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BAY COUNTY

TRANSIT DEVELOPMENT PLAN 2003 – 2007

F·I·N·A·L R·E·P·O·R·T

SEPTEMBER 2002

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PREFACE

The Center for Urban Transportation Research (CUTR) has produced a five-year Transit Development Plan (TDP) for the Panama City Urbanized Area Metropolitan Planning Organization (MPO). Each transit property in Florida that receives State Transit Block Grant funding is required to prepare a TDP. This requirement is intended to ensure that the provision of public transportation service is consistent with the travel needs and mobility goals of the community. In establishing a strategic context for transit planning, the TDP can serve as a guide in the future development of the transit system.

Five chapters were developed for this TDP. Chapter One explores the demographic and economic conditions within Bay County and also includes information gathered from an on-board customer survey, an MPO Citizens Advisory Committee workshop, and interviews with several key local officials and community leaders. Chapter Two provides a performance review of Bay Town Trolley (BTT) fixed-route service, including a trend analysis and a peer comparison. The second chapter also contains a trend analysis of Bay Coordinated Transportation's (BCT) paratransit service. Chapter Three outlines goals and initiatives for public transportation in Bay County and demonstrates their connection with goals specified in other planning documents. Chapter Four presents ridership and demand projections for public transportation service (fixed-route and paratransit) in Bay County for the five-year period, and an assessment of mobility needs and opportunities for the system. Finally, Chapter Five proposes recommended strategic initiatives for public transportation in Bay County and provides a five-year capital and operating plan.

CHAPTER ONE:

ASSESSMENT OF COMMUNITY AND CUSTOMER TRANSIT NEEDS

INTRODUCTION

With an average water temperature of 72 degrees and average air temperature of approximately 77 degrees, Panama City and Bay County, Florida have become a year-round vacation destination. The 27 miles of Bay County beaches, especially Panama City Beach, are considered among the best in the country. Recently, the Travel Channel named Panama City Beach as the fourth-best in America and, in 2000, the Surfrider Foundation, an international non-profit organization dedicated to the protection of the world's oceans and beaches, ranked Panama City Beach the third-best urban beach in the nation. In addition, three state parks are ranked among the nation's top 20 beaches.

With more than 20,000 hotel, motel and condominium units, as well as campgrounds and RV parks, the tourism industry is well developed. However, Bay County also contains diverse industries that create an economy based not only on tourism, but on government (military), retail and wholesale trade, service and manufacturing. Other smaller industries such as commercial fishing and agriculture also help comprise the economic base and employment opportunities for the county.

Tyndall Air Force base creates a majority of the employment opportunities in the area. Located on a 29,000 acre reservation in southeastern Bay County, the base houses the 325th Fighter Wing, Headquarters 1st Air Force, Southeast Air Defense Sector, 475th Weapons Evaluation Group, and United States Air Force Civil Engineering Support Agency. Approximately 6,666 military and civilian personnel are employed at Tyndall. The base also serves approximately 8,500 military retirees in Bay County.

The Navy's Coastal Systems Station (CSS), located on 648 acres along St. Andrew Bay, is a major research and development facility in support of naval operations that take place primarily in coastal regions, such as amphibious missions, swimmer operations, diving and salvage, and mine countermeasures. The Naval Diving and Salvage Training Center is headquartered at CSS. Today, this multimillion-dollar base employs 2,449 civilian and military personnel.

Other major employers in the county are planning significant expansions in the near future. Trane, which opened a facility in Lynn Haven in 1995 for the production of air handling

components, is planning on adding 500 new jobs. Nextel, the telecommunications company, will add 600 new jobs. Allied Signal Braking System is also planning on adding new employees. In addition, Pier Park, which broke ground in March 2002, is a multi-phase project with a master plan that includes an 80-acre city park, with 25 acres of beach frontage, 50 acres of retail outlet shopping and restaurants, and 70 acres of commercial retail parcels. With all of the growth anticipated in the coming years, there is a need to plan for the continued development, improvement, and expansion of a public transportation system. This is especially true since the county has only one primary corridor that connects Panama City with Interstate 10. Tourist and other industries will not continue to grow if transportation systems become further constrained by increased traffic congestion.

To accomplish the planning of future transportation services, it is necessary to understand the social, political, and economic environments within which the transit system operates. Chapter One examines the demographic and economic conditions of Bay County and its population, utilizing 1990 U.S. Census Bureau data, 2000 Census data, and other recent data available from other sources. In addition, information was collected from interviews with key local elected officials and other community leaders, as well as from an on-board passenger survey of the Bay Town Trolley. Also, information has been provided by the West Florida Regional Planning Council, the Panama City Urbanized Area Metropolitan Planning Organization (MPO), and other municipalities in Bay County.

History of Public Transportation in Bay County

Bay County has a long history of public transportation including fixed-route transit and paratransit. Fixed-route transit was operated by the City of Panama City within its city limits from after World War II until May 1982. The service was discontinued partially due to a continuing decline in public participation and a trend of decreasing ridership. In the final full fiscal year (1980/1981) the system provided 94,008 passenger trips. The majority of the regular riders were domestic help, as well as senior citizens and lower income residents.

The Bay Town Trolley, a new fixed-route system in the urbanized area of Bay County, began operations in December 1995. Fixed-route trolley service is operated by the Bay County Council on Aging. The MPO initially approved a three-year trial period beginning in December 1995 and service has continued to the present. Operation of the Trolley service continues to expand today, as the system is becoming more established in Bay County.

Paratransit service has been coordinated by the Bay County Council on Aging, Inc., since 1983 when it was selected as the Community Transportation Coordinator (CTC) for Bay County

In 1998, the MPO contracted with the Center for Urban Transportation Research (CUTR) to prepare a five-year transit development plan that included several recommendations for both the Bay Town Trolley and Bay Coordinated Transportation. Since that time there has been progress made on the implementation of that TDP, as discussed below. While progress has been achieved in addressing several specific recommendations, others have not been addressed, primarily due to time and budgetary constraints.

Progress Toward Meeting Goals and Initiatives from the Last Major TDP Update (1999-2004)

The last major TDP update in 1998 presented a series of six broad goals and accompanying initiatives for the system to work toward over the next five years. Three years into that five-year period, it is time for another major update and to revisit those goals and initiatives. The six goals were as follows:

- *Goal 1:* Strengthen the Coordinated System
- *Goal 2:* Make fixed-route transit service viable and usable
- *Goal 3:* Communicate the role of transit in Bay County
- *Goal 4:* Focus on customer service and achieve greater customer satisfaction
- *Goal 5:* Add value to the community beyond the core mission
- *Goal 6:* Change the organizational culture of the Bay Town Trolley

It is clear that the system has made significant progress in many areas, while time and funding constraints have resulted in less progress in other areas. Some of these accomplishments include:

- *Goal 2: Make the fixed-route transit service viable and useful*
 - *Initiative A: Redesign the route network of the Bay Town Trolley.* The system has been somewhat constrained by equipment resources in this process, but Route 1 has been implemented, the West route has been revised, and the east side service area changes are scheduled to be implemented in Summer 2002 (Routes 2 and 3 from the 1998 TDP update).

- *Initiative B: Acquire additional capital resources for the provision of service.* The system has obtained two additional cutaways, and four new trolleys. In addition, three of the older trolleys have been retired. Bay Town Trolley is operating four vehicles in 2002, and will be operating five vehicles by the end of 2002.
- *Initiative C: Establish market-driven approaches to increase ridership.* With a market consisting primarily of high school students, college students, seniors, and tourists, Bay Town Trolley has worked on increasing ridership. In 1998, ridership was 50,794 and in 2001 ridership increased to 75,737. By the end of this year, the system will provide approximately 90,000 passenger trips.
- *Initiative D: Refine the product approach to transit services.* This has been ongoing with the trolley theme of the system.
- *Initiative E: Focus on partnerships to fund transit service improvements.* Bay Town Trolley has been working with hotels on the beach regarding beach services, the Airman's Advisory Council, Bay High School, and the City of Panama City. Accomplishments include the joint use agreement with the School Board and inclusion in the Community College Student Orientation.
- *Goal 3: Communicate the Role of Transit in Bay County*
 - *Initiative B: Establish a Community Relations and Outreach Program.* Bay Town Trolley staff has spent significant time in the community and has received good press coverage over the past three years. This has been recognized, as evidenced by the community leader interview results summarized in this document. There have been numerous speaking engagements, and special events such as Winter Resident Appreciation Day.
 - *Initiative C: Establish a Transit Alliance Program with community groups.* Bay Town Trolley staff has worked closely with Bay High School over the past few years. In addition, the MPO has created a portable display that staff can take to various events.
- *Goal 4: Focus on customer service and achieve greater customer satisfaction*
 - *Initiative A: Create individual schedules and a new system map for the Bay Town Trolley.* The MPO intends to use the results of a recent CUTR study that examined transit information materials from every transit system in Florida and

field-tested their effectiveness with the public. The study made specific recommendations on how to make transit information materials more understandable based on design components that contributed to participant success.

- *Initiative B: Conduct focus groups.* A marketing firm hired by the Bay Town Trolley is involved in conducting focus groups.
- It should also be noted that the Bay Town Trolley staff's commitment to customer satisfaction has not gone unnoticed in the community in recent times. The results of the community leader interviews, presented later in this chapter, show that various elected officials and other leaders are pleased with the responsiveness and attentiveness exhibited by the Trolley staff.

POPULATION CHARACTERISTICS

Bay County is a coastal community located in the Panhandle of Florida, bound by Washington and Jackson Counties to the North, Calhoun and Gulf Counties to the East, Walton County to the West, and the Gulf of Mexico to the South. The county encompasses approximately 763.7 square miles of land area. In the 1990 Census, the county's population was estimated at 126,994. According to data from the U.S. Census Bureau, the 2000 population for Bay County is 148,217, which represents an increase of 16.7 percent from 1990. The most recent data available show that, for 2001, Bay County's population is approximately 150,287, an increase of 1.4 percent.

Table I-1 lists the 1990 and 2000 population and the percent changes for the communities of Bay County. The table shows that, while Bay County grew nearly 17 percent between 1990 and 2000, some of its communities grew at a significantly higher rate, while others grew much more slowly. While Callaway's population increased at about the same rate as the county, Cedar Grove's population more than tripled during the '90s from 1,479 in 1990 to 5,367 in 2000. The population in Panama City Beach nearly doubled from 4,051 in 1990 to 7,671 in 2000, an increase of more than 89 percent. The City of Lynn Haven grew more than one-third from 9,298 in 1990 to 12,451 in 2000. Panama City grew approximately six percent during this time (34,396 in 1990; 36,714 in 2000).

Table I-1
Population--Bay County Communities

Area	1990	2000	Change
Bay County	126,994	148,217	16.7%
Callaway	12,253	14,233	16.2%
Cedar Grove	1,479	5,367	262.9%
Lynn Haven	9,298	12,451	33.9%
Mexico Beach	992	1,017	2.5%
Panama City	34,396	36,417	5.9%
Panama City Beach	4,051	7,671	89.4%
Parker	4,598	4,623	0.5%
Springfield	8,719	8,810	1.0%
Unincorporated	51,208	57,628	12.5%

Source: 2001 Florida Statistical Abstract, BEBR

This section summarizes demographic and economic data for Bay County. Specifically, characteristics related to potential transit use are presented. Data used for this section were

obtained from the 2000 U.S. Census of Population and Housing databases and, where applicable, from estimates provided by the Bureau of Economic and Business Research (BEBR) at the University of Florida. All graphic depictions in this section present data at the census tract level in order to provide greater accuracy in examining various demographic and economic characteristics. Appendix A includes tables that denote, in detail, the demographic and economic data examined herein for all census tracts in Bay County.

Population, Population Densities, and Population Projections

The 2000 population of Bay County is 148,217 persons. According to the Census population estimates, the county's population has increased nearly 17 percent from 126,994 persons in 1990. This represents a slower rate of growth than that experienced during the 1980s, when the population of Bay County increased nearly 30 percent from 97,940 persons in 1980 to 126,994 persons in 1990. While Florida's total population grew by one-third between 1980 and 1990 (9,746,961 in 1980; 12,938,071 in 1990), the state's growth rate also slowed somewhat during the '90s increasing approximately 24 percent to 15,982,378 in 2000. Table I-2 summarizes the population changes between 1990 and 2000 for Bay County and the state of Florida as a whole.

Population densities were also examined, since higher densities are generally more conducive to transit use. Table I-2 shows that Bay County's 2000 population density of approximately 194 persons per square mile is somewhat less than the state's population density of 257 persons per square mile. However, it should be noted that Bay County's population density has increased more than eight percent since 1996 data were reported in the previous major TDP update (179.29 in 1996; 194.08 in 2000). In addition, according to 2000 Census data, the population density of Bay County is significantly greater than that of its neighboring counties of Walton (38 persons per square mile), Washington (36 persons per square mile), Calhoun (23 persons per square mile), and Gulf (24 persons per square mile). Figure I-1, on page 9, illustrates the population density of Bay County according to 2000 Census data, with the dark blue coloring representing the most dense census tracts that have between 1,400 and 2,600 persons per square mile. The lighter blue/teal color represents areas with between 910 and 1,300 persons per square mile, and the light green color denotes tracts with between 300 and 900 persons per square mile. All other areas have population densities below 300 persons per square mile.

Figure I-1
Bay County
Population Density
2000 Census

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Table I-2
General Populations, Growth Rates, and Densities

Area	1990 Population	2000 Population	Population Growth (1990 - 2000)	2000 Population Density (persons per square mile)
Bay County	126,994	148,217	16.7%	194.08
Florida	12,938,071	15,982,378	23.5%	296.31

Source: 2000 U.S. Census Bureau, 2001 Florida Statistical Abstract, BEBR

Table I-3 examines population projections provided by BEBR for Bay County and Florida as a whole. BEBR provides low, medium, and high population estimates for its projections over time. The projections shown in Table I-3 represent the "medium" estimates. The table shows that Florida is expected to grow at a higher rate than Bay County over the next 30 years. Between 2000 and 2010, Bay County is projected to grow nearly 13 percent to a population of 167,000. During this time, Florida is projected to grow approximately 18 percent. Between 2000 and 2020, Bay County may experience a 38 percent increase in population, to 204,600. Also, by 2020, Florida may grow nearly 53 percent to a total population of 24,420,700 persons.

Table I-3
Population Projections for Bay County and Florida

Area	2000 Population	Population Projections					% Change	
		2005	2010	2015	2020	2030	2000-2010	2000-2020
Bay County	148,217	157,600	167,000	176,600	186,400	204,600	12.7%	38.0%
Florida	15,982,378	17,376,900	18,776,400	20,211,100	21,683,300	24,420,700	17.5%	52.8%

Source: 2001 Florida Statistical Abstract, BEBR

Regional Population

The Emerald Coast of Florida extends from Escambia County (Pensacola) to Bay County (Panama City) to the east, with Santa Rosa, Okaloosa and Walton Counties in between. As part of this study, an examination of regional population trends is presented in terms of population and population density growth between 1990 and 2000. In addition, changes in city populations are presented for the region for the same period.

Table I-4, on the next page, shows the population growth for the Emerald Coast region. Overall, the growth rate for the five-county region was 20 percent and very close to the 23.5

percent growth for Florida as a whole. Between 1990 and 2000, the region grew by 128,900 persons from 642,600 to 771,500, with Santa Rosa and Walton Counties experiencing the greatest percentage growth.

**Table I-4
Regional Population Growth 1990-2000
Florida's Emerald Coast**

Area	1990 Population	2000 Population	Population Growth (1990-2000)	% Change (1990-2000)
Escambia County	262,798	294,410	31,612	12.0%
Santa Rosa County	81,608	117,743	36,135	44.3%
Okaloosa County	143,776	170,498	26,722	18.6%
Walton County	27,760	40,601	12,841	46.3%
Bay County	126,694	148,217	21,523	17.0%
REGION	642,636	771,469	128,833	20.0%
Florida	12,937,926	15,982,378	3,044,452	23.5%

Source: U.S. Census Bureau

Figure I-2, on the following page, depicts regional population changes between 1990 and 2000. It should be noted that census tracts are split by the Census Bureau when certain population thresholds have been met. Therefore, it appears as though the areas of central and southern Escambia and Santa Rosa Counties lost population when, in fact, the 1990 census tracts were split into several tracts for the 2000 Census. Overall, this map is useful in displaying the growth in Okaloosa, Walton, and Bay Counties. However, Figure I-3 (on page 15) displays a comparison of population densities between 1990 and 2000, and significant change can be found in the area between the Pensacola urbanized area and Milton, the Fort Walton Beach/Destin area, and in the area east of Panama City in southern Bay County.

Figure I-2
Regional Population 1990 - 2000
Emerald Coast Counties

1990

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Population

2000

Legend

Population

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Figure I-3
Regional Population Density 1990 - 2000
Emerald Coast Counties

1990

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Persons Per Square Mile

2000

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Population Density
Persons Per Square Mile

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Regional City Population

The U.S. Census Bureau recognizes incorporated cities and towns and, in some cases, urbanized areas that are identifiable by name but not within an incorporated place. These areas are called Census Designated Places (CDPs). In the region, there are 25 cities and towns and 22 CDPs.

The City of Pensacola's population declined three percent between 1990 and 2000; however, the contiguous urban area increased nearly six percent from 146,900 to 155,100 during this time. In Santa Rosa County, Milton declined approximately two percent, while Pace increased nearly 18 percent. Gulf Breeze experienced a modest 2.4 percent population growth between 1990 and 2000.

Ft. Walton Beach, in Okaloosa County, declined nearly seven percent while Destin, Niceville, Valparaiso, and Crestview all experienced significant population increases during the 1990s. In Walton County, between 1990 and 2000, Defuniak Springs experienced a slight decline while Miramar Beach increased; although, the actual number of persons remains low (less than 3,000 in both cases).

In Bay County, Panama City experienced a modest increase in population between 1990 and 2000 while the population of Panama City Beach nearly doubled during this time. As mentioned previously, Lynn Haven and Callaway also experienced significant population growth during this period of time.

Table I-5, on the following page, displays the population growth for major cities and CDPs over this time period while Figure I-4 (on page 19) depicts changes in population between 1990 and 2000.

**Table I-5
City and Census Designated Place (CDP) Population Changes
1990-2000**

County	City/CDP	1990 Population	2000 Population	Percent Change
Escambia	Pensacola	58,165	56,255	-3.3%
	Contiguous Pensacola Urbanized Area (includes West Pensacola, Gonzalez, Ensley, Ferry Pass, Brent, Belleview, Myrtle Grove and Warrington)	146,891	155,108	+5.6%
Santa Rosa	Milton	7,216	7,045	-2.3%
	Pace	6,277	7,393	+17.8%
	Gulf Breeze	5,530	5,665	+2.4%
Okaloosa	Ft. Walton Beach	21,471	19,973	-6.9%
	Mary Esther	4,139	4,055	-2.0%
	Destin	8,080	11,119	+37.6%
	Niceville	10,507	11,684	+11.2%
	Valparaiso	4,672	6,408	+37.1%
	Crestview	9,886	14,766	+49.4%
Walton	Defuniak Springs	5,120	5,089	-0.6%
	Freeport	843	1,190	+41.1%
	Miramar Beach	1,644	2,435	+48.1%
Bay	Panama City	34,378	36,417	+5.9%
	Panama City Beach	4,051	7,671	+89.3%
	Lynn Haven	9,298	12,451	+33.9%
	Springfield	8,715	8,810	+1.0%
	Callaway	12,253	14,233	+16.1%
	Parker	4,598	4,623	+0.5%
	Tyndall Air Force Base	4,318	2,757	-36.1%

Figure I-4
Regional City Population 1990-2000

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Bay County Demographics

To investigate the transportation needs of a given area, certain distinct segments of the population should be analyzed. One step in the development of the TDP requires the examination of segments of the study area population that consist of persons who use transit service as a primary source for their mobility needs. Typical characteristics that are analyzed include age, income, household density, vehicle availability, and journey-to-work characteristics. At this time, not all of these data are available at the census tract level. Specifically, vehicle availability and journey-to-work data for 2000 are not available as of this TDP and so are not included in this section.

Age

Table I-6 shows the percentage distributions for all age groups in Bay County. As mentioned previously, the age groups of primary interest in the TDP are those that are considered to be potential transit users. Specifically, these segments are the age groups that consist of the county's youth and elderly populations.

Bay County's population is spread relatively evenly among the age cohorts shown in Table I-6. The largest population group in the county consists of persons under the age of 18. Persons older than 65 years comprise more than 13 percent of the county's population, according to 2000 Census data.

According to 2000 Census data, the median age in Bay County is 37.4. This value reflects a nearly 13 percent increase from the 1990 Census, when the median age was calculated to be 33.2 years. The aging population within Bay County should be a consideration in the strategic planning and continuing development of public transportation in the region.

Table I-6
Population Age Distribution (2000)

Area	Age Group (in years)					
	0-17	18-29	30-39	40-49	50-64	65+
Bay County	24.1%	15.2%	15.3%	15.5%	16.5%	13.4%

Source: 2000 U.S. Census Data

The age groups of under 18 and over 65 are of particular interest in this TDP. Those under the age of 18 are either too young to drive or do not have access to an automobile. Similarly, the elderly often do not have adequate access to automobiles and, due to limitations resulting from their age (poorer eyesight and reflexes), sometimes are no longer able to drive. Therefore, persons in these two age groups usually rely more on public transportation for their mobility. Figure I-5, on page 23, illustrates the proportion of people under the age of 18 in the county. The darkest blue color represents those areas with the largest concentrations of persons under the age of 18. Figure I-6 (on page 25) similarly displays the proportion of the population that is over the age of 65 in Bay County, with the darkest blue areas indicating the highest levels of persons in this age group.

Figure I-5
Bay County
Population Under Age 18
2000 Census

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**Figure I-6
Bay County
Population Over Age 65
2000 Census**

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Income

Like age, income is an important factor in determining the usage of a public transportation system. In general, with little or no access to an automobile (vehicle availability is discussed later in this section), low-income persons rely more on a public transit system for mobility and access to employment, shopping, and entertainment.

