is only available on a per capita, countywide basis.

The 1999 per capita personal income (PCPI) for Highlands County was \$23,734. This PCPI ranked 26th in the State, and was 85% of the State average of \$27,781, and 83% of the national average of \$28,546. The 1999 PCPI reflected an increase of 5.9% from 1998. The 1998-99 State change was 3.2% and the national change was 4.5%.

The largest employment industries in 1999 were services (24.9% of earnings), farm (18.8%), and state and local government (14.2%). The slowest growing industry from 1998 to 1999 was retail trade (increasing only 1.1 %); the fastest was farm (a 61.6% increase).

When reviewing changes over the past ten years (1989-99), Highlands County had a PCPI of \$16,279 in 1989, with an average annual growth rate over the past ten years of 3.8%. The average annual growth rate for the State was also 3.8%, and the nation experienced a 4.4% increase in PCPI.

In 1989, the largest industries were the same as in 1999: services (20.1% of earnings); farm (18.3%); and state and local government (14.6%). In 1989, retail trade accounted for 14.2% of earnings in Highlands County; but in 1999, only 11.6% of earnings were attributable to retail. The slowest growing industry over the past ten years was construction, increasing at an average annual rate of 0.6%; the fastest was agricultural services, which increased at an average annual rate of 11.5%.

According to the Florida Research and Economic Database (FRED), the Highlands County civilian labor force in 2001 was 26,375. Their 2001 annual unemployment rate was 5.4, compared to Florida's 4.3%. Table 1.5 displays the population 16 years and older in the labor force and the percentage of civilian labor force who are employed.

Ten Largest Private Sector Employers In Highlands County

Employer	Number of Employees
Florida Hospitals	1,099
Highlands Reg. Med. Ctr.	400
LESCO (Fertilizers)	200
Lake Placid Growers	165
Ben Hill Griffin (Citrus)	150
Georgia Pacific	135
LinPac Plastic	130
Sprint Communications	120
Twyford Plant Labs	85
Cargill Citro Pure	83

Source:

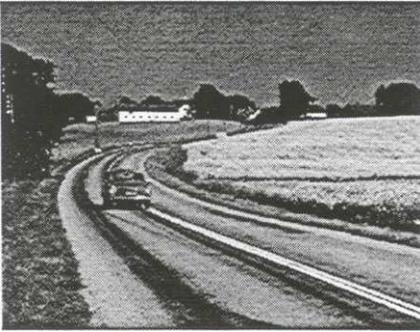
www.heartlineweb.org/highlandsbcc
2001 Highlands County Profile

Service Industry Includes:

- Hotels and other lodging places
- Personal services
- Business services-
- Auto repair, services and parking
- Miscellaneous repair services
- Motion pictures
- Amusement and recreation service
- Health services
- Legal services
- Educational services
- Social services
- Membership organizations
- Other services

**Table 1.5
Employment Characteristics**

Area	Civilian Labor Force (2001)	Labor Force Employed (2001)
Highlands	26,375	94.6%
Florida	7,763,000	95.7%



ROADWAYS and TRAFFIC

Roadway Level of Service (LOS) is a qualitative assessment of the flow of traffic. LOS is measured by driver satisfaction using a scale of “A” to “F” with “A” representing the most favorable driving conditions, and “F” representing the least favorable driving conditions. All of the local comprehensive plans in Highlands County have identified a standard Level of Service “C” for principal arterials, meaning that LOS D, E and F are unacceptable.

The Highlands County Engineering Department indicates that there is little congestion and only a few road segments showing unfavorable levels of service. Their Comprehensive Plan (rev. 8/2000) has a map depicting the roadway Levels of Service in 2010, with funded improvements. U.S. Hwy 27 remains congested in places throughout Highlands County, even after improvements. The following roads show Levels of Service “D” or below on limited, specific sections:

County:	US Hwy 27
Sebring:	SR Hwy 17 S Lakeview Drive Sparta Road Hammock Road (CR 634)
Avon Park:	SR 64 (East of US 27)

The Highlands County Comprehensive Plan essentially recognizes that nearly every local trip must access US 27. Many objectives and policies support the development of a roadway system that will alleviate unnecessary travel on US 27, including frontage roads and a better system of cross-access between properties located on US 27.

In general, travel in and through Highlands County is not time-consuming; however, the large amount of truck traffic creates an atmosphere that can be uncomfortable and intimidating to many drivers.

CHAPTER 2

PUBLIC INVOLVEMENT



One component of the TDP is to assess the current situation in Highlands County and determine if any additional transportation plans should be made. One method of doing this is to ascertain the opinions, perceptions, and attitudes of the community regarding public transportation. Three different means were used to capture this information: interviews, discussion groups, and a public survey.

INTERVIEWS

Local officials and area leaders have insight into the community's view. Elected officials are responsible for short and long-range policy formulation and the allocation of any funding that may be needed to support a local public transportation system. Other leaders have a good gauge on the perceptions and opinions of their constituents, clients, and employees, which could be indicative of public support for transportation-related issues.

The review committee compiled a list of elected officials and community leaders representing Highlands County and its municipalities. CUTR staff conducted ten interviews in January 2002. (A list of interviewees, questions asked, and responses are included in Appendix A.) This section summarizes the results of those interviews. Please note that this is a summary of what people said and may not necessarily reflect accurate representations.

Overall, interviewees agree that there is a need for public transportation. Many noted that residents normally rely on volunteers from the church or taxicab service for transportation. Some residents own cars, but safety is an issue particularly with elderly drivers, given the heavy truck traffic on Highway 27.

According to most of those interviewed, public transportation would assist in alleviating the local mobility problem. Yet, most of the interviewees were skeptical of the success of public transportation in Highlands County. A few people said that a transportation system was in place four to five years previously that had not succeeded. They attributed this failure to sprawl. These interviewees proposed a demand response public transportation system that would benefit everyone in the community. One person stated that due to the large elderly population, public transportation in Highlands should be user-friendly, comfortable and easily accessible.

When asked about potential users of public transportation, the interviewees suggested that the majority of users would be the elderly. One official stated that the older age group would ride

it the most; however, every age group would have the potential for ridership. Another said that people would use it. The majority of the users would be winter residents, retirees, mobile home park residents and those living in communities such as Thunderbird Hills and Washington Heights.

All of the interviewees were asked whether or not the community would support a public transportation system. The majority expressed skepticism of a system being supported financially by the county or cities, and many recommended federal and state funding. One person thought the community would support a system in theory, but not in dollars. Another person felt that ten years ago there was no support for something similar, but speculated that they may be ready now. Another suggested that getting the necessary funding must be a sales pitch and will require a good deal of public education, since Highlands County is very conservative and wary of government and taxes. This interviewee also felt that public transportation is beneficial and needed in the local community.

Interviewees also contributed their opinions on the viability of a Highlands County public transit system. They perceived the need for such a transit system, but cautioned that the system should be small and geared towards serving local residents. In addition, all of the interviewees express their skepticism of the system receiving financial support from Highlands County. The prevailing sentiment is one favoring federal aid in lieu of local contribution.

DISCUSSION GROUPS

The review committee also provided information regarding local group meetings that CUTR attended during the month of February 2002, in order to gain input.

Nu-Hope

Nu-Hope is the local agency for aging under the Department of Elder Affairs. In attendance were representatives of a variety of elderly services, such as American Association for Retired People, and many local organizations such as hospice, retirement communities, nursing facilities, health organizations, and overall welfare of senior citizens. Many of the representatives had used public transportation in other cities, for a variety of reasons. Some people used transit to get around a large city when visiting, and some grew up in larger cities and took advantage of transportation alternatives because there was one or no cars in the household. Most of them had positive experiences; however, those who were from smaller towns and used transit while visiting a larger city experienced the

most anxiety. They were afraid of the hustle and bustle, sometimes felt overwhelmed, and were fearful of asking for help. At the same time, they indicated that it was better than driving around in an unfamiliar place.

Despite its growth, Highlands County functions like a small town where people help people. There is a good deal of people in the community who transport those who are not able to transport themselves. But when the “snowbirds” go home for the summer, many seniors lose their transportation. Additionally, in the last several years, the number of volunteer drivers has reduced dramatically, because they are afraid of potential liability.

All of the representatives expressed a good deal of concern regarding elderly drivers. Many of them drive when they are not physically or mentally able, because they feel there is no alternative. They know of several clients who drive without a license or insurance. This problem is compounded by large volume, increased speed, and truck traffic on US Highway 27. In fact, they feel that the most critical issue regarding elderly drivers is the unsafe conditions on US Highway 27, which is virtually unavoidable when traveling in Highlands County.

The representatives also praised the Transportation Disadvantaged program, but it does not offer the flexibility for an average rider and, of course, is not available for all trip purposes. They would like to see public transportation available from 6:00 a.m. to 8:p.m., every day of the week, serving Lake Placid to Avon Park. While they are desirous of serving the needs of their clients, they view public transportation as a valuable asset to the community and feel it would benefit everyone. Some of those benefits would include: Welfare to Work; those with limited income or limited transportation available; students; reduced congestion; increased safety (many people ride their bicycle or walk in the roadways because they have no other transportation options); and increased economy, because mobility equals money.

Buttonwood Bay

Buttonwood Bay is a huge mobile home park for senior citizens, consisting of approximately 900 homesites. It is located south of Sebring on US Highway 27. Interestingly, their views differed from the Nu-Hope representatives. There were approximately 200 people in attendance at the meeting. Most of them were in good health and very active. They admitted that, although they didn't mind driving during the daytime, nighttime driving was troublesome. But, they felt that public transportation might be good for others, but not for them, because it is too inconvenient. One person in the group

was legally blind, and indicated that she would appreciate the autonomy public transportation would afford, even if it is inconvenient. When asked how many of those in attendance were seasonal residents, about half raised their hands. When asked if those seasonal residents claimed residency in Highlands County, a very small portion indicated in the affirmative. This is an indicator of the seasonal influx that exists in Highlands County, and the lack of accounting for this population group.

Residents of Buttonwood Bay indicated that they often travel out of the County, going to the airport in Fort Myers, Cypress Gardens, Sarasota, and the Veteran's Hospital. Of course, most of their travel is done within the County, going to Wal-Mart, the mall, library, and community center. They felt that the trip fare should be \$1 to Sebring and \$2 to Avon Park.

Local Coordinating Board

Responses from local coordinating board members were much more general in nature. Of course, they recognize that a public transportation system would help reduce costs and assist in the provision of trips within the Transportation Disadvantaged program. They were also cognizant of the political constraints involved in implementing a public transportation system in Highlands County. Many of the members work for social service agencies who would be grateful if their clients who do not qualify for public assistance were able to have greater mobility, thereby improving their situation and their opportunities.

It was suggested that, since there is already a transportation management company in place, it would be easy for them to manage a public transit service, and it would assist in seamless coordination of transportation services within Highlands County.

SURVEY

The Highlands County Public Transportation Feasibility Survey was conducted on Tuesday, March 26th, 2002 at four sites: the Avon Park Post Office, Lake Placid Post Office, Lakeshore Mall, and the Sebring Post Office. This survey was conducted in order to assess public sentiment regarding the possibility of public transit in the area of Highlands County. The survey was orally administered, with the survey administrator filling in the survey form according to the verbal response of the participant to a list of ten questions regarding public transit in Highlands County. A copy of the survey instrument is included in Appendix A.

A total of 200 surveys were collected as follows: 5 participants at the Sebring Post Office, 51 in Avon Park, 64 participants at the mail, and 80 in Lake Placid. The reason for the low response rate at the Sebring Post Office was that the survey team was asked to leave the premises by a Post Office Employee only a few minutes into the survey session.

Demographic Data

A breakdown of survey respondents reveals that the typical respondent for our survey was female, aged 60 and over, and white. Respondent gender was 40.7 percent male and 59.3 percent female.

The majority of respondents (53.1 percent) were over the age of 60. 20.6 percent were between the ages of 46 and 60, 19.6 percent were between the ages of 26 and 45, and the lowest percentage (6.7 percent) were under 25 years of age.

The majority of respondents (83.7 percent) were white. 4.2 percent were Hispanic, 5.8 percent were Asian, and 6.3 percent were Black.

Mode of Transportation

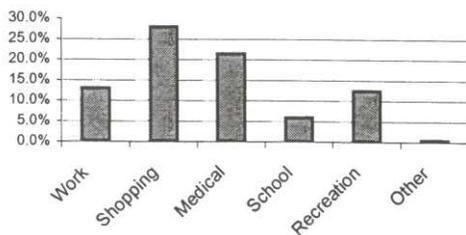
Most of the respondents (98.0 percent) used an automobile to access the survey area, with only 2.5 percent bicycling to their destination, 0.5 percent taking a taxi, and 1.0 percent walking to their destination.

Only 18 of the 200 respondents have ever used a taxi in Highlands County.

Use of Public Transit

Over half of the respondents (52.0 percent) answered that they would use public transit if it were available. The survey instrument probed further and asked the types of purpose for which respondents might use public transit. The choices included work, shopping, medical, school, recreation, other, and unspecified activities. Respondents were allowed to choose more than one option, so that these items are not mutually exclusive. Thirteen percent of respondents said that they would use public transit to get to work; 28.0 percent said they would possibly use it to go shopping; 21.5 percent indicated use for medical appointments; 6.0 percent said that they would use public transit to get to school; and another 12.5 percent said they would use it to access recreational pursuits. Only 0.5 percent answered that they would use public transit for other, unspecified access. (See Figure 2.1.)

**Figure 2.1
Transit Trip Purpose**



Respondents were also asked how important they felt public transit would be for Highlands County. A majority (56.5 percent) felt that public transit would be very important, 34.2 percent felt that public transit was important, 6.2 percent felt that public transit was unimportant, 2.5 percent felt that public transit was very unimportant, and 0.5 percent did not know the importance of public transit in Highlands County. (See Figure 2.2.)

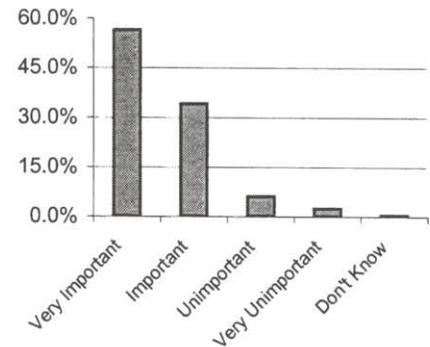
Respondents want convenience regarding accessibility of transit. When asked what they perceived as a reasonable distance to walk to access public transportation, a majority (48.2 percent) of respondents said that 1-2 blocks would be reasonable, 27.7 percent said ¼ to ½ of a mile, 21.0 percent said less than one block, and only 3.1 percent of respondents would walk more than ½ mile to access public transit.

Regarding how often they thought buses should run, the majority (47.4 percent) wanted a bus every hour, 28.4 percent wanted buses to run every two hours, 15.5 percent wanted buses to come every 30 minutes, 2.6 percent wanted buses to come every 15 minutes, 4.5 percent wanted buses to service areas twice a day, and 1.0 percent wanted buses to run on demand.

In two questions, people were asked how public transit should be funded. One question asked if tax dollars should be used to fund public transit, and the second question asked what type of tax would be most appropriate for funding public transit. 46.0 percent felt that tax dollars should be used to fund public transit, 26.2 felt that tax dollars should not be used for this purpose, 19.2 percent said that it depends, and 8.6 percent didn't know if tax dollars should be used. However, when asked what mode of taxation should- be used to fund public transit, 50.4 percent did not specify a certain mode for increase of taxation to fund public transit. 24.0 percent specified sales tax, 9.4 percent specified a gas tax, 9.9 percent specified a special taxing district, and 6.3 percent specified property tax as a means of funding transit.

A cross-tabulation was performed on how people ranked importance of public transit in Highlands County versus if people thought that public transit in Highland County should be funded by taxes. Overwhelmingly, those persons who ranked public transit as being very important or important for Highlands County also said that tax-dollars should be used to fund it (Figure 2.3). Almost half of our respondents (45.6 percent) who ranked public transit as being important or very important to Highlands County also replied that tax-dollars should be used to fund public transit. However, 28.3 percent of

Figure 2.2
Importance of Public Transit



those who ranked public transit as being very important or important to Highland County responded that tax dollars *should not* be used to fund public transit. Additionally, as shown in Figure 2.4, persons who ranked public transit as important are more likely to say that they might possibly use it if available. Over half (52.4 percent) of the respondents who ranked public transit as very important or important claimed that they would possibly use public transit if it became available. It is important to note that 38.3 percent of those ranking public transit as being important or very important responded that they would not use public transit if available.