Typically, households with annual incomes below \$15,000 are considered when analyzing potential population segments for transit use. The Bay County Chamber of Commerce reports a 1999 per-capita income of \$22,719 for Bay County. This compares to a 1999 per-capita income of \$27,781 for Florida as a whole. While detailed income data are not yet available from the 2000 Census, the Census Bureau has produced 1997 estimates of median household income and persons under the age of 18 living in poverty. Table I-7 shows that the median household income for Bay County in 1997 was \$32,047, compared to \$32,877 for the state of Florida. In addition, the table indicates that 22.4 percent of Bay County's 1997 estimated population of persons under age 18 was living in poverty, compared to 21.8 percent of Florida's total population under age 18. These data show that Bay County is slightly poorer than the state of Florida as a whole.

Table I-7
Median Income and Persons Under Age 18 in Poverty, 1997 Estimates

Area	Median Income	Persons Under Age 18 in Poverty	Percentage of Persons Under Age 18 in Poverty
Bay County	\$32,047	8,971	22.4%
Florida	\$32,877	775,812	21.8%

Source: U.S. Census Bureau, 2001 Florida Statistical Abstract, BEBR

Household Density

According to 2000 Census data, Bay County has 59,597 households. Figure I-7 illustrates the household density in the county as measured by the number of households per square mile. On the map in the figure, the darkest blue areas depict the largest concentrations of households, with between 580 and 1,000 households per square mile.

Figure I-7
Bay County
Households Per Square Mile
2000 Census

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Labor Force Characteristics

Information related to labor force participation for Bay County and Florida is presented in Table I-8. The total labor force in 2000 for Bay County is 64,938 persons. Of this labor force, 94.2 percent, or 61,153 are employed, as shown in Table I-8. The table also indicates that Bay County's unemployment rate is somewhat higher than that for the state of Florida as a whole, and that the unemployment rate in Panama City is higher than the rate for the entire county.

Table I-9 summarizes more recent data on Bay County's labor force, as compiled by the Bay County Chamber of Commerce. As of 2001, the table shows that nearly 44 percent of Bay County's population is in the labor force. In addition, the 2001 unemployment rate of 5.5 percent is less than that estimated for 2000 (5.8 percent). Some of the larger employers in Bay County include Tyndall Air Force Base, Bay County School Board, the Coastal Systems Station, and Bay Medical Center.

Table I-8
Labor Force Characteristics (2000)

Area	Percent of Labor Force Employed	Unemployment Rate
Panama City	93.0%	7.0%
Bay County	94.2%	5.8%
Florida	96.4%	3.6%

Source: 2000 U.S. Census Bureau, 2001 Florida Statistical Abstract, BEBR

Table I-9
Bay County Labor Force Characteristics (2001)

Area	Labor Force	Labor Force as Percent of County Population	Unemployment Rate
Bay County	65,586	43.6	5.5%

Source: Bay County Chamber of Commerce

INTERVIEWS WITH COMMUNITY LEADERS

One of the most important elements in the preparation of a TDP is the identification of perceptions, opinions and ideas of local officials and the general public. Fundamentally, a TDP is a strategic plan that establishes a course for future transit services that reflects the community's will and goals for public transportation. Also, the way in which public transit is viewed in the community can significantly influence the priority that is given to transit and other related transportation issues.

In Bay County, the Metropolitan Planning Organization (MPO) consists of elected officials of all jurisdictions in the county. In selecting those to be interviewed, mayors, and other elected officials were chosen as well as city officials, other officials from Bay County, the local business community, and Gulf Coast Community College. A total of 17 interviews were conducted with a total of 21 individuals. Most interviews were conducted during April 2002; however, a few of the interviews were conducted later in the TDP process.

While a standard discussion guide formed the basis of the individual interviews (a list of discussion topics used for the interviews is included in Appendix B), each interview evolved in a unique pattern, allowing the subject to offer his or her honest discourse on public transit in the county and the extent to which it affects (or does not affect) those persons or organizations he or she represents. The results of these interviews were similar in many ways to the results of the interviews conducted for the last major TDP update in 1998. In 1998, while there were positive discussions about the Trolley service and the hope that it would continue to grow, there were negative perceptions stemming from the low level of service provided and the low ridership. At that time, some noted that, while many in the community seemed to be in favor of the *idea* of public transit, very few, if any, were willing to pay for it using local dollars. These themes have also been detected in the interviews conducted for this TDP update.

The diversity of backgrounds found among the interviewees resulted in a wide range of opinions and perspectives regarding the role of public transit in Bay County. However, those interviewed can essentially be divided into two categories: those who are ambivalent about the idea of public transportation and believe that it will never quite work in Bay County, and those who see the slow, yet steady growth of the current Trolley system as a sign of the future and believe the Trolley can truly become part of the identity of Bay County. None of the interviewees in either category are particularly optimistic about the securement of any local funding for the system (which is vital to its future), although some in the latter category expressed ideas regarding the funding issue.

The interviews for this TDP were loosely formatted into three sections, summarized below:

- *Current status of public transportation in Bay County*, which focused on transit's role in such community issues as economic development, traffic congestion, land use, and quality of life. Discussions centered on the awareness of the Trolley system and its usage, as well as existing conditions regarding traffic congestion and public parking.
- *Goals for public transportation in Bay County*, whereby the interviewees were asked to articulate how they believe Bay County will be evolving over the coming years and how public transportation, in any form, fits with that vision. Those interviewed were asked to place transit into the overall scheme of priorities and indicate conditions for future support.
- *Translation of current status to future vision*, which allowed those interviewed to contemplate any improvements and policies that would assist the current transit system in achieving the goals of the community. While one of the major purposes of the TDP is to identify unfunded transit needs, given that Bay Town Trolley will need to prioritize any improvements, the interviewees were also asked to choose one aspect of the existing system that they would like to see improved.

Current Status of Public Transportation in Bay County

It is certainly true that one's previous exposure to and experience with public transit in other areas flavor one's perceptions and expectations of transit in Bay County. Several of those interviewed indicated how long they have lived in the county, and what experiences they had with public transportation in places such as South Carolina, Texas, Georgia (Columbus, Atlanta), San Francisco, Washington D.C., and other areas of Florida, including St. Augustine (trolleys), Orlando, and Miami. In addition, some who have lived in the county for a longer period of time remember the previous bus system that existed in Panama City until 1982. As such, perceptions of the Bay Town Trolley range from "an idea whose time has not come" to a "Godsend" that fills an important void for its users and has a distinct value to the community, despite having lower ridership than some would like to see.

A perception clearly exists that the ridership is low and the Trolley is underutilized. Some view this as an indication that the service has a value for only a very small portion of the population and that no additional benefits are accrued by the general public; therefore, these individuals

have reservations about the expenditure of public money from any level of government on such an endeavor. Questions arose regarding whether the government or individual families are responsible for the provision of transportation and whether there might be less expensive means, other than fixed-route services, to provide mobility in the county for those who need it. Taking this notion of the value of the existing service a step further, some believe that, although a small part of the population seems to be benefiting from the transit service, it should be regarded as a necessary public service and provided without question. However, when asked what funds should be used to provide service, answers were quite varied, as discussed in the next section. The consensus among this group of interviewees seemed to be that, since no business would provide the service because it is not a money-maker, the government must do so, whether they particularly like the idea or not.

A different group of interviewees held this same perception that the Trolley is underutilized. However, these individuals tended to see a value to the community as a whole, not just to those who actually ride the service. The relationship that exists between low funding levels, low service levels, and low ridership is recognized by many interviewees. They see the steady increase in ridership each year, and see more riders on the Trolleys. They see the Trolley taking people to work and to school, as well as being used for other trips, and they acknowledge that this provision of transportation can contribute to the economic development of the county in the future if the system is allowed continued growth and maturity. It was this group of interviewees who, though small in number, were most hopeful that a local source of funding for the Trolley could be secured.

Perceptions of the level of awareness about the Trolley varied among those interviewed. Most see a system that has limited routes and scheduling, with low, but increasing, current ridership. Some believe that they are more aware than the general public about the service because of their responsibilities in government or their jobs. Overall, the perception exists that the general public sees the Trolleys, but does not know much about them unless they need to use the service. Many still see a stigma attached to the very notion of public transportation that could be keeping potential riders and supporters at a distance. Others are seeing nice, clean, trolley vehicles that are an "added touch" in the beach areas and are superior to the concept of a regular, full-size transit bus.

Some believe that the Trolley is used primarily for work trips, while others perceive that it is not used for work trips at all due to the limited service span and lack of weekend service. It is true that more people with lower-wage, service-oriented jobs could use the service if later evening and weekend service were available. Others would consider it for the work trip, as well, as

indicated by one city employee who lives near downtown and would take it if it operated a little later in the evening. Because of the limited operating hours and days, many employers provide their own vehicles, usually vans, to transport their employees. Many, but not all, of these employers are hotels, restaurants, and even fast-food establishments located on the beach.

Other users of the Trolley, according to those interviewed, are senior citizens who are unable to drive, and others who are considered "transit-dependent." As expressed by one interviewee, it is hoped that as the Trolley grows in the future, a larger percentage of seniors will be more willing to stop driving and turn to the Trolley for their transportation needs. Tourists are also seen as users and potential users of the system. While there does not currently seem to be a high number of inquiries about transit services from visitors to the area (most are driving their own cars from Georgia, Alabama, and other parts of Florida), some are noticing that an increasing number of visitors are using the service along the beaches. Several representatives from the municipalities in the county would be interested in knowing how many people in their communities are using the Trolley and for what trips.

The Trolley is seen as quite an economical choice for its riders with a full fare of \$0.50 and a discount fare of \$0.25. However, some view the low fares as an indication of low revenues and further lament that the system will never pay for itself by charging such fares. Most, however, are well aware that public transit systems are subsidized and do not come very close at all to paying for themselves with fare revenues alone.

If usage of the Bay Town Trolley is not as high as it could be, what are the reasons? In addition to the obvious reasons of limited routes and schedules, the question arises about whether potential riders know how to access information about the system. Once again, there was disparity among the interview responses. One group believes that one must know where to look for such information. People may see the signs, but still not understand how to use the system. In addition, several of the interviewees, upon referring to a Bay Town Trolley Ride Guide during other parts of the interview, admitted that, while it looked appealing, they had no idea how to read the schedules and found the route map and schedules confusing. Overall, most agree that the promotion and marketing of the Trolley, while improving, could be better still. They also noted that this is not just the responsibility of the Trolley staff but also of the local chambers of commerce and local officials to make certain that the system is promoted and that current, accurate information is available in visitor's guides, hotels, and other city and county buildings, as well as on the internet.

Perceptions of the Trolley system seem to be getting more positive over time. The Trolley staff has done much to increase awareness in the community through media coverage, public service spots, newspaper advertising, and offering transportation for various special events. One of those interviewed recalled a recent groundbreaking event for which a trolley was used to transport a group of VIPs who came away from the experience with a positive image of the clean, attractive vehicle. Several of those interviewed mentioned the special event services provided on occasion by Bay Town Trolley and how such service helps increase the awareness and enhance the image of the system as a part of the community. Indeed, the special event services and its "conscientious effort" to make the public aware of the Trolley were considered two of the major strengths of Bay Town Trolley.

Another major strength mentioned by nearly all the interview participants was the Trolley staff's responsiveness to the community's needs, especially given its limited funding, and its willingness to "go above and beyond" to adjust its routes and schedules according to need. The system is considered to be very attentive, with its "ear to the ground." Other strengths include its flexibility, good advertising, friendly drivers, and efficiencies reaped due to merged operations with Bay Coordinated Transportation, which was also praised during the interviews, although it is perceived as a less flexible system due to the need for 24-hour advance reservations. Finally, among many, there is the perception that those who operate the system are "genuinely concerned about doing what's right" for the community and that they are not simply "spending grant money." Also, of those interviewed who believed they knew enough about the system to speak about its efficiency, all stated that they believe the Trolley staff do an excellent job of providing the service with their very limited resources.

Those interviewed were also queried as to any current issues with traffic congestion or parking. Congestion is always a problem around the Hathaway Bridge, where one accident can back traffic up for more than one hour. This congestion is worsened during Spring Break and the summer season, when Front Beach Road experiences "horrendous stop-and-go" traffic conditions. At times, the congestion filters to Middle Beach Road when queuing cars block intersections. The peak seasons include Spring Break during March, weekends from April to June, and then continuously through the first part of August. Many believe there is not enough public parking on the beaches; however, one official who was interviewed indicated that while lack of parking is an issue, there are times when residents have taken down or altered parking signs. Parking is also perceived to be a problem in the Downtown Panama City area, although it was remarked that most current Trolley riders do not have cars and therefore are not easing any parking problems nor are they using the Trolley to avoid parking. Whether parking is actually a problem is largely relative since, as proposed by one interviewee, some people

believe a parking shortage exists when they cannot park their vehicle directly in front of their destination. Given these issues, many interviewees were hopeful that, in the future, the Trolley will be more utilized in Downtown Panama City.

Goals for Public Transportation in Bay County

While the previous section addressed the current status of the Bay Town Trolley and existing levels of traffic congestion and parking hassles, this section addresses what is to come in the future. Interview participants were asked to identify the level and type of development and growth that is occurring or is expected to occur over the next five years and beyond.

It is clear that much will be happening in Bay County over the next five to ten years and beyond. Many of those interviewed mentioned the county's sector management plan, which is focusing on planned-unit developments. Approximately 1,000 new homes are anticipated in the southeast and south-central parts of the county, and approximately 2,000 new residential units are planned for the north and northwest parts of the county. In addition, there is a trend toward high-rise condominiums and apartments on the beaches. Some are against this trend, believing it will lead to traffic gridlock and reduced beach access and views. Others believe the construction of high-rises on the beach is inevitable and will preserve beach views and access due to requirements for parking and beach access, not to mention the needed increase in tax revenues such development brings.

Also on the beach, officials recently broke ground for the Pier Park project, which will contain an 80-acre city park, retail outlet shopping, dining, and other commercial retail facilities. Pier Park is anticipated to create 500 new jobs. Many of those interviewed believe that the Trolley can eventually serve as a major factor in bringing workers to the relatively low-pay service jobs that are plentiful on the beaches. One individual noted that, on any given day, there are between 1,000 and 2,000 available jobs that need to be filled, and a lack of transportation may be one reason why it can be difficult to fill those jobs.

Several employers in the area are adding jobs, including Trane, which has quadrupled in size over the past three years and will be adding 500 new jobs. Nextel is adding 600 jobs, and Allied is also expanding. Tyndall Air Force Base is expecting to add personnel when F-22s arrive in 2003. Also, a new courthouse is opening in Panama City in 2003. There was discussion of the new airport, which is envisioned to open beyond the five-year time frame of this TDP, yet still provides evidence of the growth the county is experiencing. A significant amount of roadway improvements are planned, including the construction of the new Hathaway Bridge.

According to one of those interviewed, Bay County is evolving; it is “shedding its skin.” Some envision the County as a premier family tourist destination offering not only beautiful beaches, but other entertainment options. There is a desire among some to “upgrade” the image of the beach from a “party place” to a “show place” like Biloxi, Mississippi. As the beach grows and its image changes, the area could see a steadier stream of visitors year-round, not just in Spring and Summer.

With all the changes occurring in Bay County, those interviewed were asked how public transportation, specifically the Bay Town Trolley, would fit in with the vision of Bay County’s future. They were asked what the goals of a public transportation system in Bay County should be, and what it should be trying to achieve over the coming years. As expected, results were varied but included some common themes. While some believe that public transportation should strive to reduce traffic congestion in the future, others believe it should focus on providing mobility for those who need it most. As expressed by one of those interviewed, the goals for public transportation in Bay County will be different than those in other, larger areas. Most expect the Bay Town Trolley to continue to increase ridership and to slowly expand services as funding becomes available, so that all communities can be well-covered by the route network. Goals should also include continuing to meet the needs of the public, “stay ahead of the curve” by paying attention to where new development is occurring, increase awareness and marketing of the system, and to continue to monitor ridership numbers closely. As for which segments of the population to target, several suggested that the Trolley focus on senior citizens, who will need a means of transportation after they are no longer able to drive, and on those who need transportation to and from lower-wage service industry jobs.

The goal of providing transportation for jobs was an item that was discussed often in the interviews. The area has a relatively high unemployment rate, yet there are a number of service jobs always available on the beaches. Many believe that the Trolley can act as an economic stimulus to connect people with those jobs, in particular, bringing workers from Panama City to the beaches. The Trolley in its current form makes this difficult with its limited schedule and lack of service on the weekends. However, those interviewed believe that the system should strive to provide the service needed so people can use it for their jobs.

Another goal stated by some is to secure a level of local funding. Several of the interview participants were unaware that no local funding is supporting the Bay Town Trolley. The Trolley operates with Federal and State money through the MPO. At least one of the interviewees was openly surprised at this fact. This person believes that the Trolley should be funded through a joint effort among the county and cities served by the system, and that

decision-makers should realize that the Trolley is "a necessity for Bay County's future." Conversely, others would be surprised if local funds were ever directed toward the Trolley. These individuals indicated that the Trolley is not a priority and that "the quality of life in Bay County would not deteriorate" if the Trolley did not exist. One mentioned that, ideally, the State should make the grants process more competitive. This person would prefer to see fewer areas receive larger grants so they can "really do something," rather than everyone get a smaller amount and only provide marginal services. In the "classic struggle between roadways and transit," as explained by one interview participant, people would rather see a road they use daily be improved than see additional Trolleys on the roads. It is always difficult to get people interested in paying for something that they may never use themselves. While the idea of an improved, attractive Trolley service sounds appealing, most would prefer that the funding situation, absent local funds, continue indefinitely.

When told that it is quite unlikely that the current funding situation will continue indefinitely, some offered suggestions for local funding sources. A few of the elected officials indicated that they would be willing to "look more closely at the operation" before agreeing to support paying for the service with local dollars. Others indicated that new county funds might begin to be available as increased tax revenues result from land being converted from agricultural to residential and commercial land uses by developers such as St. Joe/Arvida. In addition, new high-rise properties on the beaches will bring higher taxes in the coming years. Currently, Bay County has the second-lowest taxing district in Florida, and they are currently looking for ways to turn low-tax properties into higher-tax properties.

Many of the municipalities in the county are relatively poor. While one city representative believes that a few of the municipalities might agree to a small assessment based on their population and level of Trolley service within their city limits, other city representatives say there is "too much in the frying pan" for transit to be a priority for them. One small city representative noted that, in effect, "Our whole city is run on grant money." Many of the municipalities believe that a county-wide transit system should be funded by the county alone (for the local portion).

The Trolley system will need to look for other sources of revenue, according to some. One of those interviewed mentioned the "tastefully done" advertisements on the trolleys, which are one source of revenue. Others hope to see shelters in the future that could also have discreet advertising, which would be another source of revenue. One individual suggested that the county attempt to "extract some type of transportation impact fee" from the large-scale developers that are building thousands of new homes in the county over the next several years.

Representatives of businesses on the beaches were optimistic that, if promoted properly, some businesses would be interested in contributing a small amount to Trolley operations if it could help pay for higher-frequency service on the beach seven days per week. One interviewee indicated that businesses would offer some funds if they would see a “measurable change” in the frequency and hours of operation of the system, and if they could see that the Trolley is a “value-added service” to the community and to their businesses. Another interviewee noted that businesses on the beach have difficulty attracting employees, and would be interested in supporting a service that could be relied upon to bring them workers on-time and in a dependable manner.

Translation of Current Status to Future Vision

It became clear that a few of those interviewed for this TDP are ambivalent about the existence of the Trolley and do not believe that it, or any form of fixed-route public transportation, fits into Bay County’s future over the next five years. However, many others were more optimistic about the Trolley and hoped that local officials would “step up to the plate” and secure the system’s growth in the future. Those who stated goals for the Trolley that included the system’s continued expansion and to become a definite part of Bay County’s future were asked to discuss what steps should be taken so that the system in its current form can achieve those goals.

The necessary steps for the future were typically shared in the form of improvements that could be made to attract riders and give the system more support among the public and local officials. The most commonly suggested improvements are to:

- increase service frequency;
- increase service hours; and
- provide weekend service.

For example, those involved in the Court system and those representing Workforce Development would like nothing more than to provide transportation options to people. While it’s “not the Court’s concern” if someone who broke the law or people who are suing each other have no transportation to get to Court or to where they need to be (community service, for example), the State Attorney’s office often pays taxi fare to transport victims to Court. In addition, the Workforce Development Agency often pays for gas or pays for repairs on personal vehicles so that clients can have transportation.

Other suggested service improvements include an “attraction-oriented” beach service with park-and-rides at various locations along Middle Beach and Back Beach Roads. In keeping with this

suggestion, another individual would like to see some type of small storage space on the trolleys for shopping bags or beach gear. Also regarding the service on the beach, some suggested having alternate, later evening services on the beach only, which would encourage greater use by service workers and visitors.

Other ideas included the provision of services to civic organizations, the Lion's Club, and churches, the continued focus on special event services, and the creation of additional marketing promotions and incentives such as a "Transit Day" (or "Trolley Day," perhaps) when people could learn more about the system. Others suggested the implementation of passenger amenities such as bus shelters to protect passengers from hot and rainy weather. Some mentioned that the system should simply focus on being efficient; and, in that regard, one suggested that perhaps the system should not provide fixed-route services, but should be demand-responsive, or a deviated fixed-route service ("can we satisfy the need at less cost?"). Finally, a few interview participants believe that the Trolley can be an integral part of the revitalization of Downtown Panama City and should provide more frequent service to the city center.

It would obviously require a significant increase in funds for the Bay Town Trolley to implement all of the recommended improvements discussed above. Given that new sources of funds are likely to come in relatively small increments, and that the system will need to prioritize improvements, interview participants were asked to indicate the *one* improvement they would like to see, i.e., if funding allowed, what would be the first thing the Trolley should do to improve its service? Increased service frequency and later evening service were the most common responses to this inquiry. Some of those interviewed were more specific in their suggestions and added that service improvements should be added to the beach services first, or simply to the routes with the highest usage. Others recommended that these improved services be seasonal in nature, at least in the beginning. For example, one mentioned that it would be "great" to see 10-15 minute frequencies on the beach during the peak season. Others suggested increasing the fares on the beach routes. As one interviewee noted, "there's a lot that can be done on the beach during the season that might" get a better return, and the added return could "help subsidize" the extra vehicle(s) during the slower months of the year.

Concerned with transporting low-income service workers to and from jobs, evening service system-wide is the priority for many. Later evening service would ensure that workers would have a way to get home after their shifts ended, and would therefore enable more of these individuals to use the economical service. Actually, providing more convenient transportation for workers in the service industry was a key factor for several of the interview participants.

Convenience and dependability are also key in attracting ridership, but these traits would be ensured with an increase in service hours and, eventually, weekend services.

CITIZENS ADVISORY COMMITTEE WORKSHOP

CUTR staff attended the regularly scheduled meeting of the MPO's Citizens Advisory Committee (CAC) on April 24, 2002. The purpose was to provide the CAC with an update of the TDP process to that point, as well as to facilitate an informal workshop with the members in attendance to discuss the Bay Town Trolley. The guide used to conduct this workshop is included in Appendix B.

Attending members of the CAC were invited to share their views regarding the current Trolley system's viability, how well the system is doing in meeting the needs of the community, and how well the system is operating. In addition, the members provided their opinions concerning what the system's focus should be in the future.

Overall, the participants view the Trolley system as a limited service, being currently used only by those with no other options. Nonetheless, there was a general consensus that the awareness of the system is increasing with time, and that the system's performance is improving as the system is slowly growing. It was noted that the system staff appear to be doing quite well in allocating the resources they have to provide the service.

However, the participants believe that, for ridership to continue to grow and for new riders to be attracted to the system, certain improvements should be made. Suggested improvements to the Trolley system include increased service frequency and increased service hours, as well as the provision of passenger amenities at Trolley stops including shelters and benches.

BAY TOWN TROLLEY RIDECHECK

In the community leader interviews, interviewees mentioned the need for Bay Town Trolley to provide services effectively and efficiently. To assist BTT staff in making routing modifications for the TDP update, CUTR conducted a ridecheck of all Bay Town Trolley routes. A ridecheck consists of placing an individual on board to count passenger ons and offs by stop throughout for each bus trip. By taking such a count, boardings and alightings by stop can provide useful data to show productive versus unproductive segments of a route. A ridecheck can also help BTT target locations for passenger amenities at trolley stops.

As part of the on-board survey discussed below, a ridecheck was done for every route for the entire service day with the exception of Route 4A, which was sampled for half of its service day. The maps on the following pages provide an aggregation of an entire service day with counts of boardings and alightings by stop for each route in the system. Below is a discussion of each route, and Figures I-8 through I-17 illustrate the results graphically.

Route 1 – Lynn Haven to Downtown Panama City – The most productive segments of this route for boardings (ons) and alightings (offs) are along Highway 77 in Lynn Haven, Target at 23rd and Martin Luther King, and the stop at Harrison and Government in Downtown Panama City. The deviation from Highway 77 east on Mosley, south on Palo Alto and west on Baldwin did generate a few boardings and no alightings.

Route 2 – East Route - This route has a productive boardings and alightings along Martin Luther King from Target to 11th Street, but shows no activity south of 11th Street. Activity along 11th Street to Cedar Grove is minimal with some activity south of Tyndall Parkway. The extreme southern portion of the route, along Bertha and Boat Race, is also generating minimal ridership. Due to the circuitous routing of this route, there is some sporadic activity along the route. This route will be eliminated and segments incorporated into two new routes scheduled for implementation in Summer 2002.

Route 4 – West/Downtown - This route generated significant ons and offs in the Downtown Panama City area along Harrison Street and along U.S. 98 (15th Street), and Gulf Coast Community College. Less activity is found on 11th Street.

Route 4a – West – This route was only surveyed for half of a service day, but the majority of boardings are at Target and a majority of alightings are along 18th Street west of Michigan Avenue and at Gulf Coast Community College.

Route 5 – Beaches – As expected, Route 5 has a majority of its on/off activity at Target and along Front Beach Road. There was also, to a lesser degree, activity at Gulf Coast Community College.

Figure I-8 Bay Town Trolley Route 1 Total On

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Figure I-9
Bay Town Trolley
Route 1
Total Off

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Figure I-10
Bay Town Trolley
Route 2
Total On

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Figure I-11
Bay Town Trolley
Route 2
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Figure I-12
Bay Town Trolley
Route 4
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Figure I-13
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Figure I-14
Bay Town Trolley
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Figure I-15
Bay Town Trolley
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Figure I-16
Bay Town Trolley
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Figure I-17
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BAY TOWN TROLLEY ON-BOARD SURVEY

This section summarizes the results of an on-board rider survey of the Bay Town Trolley (BTT) routes conducted during February 2002. The purpose of this survey was to obtain data about rider demographics, travel behavior, and satisfaction with specific aspects of BTT trolley service.

The findings are presented in three major categories. These categories are demographics, travel behavior, and user satisfaction. Two on-board surveys of BTT riders have been conducted in the past, with the most recent survey being 1998. When possible, the data obtained during the 2002 on-board survey process is compared to the results of the 1998 on-board survey.

System Overview

BTT is a rubberized trolley service. At the present time, BTT provides service on five fixed routes. The routes include: Route 1 (Panama City – Lynn Haven), Route 2 (East), Route 4A (West), Route 4 (West—Downtown) and Route 5 (Beaches). The routes extend as far north as Lynn Haven, as far west as the intersection of Front Beach (Alt. 98) and Back Beach (U.S. 98) roads on Panama City Beach, as far east as Star Avenue, and as far south as Downtown Panama City.

The frequency of BTT routes varies depending on the route. Routes 1 and 4 provide hourly service. Routes 2, 4A and 5 provide service every two to three hours. Currently service is provided Monday through Friday, between 6:00 AM and 6:30 PM. There is no service available on Saturday, Sunday, or holidays.

The fare structure for BTT service includes a base fare of 50¢. Discounted fares are offered for students, senior citizens, and persons with disabilities. Children age five and under ride free.

Survey Methodology

The 2002 on-board survey was conducted February 19 – 21, 2002. Surveying started at the beginning of service and concluded at the end of service for each of the five fixed routes. Survey distribution was carried out by temporary staffing under the direct supervision of CUTR project staff. For reference, a copy of the survey instrument is included in Appendix B.

Each surveyor was assigned to a particular trolley that potentially covered more than one route during a particular survey day. Surveys were personally handed to riders as they boarded the trolley or assumed their seats. Riders were encouraged to return complete surveys to the surveyor as they exited the trolley. Due to time constraints (passengers traveling short distances), some passengers took the surveys with them to fill out and return at a later time. In addition, as time permitted, surveyors walked through the trolley asking for completed surveys and assisting riders to completed the surveys. Riders were asked to complete a questionnaire each time they boarded a trolley.

Response Rates

The response rate was typical when compared with similar efforts undertaken on this type of service and provides a good information base for analysis. During the month of the survey, average daily ridership was approximately 331; 94 surveys were returned for a response rate of 28.4 percent. All responses were subjected to weighting to reflect total patronage by route using February 2002 total monthly ridership data at the route level. A weighting factor for a particular route was calculated by dividing the total number of customers on the route by the total number of returned surveys. Using a hypothetical example, if Route 1 had a total of 100 customers and 50 surveys were returned, then each returned survey for Route 1 would be weighted by a factor of 2.0 ($100 \div 50$) in the reporting of survey results.

Survey Analysis

The survey analysis is presented in three sections: demographics, travel behavior, and user satisfaction. The responses to each question are provided and compared, when possible, with a similar survey that was completed of BTT ridership in 1998. The survey results are presented in a graphical format, while text is limited to introducing subjects and noting or interpreting findings. The reader is encouraged to use the table of contents and lists of tables and figures for easy reference to a particular subject. A description of the data provided in each subsection follows.

Demographic information collected in this survey include age, gender, ethnic origin, household income, and auto ownership. These data enable BTT to develop a demographic profile of its passengers. This kind of knowledge can be used in the design of marketing and information material and the identification of target audiences. This information can also assist in determining the need for rider facilities such as the improved design and favorable location of trolley stops and facilities for persons with disabilities.

Travel-related questions provide information such as trip origins/destinations and modes of access and egress. This information contributes to effective scheduling, planning and service design, and can influence policy decisions. Questions related to fare and ridership patterns are also included in this category.

User satisfaction is determined through responses to questions rating various aspects of BTT service. These ratings clearly reflect the perceptions of current riders. Aspects that passengers report being unsatisfied with can potentially be addressed through changes in the system. By distinguishing rider sensitivities toward specific aspects of the system, BTT is better able to set priorities for system improvements.

System Profile - Demographic Information

Questions related to demographics include those regarding the rider's age, gender, ethnic origin, annual household income, and vehicle ownership. Each of these questions is briefly discussed, and the responses are presented in table form. Table I-10 shows the results from the 2002 on-board survey, as well as comparisons of demographic data, when possible, obtained from BTT riders during the 1998 on-board survey. Some questions and answers differed slightly during the two survey periods, and comparisons are made accordingly.

Age - Forty-five percent of the survey respondents are between the ages 19 and 44, which is considered working age. This result is basically identical to the results of the 1998 survey, which included approximately 46 percent of riders in this age group. Three percent of riders reported to be 18 and under, which is a large decrease from 19 percent, reported during the 1998 survey (however, the 1998 survey was conducted during the month of July, when schools are not in session). The percentage of riders aged 55 and above decreased from 23 percent to 20 percent. This is an age group which normally represents a significant segment of the conventional transit market.

Gender - Systemwide, more women use BTT service than men. Fifty-three percent of sample respondents are women. This is an anticipated survey result, as most transit systems have a higher percentage of women riders than men.

Ethnic Origin - Approximately 71 percent of survey respondents are white. The percentage of black survey respondents decreased since 1998 from 37 percent to 22 percent. Seven percent of survey respondents identified themselves as Hispanic, Native American or "other."

Annual Income - Approximately 47 percent of sample respondents report an income lower than \$10,000, compared to 60 percent of respondents in the 1998 survey. Additionally, 22 percent report an income between \$10,000 and \$19,999. However, 21 percent of survey respondents reported having incomes greater than \$30,000. The results found are again typical of most transit systems, where as riders utilizing transit services are usually in the lower-middle to lower income brackets. The very low household incomes reported by almost half of all BTT riders suggest that a large share of the ridership is dependent on BTT for mobility and may have few other transportation options.

Vehicle Ownership - While over two-thirds of riders indicate that there is at least one licensed driver in their household, 56 percent indicate no working vehicles in the household. Additionally, over 80 percent of those surveyed reported not having access to a car or personal vehicle for their trip. These results are similar to those reported during the 1998 project. This is also typical of many conventional bus transit markets, and strongly suggests that a significant proportion of BTT ridership is a traditional market.

Table I-10
Rider Demographic Comparisons of the
1998 and 2002 BTT On-Board Surveys

Category	Year of Survey	
	1998	2002
Gender		
Male	49%	47%
Female	51%	53%
Auto Ownership		
None	62%	56.5%
One	25%	30.6%
Two	7%	6.9%
Three or more	6%	6.0%
Annual Household Income		
Less than \$10,000	60%	47.4%
\$10,000 to \$19,999	19%	22.4%
\$20,000 to \$29,999	7%	9.5%
\$30,000 and over	14%	20.8%
Ethnic Origin		
White	63%	71.2%
Black	37%	21.5%
Hispanic	0%	2.5%
Asian	0%	0%
Native American	0%	2.8%
Other	6%	1.9%
Age		
Under 15		0.0%
15 to 18		3.0%
18 years or under	19%	
19 to 24	6%	2.5%
25 to 34		18.7%
25 to 44	40%	
35 to 44		23.5%
45 to 49		20.6%
45 to 54	12%	
50 to 54		12.2%
55 to 64		8.4%
55 and over	23%	
65 and older		11.1%

NOTE: Percents may be slightly greater or less than 100 due to rounding.

System Profile - Travel Behavior

A number of questions related to travel behavior characteristics of BTT riders were included in the survey. Questions in this category included:

• Trip origin	• Trip destination	• Mode of access
• Mode of egress	• Fare category	• Fare payment method
• Frequency of use	• Reasons for using BTT	• Transportation alternatives

As listed above, the survey questions helped to identify passenger trip origins and destinations as well as modes of access and egress. Other information collected from the riders included fare types, frequency of use, reasons for using BTT, and travel alternatives. Figures I-18 through I-25 graphically present the responses to the individual travel behavior questions and compare them to the responses from the 1998 survey. It should be noted that the survey instrument used in 2002 differed slightly from the one used in 1998 due to the inclusion in 2002 of several specific response choices in various questions so that the results of this survey can be compiled with others across the country for inclusion in a study by the American Public Transportation Association (APTA). As such, in some of the graphics, the frequency of some responses is shown for either 1998 or 2002; not both.

Trip Origin/Destination - Most survey respondents reported their trips as home- or work-based, i.e., having home or work as the origin or destination. For this survey, many respondents reported that their trip either began (59 percent) or ended (32 percent) at home. In the 1998 survey, 47 percent of trips began at home while 30 percent ended at home. In the current survey, 14 percent (20 percent in 1998) of respondents noted their trip began at work, while 28 percent (22 percent in 1998) reported their trip ended at work. Twenty-six percent reported their destination as shopping/errands. Figures I-18 and I-19 graphically present the findings from these two questions.

Mode of Access/Egress - The access and egress modes have been grouped into major categories: walked, dropped off/picked up, bicycled, transferred to another route, and drove. These data are summarized in Figures I-20 and I-21 for both the 1998 and 2002 surveys. The most common means (combined average of 73 percent) of access/egress is a short walk (less than 3 blocks). During the 1998 survey, the combined average for these responses was 57 percent. This is a significant increase in the percentage of riders requiring a short walk to or from the trolley. While the percentage of those walking three or fewer blocks increased greatly

between the 1998 and 2002 surveys, the percentage of riders walking *more* than three blocks to access the trolley or to get to their final destination decreased between 1998 and 2002, as shown in Figures I-20 and I-21 (from a combined average of 23 percent in 1998 to 19 percent in 2002).

Figure I-20
Q4: How did you get to the trolley stop for this trip?

Figure I-21
Q9: When you finish your trolley travel, how will you get to your final destination?

Fare Category - Systemwide, the predominant fare category is the regular base fare (51 percent). Approximately 14 percent of respondents use the student fare and 13 percent use the special fare for disabled riders. These data are shown Figure I-22, which also notes a significant number of riders (12.5 percent) using the trolley pass.

Frequency of Use - Figure I-23 indicates that approximately 57 percent of the current BTT riders are regular users (more than four days per week). This is a sizeable increase from the 1998 survey where 42 percent of riders were considered regular users. This indicates a user group that is growing in size and relies frequently on public transportation. The figure also compares the 2002 information with the results from the 1998 survey.

Reasons for using BTT - Approximately 72 percent of the BTT riders either do not drive or do not have a car available to them, as shown in Figure I-24. This is relatively consistent with the previous survey, when 73 percent of the riders indicated that they did not drive or did not have a car available to them. This finding is also consistent with comments from officials in Bay County about the large proportion of BTT riders that are transit-dependent.

Travel Alternatives - Responses to this question by BTT riders further exhibit their transit-dependency. Fifty-three percent of the respondents indicated they would ride with someone else or they would not make the trip if BTT were not available. This is a slight increase from the 49 percent reported in 1998, but overall is consistent with the results of the previous question on the reasons for using BTT (Figure I-24). Figure I-25 shows responses to this question regarding travel alternatives: 24 percent indicated that they would not make the trip if the trolley were not available while, in 1998, 21 percent would not make the trip. For this group of riders, BTT provides the only means of mobility.

Figure I-22

Q10: What type of fare do you usually pay when you ride the trolley?

Figure I-23

Q11: How often do you ride the trolley?

Figure I-24
Q12: What is the most important reason you ride the trolley?

Figure I-25
Q13: How would you make this trip if not by trolley?

System Profile - User Satisfaction

The quality of BTT service was determined through a variety of questions that required riders to rate their perception of specific aspects of BTT service as well as overall service quality. The strengths and weaknesses of the system, as perceived by riders, were identified from a list of discrete responses that ranged from "very satisfied" to "very unsatisfied." In addition, an average (mean) score was calculated for each service aspect using the numerical values assigned to the rating system. Utilizing the numerical value assignments, an average or mean score of five (5.00) or "very satisfied" indicates a higher degree of rider satisfaction than a mean score of one (1.00) or "very unsatisfied". The numerical value assignments for determining the averages are shown in Table I -11.

Table I -11
Rating System Numerical Values

Satisfaction Category	Numerical Value
Very Satisfied	5.00
Somewhat Satisfied	4.00
Neutral	3.00
Somewhat Unsatisfied	2.00
Very Unsatisfied	1.00

BTT's overall service received very favorable ratings, with 83 percent of riders surveyed indicating a combined "very satisfied" and "somewhat satisfied." In addition to the favorable rating of BTT service, riders also reported operator courtesy (87 percent), safety while on trolley (90 percent), cleanliness of trolleys and trolley stops (92 percent), and value of fare (92 percent) a combined "very satisfied" and "somewhat satisfied." These favorable ratings indicate that the vast majority of BTT riders feel very positive about the overall quality of BTT service. However, the performance aspects "ease of transferring" and "frequency of service" received the highest combined percent of "very unsatisfied" and "somewhat unsatisfied" ratings from respondents with unfavorable ratings of 56 and 33 percent, respectively.

Figures I-26 through I-45 show the results for user satisfaction questions from the February 2002 on-board survey. Because user satisfaction responses used during the 1998 survey were different (very good, good, fair, poor, very poor) than those used during the 2002 survey (very satisfied, somewhat satisfied, neutral, somewhat unsatisfied, very unsatisfied), comparisons between the two surveys are not shown graphically.

Figure I-26
Survey Q26A: Overall satisfaction with BTT

Figure I-27
Survey Q26B: Frequency of Service

Figure I-28
Survey Q26C: Ability of Riders to Get Where They Want to Go Using the Trolley

Figure I-29
Survey Q26D: Number of Transfers to Get Where They Want To Go

Figure I-30
Survey Q26E: Ease of Transferring

Figure I-31
Survey Q26F: How Regularly Trolleys Arrive On Time

Figure I-32
Survey Q26G: Travel Time

Figure I-33
Survey Q26H: Value of Trolley Fare

Figure I-34
Survey Q26I: Ease of Obtaining Trolley Route and Schedule Information

Summary of Performance Aspects

User satisfaction ratings were calculated for each of the 20 listed system performance characteristics and overall BTT service by applying a numerical value to each possible patron response. An average or mean score was calculated utilizing the numerical values assigned to the performance characteristics. The numerical values used in calculating the means are shown prior in Table I-12.

- Overall, BTT riders are satisfied with the transit services since the mean scores range from a low of 3.20 for the performance aspect "frequency of service" to a high of 4.66 for the performance aspect "value of fare." Given the very high overall average mean score of 4.16 for all performance aspects, this is an indication that current riders are fairly satisfied with the overall quality of BTT service. The mean scores for all of the performance aspects are shown in descending order in Table I-12.

Table I-12
Rider Satisfaction Ratings for 2002 (in descending order)

Performance Aspect	Mean Score
Value of Fare	4.66
Safety/Security on Trolley	4.64
Driver's Ability to Operate Trolley	4.53
Cleanliness of Trolleys and Stops	4.52
Driver's Courtesy	4.48
Ease of obtaining trolley information	4.46
Availability of Seats	4.42
Ease of using trolley information	4.40
Safety after getting off trolley	4.36
Safety/security at the trolley stop	4.31
Overall satisfaction with BTT	4.29
Temperature inside trolleys	4.25
Earliest trolley run	4.14
Ability to get where want to go	4.06
Trolleys arrive on time	4.01
Trolley travel time	3.77
Ease of transfer	3.75
Number of transfers needed to travel	3.64
Latest trolley run	3.39
Frequency of service	3.20

BTT Survey Conclusions

The typical BTT riders continue to consist primarily of traditional transit markets, meaning those who fall within low-income and zero-vehicle availability categories. Also, the fact that more than one-half of the respondents indicated that they would either ride with someone else or not make the trip at all further illustrates the transit-dependency of these riders. A majority of trips are made for work and shopping purposes, with an under-representation of school and medical trip purposes. This suggests that strengthening service could attract riders for other trip purposes.

BAY COORDINATED TRANSPORTATION CUSTOMER SATISFACTION SURVEY

BCT conducted a mail-in postcard survey of its riders to be used in the CTC evaluation as well as the update to the Transportation Disadvantaged Service Plan (TDSP). Appendix C provides a detailed summary of the results. The survey was conducted April 3 – 4, 2002, and generated 61 responses. The results of this survey can form a basis for BCT to make decisions for future improvements to the system. Areas rated included the following:

- Dependability
- Runs when needed (time of operation)
- Easy to arrange trips (scheduling)
- Comfort and cleanliness
- Waiting time
- Cost of trip
- Employee courtesy
- Overall rating

Key findings are outlined below.

- In 2001, 91 percent of respondents rated overall service as “good” or “very good.” In 2002, this rating declined to 85 percent.
- 88 percent rated dependability of services as “good” or “very good.”
- 96 percent rated the hours of operation as “good” or “very good.”
- 87 percent rated the ease of arranging a trip as “good” or “very good.”
- The waiting time for a trip was rated “good” or “very good” by 83 percent of respondents.
- 83 percent consider the cost of a BCT trip to be “good” or “very good.”
- 97 percent rated the comfort and cleanliness of BCT vehicles as “good” or “very good.”
- Employee courtesy was rated “good” or “very good” by 95 percent of respondents.

CHAPTER TWO: ANALYSIS OF EXISTING SERVICES

INTRODUCTION

This chapter contains two main sections. The first section is a performance evaluation of the Bay Town Trolley (BTT) and Bay Coordinated Transportation (BCT), the transportation provider for the Bay County Council on Aging (BCCOA), Bay County's Community Transportation Coordinator (CTC). The second section of this chapter consists of demand estimations for the Bay Town Trolley (BTT) and Bay Coordinated Transportation (BCT) as well as an assessment of public transportation needs and opportunities. Chapter Two summarizes the results of these efforts and leads into the final tasks of the TDP, which will identify and evaluate public transportation goals and recommended initiatives.