Figure 2.3
Cross-Tabulation of Importance and Funding

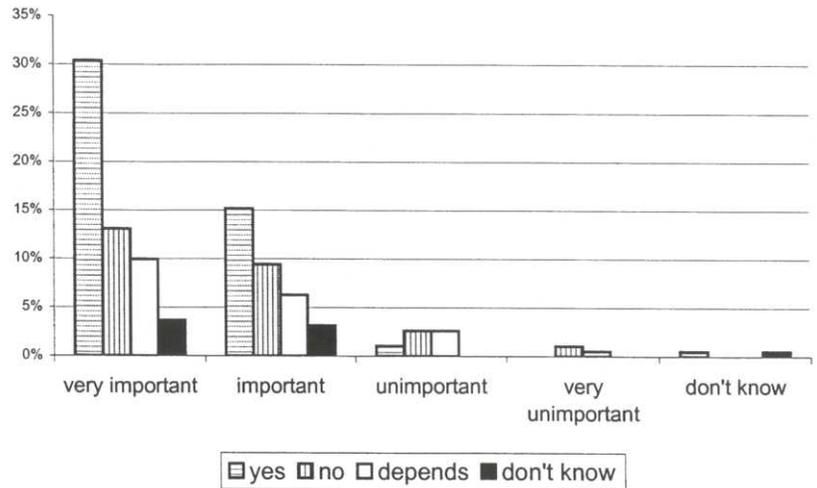
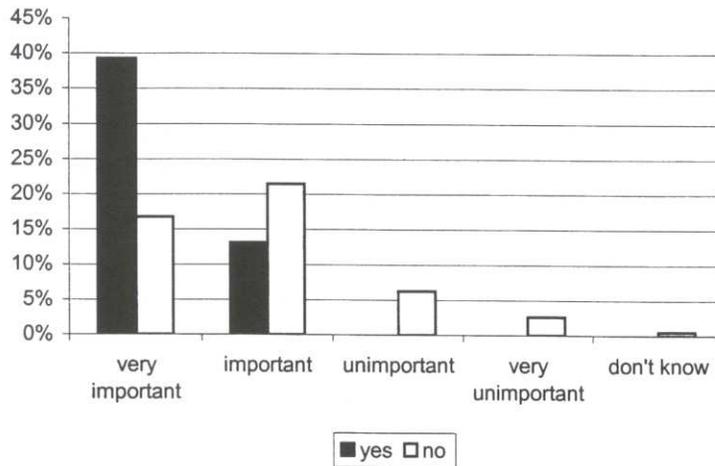


Figure 2.4
Cross-Tabulation of Importance and Transit Use



Summary

There are several barriers to public transit acceptance in this region, the primary one being that people do not want to forfeit the convenience of their cars. The other barrier is that people do not want to expand the amount that they already pay in taxes for a service that they don't think will be of much utility to them, especially when it is relatively economical and convenient to use one's personal vehicle. As shown by the cross-tabulations in both Figures 2.3 and 2.4, there is a certain amount of ambivalence as to the implementation of public transit. People realize that the introduction of public transit would be an important addition to community services in Highlands County, while at the same time realizing that the tax base must expand to offer these types of services. Of particular interest in this study is that, through running a variety of cross-tabulations of the surveys, there was no significant difference between age, race, or gender and ranking of possible use of public transit, importance, taxation, and funding sources.

CHAPTER 3

EXISTING TRANSPORTATION SERVICES



In order to assist in determining current levels of transportation service provided in Highlands County, an inventory was performed of existing public and private transportation providers. This inventory includes operators for the transportation disadvantaged program, taxi service, airport limousine, and non-emergency medical services. Information was gathered by telephone interviews and is detailed in Appendix B.

TRANSPORTATION DISADVANTAGED

Transportation in Highlands County is currently being provided to “those persons who because of physical or mental disability, income status, or age are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities, or children who are handicapped or high-risk or at-risk” (§427.011(1), F.S.), commonly known as the transportation disadvantaged. Coordination of transportation services to the transportation disadvantaged population, is the responsibility of a locally-designated entity known as the Community Transportation Coordinator (CTC).

CTC Trend Analysis

A trend comparison was completed to compare the performance of the Highlands County CTC over time. The purpose of the analysis is to examine the performance of the CTC over the past five fiscal years. The trend comparison analyzed data for fiscal years 1997 through 2001. (It should be noted that the Annual Operating Report for FY 2001 was not yet validated by the Commission for the Transportation Disadvantaged (CTD).) A longer trend is not available, because prior to 1997, the data was combined with Hardee and Okeechobee Counties. Table 3.1 shows the performance indicators and measures for each of the five fiscal years. This trend analysis represents a combined set of statistics for all TD transportation services coordinated through the Highlands County CTC.

The first measure shown in Table 3.1 is total annual passenger trips. Although the number of total trips fell slightly in 1998 and 1999, it has remained relatively constant. Total vehicle miles and total revenue miles have increased, showing the impact of the out-of-county service providers and an increased average trip length.

**Table 3.1
Trend Analysis for Highlands County CTC**

Indicator/Measure	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	% Change (1997-2001)
Total Passenger Trips	99,919	77,785	78,002	96,976	99,972	0.05%
Total Vehicle Miles	908,297	479,841	942,040	1,044,098	1,282,255	41.1%
Total Revenue Miles	852,540	420,804	787,120	875,356	1,171,180	37.4%
Vehicle Miles per Passenger Trip	9.09	6.17	12.08	11.29	12.83	41.1%
Operating Expense per Passenger Trip	\$13.68	\$12.33	\$13.41	\$14.07	\$14.07	2.9%
Operating Expense per Vehicle Mile	\$1.50	\$2.00	\$1.11	\$1.31	\$1.10	-26.7%
Accidents per 100,000 Vehicle Miles	1.43	1.46	0.32	0.38	0.31	-78.3%

Source: Annual Performance Report, FY 1997, 1998, 1999, 2000, and 2001, Commission for the Transportation Disadvantaged

Vehicle miles per passenger trip represents the average length of a trip provided under the coordinated system in Highlands County. Overall, this measure has increased over the five-year period from 9.09 vehicle miles per passenger trip in FY 1997 to 12.83 miles in FY 2001. For the past three years, however, the trip length has remained relatively constant.

The next two indicators measure cost efficiency of the services provided and coordinated by the CTC. Operating expense per passenger trip has experienced a slight (2.9%) increase, from \$13.68 in FY 1997 to \$14.07 in FY 2001, and operating expense per vehicle mile fluctuated over the period, with a peak in cost during FY 1998 (at \$2.00 per vehicle mile). The five-year trend shows a 26.7% decrease in costs per vehicle mile. This is particularly commendable, given the increased cost of fuel and increased mileage per passenger trip.

Quality of service and safety measures are also included in Table 3.1. Accidents per 100,000 vehicle miles item measures system safety. There was a general downward trend (less accidents per vehicle mile) for this measure over the five-year period.

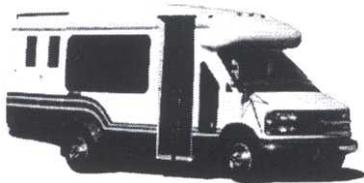


These trends illustrate the performance of the CTC over the past five years. Many factors and policies can affect these numbers; as such, they are presented for information purposes only. Explanation and critique should be conducted within the purview of the Local Coordinating Board.

CTC Peer Review Analysis

In this section, demographic characteristics of Highlands County will be compared to those of peer Community Transportation Coordinators in Florida. In addition to a comparison of demographic characteristics, the review will compare performance measures within the Transportation Disadvantaged program.

Highlands was compared to its CTC peers, which were selected based on its similarity with peers in the following categories, to the extent possible, in the following order:



- Operating environment (urban or rural)
- System size (measured by annual TD trips)
- Organization type (transit agency, government, private non-profit, or private for-profit)
- Network type (sole provider, partial brokerage, or complete brokerage)
- Demographic characteristics

According to the *Evaluation Workbook for Community Transportation Coordinators and Providers in Florida*, prepared by CUTR, the Highlands County CTC is categorized as a "size 3" system (50,000 - 100,000 annual one-way passenger trips) that operates in a rural service area, is organized as a private for-profit entity, and completely brokers all trips.

The counties that were selected for the Highlands County CTC peer review include: Columbia, Jackson, Monroe, Santa Rosa, and Sumter. Although these CTCs are not identical to Highlands, they generally share similar demographic and systemic characteristics. All peer CTCs operate in rural service areas. Except for Columbia, all of the peers are categorized as Size 3 systems. Highlands is just barely under the Size 4 category, and Columbia is a good peer based on other demographics. Only one of the peer CTCs is organized as a private for-profit entity that coordinated trips as a complete brokerage during the reporting period (FY 2000). Table 3.2 identifies the operating environment of each peer CTC.

**Table 3.2
Peer Group Operating Environment**

CTC	Operating Environment	Network Type	Organization Type
Highlands	Rural	Complete Brokerage	Private For-Profit
Columbia	Rural	Partial Brokerage	Government
Jackson	Rural	Partial Brokerage	Private Non-Profit
Monroe	Rural	Partial Brokerage	Private Non-Profit
Santa Rosa	Rural	Complete Brokerage	Private For-Profit
Sumter	Rural	Partial Brokerage	Government

Comparative Demographic

Table 3.3 contains information for each of the peer counties on total population, potential transportation disadvantaged population, population density, median age, percentage of households with annual incomes less than \$15,000, median household income, and percentage of households with no access to a vehicle. Highlands County is above the peer group mean in every category, except median household income. The lower-than-average income measurement adds to the fact that Highlands County has a potential TD population that is 53% of its total population. This kind of demand on a social service transportation system means that many people will not be able to receive service.

Comparative Performance

Performance measures for FY 2001 were calculated for Highlands County and each of its peer CTCs, shown in Table 3.4. On average, Highlands County provides more total passenger trips than its CTC peers.

**Table 3.3
Demographics of Peer CTCs**

Characteristic	Columbia	Jackson	Monroe	Santa Rosa	Sumter	Mean	Highlands
Total Population (2000) ¹	56,513	46,755	79,589	117,743	53,345	70,789	87,366
Potential TD Population (2000) ²	20,300	20,779	30,287	35,333	19,971	25,334	46,622
Population Density (Pop/Sq. Mile) (2000) ¹	71	51	80	116	98	83	85
Median Age (2000) ¹	37	38	43	37	49	41	50
Households with Incomes <\$15,000 (1997) ³	24.2%	30.1%	14.5%	16.3%	25.6%	22.1%	23.0%
Median Household Income (1997) ⁴	\$28,521	\$25,953	\$36,353	\$37,201	\$25,601	\$30,726	\$26,006

¹U.S. Census Bureau (2000)

²Forecasts using *Methodology Guidelines for Forecasting TD Transportation Demand at the County Level*

³Caliper Corporation: 1997 Demographic Estimate & Projection

⁴*Florida Statistical Abstract 2001*, Bureau of Economic and Business Research, University of Florida.

**Table 3.4
Performance Measures for Peer CTCs (FY 2001)**

Measure	Columbia	Jackson	Monroe	Santa Rosa	Sumter	Mean	Highlands
Passenger Trips	101,401	93,204	94,567	69,253	97,221	91,129	99,972
Vehicle Miles Per Passenger Trip	5.67	11.49	7.40	8.77	6.83	8.03	12.83
Operating Expense per Paratransit Passenger Trip	\$9.78	\$14.18	\$18.69	\$12.68	\$11.99	\$13.46	\$14.81
Operating Expense per Vehicle Mile	\$0.91	\$1.23	\$2.07	\$1.45	\$1.76	1.48	\$1.10
Accidents per 100,000 Vehicle Miles	.35	.75	1.00	.33	.00	.49	.31

Source: *Annual Performance Report for FY 2001*, Commission for the Transportation Disadvantaged

Compared to its peers, Highlands County records more average vehicle miles per passenger trip and, accordingly, has a higher operating expense per passenger trip. It is interesting to note, however, that Highlands County has an average trip length of 12.83 miles (60% higher than the peer group mean), with an operating expense per vehicle mile of \$1.10 (nearly 26% BELOW the mean). On the other hand, Monroe, the peer with the highest operating expense per vehicle mile, also is lower than average for vehicle miles per passenger trip. Again, we see that Highlands County has demonstrated excellent cost efficiency.

In terms of safety, (accidents per 100,000 miles), Highlands County performed better than the mean.

Conclusions

Overall, the peer comparison reveals that Highlands County is performing comparable to or better than the CTC peer group mean for all performance measures. These comparisons provide helpful insight into how well Highlands appears to be performing statistically; however, since many factors affect performance, they should not be used as the sole measures to make inferences about the quality of TD service in Highlands County.

CHAPTER 4

BUS SERVICE OPTIONS AND CASE SAMPLES

This chapter will look specifically at bus service as a means for the provision of public transportation. It will identify elements of bus service operation, and review case studies of different bus service types. This will help readers gain a better understanding of potential options and combination of options available. Ultimately, it will assist in making practical application, if any, to Highlands County.

SERVICE OPTIONS

Numerous transportation service options are possible; however, some are more appropriate than others. The three significant operation strategies that bring transportation to the customer are routing, scheduling, and stop location. Stop location can be pre-defined, such as bus stops at major activity centers, or flexible, such as door-to-door service within a set service area.

Routing

Routing considers the path of the vehicles. Hence, it determines transit accessibility, as well as destinations served. The more service routing matches the public's pattern of origins and destinations, the more accessible the service will be. According to the *Users' Manual for Assessing Service Delivery Systems for Rural Passenger Transportation*¹, there are five routing service styles. These service styles are listed below in order of increasing flexibility:

- **Fixed-Route Service**
Vehicles travel on an established route with designated pick-up and drop-off points.
- **Route-Deviation Service**
Vehicles travel on a fixed-route, picking up and dropping off passengers anywhere along the route. Additionally, by advance request, vehicles will deviate a couple of blocks from the route to pick up and drop off passengers.
- **Point-Deviation Service**
Vehicles stop at major trip generators (such as shopping mall and hospitals) at specified times, but travel a flexible route for doorstep pick-up and drop-off.

¹ TCRP Report 6, Transportation Research Board, Federal Transit Administration, 1995.

- **Many-to-Few Service**
A vehicle may pick up passengers anywhere in a particular service area, but its destinations are limited.
- **Many-to-Many Service**
A vehicle provides doorstep pickup and delivery to service all origins and destinations within the service area.

Scheduling

Scheduling defines the times transit service is available. The *Users' Manual* suggests four basic scheduling strategies:

- **Fixed Schedule**
Passengers board at specified times set by the transit agency.
- **Flexible Fixed-Schedule**
Boarding is at a specified time set by the customer in advance. Schedule changes are permitted with short notice.
- **Advance Request**
Passengers request service one or more days in advance.
- **Immediate Request**
Passengers request service from a dispatcher for a trip to be made as soon as possible.

Demand-responsive service is determined by passenger requests. Usually, a passenger calls a dispatcher to request a certain trip (time, date, origin, and destination). Service can be door-to-door or curb-to-curb. Trips are usually requested by advanced reservation. Demand-responsive service providers typically use smaller vehicles. There are three subcategories of demand-responsive service:

- **Subscription**
Passengers request a repetitive ride, such as daily or weekly service to a particular destination.
- **Advanced Reservation**
Passengers call from one to fourteen days in advance to reserve a ride for a specified date and time.
- **Real-Time Scheduling**
Passengers call to request a ride just before it is needed. A large fleet of vehicles and many drivers are needed for this type of scheduling service.

Service Combinations

There are many possible service combinations. Generally, very responsive service is attractive to customers; however, it also costs a lot. In contrast, service that is limited and fixed does not attract as many riders, but it costs less. Hybrids of demand-responsive and fixed-route service have been successful for many rural transit providers. In fact, half of all current rural transportation providers offer more than one form of service.

Service area, trip patterns, and origin/destination patterns can be useful to help determine basic, practical service options. Table 4.1 depicts service option characteristics.

Table 4.1
Service Characteristics

Characteristic	Fixed-Route, Fixed-Schedule	Flexible Route, Fixed Schedule	Demand-Responsive
Service Area	Densely Populated	Sparsely Populated	Densely/Sparsely Populated
Trip Patterns	Predictable	Similar from Day to Day	Unpredictable
Origins/ Destinations	Similar from Day to Day	Vary from Day to Day	Vary from Day to Day

Fixed-route, fixed-schedule service is not typically conducive to rural areas due to the fact that it needs high population density to be successful. The variable-route, fixed-schedule option includes route-deviation and point-deviation services. Route-deviation transit systems are more like fixed route than demand responsive. Hence, it is best for areas where door-to-door service deviations are a small portion of overall demand. Route deviation service is preferred when passengers would wait along the route to be picked up without advanced notice. Point deviation service is preferred when passengers have changing and variable demands. The *Users' Manual* states that "point deviation services may be preferable to route deviation services in rural areas because the routes between checkpoints can be flexible, allowing the driver more routing options for maintaining the schedule, and requests for service can be negotiated or deferred so that the schedule is maintained." Demand-responsive services are applicable in communities that have unpredictable trip, origin, and destination patterns. It is particularly useful in areas where trips are not taken regularly, ride sharing can lower per trip costs, overall demand levels are low, and trip origins are dispersed.

CASE SAMPLES

In order to identify thresholds suitable for public transportation in rural communities and include several successful models that could potentially be applied to a new service in Highlands County, similar communities with proven transit operations are depicted in Table 4.2. The rural transportation communities were chosen based upon their similarities to Highlands County's population, population density, and senior citizen population. The cities of Westbrook and Gothenburg are also used, because they have attracted a large ridership base at a relatively low cost. All of these systems provide useful examples of successful transportation services, especially for senior citizens. Each service is unique to its community when considering the geographical placement of towns, the trip needs of community residents, and funding options available.

**Table 4.2
Case Samples**

Community	Transportation System	Type
Nevada County, CA	Gold Country Telecare, Inc.	Rural
Venango County, PA	Venango Bus Public Transit	Rural
Dickey County, ND	Dickey County Senior Citizens	Rural
Charlotte County, FL	Charlotte Area Transit	Rural
Westbrook, ME	Independent Transportation Network	Rural
Gothenburg, Sweden	Transport Telematics	Urban

Table 4.3 shows characteristics of the counties in which the sample rural transportation systems operate. These samples were chosen because of a similarity to Highlands County. Nevada County's population of 92,033 residents is close to Highlands County's population of 87,366. Venango County's density (85.3 persons per square mile) is almost identical to Highland's (85.0 persons per square mile). Moreover, Dickey County and Charlotte County contain a large percentage of persons over the age of 65 (21.3 percent, and 34.7 percent, respectively). These four examples may provide particular insight into public transportation for Highlands County.

**Table 4.3
Characteristics of Case Samples**

Characteristic	Highlands County	Nevada County	Venango County	Dickey County	Charlotte County
Total Population ¹	87,366	92,033	57,565	5,757	141,627
Population Density (Persons per Sq Mile) ¹	85.0	96.1	85.3	5.1	204
Persons over 65 ¹	33.0%	17.4%	16.8%	21.3%	34.7%
Annual Riders ²	N/A	1,267 ³	N/A	1,900	
Annual Boardings ²	N/A	28,236 ³	94,045	7,200	26,699 ⁴
Fleet Size ²	N/A	14	19	1	13
Budget ²	N/A	\$810,000 ³	\$538,000	\$30,000	\$1,028,462

¹2000 U.S. Census

²Information obtained via CUTR phone interview

³*Supplemental Transportation Programs for Seniors*, Beverly Foundation

⁴Based on 9 months of operation

Nevada County, California

Gold Country Telecare, Inc. is a door-to-door demand responsive service for seniors 60 years of age and older, and people with disabilities. It employs 20 paid and 8 volunteer drivers, and provides service seven days a week. In addition to providing regular service, transporters are also available for special events. Although residents are encouraged to use the fixed-route system, many of Telecare's clients are low income and live in rural areas. Most reside off the fixed route in shanties or rented rooms on unpaved roads among rough terrain, and cannot get to bus stops or afford taxi service. During 1999-2000, Telecare provided its service to 1,267 riders; over half of those were subscription passengers. Initially, the services were funded by church sponsorship and donations. Currently, most of the \$810,000 budget is funded by the California Department of Transportation. Other donors include Agency on Aging, the United Way, Western Nevada County, and Catholic Healthcare West. Last year, volunteers donated 10,412 service hours. Rider fares cover about 12 percent of the budget (one-way fares are \$2.00 for 1 to 4 miles, \$3.00 for 4 to 7 miles, \$5.00 for 7 to 10 miles, and a larger flat rate for trips out of the county or longer than 10 miles). However, for the economically-disadvantaged, there is a program in which the rider donates \$2.00 to receive 20 voucher tickets good for \$1.00 each. The tickets are good for all services, including out-of-county trips.

Venango County, Pennsylvania

Venango County is one of the most economically challenged areas in Pennsylvania. The County contracts with Baker's Transportation Services for all public transportation services, which includes both fixed-route and demand-response. The fixed-route service utilizes a cost plus fixed-fee basis. The contractor provides all maintenance and operating services, and the County provides three regular buses. The demand-response service uses vehicles from the County and the contractor, and is operated by Baker's at a rate of \$30.00 an hour (dispatcher costs are not included in the rate and are billed to the County separately). Venango County's elderly population have special programs to aid with their demand-response transportation costs. The State of Pennsylvania finances about 85 percent of the cost of elder trips through the Section 203 program funded by the State Lottery. In most cases, the Venango County Area Agency on Aging will pay for the remaining 15 percent of the trip, since 85 percent of demand-response trips transport seniors to the four Department of Aging Centers in the County. The County also accepts reimbursements from other agencies, such as the Department of Public Welfare, Human Services Development, and Community Services.

Due to the high cost of demand-response service, the County expanded fixed-route service. The fixed-route includes a loop in two of the more densely populated towns, with a connector route through another township. The fixed-route system runs every hour and provides service from 8:00 a.m. until 6:00 p.m. The connector route is a loop that reverses direction each hour and is coordinated with the other two loops (one on the half hour and the other on the hour).

Marketing efforts led by Venango County's Transportation Coordinator are focused on attracting new riders, educating prospective users, and reducing no-shows. Promotional items, such as coloring books and flyers, are given to residents. In order to familiarize prospective clients, a letter explaining the merits of the transit system and how to use it is sent to all residents who have reached the age of 65, and easy-to-read calendars with important numbers and space designated to record trip times and destinations are sent to each customer every six months in order to decrease the number of no-shows.

Dickey County, North Dakota

Dickey County contains a high-performance rural public transportation system that consists of a single vehicle open to the general public. However, its user base is primarily elderly

and persons with disabilities. Although the density of the county is only about 5 persons per square mile, it contains two towns that have about 1,700 people each. In order to provide low cost service to the entire county, the county has been divided into four service zones. Each zone is serviced twice a week and riders from each town have the option to go to the other town. For example, on Mondays, the bus serves the two eastern zones. On Tuesdays, the bus picks up residents from the two eastern zones and takes them to the major town in the west zone. On Wednesdays, the bus picks up riders in the west and brings them to the larger town in the east zone. On Thursdays, the bus serves just the two western zones. On Fridays, the bus is scheduled for routine maintenance twice a month. During the other two Fridays in the month, the bus takes riders to out-of county cities.

The Dickey County Senior Citizens service has no restrictions or eligibility requirements. The system is the only transportation provider in the county. Most trips are for medical appointments, shopping, banking, and prescriptions. In addition, work trips make up about five percent of all trips. Only about five percent of the trips are for senior nutrition programs. No other service agencies are located in the county. Since the bus is not available in each town for three days, the Dickey Senior Center utilizes volunteers (who use their personal vehicles) to drive riders for essential trip purposes. The overall cost per bus trip is only \$4.80. Suggested donations (\$0.50) cover 10 percent of the operating costs. Additional funding is from Section 18 federal funding, state funding, and a local "millage levy dedicated to services for seniors."

Charlotte County, Florida

Charlotte Area Transit operates a door-to-door demand responsive service that is open to the general public. It operates Monday through Friday from 7:00 a.m. to 6:00 p.m. The base fare for each trip is \$2.00, with additional fares for traveling extended distances. Reservations must be made at least one day in advance of the requested trip, but can be made up to one week in advance. The system is run by the Charlotte County Human Services Department, and has only been in operation approximately 10 months.

Like Highlands County, Charlotte County has a high percentage of its population over 65 years of age. However, its density is 2.5 times more than Highlands County, which should make door-to-door service more efficient due to the ability to multi-load.

City of Westbrook, Maine

The Independent Transportation Network (ITN) is a private non-profit transportation system for seniors and the visually impaired in Westbrook, Maine. Westbrook is a city located in Cumberland County, containing 16,142 residents. Its population density is 960 persons per square mile. Hence, it is much more densely populated than Highlands County. In addition, only 15.5 percent of Westbrook's population is over the age of 65. Although the geographical and population characteristics of Highlands County and Westbrook are not similar, ITN is included because it is an example of a successful pilot program that emphasizes convenience for the elderly and disabled riders. In fact, ITN was developed from research funded by the Federal Transit Administration, American Association for Retired People, and the Transportation Research Board. Currently, it is supported by riders' annual membership dues, fares, grants, and donations from the community. Some of the drivers are volunteers who use their own automobile; other drivers are paid. This system tries to match the convenience of the automobile by providing 24 hour service 7 days a week, bringing customers to their door, and providing an automated payment mechanism. Riders who use their services open accounts to pay annual membership dues and pay for their rides by the mile.

City of Gothenburg, Sweden

Finally, Transport Telematics provides transportation for the elderly in Gothenburg, Sweden (eight square kilometers). Transport Telematics is a demand responsive transport service that has found success by using an automated booking and call-back system, providing a semi-fixed connector route, and using fully accessible vehicles (12 to 14 seat capacity) with low floors. The automated call-back with confirmation or delay notification feature occurs 15 minutes before the assigned pick-up time. The automated booking of travel can occur from either an interactive voice response system via touch tone phone, or a card swipe at major destinations. The swipe of a card at the stop essentially means, "I want to travel as soon as possible." Service operates somewhere between exclusive ride taxi service and regular bus services with several stopping points. End stop points are terminals (located at a hospital and shopping center); fixed intermediate stop points are similar to bus stops; predefined stop points are identified with a sign; non-predefined stop points include door-to-door service. Transportation is routed according to customer need, generally only stopping where passengers request pick-up or drop-off. Some passengers are eligible for door-to-door service. Passengers who are not eligible to use the doorstep can only be picked up at pre-designated meeting

points or bus stops. All bus passengers need to pre-book their travel at least 15 minutes before the bus departs the terminal, so that passengers down the route can be notified about possible delay caused by additional bookings.

Three types of transportation services are used by Transport Telematics: (1) semi-fixed route; (2) demand-response, which departs from the terminals at prescribed times (every two hours) and stops at conventional fixed intermediate stops, but deviations off the route are available upon request; and (3) flexible route demand-response which departs from terminals at prescribed times and has no scheduled bus stops. This flexible route service only stops on request. One bus departs in each direction every half hour and must reach the other terminal within 55 minutes in order to be ready to depart in the other direction. Virtual routes have no terminal or bus stops. Hence, the “virtual route” vehicle will only call at stops on request, essentially a shared taxi-style service operating in during set hours.

This pilot program has been expanded, due to its high level of demand. The service operates from 9:00 a.m. to 5:00 p.m. on weekdays. There are over 5,000 demand-responsive booked, planned, and dispatched trips per weekday. All of the demand-responsive riders pay the same fare as those using regular public transport. Passengers report that Transport Telematics is their “mobile social club,” in which driver friendliness provides the highest ratings. Two out of three eligible users prefer the flexible route to the optional shared ride taxi. Consequently, the costs for local taxi provision have been reduced by 70 percent. This savings covers half of the operating costs for FlexRoute. In addition, fare revenues cover a quarter of the expenses, and the rest of the costs are paid for by the city.

CHAPTER 5

SERVICE ALTERNATIVES

The focus of this chapter is on transit service alternatives. It introduces various approaches to meeting community mobility needs. While some alternatives may not be desirable or feasible in Highlands County, it is important to understand the wide array of possibilities available to meet transportation needs. Implementation of some of these options would require assistance and/or cooperation from more than one agency, organization, or entity. For clarity and simplicity, these options are contained in Table 5.1 at the end of this chapter.

FIXED-ROUTE SERVICE

Traditional fixed-route bus service is the most prevalent mode of public transportation in the United States. Fixed-route services are provided along specific routes with scheduled arrival/departure times at predetermined bus stops. One variation for low-density or more rural areas is periodic scheduling, where buses serve different areas on different days of the week. With the passage of the Americans with Disabilities Act of 1990 (ADA), all new vehicles used for fixed-route public transportation must be wheelchair accessible.

Fixed-route systems are generally effective in meeting travel demand for intra-urban and suburban-urban trips, but tend to fall short in generating suburban-suburban and rural trips, as well as trips for the elderly and persons with disabilities. The basic advantages of fixed-route transit are that no reservations are required to access the service, little or no passenger screening or registration is needed (except for discounted fares to certain population segments), and large numbers of people can be transported at one time in a single vehicle. Disadvantages include system access being limited due to predetermined stops and schedules, difficult access for seniors and patrons with disabilities, and large buses are often perceived to be aesthetically displeasing, especially in suburban or rural areas.

It is important to remember that in determining the type and level of public transportation service, community goals must be heavily weighed. There are many smaller communities (especially in Florida) that operate fixed-route transit services. Sometimes, a certain measure of cost-effectiveness or ridership is not as important to a community as the goals of providing mobility to those who truly need it.

Deviated Fixed-Route

In a fixed-route system with route deviation, a vehicle operates along a fixed route, making scheduled stops along the way. Upon request, vehicles will deviate one to two blocks or more from the route to pick up and drop off passengers. After deviating from the fixed route, a vehicle immediately returns to the fixed route at the point at which it departed to accommodate the request for deviation. This procedure ensures that the vehicle does not skip any portion of the fixed route. In the event that no requests for deviation are received, the vehicle would operate identical to a fixed-route vehicle. Typically, route deviation service requires smaller vehicles than those used for traditional fixed-route service, due to the need to travel on residential streets.

Fixed-route service route deviation is generally more cost effective in smaller urban and rural communities. The service is usually operated with minibuses or vans. To achieve greater geographic coverage, routes may vary by day of the week. Some systems, usually in more rural areas, allow riders to access the service anywhere along the fixed-route by flagging the driver. The level of information provided to the passengers must be high to avoid any confusion about the deviated routes.

Although the cost per revenue mile of service is often higher for route-deviated systems, the cost per passenger trip is normally less, due to higher ridership on the deviated routes. Cost savings are also realized because it eliminates the necessity for complementary paratransit service. General public route deviation systems are considered demand responsive, and meet the requirements for provision of service under Americans with Disabilities Act of 1990 (ADA).

It must be decided which passengers will be allowed to request deviations. Deviations may be available to the general public or may only be allowed by specific populations, such as ADA-eligible individuals. The amount of deviation allowed must also be determined. A factor in this determination is whether the system allows for general public deviation or deviations for specific populations. Vehicles typically deviate from two blocks to $\frac{3}{4}$ mile from the fixed route. If deviation service is only available for ADA-eligible individuals, vehicles must deviate at least $\frac{3}{4}$ mile on either side of the fixed route.

Route deviation service seems to work best in suburban and rural areas, and may also be appropriate on lengthy

routes with long headways and low ridership. Route deviation may also work well in areas where most origins and destinations are concentrated around a corridor.

Fixed Route with Point Deviation

Vehicles in point deviation systems serve designated stops, or time points on a fixed schedule, but the route that the vehicle takes between time points is determined by the deviation schedule. Point deviation service is similar to general demand response service, in that vehicles pick up and drop off passengers at their desired locations. However, point deviation vehicles also service specific time points on a fixed schedule to provide passengers with the structure of service that operates on a fixed schedule. Point deviation service usually requires smaller vehicles than those used on traditional fixed-routes, due to the need to travel on residential streets.

Requests for deviation are made to a system reservationist and/or scheduler. Typically, a limit is set for the number of deviations that can be accommodated within the time point schedule, filled on a first-come, first-served basis.

Point deviation service works best in rural or suburban areas. In more urban areas, point deviation may be implemented to provide access to fixed routes utilizing a time transfer system. Like general public deviated fixed-route, point deviation systems are considered to be demand-responsive by the United States Department of Transportation (USDOT), and are not required to provide complementary paratransit service.

DEMAND RESPONSIVE

“Paratransit” is defined quite broadly by some as any means of shared-ride transportation other than fixed-route service. Primarily, paratransit services are considered to be supplemental to fixed-route in order to accommodate those persons who are unable to utilize conventional fixed-route bus service. Such services are usually operated as advance reservation, door-to-door or curb-to-curb.

More specifically, paratransit service is characterized by higher levels of personalization and flexibility than fixed-route service. Paratransit can be used as a feeder to a fixed-route bus system, or can be used where fixed-route ridership or cost effectiveness would be low. Demand response service can be provided by taxis, vans or minibuses. In addition, service can be supplied through

contracts with various providers including non-profit agencies, for-profit transportation companies, volunteer organizations, and transit agencies. Demand-responsive service can be operated on “call and demand” or with advance reservations, usually a minimum of 24 hours.

Advantages of demand-response include door-to-door (or curb-to-curb) service; larger geographic area of coverage; route flexibility; smaller, more comfortable vehicles; and the fact that special needs are more easily accommodated. The disadvantages include: shared use of the vehicles, no direct travel between individual passenger origin and destination, a high degree of dispatch coordination, increased expenses and higher fares, and longer travel and wait times.

Dial-A-Ride

Dial-A-Ride (DAR) refers to demand-responsive, door-to-door or curb-to-curb service that is provided to the general public without regard to functional abilities of passengers. Customers request a trip in advance, are picked up at their origin, and dropped off at their destination. DAR usually takes one of three forms: many-to-one (many origins to one destination), may-to-few (many origins to a few destinations). General public DAR is the most personal alternative to fixed-route service, but also the most expensive. DAR meets the requirements for provision for service under ADA.

DAR service may work well in low-density areas where it may be more practical than fixed-route or to serve as feeder service to fixed routes.

FEEDER SERVICE

Feeder service involves picking up passengers at their origin point (usually home) and transporting them for the first leg of their journey to a bus stop. Vans or small buses are typically used for feeder services. One segment of the trip—either the portion from home to the stop or the fixed-route portion—is generally fare free. That is, passengers are either charged a fare for the demand response portion of their trip and use a free transfer to the fixed-route system or vice versa. Upon arrival at the stop or station, the passenger disembarks and, after a short wait or immediately upon leaving the feeder vehicle, boards the fixed-route vehicle. The passenger then travels on the bus to a stop closest to the final destination. A third leg requiring feeder service may also be necessary to reach the final

destination. Because point-to-point service is provided, careful scheduling is required to minimize wait items at transfer points.

When feeder service is used to provide ADA paratransit service to feed into the fixed-route system, it is important to understand that feeder service is really not very cost-effective for short trips. The longer the trip the greater the cost-savings that may result from substituting a portion of the paratransit trip with fixed-route service. Therefore, suburban to urban or rural to urban trips are typically better candidates for feeder service than intra-urban trips.

Mandatory use of feeder service can be part of an ADA program. Individuals who are conditionally eligible for ADA paratransit service may be required to use the fixed-route system when feeder service is provided, as long as excessive trip lengths are not required to complete the trip.

JITNEYS

Jitney services usually consist of privately-operated vans carrying up to 15 passengers, operating on semi-fixed routes on a fairly-regular basis. Most often, they operate on major thoroughfares, picking up passengers anywhere along the routes. For an extra charge, they may deviate from the thoroughfare to deliver passengers to their homes. Jitneys usually do not follow a set schedule, but tend to access stops more frequently and stop less often than vehicles on conventional bus routes.

Jitney services can serve several functions. In major urbanized areas, jitney systems operate to relieve overcrowding. In this capacity, jitneys can attract many passengers from the fixed-route public bus system who have been left at the bus stop due to overcrowding. Another role for jitneys is to provide services in low-density areas where existing bus operations do not exist or fall below acceptable minimum standards. In both of these cases, service is usually bid competitively by the transportation operator.

Jitneys can also work in concert with the existing public transportation system by serving as feeders. In this case, jitneys pick up passengers in residential areas and deliver them at the main line of the bus system. Another way jitneys can function is as the primary providers of community-based transit. In this scenario, jitneys connect residents of low-income neighborhoods to medical centers, shopping centers, community activity centers, and other

nearby destinations. Finally, jitneys may act as activity center connectors, traveling in and around areas of major commercial activity, such as employment centers and tourist attractions.