Analysis of Existing Services

As briefly mentioned above, the first part of this section includes a trend analysis for the fixed-route and demand-response modes as well as a peer review analysis for BTT. The second part focuses on the performance of the demand-response mode, BCT. For the Bay Town Trolley, the trend analysis was accomplished using data from the last five fiscal years starting with the system's first full year of operations (FYs 1997 – 2001). In addition, a peer review of small systems from within Florida and from the southeastern United States was conducted. For BCT, temporal trends in performance data were analyzed. Appendix D includes a list of major trip generators and attractors in Bay County, and Appendix E contains an inventory of public transportation providers in the county.

The Purpose of Performance Review

The following sections outline the performance evaluation methodology. Items discussed include the purpose of a performance review as it related to the TDP process, the origin of the data used in the analyses, and the general performance indicators, effectiveness measures, and efficiency measures used to gauge the performance of BTT and BCT operations.

It is important to note that, since this type of performance evaluation is only one method of evaluating the performance of a given public transportation system and is limited to only those

aspects included in the analysis; therefore, the reader should exercise caution in interpreting the results. These analyses are particularly strong in reviewing cost effectiveness and efficiency; however, they do not relay the extent to which other objectives of the public transportation system are being achieved. For example, this performance evaluation does not directly measure several relevant considerations such as passenger satisfaction with regard to levels of service, taxpayer and public attitudes toward the agency, employee morale, success in attaining minority hiring or contracting goals, quality of planning, contributions to community economic development, air quality improvements, or other goals that may be important to the public transportation system and the community. In addition, several aspects of quality of service are not measured in a performance evaluation. These include vehicle cleanliness and comfort, operator courtesy, on-time performance, quality of marketing and passenger information support, and level of satisfaction with hours of operations, frequency of service, and geographic coverage of the service. Many of the above-mentioned issues, however, are addressed in Chapter One of this TDP through the results of the on-board survey of BTT, interviews with local officials and community leaders, and other forms of public involvement.

In addition to understanding the limits of this analysis, the reader should take care in interpreting the meaning of the various performance measures. The evaluation does not necessarily provide information concerning which aspects of performance are within control of the agency and which are not. Figure II-1 denotes the major factors that ultimately affect a given agency's performance.

Performance reviews are a useful and important tool in monitoring and improving public transportation system performance. However, it must be recognized that the results of trend and peer analyses are only a starting point for gaining a complete understanding of the performance of transit systems. The issues identified as a result of this evaluation provide the basis for a series of questions that can lead to an enhanced understanding of the "hows" and "whys" of system performance.

Figure II-1
Factors Affecting Public Transportation System Performance

Performance Review Database – Bay Town Trolley

To receive federal funds, transit agencies are required to report a variety of data in a standardized format, resulting in what is known as a National Transit Database (NTD) report. These documents provide standardized measures of reporting that enable a more accurate comparison of information among properties. Since 1979, when this reporting requirement was instituted, additional refinements in data collection and reporting have increased the accuracy and comparability of the data. The data are for the fiscal year used by each transit system. For most Florida properties, including BCCOA, the fiscal year runs from October 1st through September 30th. For non-Florida properties, the fiscal year may be different.

Data Reliability - All NTD data submitted to the Federal Transit Administration (FTA) are subject to considerable review and validation through manual and automated methods. Each report is thoroughly examined to identify errors, questions, and inconsistencies. FTA specifies problems and requires each reporting agency to respond to these problems before the final report is accepted. For this study, data were taken from BCCOA's final NTD reports for fiscal years 1997 through 2000 and the preliminary FY 2001 NTD report, as well as individual NTD reports provided by the transit agencies selected as peers. Another tool used to compile data is the Florida Transit Information System (FTIS), a user-friendly software produced by FDOT in conjunction with Florida International University (FIU) that, in part, contains NTD data through FY 2000 for all U.S. transit systems that report to FTA. With the exception of the inflation rate, all information was provided by FTIS or the transit systems. BCCOA's monthly operating reports were also utilized. CUTR did not collect any original data or conduct any audits or on-site analyses of the data or data collection procedures.

Data Definitions - To fully understand the data presented in NTD reports, it is important to understand the definitions of the terms used. In many instances, these definitions differ from initial perceptions and may be subject to interpretation. Appendix F contains a detailed list of definitions for selected terms used by FTA. The data collection procedures further specify exactly what is meant by a given term. For example, a "passenger trip" refers to an individual boarding a transit vehicle. A person riding a bus from the corner to the office takes one passenger trip to work and a second passenger trip to return home. Likewise, a person transferring from one bus to another is considered to make two passenger trips to get to his or her destination. Despite these definitions and continued refinements in data collection procedures, there remain some discrepancies among systems as to how terms are defined and how information is collected. Accordingly, caution should be used in interpreting findings, especially for those variables that are more likely to be subject to variations in definition. One

example includes how employees are categorized among administrative, operating, and maintenance tasks within different agencies. Another example is how revenue service interruptions and incidents are defined by different agencies. Other discrepancies can result from differences in the organizational structure of the agency and the allocation of responsibilities among the various governmental entities within the service area. Legal services, computer services, engineering and design support, administrative support, and other costs are often shared costs that may or may not be accurately allocated between the transit system and a parent government body.

The national inflation rate, as defined by the percentage change in the Consumer Price Index (CPI) for all items (including commodities and services) from year to year, was used to deflate cost indicators from 1998 through 2001 so that they could be presented in real terms (1997 dollars). Over the past several years, service and labor costs tended to increase at a faster rate than did commodity prices. Therefore, transit operating expenses, which are predominantly comprised of service and labor costs, can be expected to increase somewhat faster than inflation even if the amount of service provided does not increase.

Performance Indicators and Measures - The evaluation measures used throughout the performance review are divided into three categories: general performance indicators, effectiveness measures, and efficiency measures. General performance indicators report absolute data in the selected categories that are required by NTD reporting. These tend to be key indicators of overall transit system performance. Effectiveness measures typically refine the data further and indicate the extent to which various service-related goals are being attained. For example, the number of passenger trips per capita is an indicator of the effectiveness of the agency in meeting transportation needs. Efficiency measures involve reviewing the level of resources (labor and other costs) required to achieve a given level of output, or service. It is possible to have very efficient service that is not effective or to have highly effective service that is not efficient.

The substantial amount of data available through NTD reporting provides an opportunity to develop a large number of measures. Sets of general performance indicators, effectiveness measures, and efficiency measures that are believed to provide a good representation of overall fixed-route transit system performance have been selected for this analysis. Table II-1 lists the selected indicators and measures provided in this report for BTT's fixed-route transit services and also provides subcategories, where appropriate.

Table II-1
Selected Performance Review Indicators and Measures
BTT Fixed-Route Transit Services

General Performance Indicators	Effectiveness Measures	Efficiency Measures
Service Area Population Passenger Trips Passenger Miles Vehicle Miles Revenue Miles Vehicle Hours Revenue Hours Route Miles Total Operating Expense Total Operating Expense (1997 \$) Total Maintenance Expense Total Maintenance Expense (1997 \$) Total Capital Expense Passenger Fare Revenue Total Employee FTEs Vehicles Available for Maximum Service Vehicles Operated in Maximum Service Total Gallons of Fuel Consumed	Service Supply Vehicle Miles Per Capita Service Consumption Passenger Trips Per Capita Passenger Trips Per Revenue Mile Passenger Trips Per Revenue Hour Quality of Service Average Age of Fleet (years) Revenue Miles Between Revenue Vehicle Failures	Cost Efficiency Operating Expense Per Capita Operating Expense Per Passenger Trip Operating Expense Per Revenue Mile Operating Expense Per Revenue Hour Maintenance Exp. Per Revenue Mile Operating Ratios Farebox Recovery Labor Productivity Revenue Hours Per Employee Passenger Trips Per Employee Vehicle Utilization Revenue Miles Per Total Vehicles Energy Utilization Vehicle Miles Per Gallon Fare Average Fare

SOURCE: National Transit Database.

Performance Review Database – Bay Coordinated Transportation

For paratransit service, BCCOA reports a variety of data in standardized formats to both FTA (in the form of NTD reports) and to the Florida Commission for the Transportation Disadvantaged (CTD) in an Annual Operating Report (AOR). Both reports provide standardized measures of reporting that enable a more accurate comparison of information between transit properties. Because the peer review for BCT is based on a comparison with other Florida paratransit systems, some of which do not file NTD reports, data from AORs are used as the benchmark for the trend and peer evaluations. The AORs submitted by BCCOA in Fiscal Years 1996 through 2001 were used in these analyses. To complete BCT's evaluation, CUTR did not collect any original data or conduct any audits or on-site analyses of the data or data collection procedures.

As with the fixed-route database, the measures used for BCT's performance evaluation are distributed among the three primary categories: general performance indicators, effectiveness

measures, and efficiency measures. General performance indicators report absolute data in the selected categories of the AOR. These tend to be key indicators of overall public transportation system performance. Effectiveness measures, as discussed previously, refine the data further and indicate the extent to which various service-related goals are being achieved. For example, passenger trips per capita is an indicator of the effectiveness of the agency in meeting transportation needs. Efficiency measures involve reviewing the level of resources (labor or cost) required to achieve a given level of output. As mentioned previously, Appendix F provides definitions for all the indicators and measures utilized in this section.

Table II-2 outlines the selected indicators and measures used in BCT's performance evaluation. The number of indicators and measures analyzed for BCT operations is comparatively smaller than that for BTT's fixed-route evaluation due to the unavailability and relative inaccuracy of some data collected from various transportation providers.

Table II-2
Selected Performance Review Indicators and Measures
BCT Paratransit Services

General Performance Indicators	Effectiveness Measures	Efficiency Measures
Service Area Population Potential TD Population TD Population Paratransit Passenger Trips Vehicle Miles Revenue Miles Operating Expense Operating Revenue Vehicle Fleet Size	Service Supply Vehicle Miles Per TD Capita Revenue Miles Per Paratransit Trip Service Consumption Paratransit Trips Per TD Capita Paratransit Trips Per Vehicle Mile Quality of Service Vehicle Miles Between Accidents Vehicle Miles Between Roadcalls	Cost Efficiency Operating Expense Per TD Capita Operating Expense Per Paratransit Trip Operating Expense Per Vehicle Mile Operating Ratio Local Government Revenue Ratio Vehicle Utilization Vehicle Miles Per Vehicle Revenue Miles Per Vehicle Mile

SOURCE: Florida Commission for the Transportation Disadvantaged 1996 – 2001 Annual Operating Reports .

PERFORMANCE EVALUATION OF EXISTING BTT SERVICE

This evaluation is useful in determining the strengths of BTT as well as areas that require additional attention and improvement. This is accomplished through two major analyses which are described herein. First, a trend analysis presents BTT's performance since its first full fiscal year of operations (FY 1997). Second, a peer review analysis compares the performance of BTT with that of other selected small Florida and non-Florida transit systems. Specifically, BTT is compared with its peer group of systems operating between one and nine vehicles in maximum service, which was established by CUTR and FDOT and is used in FDOT's most recent Annual Performance Evaluation Study.

A summary of the results the trend and peer analyses is found at the end of this section. In that summary, relative strengths and areas for improvement are discussed, as well as BTT's performance as compared to particular performance goals outlined in the last major TDP update. Appendix G contains complete data tables for the trend analysis and peer review analysis.

Overview of BTT

In December 1995, the Bay Town Trolley began operating service on five routes (Downtown, East, West, Beach, and North) with three vehicles. As of FY 2001, the system operates four rubberized trolleys on five routes. BTT is operated by the Bay County Council on Aging and the MPO serves as the transit authority.

As of FY 2001, the route network extended as far north as Lynn Haven, as far west as the intersection of Front Beach (Alt. 98) and Back Beach (U.S. 98) Roads on Panama City Beach, as far east as Star Avenue, and south to Downtown Panama City. The routes' frequency ranges from one hour (Routes 1 and 4) to approximately every two to three hours (Routes 2, 4a, and 5). Service is provided Monday through Friday (there is no service on weekends or holidays), with a service span from 6:00 a.m. to 6:30 p.m. BTT has a base fare of \$0.50, and discounted fares are offered to students, senior citizens, and the disabled. Children age five and under ride free.

To present a general overview of the fixed-route transit system, select general performance indicators, effectiveness measures, and efficiency measures are reported in Table II-3. The source of the data is BCCOA's NTD reports for FYs 1997 through 2001 (Most FY 2001 data are considered to be preliminary as of this TDP).

**Table II-3
Summary of Selected Operating Statistics, BTT**

General Performance Indicators	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	% Change (1997 - 2001)
Passenger Trips	38,052	48,694	61,479	66,482	74,787	96.5%
Passenger Miles	117,936	134,034	153,571	166,205	191,979	62.8%
Vehicle Miles	155,988	153,863	163,691	165,773	190,180	21.9%
Revenue Miles	151,452	151,353	153,571	158,158	175,531	15.9%
Vehicle Hours	8,568	9,287	9,867	9,432	11,565	35.0%
Revenue Hours	8,316	9,036	9,361	9,036	10,537	26.7%
Route Miles	106.0	106.0	106.0	106.0	118.0	11.3%
Total Operating Expense	\$203,259	\$231,522	\$206,093	\$225,434	\$255,810	25.9%
Total Maintenance Expense	\$18,995	\$17,508	\$19,830	\$33,766	\$18,316	-3.6%
Passenger Fare Revenue	\$15,708	\$16,652	\$20,586	\$20,546	\$26,292	67.4%
Total Employees (FTEs)	7.4	7.3	6.1	6.2	8.7	18.0%
Vehicles Available for Maximum Service	4	3	3	6	6	50.0%
Vehicles Operated in Maximum Service	3	3	3	3	4	33.3%
Total Gallons of Fuel Consumed	23,569	26,136	30,855	26,464	26,690	13.2%
Effectiveness Measures						
Vehicle Miles Per Capita	1.27	1.25	1.33	1.35	1.55	21.9%
Passenger Trips Per Capita	0.31	0.40	0.50	0.54	0.61	96.5%
Passenger Trips Per Revenue Mile	0.25	0.32	0.40	0.42	0.43	69.6%
Passenger Trips Per Revenue Hour	4.58	5.39	6.57	7.36	7.10	55.1%
Average Age of Fleet (years)	2.00	3.80	2.50	3.50	4.50	125.0%
Revenue Miles Between Vehicle Failures	2,483	16,817	25,595	11,297	10,325	315.9%
Efficiency Measures						
Operating Expense Per Capita	\$1.65	\$1.88	\$1.68	\$1.83	\$2.08	25.9%
Operating Expense Per Passenger Trip	\$5.34	\$4.75	\$3.35	\$3.39	\$3.42	-36.0%
Operating Expense Per Revenue Mile	\$1.34	\$1.53	\$1.34	\$1.43	\$1.46	9.0%
Operating Expense Per Revenue Hour	\$24.44	\$25.62	\$22.02	\$24.95	\$24.28	-0.7%
Maintenance Expense Per Revenue Mile	\$0.13	\$0.12	\$0.13	\$0.21	\$0.10	-16.8%
Farebox Recovery Ratio	7.7%	7.2%	10.0%	9.1%	10.3%	33.0%
Average Fare	\$0.41	\$0.34	\$0.34	\$0.31	\$0.35	-14.8%
Revenue Hours Per Employee FTE	1,124	1,238	1,535	1,448	1,207	7.4%
Passenger Trips Per Employee FTE	5,142	6,670	10,079	10,654	8,567	66.6%
Revenue Miles Per Total Vehicles	37,863	50,451	51,190	26,360	29,255	-22.7%
Vehicle Miles Per Gallon	6.62	5.89	5.31	6.23	7.13	7.7%

SOURCE: BCCOA's NTD reports for FYs 1997 through 2001.

BTT Trend Analysis

A fixed-route trend analysis for fiscal years 1997 through 2001 was conducted to follow the performance of BTT over the five-year period since its first full fiscal year of operations. Data used in this analysis are from BCCOA's NTD reports. The selected general performance indicators and measures are grouped into categories and presented in tabular form (Tables II-4 through II-10), along with brief discussions of the data. The percent change over the five-year time frame for each indicator and measure is also shown in the tables, as well as the percent change from FY 2000 to FY 2001. The trends are also illustrated graphically in Figures II-2 through II-30. As noted previously, detailed trend data tables can be found in Appendix G.

General Performance Indicators

Ridership, Route Mileage, and Level of Service

Table II-4 shows how the Bay Town Trolley has grown since its first full year of operations (fiscal year 1997). Ridership on BTT nearly doubled between 1997 and 2001 as the service began to mature and awareness of the system began to increase among those in the community. During its fifth full fiscal year of operation, BTT's ridership continued to increase with the number of passenger trips growing 13 percent over the previous year. The trend for passenger miles is similar, exhibiting an average trip length (passenger miles per passenger trip) that has stabilized at approximately 2.5 miles. Table II-4 also shows how vehicle and revenue miles as well as vehicle and revenue hours have grown between 1997 and 2001.

Figures II-2 through II-8 on the following page graphically illustrate these trends.

Table II-4
BTT - Ridership, Route Mileage, and Level of Service, Fixed-Route Trend Analysis

Fiscal Year	Passenger Trips	Passenger Miles	Route Miles	Vehicle Miles	Revenue Miles	Vehicle Hours	Revenue Hours
1997	38,052	117,936	106.0	155,988	151,452	8,568	8,316
1998	48,694	134,034	106.0	153,863	151,353	9,287	9,036
1999	61,479	153,571	106.0	163,691	153,571	9,867	9,361
2000	66,482	166,205	106.0	165,773	158,158	9,432	9,036
2001	74,787	191,979	118.0	190,180	175,531	11,565	10,537
% Change 1997-2001	96.5%	62.8%	11.3%	21.9%	15.9%	35.0%	26.7%
% Change 2000-2001	12.5%	15.5%	11.3%	14.7%	11.0%	22.6%	16.6%

SOURCE: BCCOA's NTD reports.

BTT Fixed-Route Trend Analysis – General Performance Indicators

**Figure II-2
Passenger Trips**

**Figure II-3
Passenger Miles**

**Figure II-4
Route Miles**

**Figure II-5
Vehicle Miles**

**Figure II-6
Revenue Miles**

**Figure II-7
Vehicle Hours**

**Figure II-8
Revenue Hours**

Expenses and Revenues

Total operating expense for BTT's fixed-route motorbus service increased nearly 26 percent in nominal terms between 1997 and 2001 as shown in Table II-5. However, when these figures are adjusted to real terms, the increase is 14 percent (in 1997 dollars), reflecting the low rate of inflation during this time period. Figure II-9 shows the change in operating expense in both nominal and real values.

Total maintenance expense is a subset of total operating expense. The table below and Figure II-10 show that maintenance expense, in nominal terms, declined at a rate of 3.6 percent (13 percent when adjusted for inflation) over the trend period. Furthermore, between 2000 and 2001, maintenance expense declined approximately 46 percent.

Lastly, Table II-5 shows how BTT's fare revenue has grown since the system's first full year of operations in FY 1997. The trend for passenger fare revenue is also exhibited in Figure II-11.

Table II-5
BTT – Expenses and Revenues, Fixed-Route Trend Analysis

Fiscal Year	Total Operating Expense	Total Operating Expense (1997 \$)¹	Total Maintenance Expense	Total Maintenance Expense (1997 \$)¹	Passenger Fare Revenue
1997	\$203,259	\$203,259	\$18,995	\$18,995	\$15,708
1998	\$231,522	\$227,818	\$17,508	\$17,228	\$16,652 ²
1999	\$206,093	\$198,334	\$19,830	\$19,083	\$20,586
2000	\$225,434	\$209,571	\$33,766	\$31,390	\$20,546
2001	\$255,810	\$231,151	\$18,316	\$16,550	\$26,292
% Change 1997-2001	25.9%	13.7%	-3.6%	-12.9%	67.4%
% Change 2000-2001	13.5%	10.3%	-45.8%	-47.3%	28.0%

¹Inflation rate information is from the Bureau of Economic and Business Research (BEBR).

²The source of FY 1998 fare revenue is BTT's monthly operating reports; data for December 1997 are missing.

SOURCE: BCCOA's NTD reports.

BTT Fixed-Route Trend Analysis – General Performance Indicators

Figure II-9
Total Operating Expense

Figure II-10
Total Maintenance Expense

Figure II-11
Passenger Fare Revenue

Figure II-12
Total Employees (FTEs)

Figure II-13
Vehicles in Maximum Service

Figure II-14
Total Gallons of Fuel Consumed

Employees, Vehicles, and Fuel Consumption

The total number of employees used for BTT service is represented by full-time equivalents (FTEs), which are derived from the labor hours listed on Form 404 in the NTD report. Table II-6 indicates that total employee FTEs increased 18 percent from 7.4 in 1997 to 8.7 in 2001. While no hours for maintenance were listed in the NTD report for fiscal year 1997, maintenance FTEs ranged from 0.3 in FY 1998 to 1.14 in FY 2001. Overall, however, total employee FTEs increased by 2.5 between 2000 and 2001, which was primarily the result of an increase in transportation operating FTEs between these two years. Figure II-12 illustrates the trend graphically.

The number of trolley vehicles operated in maximum service increased from three to four over the trend period, while the number of vehicles available for maximum service increased from four in 1997 to six in 2001, providing a spare ratio of 50 percent in FY 2001. Figure II-13 shows this trend.

Finally, the total gallons of fuel utilized for each year in the trend period are also presented in the table below. The table and Figure II-14 indicate that fuel consumption increased between 1997 and 2001 by approximately 13 percent. This 13 percent increase is less than the vehicle mile increase of 22 percent and vehicle hour increase of 35 percent, also experienced during the same time period. This suggests that BTT is becoming more efficient in terms of energy consumption.