VOLUNTEER TRANSPORTATION PROGRAMS

Typically, volunteer transportation programs try to match requests for transportation with the geographic area in which the volunteer driver or vehicle is available. This type of program can be effective for trips that are difficult to provide by any other mode. A volunteer organization can also help in providing an escort service to citizens who live within the service area of a fixed-route or paratransit system, but need assistance in utilizing the service. The retired community is a good resource for volunteers. Volunteers gain personal satisfaction from helping others with restricted mobility. The primary drawback to this type of service, however, is the issue of insurance and liability, as well as the need to locate and retain a pool of reliable volunteers.

Successful volunteer programs are not free. They require an investment of time, resources, and energy. Although there are costs involved with starting and maintaining a successful volunteer program, they are minimal in comparison to relying solely on paid employees. It is important to note that the costs associated with volunteer programs and volunteer labors are not limited to actual dollars, but also include the investment of time and energy. Critical components of successful volunteer transportation programs include, but are not limited to, organization, recruitment, screening, training, recognition, and possible reimbursement for mileage and/or meals.

In the current climate of federal and state funding cuts in transportation and many social service programs, the use of volunteers within community transportation may prove to be a very viable and cost-efficient transportation alternative that helps to further stretch transportation dollars in Florida. This situation may become critical in the future, as the demand for transportation by those who are transit dependent is expected to continue to grow.

RIDESHARING

Ridesharing is the shared use of a vehicle by two or more persons for the purpose of traveling to work, school or other trip locations. Vehicles used for ridesharing include privately-owned automobiles or vans or publicly-owned vans or buses (carpools, vanpools, or buspools). Trip origins and destinations of riders may vary. Passengers may share fuel, toll, and parking expenses and driving may be a rotated duty. Although ridesharers most commonly are people from the same household or neighbors, a ride-matching service operated by employers, a regional commuter assistance program or transportation agency can facilitate ridesharing arrangements.

Ridesharing success is increased when:

- Travelers find others with similar schedules and points of origin and destination
- Parking is unavailable
- Parking is expensive
- A guaranteed ride home program is offered
- Employers subsidize the cost of ridesharing
- Preferential parking and flexible work schedules for ridesharers are offered by employers

One of the ways state and local governments can support ridesharing is by providing funds for van or bus purchases, program planning, and regional commuter assistance programs.

Vanpools are particularly attractive for longer commutes. Transit agencies that administer vanpool programs benefit by the vehicle miles traveled that are accrued by the vanpools actually generating revenue. This is because vanpool programs can earn federal and state formula funding attributed to the number of vanpool vehicle miles traveled. By reporting the vanpool mileage as part of the National Transit Database, a transit system should expect to increase the amount of state and federal revenue apportioned to it as a result of increases in passenger miles, trips, and vehicle revenue miles due to the vanpool program. This revenue can be greater than the transit agency's investment in the vanpool program, making the program a revenue generator.

Florida State Block Grant program funds are distributed on a proportional basis among Florida transit agencies, based on a formula using their population, passenger trips, and

revenue miles. Florida transit agencies that currently provide vanpool services include VOTRAN (Daytona), Space Coast Area Transit (Cocoa), LYNX (Orlando), HART (Tampa), PSTA (Clearwater), Citrus Connection (Lakeland), and Miami-Dade Transit Agency (MDTA). Most transit agencies that administer vanpooling operate their own program, although some agencies purchase vanpool services.

Carpools

Carpooling may be defined as two or more persons sharing rides in a private vehicle. Census data show that, next to driving alone, it is most prevalent commute alternative in the United States. Carpooling was first encouraged in this country during World War II, due to petroleum and rubber conservation measures. It has been promoted since the 1970's in response to energy crises and as an air quality transportation control measure.

The matching processes for carpoolers range from very sophisticated computerized systems to informal arrangements. More effective matching systems usually include information on specific origins and destinations, schedules, travel routes, and passenger preferences (such as smoking). A sufficiently large pool of potential commuters is important for securing good matches. Overall, it has been found that organized carpools targeting commuters at the work site seem to be more effective than those focusing on residential areas.

A major advantage of carpooling is that it allows the convenience of a private automobile. In addition, responsibilities for driving are shared among the carpoolers. However, there are some disadvantages when compared to driving alone. These include the necessity for set schedules, the constrained ability for individuals to run errands, and increased- commute time (due to picking up additional passengers). In addition, some commuters feel that carpooling deprives them of their private time.

The most promising market for carpooling is commuters traveling to and from work during peak periods of the day. The size of this market can determine the feasibility of a carpooling program in a given area. For work trips, carpooling is best suited to suburban employment markets. For the suburban-suburban commute, carpooling seems to be the most likely alternative to driving alone, due to the higher densities necessary for transit (and even vanpooling, discussed in the next section). Length of work trip also can determine carpool success. Commutes ranging from

15 to 25 miles seem to attract the largest proportion of carpools. An additional market is educational and recreational trips. Students typically carpool because of lower private vehicle availability and increased parking constraints. Many colleges and universities have commuter alternatives that are marketed toward students.

Commuter Vanpools

Vanpools are an additional alternative to driving alone. The levels of carrying capacity, flexibility, costs, and convenience are in between those of transit and carpools. A vanpool typically consists of 7 to 15 people traveling together in a passenger van. The commuter vanpool concept typically works best for long-distance commuters (at least 20 miles). Vanpools are particularly effective in situations that include outlying work destinations with little or no public transit service. Therefore, commuter vanpools can be an effective alternative for workers with similar trip patterns and schedules. Vanpools may also be effective for employment sites that need workers on shifts that fall outside of a fixed-route's service parameters.

The three major types of vanpool organizations are owner-operator vans, employer-sponsored vanpools, and third-party vanpools. A third-party vanpool is where an organization, such as a non-profit corporation, a private vendor, or a transportation agency, acquires the vans and makes them available to employers or individual users. The vans are generally leased to the users at a rate based on the cost of the vehicle, maintenance, fuel and insurance. Sometimes, administration costs incurred by the third party are included in the fees. A third-party vanpool arrangement that acquires the vans and contracts with a private service vendor for maintenance and insurance reduces the participant costs of vanpooling. This type of arrangement has been successful applied in Polk and Brevard County, where the transit agency contracts with VPSI for administrative, maintenance and insurance services. (See Appendix C for more information on VPSI.)

Although the vanpool arrangement described above serves to reduce participant costs, these costs are often still too high for members of the transit-dependent population. Because many of the worker transportation needs identified are those of the transit-dependent population, the possibility of providing vanpool subsidies could be explored. Possible sources of subsidy funding include the local WAGES coalition to develop vanpools for WAGES participants, County subsidies for a County-operated

vanpool program, and/or subsidies provided by private donations and/or foundations for lower income commuters.

Agency Vanpools

Many agencies, groups, and organizations would probably like to provide transportation to their clients and/or members. For many of these agencies, even if fixed-route transportation were available, clients or members would not be able to use that transportation due to physical or cognitive limitations. In the past, these agencies have attempted to acquire vehicles (usually vans) to meet their own transportation needs. When successful in attempts to acquire vehicles, these groups must then contend with the challenge of finding qualified drivers, covering operating costs, ensuring the safety of vehicles through regular maintenance services, etc. A more effective and cost-efficient method of meeting the needs of these agencies are government-sponsored agency vanpool programs open to non-profit agencies. If a local government is able to provide the capital (vehicles) for the program and contracts with a private company for the administration, maintenance, and insurance needs, the agency cost of providing transportation services can be reduced. In addition, the agency is relieved of many of the administrative problems associated with the acquisition and upkeep of vehicles.

Guaranteed Ride Home Programs

A guaranteed/emergency ride home program (GRH) is generally considered crucial to success of ridesharing. Many people are reluctant to rideshare for fear of being stranded at work without transportation during an emergency. GRH reduces anxiety over ridesharing by guaranteeing participants a convenient and reliable mode of transportation to their home in the event of a personal emergency or in the event an employee must work overtime. The guaranteed ride can be provided by taxi, short-term auto rental, company-owned car, shuttle service or public transportation. An employer, a regional commuter assistance program, a transportation management organization, or transportation agency can administer such a program.

SUBSCRIPTION BUS SERVICE

Subscription bus service generally takes the form of pre-arranged service that is designed to meet specific group or individual needs. This type of service can be provided

using regular fixed-route buses, and works best when there are specific needs for group trips to one or two destinations. During off-peak hours, idle buses may be used; during peak hours, spare buses can be used.

Some examples of subscription bus services might include a consortium of agencies that need transportation to provide after-school activities for children, or seniors in adult communities that need to get to nutrition programs or go shopping.

COMMUNITY BUS SERVICE

Community bus service is similar to jitneys. However, while jitneys are generally subject to some form of regulation, community bus service refers to an informal network of private cars and vans that provide transportation to and from major destinations in and around residential neighborhoods. These networks typically thrive in low-income areas where auto ownership is minimal and public transportation is difficult to obtain. In these situations, enterprising residents with cars or vans fill this transportation gap for community residents. Providers of this type of service offer prompt, reliable transportation to grocery stores, medical facilities, shopping centers, and other major destinations within and nearby the community for a modest fee. These vehicles are not regulated and are typically underinsured, and possibly uninsured, but provide a vital function in the community.

SUBSIDIZED TRANSPORTATION

Subsidized transportation involves grants or stipends, most commonly provided by a government agency, which makes up all or part of the difference between the cost of providing a transportation service and the revenues generated by that service.

User-Side Subsidy

The distinguishing feature of the user-side subsidies is that the providers of the service receive the subsidy in amounts proportional to the number of people utilizing the service. Its main advantage is that it promotes the efficient allocation of transportation resources. Specifically, transportation providers must successfully attract passengers to receive the subsidy; therefore, an incentive exists to offer high quality, low cost transportation. The mechanism of consumer choice fosters a competitive environment, and

the providers that offer the best service will tend to attract most users.

The user-side subsidy service concept has been identified as a potential method of serving primarily low-income citizens or seniors with a need for personal mobility. In a user-side subsidy program, patrons are charged a portion of the fare associated with a demand response trip and the remainder of the cost for the trip is subsidized by the program's implementing agency. Taxicab companies typically provide the trips delivered through user-side subsidy programs. These programs have a high potential for effectiveness in areas with low demand or low density, or at specific times of the day (late evening service), or specific days of the week (Sunday service). Taxi-based user-side subsidy programs are currently operating in many large cities in the United States, such as Houston, Los Angeles, San Francisco, Oklahoma City, and Seattle.

Although each program is designed according to each area's unique mobility needs, some general parameters can be applied to taxi-based user-side subsidy programs. Customers are typically sold taxi vouchers worth a certain dollar amount toward a cab ride (e.g. \$10.00) at a reduced cost. The amount of subsidy passed on to consumers varies from 40 percent to 90 percent. For example, in a program with a 50 percent subsidy, the consumer would be charged \$5.00 for a \$10.00 taxi voucher. The customer then makes a trip with a designated taxi company and is responsible for any portion of the total fare that exceeds the total value of the voucher.

Employer-Provided Subsidies

The Transportation Commuter Benefit Program is a provision of the Internal Revenue Code, Section 132(f), which permits employers to subsidize their employees' cost of commuting to work, by transit and vanpools, up to \$100 per month. Up to \$175 per month can be provided by employers to employees for parking at or near an employer's work site, or at a facility from which an employee commutes via transit, vanpool, or carpool. These expenses are tax deductible to the employer and cost the employer less than providing the same amount in gross income. Employers can also take advantage of a provision in the tax code that allows employees to use pre-tax income to pay for qualified fringe benefits such as transit passes, vanpool fares, and qualified parking. As a result, employees take home more of their paycheck and employers benefit from this by saving on payroll taxes (at

least 7.65% savings) and other salary-based benefits such as pension contributions defined as a percent of salary. Employers can offer both the commute benefit and the pre-tax option up to statutory limits.

**Table 5.1
Service Delivery Options**

Type of Service	Service Characteristics	Vehicles Used	Advantages	Disadvantages
Fixed-Route	<p>Most common mode of public transportation in U.S.</p> <p>Specific routes with scheduled arrival/departure times at fixed locations</p>	<p>Standard buses</p> <p>Mimbuses</p> <p>High-capacity buses</p> <p>Wheelchair accessibility</p>	<p>No reservation required</p> <p>Allows passenger flexibility</p> <p>Little or no passenger screening or registration</p> <p>Transport many people at a time in one vehicle</p>	<p>Access is limited by fixed stops and schedules</p> <p>Access can be difficult for some seniors and people with disabilities</p> <p>Large buses often perceived as not aesthetically pleasing</p>
Deviated Fixed-Route	<p>Fixed-route, demand-responsive, curb-to-curb</p> <p>More cost-effective in smaller urban and rural communities</p> <p>Routes may vary by day of week</p> <p>Works best in suburban and rural areas, on lengthy routes with long headways and low ridership, and where most origins and destinations are concentrated around a corridor.</p> <p>Transit agencies must decide purpose for deviation and distance of deviation</p> <p>Advance reservation required for deviation</p>	<p>Mimbuses</p> <p>Vans</p> <p>Usually requires smaller vehicles due to travel in residential areas</p>	<p>Cost per passenger is less than demand-responsive</p>	<p>Cost per revenue mile is higher than fixed-route</p> <p>Requires that a high level of information be provided to consumers to avoid confusion</p>
Fixed-Route with Point Deviation	<p>Serves designated stops or time points on a fixed schedule</p> <p>Route between time points determined by deviation schedule</p> <p>Limit for number of deviations within time point schedule</p> <p>Requests are on a first-come, first-served basis</p> <p>Works best in rural or suburban areas</p>	<p>Mimbuses</p> <p>Vans</p> <p>Usually requires smaller vehicles due to travel in residential areas</p>	<p>Cost per passenger is less than demand-responsive</p>	<p>Cost per revenue mile is higher than fixed-route</p> <p>Requires that a high level of information be provided to consumers to avoid confusion</p>

Type of Service	Service Characteristics	Vehicles Used	Advantages	Disadvantages
Demand-Response	<p>Shared-ride door-to-door or curbside service</p> <p>Advance reservation required</p> <p>High level of personalization</p> <p>Can be used as a feeder service to fixed route</p> <p>Can be used in place of fixed-route where ridership or cost-effectiveness would be low</p>	<p>Taxis</p> <p>Vans</p> <p>Minibuses</p>	<p>Personalized and flexible</p> <p>Increased geographic area of coverage</p> <p>Smaller, more comfortable vehicles</p> <p>Meets needs of some seniors and people with disabilities</p>	<p>Shared use of vehicles</p> <p>No direct travel between individual origin and destination</p> <p>High degree of dispatch coordination</p> <p>Increased costs per passenger</p> <p>Higher fares</p> <p>Longer travel and wait times</p>
Feeder	<p>Can be demand-responsive or point to point</p> <p>Transports passengers to fixed-route</p>	<p>Taxis</p> <p>Vans</p> <p>Minibuses</p>	<p>Allows greater use of fixed-route</p> <p>Increased geographic area of coverage</p>	<p>Not cost-effective for short trips</p> <p>Longer travel and wait times</p>
Jitneys	<p>Semi-fixed routes</p> <p>Picks up passengers anywhere along route; will deviate slightly for extra fare</p> <p>Configured to meet local needs</p> <p>May or may not be authorized by local government</p> <p>Can serve as feeders to fixed-route</p>	<p>Personal vehicles</p> <p>Vans</p>	<p>Provides higher level of service</p> <p>Service to low density areas</p> <p>Usually low cost</p> <p>Fewer stops than fixed-route</p>	<p>Driven by market and may require subsidy</p> <p>Often operate illegally</p> <p>Often do not comply with safety or quality regulations</p>
Volunteers	<p>Requires time, energy, and resources, including program organization, recruitment, screening, training, recognition, and possible reimbursement for mileage and/or meals</p>	<p>Personal vehicles</p> <p>Vans</p> <p>Minibuses</p>	<p>Cost savings can be significant</p> <p>Volunteers gain personal satisfaction from helping others</p> <p>Provides service for needy</p>	<p>Costs include dollars, time, and energy</p> <p>Insurance and liability issues</p> <p>Need to locate and retain pool of reliable volunteers</p> <p>Only serves transportation-dependent population</p>

Type of Service	Service Characteristics	Vehicles Used	Advantages	Disadvantages
<p>Carpools</p>	<p>Two or more people share ride in a private vehicle Various methods for grouping individuals Best for longer work trips</p>	<p>Personal vehicles</p>	<p>Convenience of private auto Cost-efficient Incentives often offered Can reduce auto congestion and air pollution Share driving responsibilities</p>	<p>Necessitates set schedules Constrains ability for individuals to run errands or leave before/after scheduled departure Increased travel time Usually does not address needs of those who are transportation-dependent</p>
<p>Vanpools</p>	<p>One member serves as the driver Driver is often allowed to ride free and have use of vehicle after hours Driver responsible for operations and maintenance Requires several people with similar trip patterns and schedules to share in expense</p>	<p>Vans</p>	<p>Shared cost Less wear on personal vehicle Works well in dispersed, lower-density areas Employer can offer incentives, such as preferential parking and flexible work hours</p>	<p>Increased travel time Schedule constraints Does not serve those who are transportation-dependent</p>
<p>Subscription Bus</p>	<p>Pre-arranged service designed to meet group or individual needs Works best for specific group needs of one or two destinations Typically not open to general public</p>	<p>Bus Minitibus</p>	<p>Provide direct service for group trips Low cost</p>	<p>Specialized; does not serve the general public Only serves group trips</p>
<p>Community Bus</p>	<p>Informal network of vehicles to and from destinations in and around residential neighborhood Thrive in low-income, minority, neighborhoods where auto ownership is minimal Is often a prompt and reliable means of getting to destination for a modest fee</p>	<p>Personal vehicles</p>	<p>Promotes entrepreneurialism Meets needs of underserved populations</p>	<p>Vehicles are often underinsured and may be uninsured Vehicles do not comply with safety or quality regulations</p>

Type of Service	Service Characteristics	Vehicles Used	Advantages	Disadvantages
Subsidies	<p>Providers receive subsidy to make up the difference between cost and revenue</p> <p>Serves primarily those with personal mobility needs</p> <p>Need method for grouping</p>	<p>Private vehicles</p> <p>Taxis</p> <p>Vans</p> <p>Minibuses</p>	<p>Efficient allocation of transportation resources</p> <p>Serves areas with low-density or low demand</p>	<p>Can be difficult to get commitment from private providers without financial guarantees</p> <p>May require eligibility screening</p>

CHAPTER 6

GOALS AND OBJECTIVES

The identification of goals and objectives is a crucial and fundamental step in the development of a transit plan. Identification of the goals and objectives was a result of interviews with key local officials, community workshops, and review committee meetings. Transit-related goals, objectives, and strategies in other plans and documents were also identified and reviewed to ensure that the goals contained herein are consistent. Relative goals from these plans are contained in Appendix D. Below are the goals and objectives. Each objective addresses, in a broad policy context, actions to be taken to achieve the stated goal.