Table II-6
BTT - Employees, Vehicles, and Fuel Consumption, Fixed-Route Trend Analysis

Fiscal Year	Total Employees (FTEs)	Vehicles Available for Max. Service	Vehicles Operated in Max. Service	Total Gallons of Fuel Consumed
1997	7.4	4	3	23,569
1998	7.3	3	3	26,136
1999	6.1	3	3	30,855
2000	6.2	6	3	26,464
2001	8.7	6	4	26,690
% Change 1997-2001	18.0%	50.0%	33.3%	13.2%
% Change 2000-2001	39.9%	0.0%	33.3%	0.9%

SOURCE: BCCOA's NTD reports.

Effectiveness Measures

Service Supply, Service Consumption, and Quality of Service

Vehicle miles per capita is one measure of service supply. Over this time period, this measure grew nearly 22 percent, as shown in Table II-7 and Figure II-15. An additional per-capita effectiveness measure is also shown in Figure II-15: passenger trips per capita, which is a measure of service consumption. Between 1997 and 2001, this measure grew approximately 97 percent.

Additional measures of service consumption are passenger trips per revenue mile and per revenue hour, which grew over the trend period. Table II-7 and Figures II-16 and II-17 exhibit growing trends for these measures.

Table II-7 and Figure II-18 present the trend for the average fleet age. Understandably, the fleet age has been increasing since the implementation of BTT services. Because BTT did not have any reportable incidents during this trend period, the measure of revenue miles between incidents is not reported. Lastly, the significant growth in the measure of revenue miles between revenue vehicle failures (Figure II-19) reflects the sharp decline in failures since FY 1997 (61 in 1997; 17 in 2001). This decrease is exceptionally important given the growth in service during this time.

Table II-7
BTT - Service Supply and Consumption, and Quality of Service, Fixed-Route Trend Analysis

Fiscal Year	Vehicle Miles Per Capita	Passenger Trips Per Capita	Passenger Trips Per Revenue Mile	Passenger Trips Per Revenue Hour	Average Age of Fleet (years)	Revenue Miles Between Failures
1997	1.27	0.31	0.25	4.58	2.00	2,483
1998	1.25	0.40	0.32	5.39	3.80	16,817
1999	1.33	0.50	0.40	6.57	2.50	25,595
2000	1.35	0.54	0.42	7.36	3.50	11,297
2001	1.55	0.61	0.43	7.10	4.50	10,325
% Change 1997-2001	21.9%	96.5%	70.0%	55.1%	125.0%	315.9%
% Change 2000-2001	14.7%	12.5%	1.4%	-3.5%	28.6%	-8.6%

SOURCE: BCCOA's NTD reports.

BTT Fixed-Route Trend Analysis – Effectiveness Measures

Figure II-15
Vehicle Miles and Passenger Trips
per Capita

Figure II-16
Passenger Trips per Revenue Mile

Figure II-17
Passenger Trips per Revenue Hour

Figure II-18
Average Age of Fleet (years)

Figure II-19
Revenue Miles Between Failures

Efficiency Measures

Cost Efficiency

Four operating expense ratios, listed in Table II-8, are each shown in nominal values and help to measure BTT's overall cost efficiency. The first measure, operating expense per capita, rose by 26 percent from 1997 to 2001, but only increased by 14 percent between 2000 and 2001. The increase in this first measure is primarily due to a stable service population. The trend for this measure is displayed in Figure II-20. Operating expense per is the second measure that was selected to aid in developing initial performance goals for BTT's young operations. Both the table below and Figure II-21 show that BTT's value for this measure decreased significantly over the trend period, yet remained relatively stable between 2000 and 2001.

Trends for operating expense per revenue mile and per revenue hour are also shown in Table II-8 as well as in Figures II-22 and II-23. Operating expense per revenue mile increased nine percent between 1997 and 2001. Since 2000, this measure remained relatively stable. Operating expense per revenue hour decreased slightly during the entire trend period, and declined nearly three percent between 2000 and 2001. Finally, the table below and Figure II-24 indicate that maintenance expense per revenue mile declined 17 percent between 1997 and 2001, and more than 50 percent between 2000 and 2001. The significant decrease in this measure between 2000 and 2001 is attributable to a spike in maintenance expenses in FY 2000.

Table II-8
BTT - Cost Efficiency, Fixed-Route Trend Analysis

Fiscal Year	Operating Expense Per Capita	Operating Expense Per Passenger Trip	Operating Expense Per Revenue Mile	Operating Expense Per Revenue Hour	Maintenance Expense Per Revenue Mile
1997	\$1.65	\$5.34	\$1.34	\$24.44	\$0.13
1998	\$1.88	\$4.75	\$1.53	\$25.62	\$0.12
1999	\$1.68	\$3.35	\$1.34	\$22.02	\$0.13
2000	\$1.83	\$3.39	\$1.43	\$24.95	\$0.21
2001	\$2.08	\$3.42	\$1.46	\$24.28	\$0.10
% Change 1997-2001	25.9%	-36.0%	9.0%	-0.7%	-16.8%
% Change 2000-2001	13.5%	0.9%	2.2%	-2.7%	-51.1%

SOURCE: BCCOA's NTD reports.

BTT Fixed-Route Trend Analysis – Efficiency Measures

Figure II-20
Operating Expense per Capita

Figure II-21
Operating Expense per Passenger Trip

Figure II-22
Operating Expense per Revenue Mile

Figure II-23
Operating Expense per Revenue Hour

Figure II-24
Maintenance Expense per Revenue Mile

Farebox Recovery, Average Fare, and Labor Productivity

The farebox recovery ratio, which represents the amount of operating expenses covered by fare revenue, fluctuated during the trend period with an overall growth rate of 33 percent, as noted in Table II-9. Figure II-25 also illustrates this trend. BTT's low farebox recovery is due in part to a relatively low current base fare of \$0.50. The trend for the average fare per passenger trip is shown in the table, as well as in Figure II-26. BTT's average fare fell from \$0.41 in 1997 to \$0.35 in 2001, although it increased between 2000 and 2001.

The trends for BTT's labor productivity, as measured by the numbers of revenue hours per employee and passenger trips per employee, are displayed in the table below and in Figures II-27 and II-28. It is important to note that the number of employees are represented by full-time equivalents (FTEs), which are computed using the number of labor hours from the NTD report. The measure of revenue hours per employee increased between 1997 and 1999 and then declined between 1999 and 2001, amounting to an overall increase of seven percent during the entire trend period. Lastly, BTT is proving to be labor-efficient in terms of service consumption as measured by passenger trips per employee, which more than doubled between 1997 and 2000. Although this measure declined by approximately 20 percent between 2000 and 2001, BTT's performance during the entire trend period still exhibited an overall growth rate of 67 percent.

Table II-9
BTT - Farebox Recovery, Average Fare, and Labor Productivity, Fixed-Route Trend Analysis

Fiscal Year	Farebox Recovery	Average Fare	Revenue Hours Per Employee FTE	Passenger Trips Per Employee FTE
1997	7.7%	\$0.41	1,124	5,142
1998	7.2% ¹	\$0.34 ¹	1,238	6,670
1999	10.0%	\$0.34	1,535	10,079
2000	9.1%	\$0.31	1,448	10,654
2001	10.3%	\$0.35	1,207	8,567
% Change 1997-2001	33.0%	-14.8%	7.4%	66.6%
% Change 2000-2001	12.8%	13.8%	-16.6%	-19.6%

¹For FY 1998, fare revenue data are missing for December 1997.
SOURCE: BCCOA's NTD reports.

BTT Fixed-Route Trend Analysis – Efficiency Measures

Figure II-25
Farebox Recovery Ratio

Figure II-26
Average Fare

Figure II-27
Revenue Hours per Employee FTE

Figure II-28
Passenger Trips per Employee FTE

Vehicle Utilization and Energy Utilization

One measure of vehicle utilization is the number of revenue miles per total vehicles (utilizing vehicles available for maximum service). Table II-10 shows that the number of revenue miles per total vehicles decreased approximately 23 percent over the trend period. Figure II-29 graphically displays this trend.

Finally, the fuel efficiency of BTT's trolley fleet can be measured by the number of vehicle miles per gallon. As can be seen from Table II-10, this measure increased approximately eight percent over the examined time period, and increased nearly 14 percent between 2000 and 2001. This trend is also represented in Figure II-30.

Table II-10
BTT - Vehicle Utilization and Energy Utilization, Fixed-Route Trend Analysis

Fiscal Year	Revenue Miles Per Total Vehicles	Vehicle Miles Per Gallon
1997	37,863	6.62
1998	50,451	5.89
1999	51,190	5.31
2000	26,360	6.26
2001	29,255	7.13
% Change 1997-2001	-22.7%	7.7%
% Change 2000-2001	11.0%	13.8%

SOURCE: BCCOA's NTD reports.

Figure II-29
Revenue Miles per Total Vehicles

Figure II-30
Vehicle Miles per Gallon

Fixed-Route Peer Review Analysis

In addition to the trend analysis, a peer review analysis was conducted to compare the performance of the Bay Town Trolley with similar systems in Florida and throughout the southeastern United States. This section contains a comparison to an existing peer group containing systems that operate between one and nine buses in peak fixed-route service.

CUTR conducts an Annual Performance Evaluation Study for FDOT that, until 2000, included trend and peer review analyses as its main components. The peer analysis categorized Florida's fixed-route transit systems (those receiving State Block Grant funds) into four groups based on the size of the peak vehicle fleet: 1 to 9 vehicles, 10 to 49 vehicles, 50 to 200 vehicles, and more than 200 vehicles. Peers from outside Florida are carefully selected and also placed into these categories (the peer selection methodology for the Annual Performance Evaluation Study is included in Appendix F). The analysis allows Florida properties to be compared with each other as well as among their out-of-state peers.

Since the out-of-state peers were examined closely and accepted by CUTR, as well as FDOT, to be appropriate peers for Florida systems as recently as 2000, they were used in this analysis to show how BTT fits in with its existing 1-to-9 peer group. The largest system in the group included in this analysis operates eight vehicles in peak service. It should be noted that, Pasco County Public Transportation, while part of the original 1-to-9 group from FY 1999, was not included here since, as of FY 2000, it operated 11 peak vehicles. In addition, Winter Haven Area Transit, which operates seven peak vehicles, was excluded due to some data inconsistencies. All data are from the systems' NTD reports for FY 2000, which represent the most recent validated information available for all the peers. Another data source is the FDOT Florida Transit Information System (FTIS) software. Peer systems are listed in Table II-11.

Table II-11
Peer Systems Operating Between 1 and 9 Vehicles in Maximum Service (FY 2000)

Florida Peers	Non-Florida Peers
SunTran – Ocala/Marion MPO Indian River County - Community Coach Key West Department of Transportation Bay Town Trolley	Terrebonne Parish Consolidated Government (Houma, LA) City of San Angelo (TX) Tuscaloosa County Parking & Transit Authority (AL) Johnson City Transit System (TN) Port Arthur Transit (TX)

SOURCE: 2000 Performance Evaluation of Florida's Transit Systems, Part II: Fixed-Route Peer Review Analysis, FY 1999. Prepared for FDOT by CUTR, USF Tampa, December 2000.

Tables II-12 through II-14 as well as Figures II-31 through II-63 summarize selected general performance indicators, effectiveness measures, and efficiency measures by displaying the peer groups averages as well as the averages of a subset of the peer group. This peer subset contains only the four Florida systems: SunTran (Ocala/Marion MPO), Indian River's Community Coach, Key West Department of Transportation, and the Bay Town Trolley. The percentage by which BTT deviates from the peer average is also shown. Complete data tables including each peer system are found in Appendix G.

Table II-12
Selected General Performance Indicators (FY 2000), 1-to-9 Vehicle Group
Fixed-Route Peer Review Analysis

Indicator	BTT	Peer Mean	Peer Subset¹ Mean	BTT: % from Mean	BTT: % from Subset¹ Mean
Service Area Population	122,901	80,808	80,897	52.1%	51.9%
Service Area Population Density	1,566	1,245	1,181	24.9%	31.7%
Passenger Trips	66,482	194,720	181,298	-65.9%	-63.3%
Passenger Miles ²	166,205	765,044	192,108	-78.3%	-13.5%
Vehicle Miles	165,773	272,318	250,855	-39.1%	-33.9%
Revenue Miles	158,158	257,994	230,695	-38.7%	-31.4%
Vehicle Hours	9,432	18,653	17,688	-49.4%	-46.7%
Revenue Hours	9,036	17,276	15,696	-47.7%	-42.4%
Total Operating Expense	\$225,434	\$727,492	\$673,218	-69.0%	-66.5%
Total Maintenance Expense	\$33,766	\$146,468	\$93,561	-77.0%	-63.9%
Passenger Fare Revenue	\$20,546	\$101,022	\$66,486	-79.7%	-69.1%
Total Employee FTEs	6.2	14.4	10.6	-56.7%	-41.1%
Vehicles Available for Max. Service	6	9.7	9.3	-37.9%	-35.1%
Vehicles Operated in Max. Service	3	5.7	5.3	-47.1%	-42.9%
Total Gallons of Fuel Consumed	26,464	51,824	41,354	-48.9%	-36.0%

¹The Peer Subset contains the Florida systems in this group: Indian River County Council on Aging (Community Coach), Key West Department of Transportation, SunTran (Ocala/Marion MPO), and BTT.

²Key West Department of Transportation and SunTran have NTD sampling waivers for passenger miles; as such, they are not included in the mean of the entire group or the subset.

SOURCE: Systems' individual FY 2000 NTD reports and the Florida Transit Information System (FTIS) software.

Among the peers chosen for this analysis, BTT has a service area population that is more than 50 percent above average, and a population density that is 25 percent greater than that of the other systems, as shown in Table II-12 and Figures II-31 and II-32. These differences do not vary greatly when focusing on the Florida systems in this group, with BTT's population being 52 percent above average and its density 32 percent above its Florida peers. When analyzing populations and densities across transit system service areas, it is important to note that many systems measure their service area populations differently. These disparities are especially evident between Florida and non-Florida properties, as many Florida systems report entire county populations as service area populations, mainly due to the fact that many also provide demand-response service in their entire counties. These variations affect the per-capita measures discussed later in this section. Using the FTIS software, it was determined that, according to 2000 Census population data, BTT's service area population within $\frac{3}{4}$ -mile of its fixed-route network is 69,261, which represents only 47 percent of its 2000 county population of 148,217, and 56 percent of the service area population reported in the NTD. This information was not readily available for the out-of-state peer systems.

Regarding ridership (in terms of passenger trips and passenger miles) and level of service (as measured by vehicle miles, revenue miles, vehicle hours, and revenue hours), Table II-12 shows that BTT ranks below its peers. This is primarily due the fact that, in FY 2000, BTT was the smallest of the systems in the group, in terms of the number of peak vehicles operated. Figures II-33 through II-38 show BTT's ranking in these variables graphically. In terms of operating expense, maintenance expense, and passenger fare revenue, BTT is also significantly under the averages, again due to the fact that it is the smallest (as well as a relatively young) system in the group. The same is true for the number of total employee FTEs and fuel consumed, as shown in Table II-12 and Figures II-39 through II-42 and Figure II-45). The table, as well as Figures II-43 and II-44 indicate again that BTT has the fewest number of vehicles available for and operated in maximum service.

While analysis of the effectiveness and efficiency measures on the following pages will result in a more meaningful analysis of BTT's place among its peers, a short discussion on local revenues is included here. While not included in Table II-12, it must be noted that each of the nine fixed-route peer systems, except BTT and Key West, receive General Revenue funds from their local governments. Key West, while not a recipient of General Revenues, does receive other local funds. The average amount of annual General Revenue funding received by BTT's peers in FY 2000 is \$171,224. Overall, BTT is the only one of its peers that does not receive any local assistance for fixed-route services. The average amount of total local assistance received by the peers in FY 2000 is \$252,460. As of FY 2001, out of 26 Florida transit systems receiving

State Block Grants, 18 received local general revenues and BTT was the only system that received no local assistance at all. It is clear that, with local funds, BTT would be able to provide higher levels of service and subsequently attract more ridership, thus enabling the system to be more comparable with its peers.

1-to-9 Motorbus Vehicle Category – General Performance Indicators, FY 2000

Figure II-31
Service Area Population (000)

Figure II-32
Service Area Population Density

Figure II-33
Passenger Trips (000)

Figure II-34
Passenger Miles (000)

Figure II-35
Revenue Miles (000)

Figure II-36
Vehicle Miles (000)

Figure II-37
Revenue Hours (000)

Figure II-38
Vehicle Hours (000)

1-to-9 Motorbus Vehicle Category – General Performance Indicators, FY 2000

Figure II-39

Total Operating Expense (000)

Figure II-40

Maintenance Expense (000)

Figure II-41

Passenger Fare Revenue (000)

Figure II-42

Total Employee FTEs

Figure II-43

Vehicles Available for Max. Service

Figure II-44

Vehicles Operated in Max. Service

Figure II-45

Total Gallons of Fuel (000)

Table II-13
Selected Effectiveness Measures (FY 2000), 1-to-9 Vehicle Group
Fixed-Route Peer Review Analysis

Effectiveness Measure	BTT	Peer Mean	Peer Subset¹ Mean	BTT: % from Mean	BTT: % from Subset¹ Mean
Vehicle Miles Per Capita	1.35	4.25	4.36	-68.2%	-69.1%
Passenger Trips Per Capita	0.54	3.47	3.84	-84.4%	-85.9%
Passenger Trips Per Revenue Mile	0.42	0.76	0.79	-44.6%	-47.0%
Passenger Trips Per Revenue Hour	7.36	11.43	11.74	-35.6%	-37.3%
Average Fleet Age (years)	3.50	5.35	3.48	-34.5%	0.7%
Revenue Miles Between Incidents	n/a	121,826	109,058	n/a	n/a
Revenue Miles Between Failures	11,297	6,159	6,130	83.4%	84.3%

¹The Peer Subset contains the Florida systems in this group Indian River County Council on Aging (Community Coach), Key West Department of Transportation, SunTran (Ocala/Marion MPO), and BTT.

SOURCE: Systems' individual FY 2000 NTD reports and the Florida Transit Information System (FTIS) software.

Table II-13 shows the effectiveness measures chosen for this review. Analysis of the measures of vehicle miles per capita and passenger trips per capita reveals that BTT falls near the bottom of the peer group in this area (this is further illustrated in Figures II-46 and II-47). BTT's low values for these measures are partially due to its comparatively high service area population. As discussed previously, BCCOA reports a larger service area in the NTD due to its paratransit services; the fixed-route service area is smaller. Passenger trips per revenue mile and per revenue hour were two of the measures to be used as a benchmark for BTT's progress over its past five years of operation. Table II-13, and Figures II-48 and II-49, show that, in FY 2000, BTT was 45 percent and 36 percent, respectively, below the averages for these measures.

Table II-13 and Figure II-50 indicate that, compared to the entire group, BTT has a relatively young fleet. When compared only to the Florida systems, BTT's fleet age is about average. The last two effectiveness measures shown in Table II-13 deal with safety and reliability. In FY 2000, BTT had no reportable incidents; thus, the measure of revenue miles between incidents is not applicable to BTT. However, the table and Figure II-51 show this measure for the peer systems. In FY 2000, in the entire group, the number of incidents ranged from none to seven. Figure II-52 shows BTT with a high number of revenue miles between vehicle failures (83 percent above the peer group average, according to the data in Table II-13), which translates to a relatively low number of failures for FY 2000. In fact, the Trolley system experienced the fewest number of revenue vehicle failures among all of its peers during fiscal year 2000.

1-to-9 Motorbus Vehicle Category – Effectiveness Measures, FY 2000

Figure II-46
Vehicle Miles per Capita

Figure II-47
Passenger Trips per Capita

Figure II-48
Passenger Trips per Revenue Mile

Figure II-49
Passenger Trips Per Revenue Hour

Figure II-50
Average Age of Fleet (years)

Figure II-51
Rev. Mi. Between Incidents (000)

Figure II-52
Rev. Miles Between Veh. Failures

Table II-14
Selected Efficiency Measures (FY 2000), 1-to-9 Vehicle Group
Fixed-Route Peer Review Analysis

Efficiency Measure	BTT	Peer Mean	Peer Subset¹ Mean	BTT: % from Mean	BTT: % from Subset¹ Mean
Operating Expense Per Capita	\$1.83	\$12.83	\$14.04	-85.7%	-86.9%
Operating Expense Per Passenger Trip	\$3.39	\$3.82	\$3.75	-11.2%	-9.5%
Operating Expense Per Revenue Mile	\$1.43	\$2.84	\$2.89	-49.8%	-50.7%
Operating Expense Per Revenue Hour	\$24.95	\$42.83	\$42.91	-41.8%	-41.9%
Maintenance Expense Per Revenue Mile	\$0.21	\$0.56	\$0.40	-61.6%	-46.6%
Farebox Recovery Ratio	9.1%	13.5%	9.7%	-32.5%	-5.7%
Average Fare	\$0.31	\$0.51	\$0.37	-39.7%	-17.1%
Revenue Hours Per Employee FTE	1,448	1,234	1,380	17.3%	4.9%
Passenger Trips Per Employee FTE	10,654	12,164	10,473	-12.4%	1.7%
Revenue Miles Per Total Vehicles	26,360	28,439	27,245	-7.3%	-3.2%
Vehicle Miles Per Gallon	6.23	5.90	7.00	6.2%	-10.5%

¹The Peer Subset contains the Florida systems in this group: Indian River County Council on Aging (Community Coach), Key West Department of Transportation, SunTran (Ocala/Marion MPO), and BTT.

SOURCE: Systems' individual FY 2000 NTD reports and the Florida Transit Information System (FTIS) software.

Table II-14 lists selected efficiency measures for this analysis, including four operating expense ratios. BTT is well below the mean (meaning high cost efficiency) for three of the measures: operating expense per capita, per revenue mile, and per revenue hour (BTT has the lowest value for the latter two). BTT's value for operating expense per passenger trip is 11 percent below average for FY 2000. Similarly, when compared among only the Florida systems in the group, BTT's value falls approximately 10 percent below average. These efficiency ratios are further illustrated in Figures II-53 through II-56. Another measure of cost efficiency is maintenance expense per revenue mile. The table above and Figure II-57 show that, for this measure, BTT is significantly below the mean of the entire group as well as the Florida subset.