GOAL 1

Public transportation in Highlands County should be flexible and safe, while providing mobility for many of its full and part-time residents.

Objective 1.1

Public transportation should begin by serving the needs of many transit-dependent residents and visitors (e.g., youth, elderly, low income, and disabled.)

Objective 1.2

Public transportation should be flexible enough to be expanded or downsized (e.g., on a seasonal basis and overtime), as needed.

Objective 1.3

A high standard of safety for riders and drivers should be maintained.

GOAL 2

A public transportation system in Highlands County should be efficient, visually-appealing, environmentally sound, and cost-effective.

Objective 2.1

A mix of transportation options should be considered including, but not limited to, fixed-route service, deviated fixed-route, community circulators, vanpools, dial-a-ride, and other transportation demand management strategies.

Objective 2.2

A public transportation system should minimize its effect on the natural environment of Highlands County.

GOAL 3

Public transportation should be coordinated with local planning and economic development goals.

Objective 3.1

Public transportation should be a means to assist in fulfilling the goals of local plans, particularly in terms of safety, congestion, and growth management.

Objective 3.2

Public transportation should be used to encourage and support economic development.

GOAL 4

Explore and secure dedicated funding sources

Objective 4.1

Communicate need for transit and funding to governments and businesses

Objective 4.2

Explore several funding options, including an investigation of public-private partnerships.

Table 5.1 summarizes the goals and their corresponding objectives.

**Table 6.1
Goals and Objectives**

Goal 1	Public transportation in Highlands County should be flexible and safe, while providing mobility for many of its full and part-time residents.
	<ul style="list-style-type: none"> ■ Begin by serving the needs of many transit-dependent residents and visitors ■ Be flexible to allow for expansion or downsizing, as needed ■ Maintain a high standard of safety for riders and drivers
Goal 2	A public transportation system in Highlands County should be efficient, visually-appealing, environmentally sound, and cost-effective.
	<ul style="list-style-type: none"> ■ Consider a mix of transportation options ■ Minimize effect on the natural environment
Goal 3	Public transportation should be coordinated with local planning and economic development goals.
	<ul style="list-style-type: none"> ■ Assist in fulfilling the goals of local plans ■ A means to encourage and support economic development
Goal 4	Explore and secure dedicated funding sources
	<ul style="list-style-type: none"> ■ Communicate need to governments and businesses ■ Explore several funding options

CHAPTER 7

FUNDING OPTIONS

Opportunities for funding transit and transportation are plentiful, largely restricted by project type, location, use, and effect. Potential options for funding a transit project in Highlands County are listed below.

Bonds

A bond is a certificate or evidence of a debt on which the issuing company or governmental body promises to pay the bondholders a specified amount of interest for a specified length of time, and to repay the loan on the expiration date. Bonds are sold to finance improvements and may require voter approval.

County Incentive Grant Program

This program provides grants to counties to improve a transportation facility which is located on the State Highway System or which relieves traffic congestion on the State Highway System.

Dedicated Millage Rates

At least four counties in Florida dedicate millage to their transit system: Hillsborough, Pinellas, Polk, and Volusia. These ad valorem taxes have been a major source of revenue for the systems. Florida's Constitution limits the amount of ad valorem taxes that may be levied by a municipality to 10 mills.

Development Agreements

A local government may agree to approve a new development plan if the developer agrees to provide transportation improvements or right-of-way needed to support the development. Improvements are then turned over to the public agency, which is responsible for maintenance and operation. This is a voluntary approach, although the resulting agreements are binding. The process also typically involves some concessions on the part of the municipality.

Exactions

Monetary payments, contributions of land, or infrastructure improvements may be required by a government agency as a condition of development approval. Such exactions are typically determined through negotiations between a municipality and a developer. Regulatory exactions must be roughly proportional both in nature and degree to the impacts of the regulated activity.

Federal Demonstration Projects

This funding is promoted by congressmen who feel a project is needed within their area and is applied for through federal appropriation bills.

Fundraising

A variety of fundraising activities can be used to encourage local businesses, property owners, or philanthropic groups to contribute financial assistance toward transportation activities.

Gas Taxes

In essence, this is a user fee that enables government to tax gasoline for the purpose of funding transportation expenditures. Gas taxes are of central importance to assuring adequate transportation funding. Florida is a leader in the use of local option gas taxes for transportation funding.

Grants

Grants come in a variety of forms and are offered by a variety of government and public agencies, private sources, and foundations. Grants are monetary contributions that do not have to be repaid. They are usually distributed through an application process, and may be for any number of purposes.

Section 5311

Formula program that funds capital and operating assistance in non-urbanized areas.

Impact Fees

Impact fees are charges levied against a development project to help fund the cost of off-site capital improvements that benefit that development. The fee is determined by assessing the projected impact the development will have on surrounding public facilities. Fees must not exceed the proportionate share of the cost of serving a given development, and cannot be used to address existing deficiencies. In other words, the need for new facilities must be attributable to new development.

Job Access and Reverse Commute Grant Program

TEA-21 creates a new program for Job Access and Reverse Commute Grants. The program is authorized at \$150 million annually (\$50 million of this amount was guaranteed in FY 1999). The guaranteed portion rises by \$25 million a year, reaching the fully authorized level of \$150 million in FY 2003. The program requires a 50% non-USDOT match. The program provides funding to local areas to develop transportation services designed to transport welfare recipients and other low-income individuals to and from jobs, and to develop transportation services for residents of urban centers and rural and suburban areas to suburban employment opportunities.

The Job Access and Reverse Commute Program is a discretionary program. Eligible recipients for the program include local agencies and authorities, non-profit organizations, and designated recipients under the Section 5307 program. In urbanized areas with a population of 200,000 or above, the MPO selects the applicants.

Local Agency Partnering

Local agency partnering involves the uniting of local agencies to achieve an end that will benefit all parties. The parties voluntarily sign a contract that specifies a financial commitment, as well as a commitment to implementation. This is a widely-used form of financial support. A transit system may cross district boundaries (city to county, for instance), and the lack of participation by one government could have a negative effect on the other(s).

National Corridor Planning and Development Program (NCPD)

This program, under the Federal Highway Administration, provides funding for planning, project development, construction and operation of projects that serve high priority corridors throughout the United States. States and metropolitan planning organizations (MPOs) are eligible for discretionary grants for feasibility studies, planning, multi-state coordination, environmental review, and construction.

Other Federal Programs

A variety of programs and funding exist within the realm of the federal government, beyond those already mentioned. Because of the numerous branches of the federal government, frequent changes in funding provisions and allocation, and associated restrictions in each program area, it would be necessary for the local government agency to explore other possible funding sources. Some areas where funding may exist include the Department of Commerce, Environmental Protection Agency, Small Business Administration, Economic Development Administration, and the Department of Housing and Urban Development.

Public/Private Partnerships

A public/private partnership is the pairing and cooperation of public and private resources to achieve an end that will benefit both the private developer and the public sector. A local government may benefit from the construction of a needed improvement at a low cost and in a more expeditious manner than could be accomplished by the government. The private enterprise may benefit from the profits earned through its implementation.

Reserve Funds

In reserve fund financing, funds are accumulated in advance for capital improvements. The accumulation may result from surplus or earmarked operational revenues, funds in depreciation reserves, or the sale of capital assets.

Rural Economic Development Initiative (REDI)

This multi-agency initiative focuses the efforts of state and regional agencies on problems that affect the economic viability of rural communities. REDI works with local governments, community-based and private organizations to find ways to balance environmental and growth management issues with local needs. According to the FDOT REDI 2001 Annual Report, Highlands County has been approved and is currently eligible to request a waiver or reduction of project match requirements.

Rural Transit Assistance Program (RTAP)

This program funding is available in non-urbanized areas for transportation research, technical assistance, training, and related support services. The goals of RTAP are to provide training and technical assistance for rural public transportation operators, improve professionalism and safety of rural public transit services, and promote efficiency and effectiveness of rural transit services and support coordination with human service transportation.

Safety Funds

Any unit of local or state government can request highway safety funds for projects to demonstrate, evaluate, or enhance a special countermeasure activity. The applicant must show that an identified highway safety problem exists within their jurisdiction and is supported by documented evidence.

Sales Tax

Sales tax is a state or local-level tax on the retail sale of specified property or services. It is a percentage of the cost. Usually, levying a sales tax for the purpose of funding special projects (such as transportation) requires a public referendum.

Small County Outreach Program

This program provides assistance to small county governments for resurfacing or reconstructing county roads **or** in constructing capacity or safety improvements to county roads.

Special Assessment Districts

Special assessment districts levy a tax on property owners who will benefit from specific improvements. These may be initiated by local governments, developers, or property owners who wish to expedite the improvement(s). One parameter of special assessment districts is that property owners must not pay more than they receive in special benefits.

State Infrastructure Bank (SIB)

This is a program under which four states – California, Florida, Missouri, and Rhode Island – are authorized to enter into cooperative agreements to set up infrastructure revolving funds eligible to be capitalized with federal transportation funds. This SIB program gives states the capacity to increase the efficiency of their transportation investment and leverage federal resources by attracting non-federal public and private investment. As loans are repaid, the initial capital is replenished, and it can support a new cycle of projects.

State-Shared Revenue Sources

Florida has two sources of state-shared revenue, which may be used for right-of-way acquisition and transportation improvements. The first is authorized by the Florida Constitution and is a \$.02 motor fuel tax. Eighty percent of the total revenue generated is allocated for debt service on bond issuance; the remaining twenty percent is allocated to local governments. The second type is a \$.01 county gas tax, which is also used for county debt service.

State Transportation Trust Fund (STTF)

The two major contributors to this fund are state fuel sales tax revenue (of which about 90 percent goes to the STTF), and the State Comprehensive Enhanced Transportation System (SCETS) tax. Other sources include Florida's fuel use tax, aviation fuel tax, vehicle licensing fees, initial auto registration fees, and rental car surcharges. In accordance with §206.46, Florida Statutes, 15 percent of all revenues distributed to the STTF are to be dedicated annually by FDOT for public transit and capital rail projects.

Public Transit Service Development Program

The Service Development Program was enacted by the Florida Legislature to provide initial funding for special projects. The program is selectively applied to determine whether a new or innovative technique or measure can be used to improve or expand public transit in an area. Service Development projects specifically include projects involving the use of new technologies, services, routes, or

vehicle frequencies; the purchase of special transportation services, and other such techniques for increasing service to the riding public as are applicable to specific localities and user groups.

Service Development projects are subject to specified times of duration, but no more than three years for system operations and maintenance procedures and no more than two years for marketing and technology projects.

Surface Transportation Program (STP)

The STP provides flexible funding that may be used by states and local municipalities for projects on any Federal-aid highway, including mass transit, pedestrian and bicycle facilities, as well as on roads and highways. It should be noted, however, that transit funds must compete for road projects

Transportation Community and System Preservation Program (TCSP)

The TCSP provides funding for planning, implementation, and research to investigate and address the relationships between transportation and community and system preservation, and to identify private sector-based initiatives, such as transit-oriented development, traffic-calming measures, or other projects to reduce need for future infrastructure investments

Transportation Enhancements

Transportation enhancements are transportation-related activities that are designed to strengthen the cultural, aesthetic, and environmental aspects of the nation's intermodal transportation system. The Transportation Enhancements Program provides for the implementation of a variety of non-traditional projects, with examples including restoration of historic transportation facilities, bike and pedestrian facilities, and preservation of abandoned railway corridors.

Transportation for Livable Communities

These funds are available for bicycle, pedestrian, transit or other projects that enhance community vitality, including planning studies.

Transportation Outreach Program

This program is dedicated to funding transportation projects of a high priority, based on preservation, enhancing economic growth, and improving choices for mobility.

For clarity and convenience, Table 7.1 identifies the source of each funding option.

**Table 7.1
Source of Funding**

Funding Source	Federal	State	Local
Bonds			✓
County Incentive Grant Program		✓	
Dedicated Millage Rates			✓
Development Agreements			✓
Exactions			✓
Federal Demonstration Projects	✓		
Fundraising			✓
Gas Taxes			✓
Impact Fees			✓
Job Access and Reverse Commute Grant Program	✓		
Local Agency Partnering			✓
National Corridor Planning and Development Program	✓		
Public/Private Partnerships			✓
Reserve Funds			✓
Rural Economic Development Initiative	✓	✓	
Rural Transit Assistance Program	✓	✓	
Safety Funds			✓
Sales Tax			✓
Section 5311		✓	
Small County Outreach Program		✓	
Special Assessment Districts			✓
State Infrastructure Bank	✓	✓	
State-Shared Revenue Sources		✓	✓
State Transportation Trust Fund		✓	
Public Transit Service Development Program		✓	
Surface Transportation Program	✓		
Transportation Community and System Preservation	✓		
Transportation Enhancements	✓		
Transportation for Livable Communities	✓		
Transportation Outreach Program		✓	

CHAPTER 8

RIDERSHIP DEMAND

TYPES OF DEMAND

In Highlands County, there are various segments of market demand or unmet transportation needs.

Employment

In Florida, targets for reducing welfare recipients have been exceeded as more people have voluntarily renounced their public assistance in favor of going to work. However, transportation can be a barrier to fulfilling this desire. Additionally, unskilled or semi-skilled laborers work shifts around the clock for relatively low pay, which increases the need for dependable transportation.

Single Vehicle Households

Single vehicle households with one or two working adults are prime targets for alternative transportation. When it is not feasible for both adults to coordinate transportation efforts, the second adult must secure other means of travel, whether for work, shopping, or other household needs.

Children/Youth

From sports to church programs to music lessons to education, opportunities to enrich and develop young minds are vast. However, transportation takes center stage in determining the level of access to these opportunities. According to the 2000 Census, 19 percent of the population in Highlands County is under 18 years of age.

Seniors

At 33 percent, Highlands County has a very high rate of people over the age of 65. In fact, it is nearly twice the state average of 17.6 percent. Even though many of the survey respondents over 65 indicated that they would not use transit, the fact is that they may not always be able to drive or able to get a ride.

Disabled

Mobility for people with disabilities is constantly challenging. Even with transit service, there are issues regarding accessing, waiting for, and navigating buses and stop locations.

Low-Income

People with low income have long been a stable transit market. In many ways, social mobility is linked with physical mobility. When a person lacks physical mobility, they can also be socially, economically, and culturally disaffected. For these individuals, public transportation is a valuable low-cost mobility alternative.

No Vehicle/Unable to Drive

Some households have no vehicle available or are unable to drive. There are a variety of reasons for these situations. The vehicle may need repair or a person's license may be temporarily suspended. There are also people who are unable to drive, but have a vehicle available so that others may use it to transport them.

Agencies and Organizations

The most common issue heard among non-profit agencies is that it is difficult for clients to access services. While many agencies are providing transportation assistance through volunteers or agency vehicles, those resources are limited or stretched thin. Therefore, even agencies with resources cannot accommodate all their transportation needs.

DEMAND ESTIMATES

Because there is no fixed-route public transportation service in Highlands County, demand estimation projections for this type of service is somewhat limited. Further, some of the demand for fixed-route service may already be satisfied by the coordinated paratransit service under the Transportation Disadvantaged program. Conversely, some of the current paratransit ridership might be able to be shifted to a fixed-route transit system.

One of the methodologies used to derive demand estimates for fixed-route transit service consists of compiling operating profiles for a group of fixed-route public transit systems that have been selected as peers. Because the peer group analysis performed in Chapter 3 was for peer CTCs, this peer group is slightly different, focusing mainly on population. Peers selected for Highlands County demand estimates are shown below.

Peer Group

Indian River, Florida
Port Arthur, Texas
San Angelo, Texas
Terrebonne Parish, Louisiana
Ocala, Florida

Table 8.1 contains selected average operating statistics for this peer group. (Comprehensive data for each peer can be found in Appendix D.)

**Table 8.1
Peer Group Averages**

Measure	Mean
Service Area Population	78,201
Service Area Size (Square Miles)	167
Service Area Population Density	1,267
Annual Passenger Trips	175,477
Annual Revenue Miles	252,703
Total Annual Operating Expense	\$697,365
Passenger Trips per Capita	2.5
Passenger Trips per Revenue Mile	0.69
Passenger Trips per Revenue Hour	10.38

To estimate potential demand for transit in Highlands County based on this information, one key measure is trips per revenue hour. The average passenger trips per revenue hour for the selected peer group was 10.38. As detailed in Chapter 9, it is anticipated that three buses will run 12 hours a day, 5 days a week, and two buses for 8 hours on Saturdays, times 51 weeks (6 days off for holidays). There will also be a supplementary feeder route running one bus between Sebring and Lake Placid for the same time periods.