Table II-14 above and Figures II-58 and II-59 indicate that BTT's farebox recovery ratio and its average fare are below the mean of its peers. However, when compared only with the Florida system subset, BTT is only slightly below the average. This is due primarily to its relatively low base fare (\$0.50) as well as the fact that the system is still maturing. BTT's base fare of \$0.50 is the lowest of its peers. The next highest base fare is Johnson City's at \$0.60. Key West has

a base fare of \$0.75 and the rest have base fares of \$1.00. It should be noted that, as of January 2003, BTT will raise its base fare to \$1.00.

BTT's two measures of labor productivity as compared to the peers are shown in Table II-14 as well as Figures II-60 and II-61. BTT is above average for both measures in comparison to its Florida peers, as of FY 2000. When compared to the entire 1-to-9 peer group, BTT performs above the average in terms of revenue hours per employee FTE, yet below the average of the group in terms of the measure of passenger trips per employee FTE.

Data for a vehicle utilization measure, revenue miles per total vehicles, are shown in Table II-14 and Figure II-62 and indicate that BTT is performing slightly below average in comparison to its peers. Compared to the entire group, BTT is seven percent below average for this measure, while compared to the Florida subset the system is only three percent below average.

In addition, the table and Figure II-63 show information relating to the fuel efficiency of the systems' fleets. BTT has an above-average value for vehicle miles per gallon when compared to the whole group; however, the system is below average when compared to its Florida peers.

Figure II-53
Operating Expense per Capita

Figure II-54
Operating Expense per Pass. Trip

Figure II-55
Operating Expense per Rev. Mile

1-to-9 Motorbus Vehicle Category – Efficiency Measures, FY 2000

Figure II-56
Operating Expense per Rev. Hour

Figure II-57
Maintenance Expense per Rev. Mile

Figure II-58
Farebox Recovery Ratio

Figure II-59
Average Fare

Figure II-60
Revenue Hours per Employee FTE

Figure II-61
Passenger Trips per Employee FTE

Figure II-62
Revenue Miles/Total Vehicles (000)

Figure II-63
Vehicle Miles Per Gallon

Conclusions – BTT Performance Evaluation

A general summary of BTT's performance strengths and areas for improvement based on the peer review analyses conducted in this chapter is presented below. Because BTT is still considered to be a relatively young fixed-route system, it is not particularly useful to attempt to ascertain strengths and areas for improvement based on the trend analysis, which covers nearly its entire operating life of five years. Most of the significant changes that occurred over the trend period evidenced the beginnings of system maturation.

The intention of this section is not to, based on the peer review of the 1-to-9 vehicle group, suggest the extent of a strength or improvement area but to identify those performance areas wherein BTT appears to perform, on average, better or worse than the peer systems defined for this study. The measures of effectiveness and efficiency that were employed in this analysis are used rather than the general performance indicators, which only report data in absolute terms.

Table II-15 below outlines BTT's apparent strengths and areas for improvement based on the fixed-route peer review analysis of systems that operate nine or fewer vehicles in maximum service. For the results of this exercise, an area where BTT is more than 10 percent better than the peer average is considered to be a performance strength, whereas an area that is more than 10 percent worse than the peer group average is defined as an area for improvement. Performance areas that are within 10 percent of the peer mean are considered neither strengths nor areas for improvement.

Table II-15

BTT Performance Strengths and Areas for Improvement, Fixed-Route Peer Review Analysis

Performance Strengths	Areas for Improvement
Quality of Service Cost Efficiency Average Fare per Passenger Trip Labor Productivity (revenue hours per employee FTE)	Service Supply Service Consumption Farebox Recovery Ratio Labor Productivity (passenger trips per employee FTE)

As shown in the table above, the peer review analysis resulted in four performance strengths (quality of service, cost efficiency, average fare, and revenue hours per FTE employee) and four areas for improvement (service supply, service consumption, farebox recovery, and labor

productivity as measured by passenger trips per FTE employee). These strengths and areas for improvement are explained below.

Among the peer systems selected for the 1-to-9 vehicle category, BTT was found to have a measure of revenue miles between revenue vehicle failures that was above the peer mean. BTT's revenue miles between failures for FY 2000 was 11.3, while the mean was 6.2. A greater number of revenue miles between vehicle failures is considered to be a strength since it reflects fewer service interruptions (failures) and typically less maintenance costs, thus resulting in more effective service.

BTT appeared to be relatively weak in terms of service supply and service consumption. BTT's measure of vehicle miles per capita (1.35) was 68 percent below average. Similarly, BTT's 0.54 passenger trips per capita was more than 84 percent below the peer mean. Two additional effectiveness measures of service consumption are passenger trips per revenue mile and per revenue hour. BTT's figures for these two were 45 percent and 36 percent below average, respectively. Evidently, this analysis shows that BTT is not providing the service miles or generating the ridership to be performing at a level equal to the average of its peers. However, BTT's performance in these measures has improved since the previous major TDP update and considering that BTT is still a relatively young system, it might not yet be realistic to assume that BTT would be performing, on average, the same as its peers.

When compared to its peers, BTT was found to be quite cost-efficient, which is an important strength in these times of shrinking budgets. All four expense ratios presented in Table II-14 (operating expense per capita, per passenger trip, per revenue mile, and per revenue hour) were below the average of the peer group, as was the measure of maintenance expense per revenue mile.

From the riders' (consumers') point of view, a low average fare is considered to be a benefit and, as such, it is considered a strength in this analysis. BTT has a comparatively low average fare of \$0.31, which represents the minimum value of the peer group. This results from its low base fare of \$0.50, which is the lowest of the peers. However, the converse of the strength in the average fare is the resulting low farebox recovery ratio. BTT's farebox recovery was only 9.1 percent in FY 2000, which was 33 percent below the mean and, subsequently, considered to be an area for improvement. As noted previously, BTT's base fare will increase to \$1.00 as of January 2003.

Lastly, while one measure of labor productivity, revenue hours per employee FTE, was considered to be a strength, the other measure, passenger trips per employee FTE, was found to be an area for improvement. In FY 2000, BTT had 1,448 revenue hours per FTE employee, which was 17 percent higher than the peer group mean and had 10,654 trips per FTE, which was slightly below (12 percent) the mean of 12,164 trips per FTE.

Because BTT's measures of vehicle utilization (revenue miles per total vehicles) and energy utilization (vehicle miles per gallon) were within 10 percent of the means, they are not considered to be neither strengths nor areas for improvement. BTT's value of 28,439 revenue miles per total vehicles is approximately seven percent below the peer average, and the system's value of 6.26 vehicle miles per gallon is approximately six percent above average.

In the 1999 TDP, performance goals were specifically set in terms of service consumption and cost efficiency. In this analysis, Table II-15 showed service consumption to be an area for improvement when compared to the peer systems and cost efficiency to be a strength. Table II-16 below shows how well BTT has done in achieving the benchmarks identified in the 1999 TDP, which were based on peer data. It should be noted that the peer group has changed somewhat since 1999. Manatee and Pasco Counties were eliminated from the peer review in this TDP since they now operate more than nine peak vehicles. In addition, SunTran (Ocala/Marion MPO) was added as a new fixed-route system. As for out-of-state peers, Danville, Virginia, Spartanburg, South Carolina, and Clarksville, Tennessee were eliminated in 2000 during the re-selection process for the FDOT Annual Performance Evaluation Study. The system in Houma, Louisiana (Terrebonne) was added at that time.

The performance goals were set with the assumption that all recommended route changes from the 1999 TDP would be implemented by FY 2000. Although not all changes have occurred, Table II-16 (on the following page) indicates that, in FY 2000, BTT exceeded each of the goals by approximately one-third. In FY 2001, BTT exceeded the goals set for trips per revenue hour and expense per trip by 9 percent and 29 percent, respectively. In 2001, BTT was only four percent below the set goal for passenger trips per revenue mile. Revised goals are addressed in Chapter Five of this TDP.

Table II-16
BTT's Performance Compared to Goals, FY 2000 – FY 2001

Measures	Passenger Trips Per Revenue Hour	Passenger Trips Per Revenue Mile	Operating Expense Per Passenger Trip
Goal, FY 2000 ¹	5.39	0.32	\$4.81
BTT, FY 2000 Actual	7.36	0.42	\$3.39
BTT -- % from Goal, FY 2000	+36.5%	+31.3%	-29.5%
Goal, FY 2001 ²	6.50	0.45	\$4.81
BTT, FY 2001 Actual	7.10	0.43	\$3.42
BTT -- % from Goal, FY 2001	+9.2%	-4.4%	-28.9%

¹The performance goals for FY 2000 were based on BTT's FY 1998 values for the measures of trips per revenue hour and revenue mile, and for the 1999 TDP peer group average for operating expense per trip.

²The performance goals for FY 2001 were based on 50 percent of the 1999 TDP peer group averages for the measures of trips per revenue hour and revenue mile, and on 100 percent of the 1999 TDP peer group average for operating expense per trip.

SOURCE: BTT's values from BCCOA's FY 2000 and FY 2001 NTD reports.

While not specifically addressed in the analysis of effectiveness and efficiency measures for BTT, two points should be noted. One is that BTT, which was found to operate the lowest number of revenue miles and operate the fewest vehicles of the peer group, was also found to have the third-highest number of directional route miles (behind two other Florida systems, SunTran and Indian River), indicating sparse coverage of its network. Clearly, from the data presented in this section, BTT continues to have a significantly lower level of revenue miles per route mile as compared to the peer systems. Also, as discussed earlier in this section, BTT is the only one of its peers that does not receive any local assistance for the operation of its fixed-route services. It was found that, on average, the peer systems cover approximately 19 percent of their operating expenses with general revenues from their local governments. Overall, the peers cover, on average, more than 26 percent of operating expenses with local assistance, including general revenues. These systems were shown in this peer review to outperform BTT in the level of service provided as well as the level of ridership generated. A simple conclusion here is that systems with monetary support from their local governments can afford to provide better services and, therefore, realize higher levels of ridership.

Peer review analyses (as well as trend analyses) can be very useful tools for developing a better understanding of BTT performance and for identifying target areas for additional attention and improvement. However, it is important to remember that performance evaluation measures do not comprehensively cover all of the objectives of a transit system, nor do they necessarily consider the unique geographic, political, operating, and financial characteristics of a transit

system. Many system goals and objectives cannot be measured with this mechanism and require additional information or a more subjective evaluation. Nonetheless, the results of the trend and peer review analyses provide a useful introduction to a full understanding of the performance of BTT and complement the other components of this TDP, most notably the development of goals and initiatives.

REVIEW OF EXISTING BCT PARATRANSIT SERVICES

A historical trend analysis for FYs 1996 through 2001 for Bay Coordinated Transportation (BCT) was conducted using data from BCCOA's Annual Operating Reports (AORs) and from Annual Operating Reports compiled by the Florida Commission for the Transportation Disadvantaged.

BCT Trend Analysis

The trend analysis was conducted to recount BCCOA's temporal performance over the time period from FY 1996 to FY 2001 for its paratransit services. The tables provided throughout this analysis present only the general performance indicators and measures of effectiveness and efficiency that are available from BCCOA's AORs. Results from the trend analysis are provided in the following paragraphs.

General Performance Indicators

As shown in Table II-17, BCCOA ridership (paratransit passenger trips) rose by 35 percent in the period from 1996 to 2001. During this time period, the number of paratransit passenger trips increased continuously, with the exception of 1997 when a slight decline of three percent occurred. The level of service as measured by vehicle miles increased steadily from 1996 to 2001, with an overall increase of nearly 43 percent. The only exception to this trend took place in 2000 when vehicle miles decreased by approximately one percent. Revenue miles increased at a slightly lower rate of 38 percent from 1996 to 2001. Thus, service provision increased at a faster rate than ridership over the six-year period.

Without taking into account inflation, both total operating expense and revenue increased by 133 percent from 1996 to 2001. Table II-17 shows the temporal trends for expenses and revenues.

Also shown in Table II-17, the fleet size of BCT increased by more than four percent from 1996 to 2001, with the net addition of four vehicles in 1999, five vehicles in 2000, but with a decrease of three vehicles in 1997 and four vehicles in 2001.

Table II-17
BCT Paratransit Trend Analysis - General Performance Indicators

Indicators	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	% Change (1996-2001)
Service Area Population	140,626	142,889	144,584	147,496	148,217	150,287	6.9%
TD Population	14,199	14,476	17,736	14,840	15,115	15,376	8.3%
Potential TD Population	48,984	50,486	51,393	51,763	52,723	53,648	9.5%
Paratransit Passenger Trips	136,825	132,542	147,960	169,714	173,805	184,674	35.0%
Vehicle Miles	633,364	644,714	676,275	842,060	831,151	905,313	42.9%
Revenue Miles	523,711	538,549	611,518	810,456	664,942	724,250	38.3%
Operating Expense	\$776,388	\$1,017,122	\$1,278,067	\$1,347,477	\$1,481,912	\$1,808,167	132.9%
Operating Revenue	\$776,348	\$1,050,709	\$1,256,140	\$1,347,476	\$1,481,912	\$1,808,167	132.9%
Vehicle Fleet Size	45	42	42	46	51	47	4.4%

SOURCE: BCCOA AORs, fiscal years 1996-1998 and Florida Commission for the Transportation Disadvantaged *1999 - 2001 Annual Operating Report*. FY 2000 service area population based on Bay County's 2000 Census population. FY 2001 service area population is based on Bay County's 2001 estimated population.

Effectiveness Measures

Effectiveness measures indicate the extent to which various service-related goals are being achieved. Six effectiveness measures are included in Table II-18. The amount of service being supplied is measured by the number of vehicle miles per TD capita (using the TD population for Bay County). From 1996 to 2001 vehicle miles per TD capita increased by 32 percent. This translates into approximately 59 miles per year for each person in the TD population.

Table II-18 also contains a measure of service consumption. Paratransit trips per TD capita measures the average number of annual boardings made by each person in the TD population. This measure increased by 25 percent from 1996 to 2001, with a 2001 average of 12.01 trips per TD capita.

Paratransit trips per vehicle mile, also shown in Table II-18, is a measure that indicates the extent of multi-loading of vehicles by BCT. From 1996 to 2001 this measure decreased by nearly six percent.

Revenue miles per paratransit trip is also contained in Table II-18. This measure is an approximation of BCT's average trip length. From 1996 to 2001 this measure increased by 2.5 percent, indicating that the average trip is getting slightly longer.

Table II-18
BCT Paratransit Trend Analysis - Effectiveness Measures

Measures	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	% Change (1996-2001)
Vehicle Miles/TD Capita	44.61	44.54	45.89	56.74	54.99	58.88	32.0%
Paratransit Trips/TD Capita	9.64	9.16	10.04	11.44	11.50	12.01	24.6%
Paratransit Trips/Vehicle Mile	0.22	0.21	0.22	0.20	0.21	0.20	-5.6%
Revenue Miles/Paratransit Trip	3.83	4.06	4.13	4.78	3.83	3.92	2.5%
Vehicle Miles Between Accidents	70,374	322,357	96,611	421,030	277,050	100,590	42.9%
Vehicle Miles Between Roadcalls	63,336	11,513	28,178	40,098	18,069	53,254	-15.9%

SOURCE: BCCOA AORs, fiscal years 1996-1998 and Florida Commission for the Transportation Disadvantaged 1999 - 2001 Annual Operating Report.

The last two effectiveness measures in Table II-18 measure system safety and reliability. The number of vehicle miles between accidents, as shown in Table II-24, increased by 43 percent from 1996 to 2001, with a decrease from 1997 to 1998 and from 1999 to 2001. The number of vehicle miles between roadcalls fluctuated from year to year, with a final rate in 2001 of 53,254 vehicle miles between roadcalls. The variability in the number of roadcalls during the trend period is not readily explained.

Efficiency Measures

Efficiency measures review the level of resources required to achieve a given level of output. The first three measures contained in Table II-19 measure cost efficiency. All of these cost efficiency measures increased from 1996 to 2001, as shown in Table II-19. Operating expense per paratransit trip increased by approximately 73 percent. In addition, operating expense per vehicle mile increased 63 percent from 1996 to 2001, and operating expense per TD capita

more than doubled with an increase of 115 percent. All of these measures, with the exception of operating expense per TD capita, decreased in 1999 because of a large increase in trips and vehicle miles for that year.

Table II-19
BCT Paratransit Trend Analysis - Efficiency Measures

Measures	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	% Change (1996-2001)
Operating Expense/ Paratransit Trip	\$5.67	\$7.67	\$8.64	\$7.94	\$8.53	\$9.79	72.6%
Operating Expense/ Vehicle Mile	\$1.23	\$1.58	\$1.89	\$1.60	\$1.78	\$2.00	62.9%
Operating Expense/ TD Capita	\$54.68	\$70.26	\$86.73	\$90.80	\$98.04	\$117.60	115.1%
Local Government Revenue Ratio	0.84%	20.82%	24.67%	20.19%	15.06%	9.54%	1,028.9%
Vehicle Miles/Vehicle	14,075	15,350	16,102	18,306	16,297	19,262	36.9%
Revenue Miles/Vehicle Mile	82.69%	83.53%	90.42%	96.25%	80.00%	80.00%	-3.3%

SOURCE: BCCOA AORs, fiscal years 1996-1998 and Florida Commission for the Transportation Disadvantaged *1999 – 2001 Annual Operating Report*.

Also contained in Table II-19 are the local government revenue ratios for BCCOA. It should be noted that the revenue in this ratio is from local purchase of service contracts and is not from local jurisdictional support. Over the time period from 1996 to 2001, this ratio fluctuated from a low of 0.84 percent to a high of 24.67 percent.

Vehicle utilization is measured by the number of vehicle miles per vehicle. As shown in Table II-19, this measure increased by 36.9 percent from 1996 to 2001. The average annual vehicle miles per vehicle in 2001 was 19,262 vehicle miles. An 11 percent decrease in this measure shows up in 2000; however, all of the remaining years exhibit increases. Revenue miles per vehicle mile, also contained in Table II-19, reflects how much of the total vehicle operation is in passenger service. This measure decreased slightly from 1996 to 2001.

The general performance indicators, effectiveness measures, and efficiency measures used in this trend analysis are also presented graphically in Figures II-64 through II-83 on the following pages.

BCT Paratransit Trend Analysis – General Performance Indicators

Figure II-64
Service Area Population

Figure II-65
Potential TD/TD Population

Figure II-66
Paratransit Passenger Trips

Figure II-67
Vehicle Miles

Figure II-68
Revenue Miles

Figure II-69
Operating Expense

Figure II-70
Operating Revenue

Figure II-71
Vehicle Fleet Size

BCT Paratransit Trend Analysis – Effectiveness Measures

Figure II-72
Vehicle Miles per TD Capita

Figure II-73
Paratransit Trips per TD Capita

Figure II-74
Paratransit Trips per Vehicle Mile

Figure II-75
Revenue Miles per Paratransit Trip

Figure II-76
Vehicle Miles Between Accidents

Figure II-77
Vehicle Miles Between Roadcalls

BCT Paratransit Trend Analysis – Efficiency Measures

Figure II-78
Operating Expense/Paratransit Trip

Figure II-79
Operating Expense/Vehicle Mile

Figure II-80
Operating Expense per TD Capita

Figure II-81
Local Government Revenue Ratio

Figure II-82
Vehicle Miles per Vehicle

Figure II-83
Revenue Miles per Vehicle Mile

Conclusions – BCT Performance Evaluation

This concluding section summarizes the results of the paratransit trend review analysis for BCT. A summary of BCT's performance strengths and areas for improvement based on the trend analysis of effectiveness and efficiency measures is provided in Table II-20. As with the fixed-route analysis, the intent of showing this information is not to suggest the extent of the strength or area for improvement but to identify those areas where BCCOA's performance has improved or declined from 1996 to 2001. With regard to the trend analysis, a performance strength is defined as any performance area that improved or was maintained over the trend analysis time period and an area for improvement is defined as a trend that declined over the trend analysis time period.

Table II-20
BCT Paratransit Performance Strengths and Areas for Improvement, Trend Analysis

Performance Strengths	Performance Weaknesses
Vehicle Miles Between Accidents	Paratransit Trips per Vehicle Mile
Local Government Revenue Ratio	Vehicle Miles Between Roadcalls
Paratransit Trips per TD Capita	Operating Expense per Paratransit Trip
Vehicle Miles per TD Capita	Operating Expense per Vehicle Mile
	Operating Expense per TD Capita
	Revenue Miles per Vehicle Miles

The results from the trend analysis show that vehicle miles and passenger trips per capita have steadily increased from 1996 to 2001 indicating that BCT's service supply is increasing. Since the number of accidents remained stable during the trend period, BCT's performance in terms of vehicle miles between accidents improved, as well. While the local government revenue ratio is considered a strength, it should be noted that the revenue in this ratio is from local purchase of service contracts and is not from local jurisdictional support.

The level of service consumption (passenger trips per vehicle mile), found to be an area for improvement, could indicate a reduction in the grouping of trips and/or that the length of passenger trips has increased over the trend-analysis time period.

The trend analysis also revealed a need for improvement in operating expense per trip, per TD capita, per vehicle, and per vehicle mile. The increases in these measures can partially be explained by the increased number of passenger trips per TD capita over the trend-analysis time period, and that the average length of each trip has increased. These measures could indicate that BCT was in a service growth period for the years of this trend analysis. However, BCCOA should continue to monitor operating expenses to ensure that their growth is not due to an increase in trips that perhaps could be handled by the fixed-route service.

While trend analysis can be useful in developing a better understanding of BCT performance and in identifying target areas for additional attention and improvement, as with the fixed-route mode, these performance evaluation measures do not comprehensively cover all of the objectives of a paratransit system. Many objectives cannot be measured with this mechanism and require additional information or more subjective evaluation. However, as with BTT, the results of BCT's trend analysis provide a useful starting point for fully and completely understanding the system's performance.

CHAPTER THREE: PUBLIC TRANSPORTATION GOALS AND INITIATIVES

IMPLICATIONS OF GOALS AND INITIATIVES FOR TRANSIT IN BAY COUNTY

A five-year Transit Development Plan can be regarded as a blueprint for establishing the future of transit services in a community. As a strategic document, it must reflect the community's will and desires as well as implement priorities established by community leaders and the public. The "transit experiment" that began in December 1995 has not lived up to the expectations of some; however, there is also a growing sense among people in the community that transit could be much more viable, meaningful, and contributory to residents and visitors in the county. According to many, the Bay Town Trolley has come quite far, especially in the past three years since the last major TDP update.