Using passenger trips per revenue hour:

$$9,996 \text{ revenue hours/year} \times 10.38 = 103,758 \text{ trips}$$

In the same way, trips per revenue mile or trips per capita can also be used to estimate ridership, as follows:

In trips per revenue mile, the proposed routing is approximately 35 miles in length.

$$146,982 \text{ revenue miles/year} \times .69 = 101,418 \text{ trips}$$

Using the total population of Highlands County, passenger trips per capita would be calculated as follows:

$$87,366 \text{ population} \times 2.5 = 218,415$$

For all of these estimates, consideration must be given to the fact that the peer group averages are derived from mature systems in much more densely-populated areas. On the other hand, the lower-than-average income and higher-than-average elderly levels that exist in Highlands County could offset these factors.

The above estimates are reflected in Table 8.2, below.

**Table 8.2
Ridership Estimates**

	Low	Medium	High
Ridership	101,418	103,758	218,415

TRANSPORTATION DISADVANTAGED

Another way to get a perspective of demand for transportation in Highlands County is to review the trips and trip-making patterns within the Transportation Disadvantaged (TD) program. ATC, the Community Transportation Coordinator in Highlands County, provided CUTR with information for all trips taken during the month of January 2002. There were a total of 1,146 trips having origins and destinations within the county. Of those in-county trips, the following is a breakdown of trips between locations.

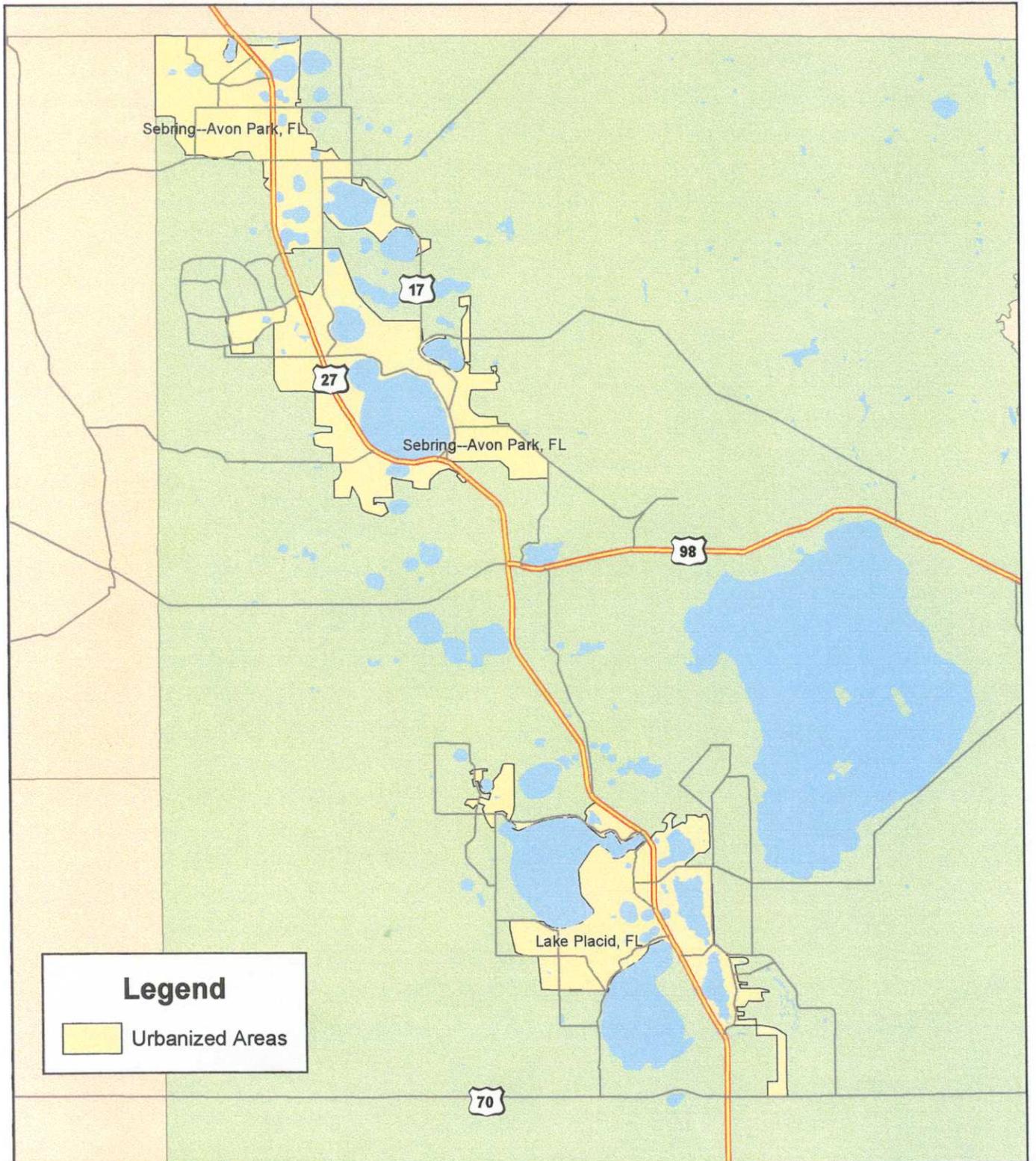
Avon Park to/from Avon Park	97
Avon Park to/from Lake Placid	53
Avon Park to/from Sebring	469
Sebring to/from Lorida	16
Sebring to/from Sebring	580
Sebring to/from Lake Placid	90
Lake Placid to/from Lake Placid	114

Out of those 1,146 trips, 257 were to/from Lake Placid, and only 16 were to/from Lorida. The remaining 873 trips were in and around Avon Park and Sebring.

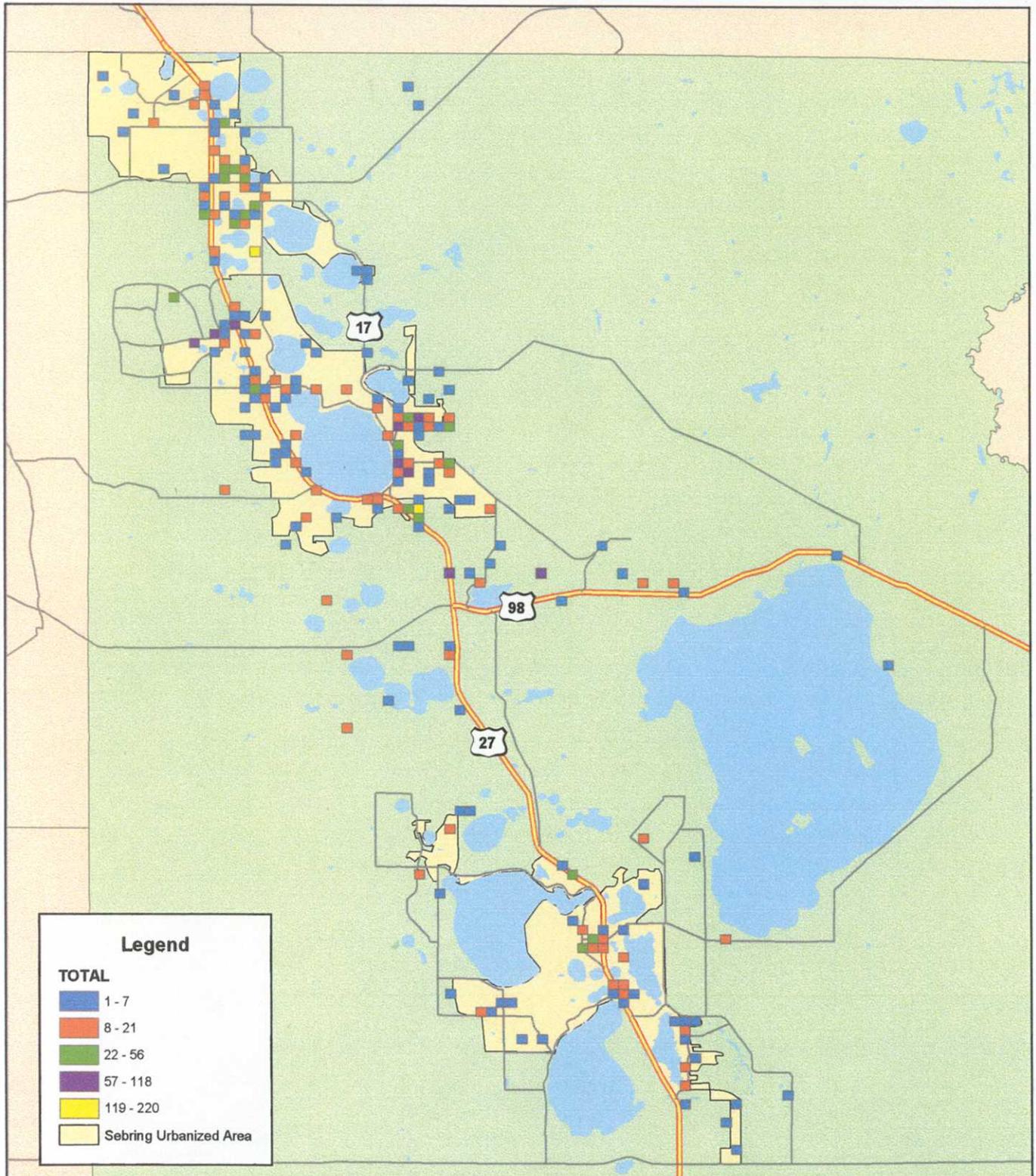
The 2000 Census has re-defined the Sebring Urbanized Area to include Avon Park, as shown in Map 5, which may help to better understand the demand. Map 6 shows every trip origin and destination in January 2002, and identifies the frequency of trips made to each site. Keep in mind that TD trips are predominantly for medical purposes, and do not show demand for employment, recreational, social, or other trip purposes.

Using TD trip characteristics in Highlands County, along with density and potential origins and destinations, it was determined that deviated fixed-route transit service is feasible for the Avon Park and Sebring areas, with feeder service between Lake Placid and Sebring.

Map 5 - Highlands County Urbanized Areas



Map 6 - Origin-Destination of TD Trips (January 2002)



CHAPTER 9

SERVICE RECOMMENDATIONS and FINANCIAL PLAN

Although a Transit Development Plan does not substitute for an operations or service plan, it provides justification for and public transportation in Highlands County. Preparation of a detailed Transit Operation Plan (TOP) will be required prior to implementation of any new public transportation service. The TOP will address detailed operational and financial issues and will develop a specific implementation plan.

SERVICE OVERVIEW

Based on input from the public and information collected from all phases of this study, it has been determined that transit is a feasible option for Highlands County. A deviated point-to-point fixed-route service is recommended to serve the areas of Avon Park and Sebring, with a feeder service between Lake Placid and Sebring.

For the fixed-route service, a vehicle would operate along the designated route, making stops at certain points along the way. Vehicles will deviate up to $\frac{1}{4}$ mile from the route to pick up and drop off passengers, upon request. After deviating, a vehicle then returns to the route and continues on to the next scheduled point on the route, making sure it does not skip any stops. Route deviation is a hybrid public transportation service with features of fixed-route, fixed-schedule transit service and demand-responsive, curb-to-curb service (i.e., the driver will not assist the passenger to the door). Requests for route deviation must be made a minimum of 24 hours in advance.

Route-deviated service is officially defined as demand-responsive, and meets all requirements for complementary paratransit service required by the Americans with Disabilities Act of 1990.

Map 7 shows the proposed Avon Park-Sebring transit route, primarily running from Main Street in Avon Park, down Highway 27 to Sebring, and into downtown Sebring. The route is approximately 18 miles each way, with an estimated run time of one hour. The following stops are proposed, beginning at Main Street and Highway 27, heading South to Sebring:

Walgreen's
Publix
South Florida Community College
Florida Hospital/Medical Center Area
Tanglewood
Wal-Mart
Lakeshore Mall
Publix at Lakeview
Library
Downtown Circle
Government Center
Department of Children and Families

It is recommended that there would be two buses running the route in each direction with hourly service operating 12 hours a day, from 7:00 a.m. to 7:00 p.m., on weekdays. Limited Saturday service is also recommended, running one bus on the route from 9:00 a.m. to 5:00 p.m. This means that Saturday service would be every two hours.

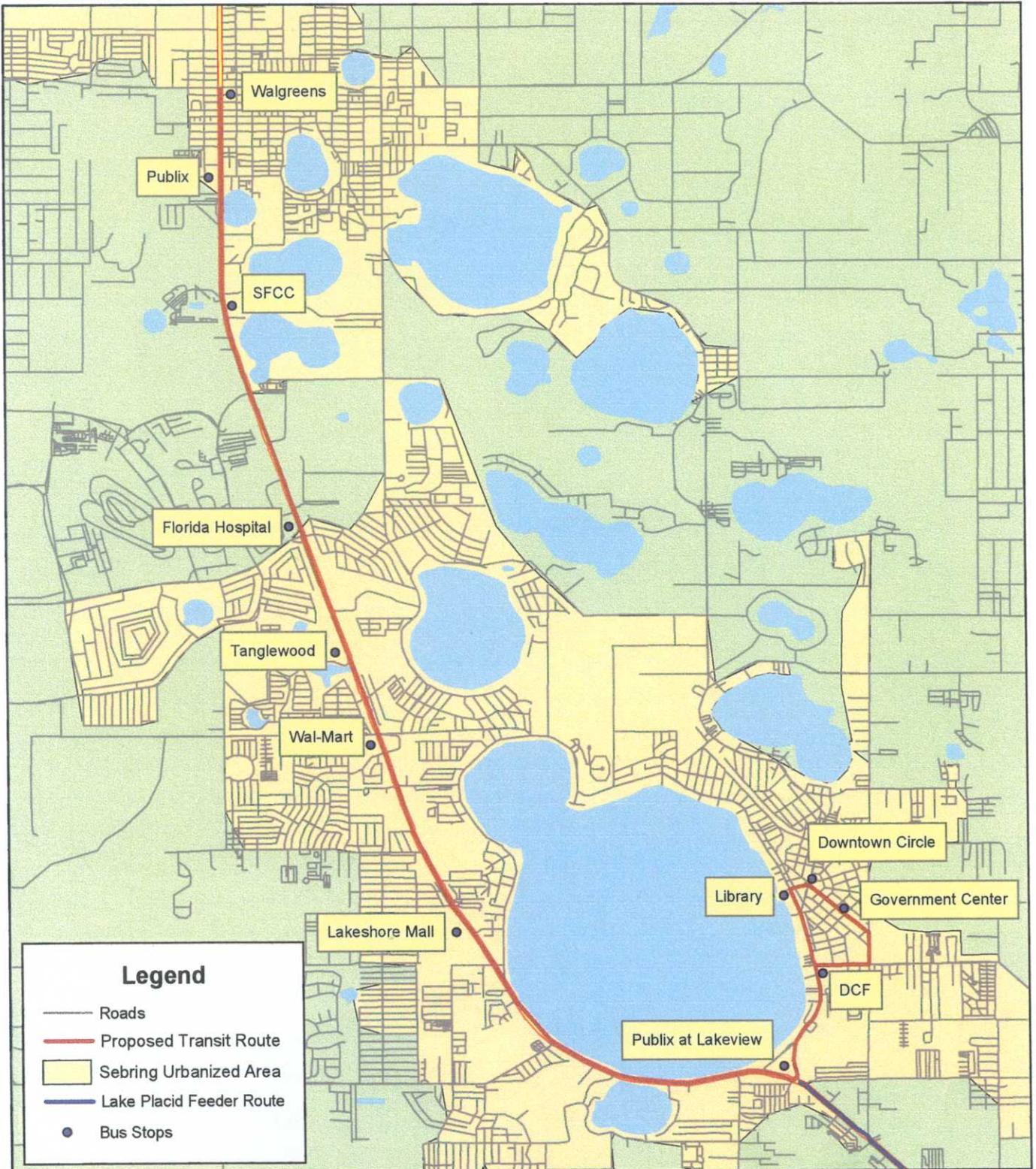
In addition, a bus traveling between Lake Placid and Sebring would feed into the Avon Park-Sebring deviated fixed-route and operate during the same hours. This service would run approximately every two hours with one bus traveling approximately 17 miles in each direction.

Vehicles

Due to the anticipated ridership, the type of streets on which service would operate, and input from the public, it is recommended that smaller, 25-foot medium-duty buses be used in Highlands County. These vehicles generally seat approximately 20 passengers, with room for up to five standees. The approximate cost of such a vehicle is \$120,000. Of course, all vehicles purchased must be handicapped accessible, and are available through the FDOT Florida Vehicle Procurement Program (FVPP).

Consideration should be given to the purchase of low-floor buses. A low-floor bus has been defined as a bus which has a vehicle floor sufficiently low and level enough to remove the need for steps for passenger boarding and alighting. Transit agencies choose low-floor buses to provide more user-friendly and easier access for all customers, including adults, children, people with disabilities, seniors, people carrying infants, strollers, and/or packages. The cost of low-floor buses is more than standard buses without low-floors.

Map 7 - Proposed Transit Routing



Fare

In determining fare levels, it is important to set a price that will ensure adequate ridership, while covering some costs. To keep public transportation affordable for all patrons, a base fare of \$1.00 is recommended. Half-price fares should be offered to seniors, persons with disabilities, and students. The availability of half-price fares during non-peak hours of service for seniors and persons with disabilities is required by the Federal Transit Administration for public transportation systems that accept federal funds. An unlimited-use monthly pass could be made available at a recommended cost of approximately \$30. Advantages of a monthly pass, other than the convenience and lower cost per trip, is the option for various social service agencies to purchase them for their clients.

Among smaller Florida transit systems, fare revenues typically offset only about 20 percent of operating expenses.

Signage and Amenities

To adequately serve the needs of patrons, bus stops must have adequate signage. Other amenities will be necessary (shelters, benches, and information displays), particularly at the end of the line (in Avon Park and Sebring).

Marketing

Perhaps the most critical element to the success of a new transit system is effective marketing and public relations. People must know that public transportation exists, and when and where it is available.

Operations

Because there is currently no fixed-route service available in Highlands County, it is necessary to go back to the peer group data (see Chapter 8 and Appendix D) to derive approximate hourly costs. The peer group's average cost per revenue hour is \$40.63.

MANAGEMENT ACTIVITIES

The management strategy refers to how overall public transportation services will be managed, and the management of day-to-day responsibilities. This description is

strategic in nature, and may need to be modified when a detailed Transit Operation Plan is developed.

Overall Management

It is recommended that one organization maintain overall management duties of public transportation services in Highlands County. This organization may not, necessarily, be responsible for managing day-to-day operations. Some of the overall management responsibilities include:

- Grant development
- Contract management
- Marketing activities
- Customer assistance/complaints
- Fulfilling state and federal reporting requirements

Options for the overall management of public transportation services include:

- The Highlands County Government
- The Community Transportation Coordinator
- A Private Transportation Management Company

Day-to-Day Operations

Private Sector

A private sector transportation company could be contracted for daily operations. Under this scenario the vehicles could be purchased through the FDOT FVPP program and then leased to a private provider to operate and maintain, according to applicable County and State regulations. This will aid in decreasing operating costs charged by a private provider. A Request for Proposal would need to be issued to allow qualified private providers an opportunity to propose for the operation of deviated fixed-route service. Because the service is expected to be very small initially, only one private provider would be needed.

Advantages

- Ability to quickly expand or contract public transportation services
- Experience in transportation management
- Available resources for administrative support

- Joint development opportunities (such as maintenance)

Disadvantages

- Requires contract and overall system management for compliance with state and federal regulations, service levels, quality, safety.
- Higher operator turnover rate.

Community Transportation Coordinator

Another option for day-to-day service operation is the CTC for Highlands County, ATC. ATC has been coordinating transportation services in Highlands County for a number of years, and is familiar with the local operators, geography, and political climate.

Advantages

- Public transportation services could be coordinated with transportation disadvantaged services.
- Existing facilities and software
- Local experience

Disadvantage

- Currently serve a specific client base, and not the general public

County Government

Another option is for public transportation services to be operated by a County department.

Advantages

- An existing elected board (Commission) would be directly responsible to the citizens and customers of public transportation services
- Administrative infrastructure in place (accounting, finance, human resources)
- Existing fleet storage/maintenance and fueling facilities

Disadvantages

- Slower response to expansions and contractions of service
- Lacks expertise in marketing and other business approaches

- Lacks experience in running a transit system

- Lacks resources (personnel, software) to run a transit system

Recommendation

It is recommended that a transit service would come under the responsibility of the County, but that the County would develop a Request for Proposal for a management company to oversee the responsibilities of the service. This would allow the County to apply for grants and possible waivers that would not be available to a private organization. The most likely candidate for management would be the CTC. It is recommended that the County acquire and own all vehicles and amenities (e.g., shelters, and signs).

TRANSIT OPERATION PLAN

It is recommended that a detailed Transit Operation Plan be developed prior to the implementation of public transportation services in Highlands County. It should contain, at a minimum:

- Specific, detailed routing
- Specific scheduling
- System identity (color scheme, logo, sign design)
- Amenities (shelter and bench locations)
- Signage
- Cooperative agreements with all private property owners/managers
- Bus stop placement
- Bus stop design
- Development of RFP for operation of deviated fixed-route service
- Development of Performance Monitoring Program
- Staffing plan
- Development of marketing program
- Camera-ready schedules
- Fare policy
- Refined ridership estimates
- Bus type and paint scheme

PERFORMANCE MONITORING PROGRAM

A performance monitoring program must be developed prior to starting any new public transportation service. A performance monitoring program will provide objective measures related to system performance (efficiency and effectiveness) and will include benchmarks or service standards against which to measure system improvement.

Operational Objectives

Operational objectives should be developed for any public transportation service that is established. The objectives must be quantified so that they may be incorporated into performance indicators. Operational objectives should cover at least the following four areas:

- Service utilization
- Service quality
- Cost efficiency and effectiveness
- Safety

Once operational objectives are developed, they should be used to establish the performance indicators that will be measured on a regular (daily, monthly, quarterly, annual) basis.

Performance Indicators

Performance indicators are the actual measures used to analyze whether operational objectives have been successfully achieved. As such, they are integral to the process of developing a Performance Monitoring System. Quantitative methods have been developed as a standardized way of measuring the success of a public transportation system. Performance indicators can cover the following areas:

Service Utilization

Passenger Trips per Revenue Hour and/or Revenue Mile. This indicator can be measured for specific time periods or for total service day, depending on whether the information is to be used for detailed or generalized route design evaluations.

Passenger Trips per Capita. This measure indicates the market penetration or utilization of the transit service.

Sample Performance Standards from Winter Haven

- Achieve ridership of at least 10 passenger trips per revenue hour on all fixed routes.
- Achieve an Operating Ratio (Farebox Revenues/Total Operating Expenses) of at least 20%.
- Allocate at least 2% of the total operating budget for marketing efforts.

Service Quality

On-Time Performance. This is used to measure service reliability and scheduling efficiency. This indicator is useful for the supervision of bus operators and for determining the need for additional services or rescheduling.

Surveys of Users. Users of a public transportation system should be surveyed at least on an annual basis. Information collected from surveys should include suggested service changes and evaluation of service quality.

Cost Efficiency and Effectiveness

Cost per Revenue Hour. This measure is used to analyze the impact of incremental changes in service levels.

Safety

Revenue Miles Between Accidents/Incidents. This measure is used to monitor safety related to personal casualties, non-arson fire, transit property damage greater than \$1000, and collisions associated with transit vehicles.

Performance Guidelines

Performance guidelines are targets against which performance indicators are measured to determine how well a public transportation system is performing. Performance guidelines should be developed in the TOP based on peer comparisons and system goals. Guidelines are not absolute performance requirements. A variety of circumstances can affect attainment of performance guidelines. It is important to ascertain whether a route is meeting the purpose for which it was designed (for example, geographic coverage or ridership performance). A properly executed Performance Monitoring Program will help management to determine what corrective actions might be needed if performance guidelines are not met.

It is common in the industry that new service is continuously monitored in the first two years of service. Radical changes in routing is not suggested during this time period, because the system is attempting to develop a customer base, instill customer confidence, and establish service reliability and schedule adherence. Radical changes made too soon or too often will degrade customer

confidence in the system, which will impair retaining existing riders and attaining new ones.

FINANCIAL PLAN

Up to this point, the TDP process has not been constrained by fiscal considerations, in accordance with its strategic intent. Demographics, survey results, community input in various forms, and peer and trend analyses have all been used to assess the demand for transit service and to identify the mobility needs of residents in Highlands County. The recommendations presented herein have been based on findings. The final step in the TDP process is to estimate costs for these recommendations and attempt to identify anticipated financial resources.

Table 9.1 presents the costs associated with the TDP recommendations. Costs in the table are based on assumptions, such as peer group average cost of operating expenses. These are the most reasonable assumptions available, but cost estimates should be refined at the time the recommendations are implemented, when greater detailed information will be available. (Note: Although the system will operate with three vehicles, a fourth vehicle must be added for back-up.) Table 9.2 presents the capital and operating costs by year, in accordance with TDP requirements. Finally, Tables 9.3 and 9.4 present operating and capital costs, respectively, among potential funding sources.

Costs of Deviated Fixed-Route vs. Demand-Response

It would take a minimum of 15 vehicles to provide demand-response (curb-to-curb) service for the general public. The matching portion of monies available for vehicles can usually be provided through toll revenue credits, meaning that purchase of capital equipment is not the greatest concern of start-up. Rather, the day-to-day operating costs, which include labor and fringe benefits, are what tend to make or break the decision to go forward with public transportation improvements.

In this case, operating costs for demand-response service is estimated at \$18 per driver hour, based on the Highlands County 2001 Annual Operating Report for the Transportation Disadvantaged Program.

Calculated as follows:

15 (vehicles) x 12 (driver hours) = 150 hours/day
150 x 5 (days/week) = 750
750 x 51 (weeks/year) = 38,250 hours/year
38,250 x \$18/hr = \$688,500 in operating costs/year

This annual operating cost of \$688,500 for demand-response service is approximately 60% more than the estimate of \$406,137 for the deviated fixed-route service. Additionally, the cost for demand-response was calculated for operating five days a week, rather than the six days proposed or the fixed-route. Keep in mind, however, that if the objective of public transportation is to serve as many elderly people as possible, then demand-response may be the most viable option. Individualized service costs more than generalized service, but generalized service can provide more trips per person.

**Table 9.1
Estimated Costs of Recommendations**

Action	Unit Cost (in 2001 \$s)	Number of Units	Annual Operating Cost¹ (in 2001 \$s)	Annual Farebox Revenue² (in 2001 \$s)	Total Capital Cost (in 2001 \$s)
Deviated Fixed-Route Service - Capital - Operating	\$120,000 \$40.63	4 9,996 hrs.	\$406,137	\$48,736	\$480,000

¹Uses average peer group costs to generate estimated annual operating cost

²Farebox revenue is based on an estimated farebox recovery ratio of 12% for the first year

**Table 9.3
Estimated Operating Costs¹ of Recommendations
Among Potential Funding Sources by Year**

Action	Year One	Year Two	Year Three	Year Four	Year Five	Total
Deviated Fixed-Route Service						
- FTA Section 5311		\$119,134	\$119,134	\$119,134	\$119,134	\$476,536
- FDOT Transit Block Grant		\$119,134	\$119,134	\$119,134	\$119,134	\$476,536
- Local Match		\$119,134	\$119,134	\$119,134	\$119,134	\$476,536
TOTAL		\$357,402	\$357,402	\$357,402	\$357,402	\$1,429,608

¹Operating costs use peer group average cost, reduced by projected fare revenues

**Table 9.4
Estimated Capital Costs of Recommendations
Among Potential Funding Sources by Year**

Action	Year One	Year Two	Year Three	Year Four	Year Five	Total
Deviated Fixed-Route Service - FTA Section 5311	\$480,000					\$480,000

**Table 9.2
Estimated Operating¹ and Capital Costs
of Recommendations by Year**

Action	Year One		Year Two		Year Three		Year Four		Year Five		Totals			
	Operating Cost	Capital Cost												
Deviated Fixed-Route Service - Capital - Operating		\$480,000	\$357,402		\$357,402			\$357,402			\$357,402		\$1,429,608	\$480,000
¹ Operating costs use peer group average cost, reduced by projected fare revenues														

APPENDIX A

**HIGHLANDS COUNTY TDP
COMMUNITY LEADERS INTERVIEW QUESTIONS**

Where Are We?

- When you hear the word “public transportation” what immediately comes to mind?
- How much interest in and support for public transportation is there in the community?
- What role do you feel public transportation could provide to the community?
- Is traffic congestion an issue in Highlands?
If so, can public transportation play a role in alleviating this problem?
- Have you ever ridden on a bus?
If so, under what circumstances? Describe your experience(s).
- Who do you think would use public transportation?

Where Do We Want To Be?

- What should public transportation in Highlands County look like?
- Is there a willingness in the community to fund a public transportation system?
- What are the major attractions/destinations in Highlands County?

How Are We Going To Get There?

- Are there policies in place that should be changed to better support the provision of public transportation services?

INTERVIEWEES FOR HIGHLANDS COUNTY TDP

Ken Burke
Manager of Lakeshore Mall

Santas DeLaRosa
Florida Non-Profit Housing

Pauline Dionne
Mayor of Lake Placid

Allon Fish
Sebring Chamber of Commerce

Howard Godwin
Highlands County Sheriff

George Hensley
City of Sebring Mayor

Andrew Jackson
Highlands County Commissioner

Reverend Mike Karl
New Testament Church and Mission

Tom Macklin
Mayor of Avon Park

Kevin Roberts
Collier County Human Services

Sonny Stalls
Lake Placid Chamber of Commerce

INTERVIEW RESPONSES

Q1. When you hear the word “ public transportation” what immediately comes to mind?
<ul style="list-style-type: none">■ A facility that operates to provide transportation to areas where public can easily access from home to work to shopping at an affordable cost.
<ul style="list-style-type: none">■ A system that is devised to transport lots of people from one place to another.
<ul style="list-style-type: none">■ Being able to get from one place to another without always having to drive.
<ul style="list-style-type: none">■ Public transportation means buses. In many places, public transportation brings in “undirected youth” (i.e., teenagers), but is comfortable with a Dial-A-Ride type of system. It also provides transportation for mall employees.
<ul style="list-style-type: none">■ Public transportation is a supplement for the needy.
<ul style="list-style-type: none">■ Public transportation is buses and taxis.
<ul style="list-style-type: none">■ Public transportation is buses, vans and shuttles.
<ul style="list-style-type: none">■ Public transportation is buses and transportation systems like HARTline. Good for urban areas, not for rural. In Highlands, it would not benefit the majority; it would benefit only those with no vehicle access, or those who should not drive (elderly).
<ul style="list-style-type: none">■ A fixed route system with passenger payment.

Q2. How much interest in and support for public transportation is there in the community?

■ There is a need for public transportation. There have been several attempts in the past to provide service to the needy, but it failed due to lack of support (only a small percentage could afford to use it). The ones who really needed it couldn't afford it, though.

■ Highlands County is a friendly place; neighbors and friends can be called. Many rely on church volunteers to take them places. That is okay for a while, but then it becomes difficult, because people get tired of giving rides.

■ There would be strong support in the community -if done correctly. Doesn't know what that means, but community is socially and educationally backward.

■ Definitely a need for public transportation, but it must be unique in its design

■ Most interest is from elderly and low income. There should be a shuttle between the mall and downtown, which may attract choice riders.

■ There is extreme community interest. People realize the importance of transportation.

■ There is minimal community interest – only from elderly and disabled communities.

<p>Q3. What role do you feel public transportation could provide to the community?</p>
<ul style="list-style-type: none"> ■ The role of public transportation is safety and convenience (for the elderly population mostly safety). Safety is a role because bus transportation is safer than private vehicles. It helps the quality of life and decreases hardships for elderly and disadvantaged
<ul style="list-style-type: none"> ■ There is only one food stamp office in Highlands County, and it is located in Sebring. People coming from Lake Placid and Avon Park often have to get someone to bring them.
<ul style="list-style-type: none"> ■ It would provide a valued service to less fortunate and disabled individuals.
<ul style="list-style-type: none"> ■ Volunteerism in Highlands is very high, compared with other counties. Many church members provide transportation assistance to other members in their church. This is also true of residents within adult communities. Public transportation system should not replace this type of help, but should augment it or provide transportation to those who are not hooked up with a church/community/social service program.
<ul style="list-style-type: none"> ■ Its greatest role would be as a community social service. It would also provide socialization for the needy.
<ul style="list-style-type: none"> ■ If the public was educated about public transportation, there could be support. Would have to work to get buy-in. There are many people without a license or car, and it would help to give them independence. Many people walk to where they need to go, and it can be dangerous, such as elderly and babies in the heat of the summer. Consequently, there is a dangerous mix of pedestrians and automobile traffic.
<ul style="list-style-type: none"> ■ Concerned that it should show overwhelming support before implementation. Hopefully no one will “launch the balloon” with marginal support, because it won’t fly.

Q4. Is traffic congestion an issue in Highlands? If so, can public transportation play a role in alleviating this problem?

■ High traffic areas on HWY 27: most restaurants and shopping; lots of construction, busy road.

■ Compared to Tampa, no congestion; though seniors don't feel safe to drive

■ Maybe some congestion in Sebring.

■ Traffic congestion is seasonal- not so much the amount, but the quality of drivers. Many elderly drivers on Hwy. 27, along with a large amount of truck traffic.

■ Congestion is getting to be a problem during peak hours. The mix of trucks and automobiles has always been a problem. There needs to be a North/South alleviator route.

■ No congestion in Highlands County; it just feels uncomfortable because people are too much in a hurry or too slow.

■ There is not enough traffic to warrant a countywide public transportation system.

■ No congestion in Highlands.

■ Intersection of Highway 27 and Fairmont (in Sebring) supposedly one of the busiest in Florida.

■ Congestion is not a problem in Highlands County

Q5. Have you ever ridden on a bus? If so, under what circumstances? Describe your experience(s).

■ Has ridden a bus before.

■ As a child, regularly used public transportation to get around.

■ Has ridden on a bus before.

■ Yes, ridden on a bus many times- both city and interurban tour, and national buses, all types of lengths of trips.

■ Has ridden public transit on a regular basis, and it was a positive experience.

■ Has ridden a bus, but only in large cities that were unfamiliar. If the area is familiar, driving is preferred, because it is more convenient.

■ Has used public transit in large cities. Thinks it is fast and efficient in some places, such as New York and Washington D.C.

■ Has ridden public transportation – bus and rail – when out of town.

Q6. Who do you think would use public transportation?

■ Older age group would ride it the most; however, every age group of some style and variety would probably be riders, too. Retirement communities would enjoy regular service.

■ Communities needing bus access: Spring Lake (past the airport), Sun & Lakes, Martin Luther King Terrace (low income), Citrus Terrace (low income), migrants need to go from Sebring to Lake Placid or Avon Park for work. When they first arrive, it is difficult, but after about a month they move to wherever they are working. When residents walk to Highway 27, it is dangerous because there is often no sidewalks and narrow roadways. As a result, accessing Highway 27 is difficult.