Panama City MPO and Bay Town Trolley staffs have done their part to realign fixed-route services, increase ridership (up 54 percent and growing since 1999 when the last TDP was updated), and increase levels of community awareness and support. All of the above accomplishments and successes must work in conjunction with each other to maintain the momentum that fixed-route services have achieved over the past three years. However, some common themes from the previous major TDP update persist. While the Bay Town Trolley is supported in concept at the MPO level, the fact remains that it is not supported with MPO funds or local funds at the jurisdictional levels, namely the incorporated cities and county government of Bay County. Previously, revenues from Purchase of Service contracts in the coordinated system were used to expand fixed-route services by matching federal and state funds. However, Federal (Governor's Apportionment) funds allocated to Bay County may fluctuate in future years, which could create a scenario whereby Federal funds used for operating costs would compete with capital acquisition needs such as vehicles. Therefore, this TDP update includes an initiative to develop a model for local jurisdictions to help fund transit in the future.

The goals and initiatives listed herein are designed to outline those factors that would make fixed-route transit more viable as well as challenge citizens and leaders of Bay County to achieve that viability. The initiatives and any associated costs of implementing them are discussed in further detail in the final chapter of the TDP. Following the goals is a section that reviews other plans and legislation related to public transportation.

Goal 1: Continue to Strengthen the Coordinated System

Initiatives

- A. Continue to replace paratransit vehicles as necessary and expand based on system growth.*

Traditionally, Federal and State funds for transportation have been used primarily for capital and operating needs for Bay Coordinated Transportation. This TDP does not change that focus. As vehicles are operated throughout their useful life, BCT should continue to replace vehicles and expand based on system growth.

- B. Monitor more closely the number and variability of roadcalls for paratransit service.*

The number of vehicle miles between roadcalls has varied considerably over the trend period examined in this TDP (FY 1996 – FY 2001). Vehicle miles have grown steadily from FY 1996 to FY 2001, and the variation in the measure of vehicle miles between roadcalls is primarily due to annual fluctuations in the number of roadcalls. These variations should be monitored to determine whether the fluctuations are due to maintenance issues or reporting issues.

- C. Improve coordination between paratransit services and fixed-route services.*

While the number of users of the paratransit system continues to grow, the resources to operate the system have generally been stable. Due to the higher cost per trip associated with paratransit service, it is beneficial to ensure that those users of the paratransit system who could utilize the fixed-route services do so. Also, improvement in coordination and alignment between the two modes will ensure that they operate in the most complementary and efficient fashion.

Goal 2: Expand and Enhance Fixed-Route Transit Services

Initiatives

- A. Develop a cost-sharing model for local jurisdictions to participate in funding fixed-route services.*

Funding support at the local level is essential for the long-term viability of the Bay Town Trolley. As discussed in other sections of this TDP, it was discovered that, on average, BTT's fixed-route peer systems cover approximately 19 percent of their operating expenses with general revenues from their local governments. Overall, the peers cover, on average, more than 26 percent of operating expenses with local assistance, including general revenues. These systems were shown in this peer review to outperform BTT in the level of service provided as well as the level of ridership generated. A simple conclusion here is that systems with monetary support from their local governments can afford to provide better services and, therefore, realize higher levels of ridership. Out of 26 Florida transit systems that receive State Block Grant funds, 18 receive local general revenues, and BTT is currently the only system that receives no local assistance at all. Possible sources of funding at the local level include General Revenue from the County, funds from local municipalities that are served by BTT, property tax revenue, local-option gas tax revenue, and support from businesses and hotels along the Beach that can fund fixed-route services on the Beach.

Several options exist for the development of a cost-sharing model to fund fixed-route transit services. Such a model could be determined on a per capita basis in each jurisdiction, or it could be based on the proportion of transit service hours or transit service coverage within each jurisdiction.

- B. Continue to implement fixed-route network recommended in the 1999 TDP.*

Over the past three years since the 1999 TDP update, BTT has made significant progress in this area. Changes made thus far have been well-received by passengers, and ridership continues to increase considerably in FY 2002.

C. Improve frequency of transit services.

The results of the on-board survey indicate that, out of 20 performance characteristics, current BTT riders are least satisfied with the frequency of service. In addition, during the interview process, community leaders expressed that the low frequency of service is an inhibitor to attracting ridership. The fixed-route network, as designed in the 1999 TDP, is based on a frequency of 60 minutes on each route. BTT should continue to work toward implementing 60-minute frequencies on all routes as funding allows, and then gradually bring frequencies to 30 minutes.

D. Explore the feasibility of an improved span of service for transit services.

The BTT on-board survey results also indicate that, out of 20 performance characteristics, the item that causes the second-least level of satisfaction is the time that the latest Trolleys run in the evenings. Riders also expressed dissatisfaction with the time that the earliest Trolleys run in the mornings. During the community leader interviews, a common topic was job access. Specifically, several discussions centered on how some workers who are able to use the Trolley to get to their jobs in the mornings must often make other arrangements to get home after their shifts because the Trolley has stopped running by that time. Based on these findings, as resources allow, BTT should first work toward increasing the evening span of service, and then increase the morning span.

E. Continue to seek partnerships to make transit improvements.

Recently, the Gulf Coast Women's Club approached BTT regarding the sponsorship of a passenger shelter at Panama City's City Hall. Various segments of the community need to be brought together to make this happen. This approach serves as a good model for the formation of partnerships that can be developed to make transit improvements in Bay County.

F. Continue to acquire vehicles for the provision of fixed-route transit service.

The peer review for BTT indicates that the Trolley is the smallest of its peers; the next smallest system operates five peak vehicles. To implement all the

aspects of the route network outlined in the 1999 TDP (last major update) and to ensure an adequate spare ratio, the system should work toward fleet expansion. BTT should acquire vehicles to expand fixed-route service according to available funding from Federal, State, and local sources.

G. Continue to utilize market-driven approaches to increase ridership.

BTT should continue to work through the contracted marketing firm to make transit services appeal to the transit-dependent, high school and college students, senior citizens, tourists, and lower-income working adults.

H. Continue to monitor performance of Trolley services according to service standards.

In the 1999 TDP, service standards were established for the Trolley system covering FY 2000 to FY 2004. It was shown in Chapter Two of this TDP (Table II-16 on page 122) that BTT has thus far been meeting or exceeding the set performance goals. The performance monitoring should continue, and new performance goals should be determined based on the current status of the route network implementation and the most recent peer system data.

I. Position BTT to expand fixed-route services as growth in new residential and commercial developments occur.

During the course of the community leader interviews, a desire was expressed for BTT to grow as the community grows. BTT should continue to keep informed of new development in the county, specifically the residential development planned for the north and northwestern portions of the county, changes along the Beaches, including the trend toward high-rise condominiums and apartments, as well as developments such as Pier Park, which will contain a city park, 50 acres of retail outlet shopping and dining, and 70 acres of commercial retail parcels. Other major employers are planning significant expansions in the near future, including Trane, Allied, and Nextel. Finally, BTT should keep informed regarding any plans for a new airport in the county. These developments will help to guide service expansions in the coming years.

- J. *Increase transit fares from a base price of \$0.50 to \$1.00.*

The peer review analysis conducted for Chapter Two of this TDP found that BTT has one of the lowest base fares among similar small transit systems. Most of BTT's peers have base fares of \$1.00. Because the demand for transit ridership is considered to be relatively inelastic with respect to the fare, an increased fare will result in increased revenues for the system.

Goal 3: Broaden Community Support for and Usage of Fixed-Route Transit Services

Initiatives

- A. *Expand communications program.*

Transit's image in Bay County, though significantly improved from three years ago, remains uncertain. As BTT makes its case for local funding for fixed-route services, communication will take on even greater importance. BTT should strive to make presentations on service initiatives to jurisdictions. The system should also communicate proposals for new services and transit's role and benefits to the community. While BTT has made progress in these areas since the 1999 TDP, particularly with regard to its community relations and outreach, the efforts should be continued and enhanced.

- B. *Continue to grow the Transit Alliance Program with community groups.*

BTT staff has worked closely with Bay High School over the past three years. In addition, the MPO created a portable display that staff can take to various events. In the past, the League of Women has taken an official position supporting transit. The challenge for BTT staff continues to be to locate other community groups who have an interest in transportation. Natural alliances include the Bicycle/Pedestrian committee of the MPO and the TD Local Coordinating Board. Potential alliances could include Gulf Coast Community College, the Bay County School Board, and the Tourist Development Council. The program is one way to expand communications for transit by creating advocates and spokespersons for the expansion of the transit system. It also requires the transit system to be responsive to its allies in meeting and promoting their interests in the community.

C. Continue marketing efforts.

The transit system and MPO should continually build upon their marketing plan as services, service areas, and customer bases emerge. As service improvements, changes, and service types are altered to meet market demand, BTT should be prepared to market those changes to stimulate usage of transit. As Bay County is making progress toward creating a long-term viable transit system, marketing tools designed to maintain existing customers and attract new customers will continue to be of critical importance.

D. Develop a mission and vision statement.

BTT would benefit from developing a mission and/or vision statement that will help the system focus on its goals, its purpose, and its role in the community. A mission and vision statement, while seemingly simple, can help the system set priorities and guide the system as it gradually grows and expands. The statement should become a part of the system's identity and be included on route maps and schedules, etc., and also assists community leaders in communicating with their constituencies.

E. Establish an identity for transit services on the Beach.

Many fixed-route transit systems in Florida that operate in coastal communities have separate "beach trolley" service that operates in their beach communities, often with different schedules and service spans that are sometimes seasonal in nature. Typically, trolley-like vehicles are used for these services to better fit in with a beach environment and to separate the service from the regular fixed-route bus service in the community. BTT is somewhat ahead in this regard since it already operates using trolley-like vehicles on its entire fixed-route network. Transit service on the Beach was discussed in many of the community leader interviews that were conducted as part of this TDP. While increased service frequency, increased hours of operation, and increased days of service are desirable for the entire service, several interview participants expressed a desire to see these types of improvements on the Beach exclusively, at least during the peak visitor season. BTT should work with the Tourist Development Council, and the hotels and businesses on the Beach to fund frequency and service span improvements, at least during peak season, for the transit service that operates

on the Beach. FDOT and the MPO have entered into a Joint Participation Agreement to fund improvements to services to and on the beaches.

Goal 4: Continue to Focus on Customer Service and Customer Satisfaction

Initiatives

A. Create individual schedules and a new system map for the Bay Town Trolley.

The concept of user-friendly schedules and system maps is one that has plagued the transit industry to the degree that multiple approaches have been tried and discarded. Typically, a bus schedule looks the same nationwide—it usually contains a map of the route, time-points from the beginning to the end of the line, separate timetables for “outbound” and “inbound” trips, and individual trip times. The current system map/schedule for BTT contains a multitude of time-points and variations for each loop. As services are redesigned, the more standard approach should be utilized. In addition, BTT should keep apprised of ongoing research regarding the design of system route maps and information (specifically, a study being conducted by CUTR) and incorporate any lessons learned into the design of their maps and schedules.

B. Explore the feasibility of creating additional fare media and instruments.

Since the 1999 TDP Update, BTT has instituted a monthly Trolley Pass. During this time, the percentage of customers paying the full cash fare declined from 64 percent to 51 percent, according to the on-board survey conducted as part of this TDP. This decline can be attributed exclusively to the implementation of the Pass, as 13 percent of riders indicated that they paid their fare using the Trolley Pass. However, there are still several other instruments that customers can use to pay for their trips. Fare media also play a role in generating revenues from those agencies who purchase them in bulk as a benefit to their clientele. Finally, in many instances, employers purchase fare media for their employees. Passes should also be developed in weekly increments for both multi-ride (punch passes) and unlimited ride passes. Consideration should be given to discounts for customers who can afford to purchase their transportation in quantity.

C. Expand Passenger Amenities Program

Since the 1999 TDP update, jurisdictions serving on the MPO agreed to permit and allow the installation of passenger shelters. Locations would be major stops and transfer locations including the system transfer point at Target, GCCC, Wal-Mart on Tyndall Parkway, and the proposed Downtown Panama City City Hall location. In addition to shelters, passenger amenities should include information kiosks at Trolley stops, street furniture, trash cans, lighting, etc. The program has the objective of being flexible enough to incorporate different design features based on compatibility with surrounding land uses, customer demand, artistic and creative elements, and community values.

Goal 5: Continue to Add Value to the Community

Initiatives

A. As feasible, provide transportation services to community events.

During the peak tourist season, there may be events out on the beaches that are of interest to residents and visitors alike. Community event transportation constitutes an opportunity to give residents experience with transit that they might not otherwise have. As the number of trolley vehicles increases, BTT could utilize GCCC as a park-and-ride to provide transportation over the Hathaway Bridge to the beach for weekend events. BTT should look for opportunities to provide community event transportation and then determine the feasibility of contributing these services on a case-by-case basis, based on available resources, including vehicles and labor.

B. Continue to provide community service.

The provision of community service is another way for the transit system to experience increased visibility in the county. BTT should strive to provide community service when opportunities arise.

Goal 6: Transition Federal Grantee Status and Responsibility for Transportation Services to Local Control in Bay County

The institutional relationship established for federal and state grantee status has always been unusual in Bay County. The Panama City Urbanized Area MPO is the designated grantee; however, the staff for the MPO is located in Pensacola. The Bay County Council on Aging cannot be the grantee because it is a private, not-for-profit entity and not a public agency. Grantee status entails a number of responsibilities including grants administration, procurement of all items purchased under a grant, accounts receivable and payable for every purchase, grant invoicing, meeting all Federal requirements (DBE plan, EEO plan, Title VI, etc.), administering public hearings for fare and service changes, administering all services under contract to private vendors, and a host of other administrative responsibilities. Responsibility for transportation services includes all service planning, monitoring, short-range plans, vehicle procurement, vehicle maintenance, service quality, facility upgrades, etc. The fact is that the MPO is set up to be a planning agency, not an operating agency. Transportation services have grown significantly to be more successful in Bay County, but the practical applications of having a staff that is located 100 miles away is becoming more unmanageable. Local transit systems should be under local control, and the intent of this goal is to create a mechanism by which status and responsibility are transferred to a local, public, eligible grant recipient.

Initiatives

- A. Begin discussions with Bay County and the Panama City MPO to transfer administrative functions for paratransit and fixed-route systems to a local, public agency.*

The primary advantage of this initiative for Bay County is that there is a local, established and longstanding transportation provider in the region that can assume a vast majority of the operational and administrative responsibilities. Therefore, the County would be taking on a program that does have a significant revenue stream including Federal, State, Commission for the Transportation Disadvantaged, and funds from local sponsors of paratransit service to cover system expenses. The County would also be able to use Federal grants to fund a position to oversee grants administration and transportation services. Therefore, the County has significant opportunities to localize the system while

managing its financial liability. The MPO staff should go to great lengths to explain all of the mechanisms available to Bay County to assume these responsibilities without committing significant ad valorem funds.

B. Develop a transition plan for Bay County to assume Federal and State grantee status.

In keeping with its planning responsibility, the MPO should develop a detailed transition plan for the County in order to have the smoothest possible transition with minimal impact on the public. The MPO has the resources to develop such a plan because of the years of experience the staff has in fulfilling all of the responsibilities. This plan should address all responsibilities of Federal and state grantee status, CTC responsibilities, and a 12-month implementation plan that could be executed at any time.

REVIEW OF PLANS, LEGISLATION, AND OTHER REPORTS

Federal

Transportation Efficiency Act for the 21st Century

In 1998, Congress passed and President Clinton signed into law the Transportation Efficiency Act for the 21st Century, which was a follow-up bill to the previous Transportation Efficiency Act of 1991. Following is a summary of opportunities for urban areas under 200,000 population.

STP in TEA-21

The STP provides flexible funding that may be used by states and localities for projects on any federal-aid highway, including transit capital projects and public bus terminals and facilities. TEA-21 expands and clarifies STP eligibilities, such as programs to fund the modification of sidewalks to meet ADA requirements and infrastructure-based ITS capital improvements. Funding flexibility features established by ISTEA were retained in this Act. MPOs have the authority to transfer or set aside STP funds for use by public transit operators. However, the wording is different for Transportation Management Areas (TMAs) than for urbanized areas under 200,000.

The following are selections from federal law that establish the process for project selection from an approved MPO TIP:

23 C.F.R. Part 450, Subpart C - Metropolitan Transportation Planning and Programming

"In areas not designated as a Transportation Management Area . . . , projects to be implemented using Title 23 funds other than Federal lands projects or Federal Transit Act funds shall be selected by the state and/or transit operator, in cooperation with the Metropolitan Planning Organization from the approved Transportation Improvement Program. . ."

And, in contrast:

*Transportation Equity Act for the 21st Century (TEA-21) - Title I, Subtitle B, Section 1203
(i)(4)(A)*

"All federally funded projects carried out within the boundaries of a TMA under this title or under Chapter 53 of Title 49 shall be selected for implementation . . . by the MPO for the area in consultation with the state and any affected public transit operator."

In practice in the State of Florida, this language means that for MPOs with greater than 200,000 population, the FDOT must implement projects at the will of the local MPO whereas in areas under 200,000 population the FDOT must only "consult" with the local MPOs and transit operators.

Urbanized Area Formula Program

Authorizations totaling \$18 billion for the 6-years of TEA-21 are provided for this program. For urbanized areas with a population of less than 200,000, funding may be used for either capital or operating costs at the option of the local area and without limitation. For areas over 200,000 in population, there no longer is an operating subsidy available. However, the definition of "capital" has been revised to include preventative maintenance and the provision of non-fixed route paratransit transportation services in accordance with the ADA. The provision for ADA services is limited to an amount not to exceed 10 percent of the recipient's annual formula apportionment.

Access to Jobs and Reverse Commute Grant Program

The Act created a new program for job access. The program is funded for FYs 1999-2003 with \$400 million from the Mass Transit Account of the Highway Trust Fund and an additional \$350 million from the General Fund. The twofold purpose of the program is (1) to develop transportation services designed to transport welfare recipients and low-income individuals to and from jobs, and (2) to develop transportation services for residents of urban employment centers and rural and suburban areas to suburban employment opportunities.

For areas under 200,000 in population, the state must make application for the funds. In TMAs, the MPOs will make their application for funds directly to the FTA regional office.

Intelligent Transportation Systems Program

TEA-21 provides a total of \$1.282 billion in contract authority for FYs 1998-2003 to fund the Intelligent Transportation Systems (ITS) program. Of this total, \$482 million has been targeted for programs to accelerate the integration and interoperability of ITS technologies in the MPO and rural areas. Projects will be selected through competitive solicitation and meet certain detailed criteria. The following fiscal year limitations have been established: (1) not more than \$15 million for a single metropolitan area; (2) not more than \$2 million for projects in a single rural area; and (3) not more than \$35 million for projects in any one State. In metropolitan areas, funding will be used primarily for ITS integration projects. For projects outside of metropolitan areas, funding may also be used for installation. At least 10 percent of ITS integration program funds must be used in rural areas.

State

Florida Comprehensive Plan

The State's goal for transportation as stated in Section 187.201 of Florida Statutes is:

- Florida shall direct future transportation improvements to aid in the management of growth and shall have a state transportation system that integrates highway, air, mass transit, and other transportation modes.

Local

Panama City Urbanized Area Transportation Study (2020 Plan Update)

This plan update is designed to provide a continuing, cooperative, and comprehensive guide to meet the area's transportation needs. Required by the Federal Highway Administration, plans are developed to assist policy makers in decision making. The plan includes a series of 4 goals and 28 objectives that were approved in September 1999 and relate to the long range transportation network in the region. On the following page is a listing of the goals and objectives that relate to this TDP effort.

Goal A: Provide a safe and efficient transportation system to accommodate current and future land use patterns and to maintain adopted traffic circulation level of service standards.

Objective 1: Develop a Long Range Transportation Plan that identifies multimodal and intermodal transportation facilities that will function as an integrated system and address the mobility needs of the area.

Objective 5: To maintain consistency with local growth management plans by maintaining coordination between transportation planning activities and local, regional, and state comprehensive plans.

Goal B: Provide a transportation system in harmony with environmental, social, economic, and aesthetic features of the area.

Objective 1. To reduce energy consumption by promoting alternative high occupancy vehicle (HOV) modes of transportation, such as ridesharing, transit ridership, vanpooling, etc.

Objective 7: To promote and maintain accessible services for the transportation disadvantaged in the urbanized area through coordination of local social service transportation and enhancement of the system for all citizens.

Goal C: To emphasize the need to preserve and improve the efficiency of the existing transportation system.

Objective 1: Minimize the need for construction of new highways by making use of the current Congestion Management System and identification of strategies to reduce travel demand, encourage alternate modes of travel, and implement traffic operations improvements.

Goal D: To provide comprehensive transportation planning which will seek alternative funding for intermodal and multimodal projects.

Objective 2: Obtain adequate funding for needed transportation improvements by encouraging greater state and federal participation.

Transportation Disadvantaged Service Plan

In August 2002, the most recent Bay County Transportation Disadvantaged Service Plan was adopted. The plan, as prescribed by the Commission for the Transportation Disadvantaged, is an integrated five year plan and operations plan for the coordinated system in the county. The plan contains 5 goals, 13 objectives, and 28 strategies to implement the service plan. Below are the goals, objectives, and strategies related to fixed-route transit service in Bay County.

Goal 1: Ensure availability of transportation services to the Transportation Disadvantaged.

Objective 1.1: Increase trips by five percent of the previous year.
Strategy B: Continue to expand fixed-routes.

Goal 2: Ensure cost-effective and efficient transportation services.

Objective 2.1: Improve cost-effectiveness in service delivery.
Strategy B: Maximize use of deviated, fixed-route service provided by Bay Town Trolley (BTT).