■ Seniors, working poor for employment, and individuals with special needs.

■ Snowbirds and retirees, larger mobile home park residents and residential development communities such as Tanglewood, Thunderbird Hills, and Washington Heights. More affluent population will not use public transportation.

■ People would go to the mall in Sebring; however, customer base won't pay for gas and insurance of the long ride.

■ Elderly people who do not like to drive, especially at night and especially to the mall in Sebring; however, mobile home parks have buses that residents can call and reserve to take to doctors and for shopping. Some nursing homes have shuttles too.

■ Elderly would ride the most, followed by low-income individuals and/or those without automobiles.

■ Retirees and low-income individuals would ride it. Provides transportation for necessary services and social activities.

■ Users would be those without cars, elderly, low income, young, and college students.

Q7. What should public transportation in Highlands County look like?

- Fixed-route, point-to-point, with specified locations for pick-up and drop-off, operating five or six days a week.
- One transportation plan for the county will be difficult. Bus is attractive as long as usage is planned. Due to the large elderly population, public transportation in Highlands should be “user-friendly, easy to get on, attractive to ride, and comfortable.” In addition, Orlando has a pick-up mini bus/shuttle service that may be a model for Highlands.
- Door-to-door service would work for women and children.
- Highlands is a large and rambling rural area; homes are away from the main roads, which is problematic for servicing. The major problems are scattered medical clinics and hospitals. People have different clinics they need to go to. Door-to-door service provided by a number of people from a volunteer pool has decreased. Only a limited number that can go at a beckoned call. In the long run, it won’t work.
- Smaller van service units would be useful.
- Bus on Highway 27 won’t help without feeders due to homes being 5 to 8 miles from main road.
- A Transportation System throughout Highlands County won’t work because of the large service area; however, individual city systems are okay.
- Don’t know if public transportation would work because it is so spread out. Feasibility might be hard to handle because of all of the small subdivisions.
- Service such as a fixed route schedule would be a money losing situation; an on-call basis would probably be the most logical transportation system.

Q8. Is there a willingness in the community to fund a public transportation system?

■ There was a bus service 4 or 5 years ago that went from downtown Sebring to the mall. It went bankrupt.

■ Don't know about funding: County budget was flat lined for two consecutive years; funding is same this year as last year. Budget has been a struggle and many agencies have had to cut back.

■ Don't know whether they would fund or not, but would be a great asset to community. Not enough people used the bus last time to keep it going-probably need subsidies from county commissioners (fixed route service).

■ Do not see city paying for public transportation-a small geographic area (mall is not in city and the retirement mobile home parks on Hwy. 27 are not in city). "I am skeptical that it would be financially successful." It can work with government subsidies from the state and federal governments. After all, they seem to like to throw money at transportation like Amtrak and the airliners.

■ There are some who would support it, but doubt a referendum would carry it. With federal grant and matching, people would like it. If the service went to the mall and downtown, this might attract choice riders. Whoever runs it has to make a buck: have to pay for drivers, fuel, and systems administrator.

■ Not too many people would be interested. However, those in the mobile home parks (unincorporated areas) would be more interested.

■ Reported income in Highlands may be low, because there are many elderly who do not pay taxes and who have a fair amount of disposable income (savings). Community would support system in theory, but not in dollars. Maybe volunteer drivers could be used to supplement paying for such a system.

<ul style="list-style-type: none">■ There is a willingness among senior citizens to pay fair fees to access transportation. But the government will not support it. There is always a push to suppress taxes.
<ul style="list-style-type: none">■ Ten years ago there was no support for something similar. I am not sure about today. There may be more support because of the amount of growth. Sometimes kids must choose between going to college or owning a car, because they don't have money for both.
<ul style="list-style-type: none">■ Funding must be a sales pitch and will require a good deal of public education. Highlands County is very conservative and does not like government or taxes. It will be necessary to show a need and the benefits.
<ul style="list-style-type: none">■ Not by raising taxes. Better if supported by state and federal grants. Business community may be suspicious regarding their involvement in such an endeavor.
<ul style="list-style-type: none">■ Should not be subsidized on a municipal level, but only on county level. Funding would be ideal if paid for by users.

Q9. What are the major attractions or destinations in Highlands County?

■ Destinations include Lakeshore Mall, downtown Avon Park, downtown Sebring, medical centers & hospitals.

■ Bus station should be at mall. Other destinations include employment centers of Lesco and Linnpack (12 miles round trip for the workers from the mission, who usually walk, try to hop a ride, or ride a bike); \$12 to get a Taxi from the airport to the mission; \$6 to take taxi from mission to mall; 2 miles to Highlands Hospital and 8 miles to Florida Hospital.

■ Shopping mall, downtown Sebring, hospitals (for workers and volunteers who may not want to drive), courthouse/town hall area, not necessarily the airport because it is not a “commuter airport,” train station (a train arrives only a couple of times a day).

■ In this town, other than going to the grocery store, we don’t have places to go (Kmart, Walmart to save a buck if service was available). Other destinations include going to the mall and Highlands Regional Medical Center.

■ Destinations include hospitals and doctors’ offices, church on Sunday (although many churches have their own buses) and grocery shopping.

■ Development on Highway 27 is predominant. Although downtowns are attempting to maintain a sense of place, everyone must go to Highway 27 for shopping, medical, WalMart, etc.

■ Destinations are the Community College, public beaches and parks, government facilities, and courthouse.

■ Destinations include area churches.

■ Destinations are the medical center, mall, downtown, YMCA, and hospitals.

■ Generators are medical, shopping, college, and recreation.

Q10. Are there policies in place that should be changed to better support the provision of public transportation services?

■ Office may need to create new policies but don't know of anything off hand.

■ Changes include ordinances as to where they would be allowed to stop

■ Not aware of any policies that should be changed, but if there are, they could easily be restructured.

■ Regulatory permits for transportation providers is very stringent. May need to be loosened.

■ Not aware of policies that need to be changed.

■ Federal, state, and local governments need elevated respect for the importance of having public transportation. It would reduce the necessity for social services. If a premium was put on transportation, there would be less accidents, and improved physical and mental health.

■ Not aware of policies that should be changed.

Highlands County Public Transportation Feasibility Survey

M F
-25 26-45 46-60 60+
W H A O

1. Which type of transportation do you use the most?
 - A. Automobile
 - B. Bicycle
 - C. Taxi
 - D. Other _____
2. Have you ever used a taxi in Highlands County?
 - A. Yes
 - B. No
3. If public transportation were available would you use it?
 - A. Yes
 - B. No
4. If yes, for which purposes?
 - A. Work
 - B. Shopping
 - C. Medical Appointments
 - D. School
 - E. Recreation
 - F. Other _____
 - G. Would Not Use It
5. How important do you feel public transportation would be to Highlands County?
 - A. Very important
 - B. Important
 - C. Unimportant
 - D. Very unimportant
6. What do you feel is a reasonable distance to walk to access public transportation?
 - A. More than ½ mile
 - B. ¼ to ½ mile
 - C. 1-2 blocks
 - D. Less than 1 block
7. How often should buses run?
 - A. Every two hours
 - B. Every hour
 - C. Every thirty minutes
 - D. Every fifteen minutes
 - E. Other _____
8. What is the highest one-way fare you would be willing to pay? _____
9. Should tax dollars be used to pay for a public transportation service in Highlands County?
 - A. Yes
 - B. No
 - C. Depends
 - D. Don't know
10. Which of the following funding methods would you favor?
 - A. Sales tax
 - B. Gas tax
 - C. Special taxing district
 - D. Property tax
 - E. None of the above

APPENDIX B

Highlands County Inventory Report: Participants

Mr. Taxi

ADDRESS: Lake Placid, FL 33852

PHONE: (863) 699-6262

SERVICE AGREEMENTS/CONTRACTS:

GENERAL INFORMATION:

Type of Service: Taxi Cab Service

Service Area: All over U.S.

Service Users: General Public

SERVICE HOURS:

24 hrs./ day, 7 days a week

OPERATING STATISTICS:

Number of Vehicles Operated: 3

PERSONNEL:

Total Employees:

Average Passenger Trips:

=

FARE STRUCTURE:

\$2.00 flat, \$1.50/ mile

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT AVAILABLE

Highlands County Inventory Report: Participants

Classie Transportation

ADDRESS: 503 Lake Avenue
Avon Park, Florida 33825

PHONE: (863) 453-3600

SERVICE AGREEMENTS/CONTRACTS:

Contracted under state of Florida, TD Program

GENERAL INFORMATION:

Type of Service: Medicaid, Veterans

Service Area: Highlands, County, Okeechobee, Polk, Hardee, all of Florida

Service Users: Disabled

SERVICE HOURS:

24 hrs./ day, 7 days a week; office 7-5 pm.
5 days

OPERATING STATISTICS:

Number of Vehicles Operated: 35
Vans, Cars, Wheelchair Vans, Minibus

PERSONNEL:

Total Employees: 30

Average Passenger Trips: Daily
= 200

FARE STRUCTURE:

Medicaid, charity, \$1.25 - \$1.50

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT AVAILABLE

Highlands County Inventory Report: Participants

Lake Placid & Sunny Ridge Limo Service

ADDRESS: 198 N. Graham Road
Avon Park, FL 33825

PHONE: (863) 453-3340

SERVICE AGREEMENTS/CONTRACTS:

Other limousine companies

GENERAL INFORMATION:

Type of Service: Limousine Service, Cars
Airports
Service Area: All over the U.S.
Service Users: General Public

SERVICE HOURS:

24 hrs./day, 7 days a week

OPERATING STATISTICS:

Number of Vehicles Operated: 8

PERSONNEL:

Total Employees: 17

Average Passenger Trips:

=

FARE STRUCTURE:

by the mile

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT AVAILABLE

Highlands County Inventory Report: Participants

On Time Transportaion

ADDRESS: 237 Eagle Ave.
Sebring, Florida 33872

PHONE: (863) 382-4044

SERVICE AGREEMENTS/CONTRACTS:

Access, Black Diamond, The Zone Transportation, American Network, Medi-Trans

GENERAL INFORMATION:

Type of Service: Worker's Comp, Ambulatory

Service Area: Highlands County, Lake Placid, Wauchula, Avon Park

Service Users:

SERVICE HOURS:

7:00 a.m. - 8:00 p.m.

OPERATING STATISTICS:

Number of Vehicles Operated: 3

Sedans

PERSONNEL:

Total Employees: Independent Drivers

Average Passenger Trips:

=

FARE STRUCTURE:

Contracted with companies

Comments:

This company takes overflow from the places it is contracted with. Believe a bus system would be beneficial for elderly. There is no regulation on taxis, a poorer area that is monetarily taken advantage of.

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT AVAILABLE

Highlands County Inventory Report: Participants

Highlands Yellow Cab, Inc.

ADDRESS: 3717 Craig Ave.
Sebring, FL 33870

PHONE: (863)382-6119

SERVICE AGREEMENTS/CONTRACTS:

GENERAL INFORMATION:

Type of Service: Taxicab Service
Airport Service, Radio Dispatched
Service Area: Sebring and all Highlands County, some outside
Service Users: General Public

SERVICE HOURS:

Mon.- Sat- 7:00 a.m. -6:00 p.m. , Sun.- 8:00
a.m.-6:00 p.m.

OPERATING STATISTICS:

Number of Vehicles Operated: 4
4-Door Sedan

PERSONNEL:

Total Employees: Independent
Contractors-6, 1- Office
Average Passenger Trips: =

FARE STRUCTURE:

Zoned Rates

Comments:

aka: Sebring Yellow Cab Inc.

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT AVAILABLE

Highlands County Inventory Report: Participants

Lake Wales Cab Company

ADDRESS: 1024 S.R. 60 East
Lake Wales, FL 33853

PHONE: (863) 676-1089

SERVICE AGREEMENTS/CONTRACTS:

Stretcher/ wheelchair service to hospitals

GENERAL INFORMATION:

Type of Service: Taxi Cab

Service Area: General Public

Service Users:

SERVICE HOURS:

6:30 a.m. - 6:30 p.m.

OPERATING STATISTICS:

Number of Vehicles Operated: 6

3 cars, 3 vans

PERSONNEL:

Total Employees: 8

Average Passenger Trips: =

FARE STRUCTURE:

\$1.65 / mile, flat rate depending on destination

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT AVAILABLE

Highlands County Inventory Report: Participants

A-1 Taxi d/b/a RGK Transport

ADDRESS: 2371 U.S. Hwy. 27 South
Sebring, Florida 33870

PHONE: (863) 763-8316

SERVICE AGREEMENTS/CONTRACTS:

GENERAL INFORMATION:

Type of Service: Paratransit

Service Area: Hardee, Highlands, and Okeechobee

Service Users: disabled

SERVICE HOURS:

Office hours 8:00 a.m. - 5:00 p.m. .
Vehicles Mon-Sat until 6:00 p.m.

OPERATING STATISTICS:

Number of Vehicles Operated:

Mostly vans

PERSONNEL:

Total Employees:

Average Passenger Trips:

=

FARE STRUCTURE:

Medicaid, other county fundings

Comments:

***CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT AVAILABLE**

Highlands County Inventory Report: Participants

Hayes Medical Transport

ADDRESS: 3884 N.E. Hwy 70
Arcadia, Florida 34266

PHONE: (863) 993-3140

SERVICE AGREEMENTS/CONTRACTS:

GENERAL INFORMATION:

Type of Service: Non-emergency transport

Service Area: Statewide

Service Users:

SERVICE HOURS:

24 hrs./day, 7 days/week

OPERATING STATISTICS:

Number of Vehicles Operated: 38

vans, minivans, stretcher vans, cars

PERSONNEL:

Total Employees: 38

Average Passenger Trips: =

FARE STRUCTURE:

Medicaid or Social Services

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT AVAILABLE

Highlands County Inventory Report: Non-Participants

Annett Bus Lines

(863) 655-5547

**Kitty's Cab
Taxi Cab Service**
(863) 465-4429
111 Bunche St., Lake Placid

No answer, Voice mail did not identify the resident. May be out of service.

Medi-Vac Transportation

Unable to contact or find a number for the service.

Steve Wells Shuttle

(863) 471-6445
Sebring

A cell phone #. No answer. Voice mail did not identify the owner. May be out of service.

**Taxi Limousine
Taxi Cab Service**
(863) 465-5240
640 River Dr. Sebring

Still in service, owner unavailable.

APPENDIX C

Commuter Vanpooling

A vanpool is a group of 7-15 people who commute together on a regular basis in a van. One person volunteers to be the driver/coordinator of the van. The riders share a fee that covers the vanpool fare. Riders usually meet at a designated pick-up location, like a shopping center, parking lot, or park-and-ride location. Some vans have more than one pick-up point; some don't. It's the same with drop-off points at the destination. It all depends on the nature and needs of the vanpool group. Of course, the fewer stops, the faster you get to work and back again.

If you travel about 15 miles or more one-way to work and have a schedule that's relatively consistent, you're a good prospect.

Costs include insurance, all scheduled and unscheduled maintenance, loaner vehicles, and, best of all, there's no long-term commitment.

Vanpools and Transit Agencies

Vanpools are a cost-effective way to provide new service or augment existing service in many public transit systems. VPSI helps transit agencies leverage their federal dollars through vanpooling. An agreement with a private company, such as VPSI, which owns and/or operates equipment and provides services, may permit grant recipients to qualify for program funds. By utilizing these programs, transit properties are able to increase service in low-demand regions. Much of the expense for the vanpool program can be covered through the use of capital funds, rather than dwindling operating funds. Increasing fleet growth generates additional revenue and passenger miles, which become part of the transit properties overall operating statistics included in their annual NTD report. The increased revenue miles can significantly increase the transit property's federal apportionment for future funding cycles.

Two Florida transit agencies have used VPSI successfully for many years. They are Space Coast Area Transit (SCAT) in Brevard County, and Citrus Connection in Polk County.

Commuter Carpooling

A carpool is the same as a vanpool (above), but it consists of a group of 2-6 people.

Commuter Choice

The Commuter Choice benefit enables employers to offer a tax-free fringe benefit to employees who vanpool or use transit to get to work. Under federal law, the first \$100 provided to an employee each month for vanpooling is not considered taxable income. Commuter Choice allows employers to exempt the cost of commuting from certain taxes, including federal income tax and FICA/Medicare tax. The employer also gets the tax savings on the employer share of FICA and Medicare. Either the employee or the employer can contribute towards the cost of vanpooling up to the \$100 limit.

APPENDIX D

Company Name	Service Area Population	Service Area Size (square miles)	Service Area Density	Passenger Trips	Passenger Trips per Capita	Revenue Miles	Passenger Trips per Revenue Mile	Revenue Hours	Passenger Trips per Revenue Hour	Total Operating Expense	Vehicles Operated in Maximum Service
Indian River, FL	109,000	543	201	153,768	1.41	226,524	0.68	19,608	7.84	\$548,198	8
Port Arthur, TX	56,724	39	1,454	160,776	2.83	232,344	0.69	14,616	11.00	\$841,643	5
San Angelo, TX	90,467	49	1,846	166,612	1.84	262,692	0.63	17,520	9.51	\$689,015	5
Terrebonne Parish, LA	56,613	36	1,572	220,750	3.90	289,250	0.76	16,750	13.18	\$701,668	6
Ocala, FL	59,214	47	1,260	154,719	2.61	317,548	0.49	19,404	7.97	\$706,303	5
<i>Mean</i>	<i>78,201</i>	<i>167</i>	<i>1,267</i>	<i>175,477</i>	<i>2.50</i>	<i>252,703</i>	<i>0.69</i>	<i>17,124</i>	<i>10.38</i>	<i>\$697,365</i>	<i>6</i>

CENTER for
URBAN
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RESEARCH

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