Local Comprehensive Plans

CUTR reviewed the local comprehensive plans for the Cities of Panama City, Panama City Beach, Lynn Haven, Parker, Cedar Grove, and Springfield. In all cases, there were no policies related to transit and a few cities had policies related to pedestrian and bicycle facilities. Only Bay County had a policy mentioning public transit, discussed below.

Bay County

Objective 4.17: Participate in the provision of public transportation insofar as such transportation can be ridership justified and financially feasible.

Policy 4.17.1 The County will participate through the MPO toward continuation of the Bay Town Trolley and Bay Coordinated Transportation programs.

Performance Measure: Whether or not the County is eligible for and can justify participation in the program.

CHAPTER FOUR: DEMAND ESTIMATION AND NEEDS/OPPORTUNITIES

INTRODUCTION

In developing a five-year TDP for Bay County, two important steps in the process include the preparation of public transportation ridership demand estimates over the planning period and an assessment of mobility needs in the county. For these tasks, demand for the Bay Town Trolley (BTT) as well as Bay Coordinated Transportation (BCT) was estimated over the five-year planning period. In addition, an assessment of mobility needs was conducted. This chapter summarizes the results of this effort and leads into the final chapter of the TDP, which identifies and evaluates public transportation alternatives and recommendations.

Various methods of estimating demand for both fixed-route transit and paratransit service and assessing mobility needs are presented and discussed herein. These techniques utilize data and findings from all previous tasks as well as operating data collected from BTT staff. The demand estimates are compared to current public transportation service to determine the extent to which transit demand exceeds existing service. The proposed goals and initiatives for the MPO and BCCOA and the existing levels and perceptions of service are also considered in gauging the need for additional and/or improved public transportation service.

A needs assessment is also included which summarizes relevant information concerning unmet demand, service area and type of service, service span and frequency, and coordination of service with other operators that may contribute to improved public transportation service and mobility for residents of Bay County. In addition, the impacts of complying with the ADA are briefly examined; however, because BTT operates as a route deviation system and all its vehicles are accessible to persons with disabilities, the provision of ADA-complementary paratransit service is not necessary. Possible public transportation alternatives for meeting the county's mobility needs were identified through the on-board survey, interviews with local officials, other forms of public participation, and through CUTR's experience in other areas similar to Bay County.

CURRENT AND FUTURE DEMAND FOR PUBLIC TRANSPORTATION

There are several different methodologies available to estimate the level of demand for public transportation service in Bay County. For example, the demand for fixed-route service may be

estimated through the use of trend analyses, peer review comparisons among similar Florida and non-Florida transit systems, fare and service elasticities, census tract analysis, survey results, and results of interviews and other public involvement. Demand estimates for fixed-route transit, general public paratransit service, and ADA complementary paratransit service in Bay County through the year 2007 are provided in this section.

Demand for Fixed-Route Transit Service (BTT)

Ridership Trend Analysis

BTT began operating service during FY 1996 (December 1995); as such, its ridership total for the year according to National Transit Database (NTD) information, 10,200 trips, was based on 10 months of data. In FY 1997, BTT increased its ridership to 38,052 trips, as reported in the NTD. In FY 2001, NTD data indicate that ridership grew nearly 97 percent above the FY 1997 level to 74,787 trips.

To provide estimates of future annual ridership levels, existing trends were extrapolated over the study period (FY 2002 - FY 2007). The ridership estimations presented in Table IV-1 below are based on BTT's historic annual operating data and do not account for any changes in the level of service provided, fare levels, or other factors (both endogenous and exogenous to BTT's operations) that may influence the number of annual passenger trips. Several attempts were made to calibrate a regression model to predict ridership that would account for changes in level of service or the fare; however, none of the results was found to be statistically significant for predictive purposes (due to the relatively small amount of available data and the fact that BTT, as a very young system, does not yet have well-established trends over time).

Table IV-1
Projected Fixed-Route Ridership for BTT
(based on existing ridership trends)

Ridership	FY 2001 (actual)	FY 2002²	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Annual Passenger Trips ¹	74,787	90,000	99,300	109,100	119,300	130,100	141,500

¹Projections assume a constant level of service over the time period (fares and other factors are also held constant).

²FY 2002 ridership estimated using both historic trends and monthly ridership data for FY 2002 to date.

SOURCE: The data used in this straight-line extrapolation were from BTT's NTD reports, FYs 1997 through 2001.

Peer Group Comparisons

An alternate approach in determining the extent of transit demand is to compare per-capita ridership, service, and spending levels at BTT with those at similar systems in Florida and the southeastern United States. The peer review analysis presented earlier in this chapter summarized a wide array of data for nine transit systems (including BTT) that operate between one and nine buses in maximum fixed-route service. In addition, data was compared among a subset of the 1-to-9 group consisting of only Florida systems. Since BTT's variation from the mean of each group was similar, the entire peer group is used in this demand analysis. By taking the averages of ridership per capita, ridership per revenue mile, vehicle miles per capita, and operating expense per capita and then applying them to BTT's service area population, it is possible to estimate the level of demand for transit service in systems of BTT's size, all other things being equal. Fiscal year 2000 data were used in this analysis since FY 2001 data are not yet available from the peer systems. Table IV-2 lists the transit systems that, in FY 2000, operated between one and nine vehicles in maximum service, as found in the NTD.

Table IV-2
Fixed-Route Peer Systems Operating Nine or Fewer Vehicles

Florida Peers	Non-Florida Peers
SunTran – Ocala/Marion MPO	Terrebonne Parish Consolidated Government (Houma, LA)
Indian River County - Community Coach	City of San Angelo (TX)
Key West Department of Transportation	Tuscaloosa County Parking & Transit Authority (AL)
Bay Town Trolley	Johnson City Transit System (TN)
	Port Arthur Transit (TX)

SOURCE: 2000 Performance Evaluation of Florida's Transit Systems, Part II: Fixed-Route Peer Review Analysis, FY 1999. Prepared for FDOT by CUTR, USF Tampa, December 2000.

Table IV-3, on the following page, presents the results of this exercise. In FY 2000, the peer group systems averaged 3.47 passenger trips per capita, while BTT generated 0.54 trips per capita. If BTT were to match the average number of trips per capita for the peer group, BTT ridership would increase to 426,466 annual trips. Similarly, BTT provides less service, as measured by vehicle miles per capita, than the peer group average. Service levels would have to more than triple to match the peer group. Operating expenses per capita for BTT are already below the average of its peers. However, if BTT were to spend, on average, the same as their peers, the system would have approximately \$1.6 million in operating expenses.

Table IV-3
Peer Group Comparisons with BTT
(Fixed-Route Systems Operating Nine or Fewer Vehicles - FY 2000)

Measure	Bay Town Trolley	Peer Group Mean
Service Area Population	122,901	480,808
Maximum Vehicles Operated	3	5.7
Passenger Trips Per Capita	0.54	3.47
Vehicle Miles Per Capita	1.35	4.25
Operating Expense Per Capita	\$1.83	\$12.83
Projected BTT Ridership Based on Peer Average	426,466	181,298
Projected BTT Vehicle Miles Based on Peer Average	521,961	250,855
Projected BTT Operating Expense Based on Peer Average	\$1,576,328	\$673,218

SOURCE: Systems' individual FY 2000 NTD reports and the Florida Transit Information System (FTIS) software.

One important factor to consider in interpreting these numbers is that not all transit systems measure their respective service area populations in the same way. BTT is one of the Florida systems that uses a figure similar to county population as an estimate of service area population due its paratransit services, Bay Coordinated Transportation (BCT). While BCT serves the entire county, the fixed-route network of BTT does not. The service area population of a fixed-route system can be defined as the population residing within three-quarters of a mile of the route network. Therefore, based on 2000 U.S. Census data, BTT's 2000 service area population would be 62,852 which represents 42 percent of the 2000 total county population and 51 percent of the NTD service area population reported by BCCOA.

If BTT's service area population based on the $\frac{3}{4}$ -mile route buffer was used in the above analysis, the projected ridership, service, and operating expense levels would be somewhat lower. However, to keep the data used in the analysis consistent, only NTD data were used in Table IV-3. Similar to the 1999 major TDP update, Table IV-4, on the following page, presents BTT's projected service area population (based on the population within $\frac{3}{4}$ -mile of its fixed routes and projected population growth rates provided by BEBR) and ridership based on updated peer average information from FY 2000. Because BTT is still a relatively young system and is still the smallest in the peer group (there are no other systems with which to compare BTT), and to allow for the continuing maturity of BTT, the demand estimates for FYs 2002 and 2003 were based on three-quarters of the peer average of the Florida peers (excluding Key

West, which, because of its high density, generates more than 10 trips per capita), which is of 1.14 trips per capita. The following years were calculated utilizing the full value of 1.52 trips per capita. These estimates hold service levels constant and, because BTT is already exceeding these estimates, it will likely experience higher ridership with expanded services.

Table IV-4
BTT Fixed-Route Demand Estimates¹ Based on the Peer Average Trips Per Capita (FY 2000)

Year	Population Estimates²	Demand Estimates
2002	64,400	73,500
2003	65,200	74,300
2004	66,000	100,300
2005	66,800	101,500
2006	67,600	102,800
2007	68,400	104,000

¹Estimates were derived using 1.14 passenger trips per capita for 2002 and 2003 (three-quarters of the Florida subset peer group mean, excluding Key West), and 1.52 trips per capita for the remaining years (the Florida subset peer group mean). The entire Florida subset peer group includes SunTran (Ocala/Marion MPO), Indian River's Community Coach, Key West Department of Transportation, and BTT.

²Service area population estimates are based on the 2000 population within a three-quarter-mile buffer around BTT's routes (utilizing FTIS software) and Bay County population growth rates provided by BEBR. These represent updates from the previous major TDP update.

An additional method of gauging potential ridership based on peer system data is through the mean number of passenger trips per revenue mile. Clearly, the level of system ridership is dependent on the level of service provided. For example, BTT generated 0.42 passenger trips per revenue mile of service in FY 2000. The FY 2000 peer group mean for this measure is 0.76 trips per revenue mile; therefore, based on this figure, as BTT continues to mature it could carry approximately 120,000 annual passengers at a constant level of service. Demand forecasts based on service levels are somewhat more refined than those based solely on area populations.

While peer group analysis is useful for comparing the relative performance levels of similar systems, caution must be used in applying these results to demand estimation and needs assessment. The underlying assumption that the propensity to use transit is constant across urbanized areas of similar size and similar transit system characteristics ignores differences among cities such as the political environment, urban development, demographics, and quality of service.

Fare and Service Elasticities

Another means of estimating future demand for transit is through the use of fare and service elasticities. An elasticity is a measure of the sensitivity of a dependent variable, such as passenger trips, to changes in an independent variable, such as fare or level of service. It is also represented by the percent change in a dependent variable divided by the percent change in an independent variable (and holding all other factors constant). While considerable variations can occur, especially for changes at the level of individual routes, fare and service elasticities have been shown to remain relatively consistent across systems of all sizes at the aggregate system level.

The American Public Transit Association (APTA) has published a value of -0.43 for the elasticity of ridership with respect to fare (for systems serving areas with populations of less than one million).¹ According to an Ecosometrics, Inc., report, the elasticity of ridership with respect to level of service as measured by vehicle miles is +0.61.² The elasticity measures are interpreted as follows: a 10 percent increase in the transit fare would result in a 4.3 percent decrease in ridership (all else being equal), while a 10 percent increase in the level of service would generate a 6.1 percent increase in ridership (all else being equal). These elasticities show that, generally, transit riders are more sensitive to service levels than to the fare.

On the next page, Table IV-5 presents the results of two fare pricing scenarios as well as a scenario involving an increase in the level of service. The first scenario predicts how ridership will be affected if the current fare of \$0.50 were to increase to \$1.00 (an increase of 100 percent). According to the elasticity measure, with a fare of \$1.00, the system can expect a decrease in ridership (as measured by the number of passenger trips) of 32,158 trips, all other things being equal. However, since the demand for transit is considered inelastic with respect to fare (indicating a lesser degree of sensitivity to fare changes), the increase in revenue from riders paying the higher fare will more than offset the loss from fewer trips, resulting in an annual net financial gain of \$5,236 (based on the average fare which, based on BTT's FY 2001 data, is 70 percent of the full fare). As discussed previously in this TDP, BTT plans to increase its base fare to \$1.00 beginning in January 2003.

¹American Public Transit Association, *Effects of Fare Changes On Bus Ridership* (Washington: American Public Transit Association, May 1991), 7.

²Ecosometrics, Inc., *Patronage Impacts of Changes in Transit Fares and Services*, report prepared for the U.S. Department of Transportation (Washington: Government Printing Office, September 1980), 65.

In the second pricing scenario, the effects of a fare decrease from \$0.50 to \$0.25 are reported. As evidenced in Table IV-5, the 50 percent decline in the fare would cause an increase in ridership equal to 16,079 passenger trips, holding all other factors constant. Due to the inelasticity of transit demand with respect to fares, the increase in riders will not generate enough revenue to counter the loss from the lower fare, and an annual net financial impact of -\$9,820 will be realized.

Table IV-5
Impacts of Fare and Service Changes Based on Elasticity Analysis

Measure	Existing (FY 2001)	Scenario 1 50-cent fare increase	Scenario 2 25-cent fare decrease	Scenario 3¹ 10% increase in service
Fare	\$0.50	\$1.00	\$0.25	\$0.50
Average Fare	\$0.35	\$0.70	\$0.18	\$0.35
Vehicle Miles	190,180	190,180	190,180	209,198
Passenger Trips	74,787	42,629	90,866	79,349
Operating Expense	\$255,810	\$255,810	\$255,810	\$281,391
Change in Ridership	--	-32,158	+16,079	+4,562
Change in Revenue	--	+\$5,236	-\$9,820	+\$1,597
Change in Operating Expense	--	--	--	+\$25,581
Net Financial Impact	--	+\$5,236	-\$9,820	-\$23,984

¹Scenario 3 utilizes fully-allocated costs per vehicle mile to generate the estimated annual expense.

The last scenario in Table IV-5 exhibits the results of an increase in BTT's level of service, as measured by vehicle miles. Transit demand with respect to the level of service is also considered to be inelastic, but the value of 0.61 indicates a higher sensitivity to the service levels provided by the system than to fares. Therefore, a 10 percent increase in vehicle miles would produce 4,562 additional passenger trips, which would generate additional revenues of \$1,597, all else being equal. However, a 10 percent increase in the level of service provided is presumed to require a 10 percent increase in operating expense. The increase in operating expense to provide the additional service would result in an annual net financial impact of -\$23,984. It is also important to note that the predicted results of a fare change and the predicted results of a service change, based on these elasticities, cannot be added together to provide a statistically valid estimate of the effect of both changes simultaneously. This is because measures of elasticity are derived assuming all other factors remain constant.

The results of the elasticity calculations indicate that increasing service levels does not necessarily produce the results one might expect, since the cost involved in service expansion is significant. A 10 percent increase in vehicle miles would represent a major challenge for any small transit agency. These results imply that proposed service improvements must be closely scrutinized for impacts on cost as well as ridership. Also important, however, is the fact that all service extensions are not equal; an improvement targeted at a specific corridor or location where there is significant demand can perform much better than aggregate averages.

Table IV-6 contains the original fixed-route ridership projections from Table IV-1 as well as estimates assuming that an annual 10 percent increase in service would result in a 6.1 percent increase in ridership. This increase would be in addition to the annual ridership increases predicted by the straight-line extrapolation, which holds all exogenous factors, including service changes, constant. Since it may be assumed that a system will grow somewhere between zero and 10 percent annually, it is likely that, by the fiscal year 2007, BTT can generate approximately 163,600 passenger trips (an average of the base and enhanced values for FY 2007).

Table IV-6
Projected Fixed-Route Ridership for BTT – Base and Enhanced Service
(based on existing ridership trends)

Annual Ridership	FY 2001 (actual)	FY 2002³	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Base (no service increases) ¹	74,787	90,000	99,300	109,100	119,300	130,100	141,500
Enhanced Service ²	74,787	90,000	104,800	121,500	140,300	161,600	185,600

¹Base projections assume a constant level of service over the time period (fares and other factors are also held constant).

²Enhanced projections assume a 10 percent annual increase in the level of service provided beginning in FY 2003.

³FY 2002 ridership estimated using both historic trends and monthly ridership data for FY 2002 to date.

SOURCE: The data used in this straight-line extrapolation were from BTT's NTD reports, Fiscal Years 1997 through 2001.

Census Tract Analysis

Census tract data can be used to compare demographic information, particularly those characteristics that are highly correlated with a person's or household's need for transit, with the county's existing transit network configuration. This type of analysis is normally useful for determining whether census tracts with transit-dependents characteristics are adequately served by the existing transit network. Typically, the demographic characteristics used to indicate transit-dependence include the distribution of youths (less than 18 years old), elderly persons (65 years or older), low-income households (less than \$15,000 annual household

income), and zero-vehicle-ownership households. For this TDP, 2000 U.S. Census tract-level data are available for the age distribution characteristics; however, data for household income or vehicle availability have not yet been released at the census tract level. Due to the differences in the available data, the census tract analysis was not conducted for this TDP.

Table IV-7, on the following page, presents the results of the census tract analysis that was performed for the 1999 TDP Update. The analysis identified a total of one primary, one secondary, and six tertiary transit-dependent census tracts. Nearly all of the tracts listed in the table are served by the existing transit network, with the exception of Tract 011 in Cedar Grove, which only is served in the southwest portion.

Table IV-7
Transit-Dependent Census Tracts - Bay County (from 1999 TDP)

Tract	Routes Serving Tract	Comments
PRIMARY TRACTS (far above average)		
020 Panama City	West, Downtown routes	Adequately served
SECONDARY TRACTS (above average)		
016 Panama City	All routes	Adequately served
TERTIARY TRACTS (average)		
022 Panama City	West route	Adequately served
011 Cedar Grove	East route	Southwestern portion served
021 Panama City	West, Downtown routes	Adequately served
017 Panama City	East route	Adequately served
018 Panama City	East route	Adequately served
010 Springfield	East route	Adequately served

SOURCE: Bay County 1999 Major TDP Update, CUTR.

Complementary Paratransit Service Demand

The Americans with Disabilities Act of 1990 (ADA) requires all transit agencies that provide fixed-route bus service to provide complementary paratransit service, as well. Passengers who would be considered eligible for ADA complementary paratransit service are not analogous to the TD Population; ADA eligibility is more narrowly defined (Category 1 and 3, as described below). The paratransit service must "shadow" the fixed-route service area and provide a comparable level of service for persons who cannot use the fixed-route service. The paratransit

service must be comparable to the fixed-route service in six service criteria. The service criteria, described in Section 37.31 of the regulations (49 CFR Part 37) are:

- Service area
- Response time
- Fares
- Trip purpose
- Hours and days of service
- Capacity constraints

Three categories define who is eligible for the complementary paratransit service mandated by ADA. The categories are listed below.

- Category 1: Persons who are unable to board, ride or disembark from a vehicle even if they are able to get to the stop and even if the vehicle is accessible.
- Category 2: Persons who cannot use vehicles without a lift or other accommodations. These persons are eligible for paratransit service if accessible fixed-route vehicles are not available on the route on which they need to travel when they need to travel.
- Category 3: Persons with specific impairment related conditions who cannot travel to a boarding location or from a disembarking location to their final destination.

Population estimates for Categories 1 and 3, based on the methodology presented in the *ADA Paratransit Handbook* prepared by the U.S. Department of Transportation, are presented in Table III-8. Category 2 was not included in these estimates because the persons included in this category can not use the fixed-route system if the vehicles are not accessible. All fixed-route vehicles in Bay County are accessible. The service area includes all persons (based on 2000 Census data) living within three-quarter miles of the fixed-route system. The service area population was then estimated to grow at the same rate as the county population under estimates from the Bureau of Economic and Business Research (BEBR) at the University of Florida.

The ADA-eligible populations were determined by multiplying the service area population by 1.3 percent for Category 1 and Category 3 combined, as described in the *ADA Paratransit Handbook*. An estimate for annual trips was then calculated, based on an estimate of 1.2 trips per month per ADA eligible persons as suggested by the *Handbook*. As shown in Table IV-8, the estimate of trips that would be made by the Category 1 and 3 eligible populations for 2002 is 12,061 and is expected to grow to 12,809 by 2007. Although this analysis of the ADA-eligible population and demand is necessary for the TDP, BTT operates as a route deviation system. Because all of the vehicles are accessible to persons with disabilities, the provision of complementary paratransit service is not necessary.

Table IV-8
ADA Paratransit Population and Trip Estimates¹ – Bay County

Population/Trips	2002	2003	2004	2005	2006	2007
Estimated Service Area Population	64,400	65,200	66,000	66,800	67,600	68,400
Estimate of ADA-Eligible Population - Categories 1 & 3	838	847	858	868	879	889
Estimate of ADA Trips - Categories 1 & 3	12,061	12,197	12,350	12,503	12,656	12,809

¹Estimates based on the methodology presented in the *ADA Paratransit Handbook* prepared by USDOT.

Demand for Paratransit Service

Population and Trend Analysis

Projections of the Potential TD Population and the TD Population for Bay County were developed using the method described in the 1993 report, *Methodology Guidelines for Forecasting TD Transportation Demand at the County Level*, prepared by CUTR for the Florida Commission for the Transportation Disadvantaged. The model forecasts the TD populations using data from the Bureau of Economic and Business Research (BEBR) at the University of Florida, and the U.S. Bureau of the Census. The forecasts for Potential TD Population and TD Population for FY 2002 through FY 2007 are shown in Table IV-9. This population information is explained in more detail in Appendix H.

Table IV-9
Estimated TD Population, TD Demand, and TD Supply – Bay County

Estimates	2002	2003	2004	2005	2006	2007
Potential TD Population	54,591	55,552	56,531	57,527	58,719	59,994
TD Population	15,646	15,918	16,198	18,480	18,817	17,163
Demand for TD Service	372,851	376,579	380,345	384,148	395,788	399,746
Supply of TD Service	248,036	250,517	253,021	255,552	258,089	260,688
Unmet Demand for TD Service	124,815	126,062	127,324	128,596	137,699	139,057

SOURCE: Estimates obtained by CUTR using the methodology described in *Methodology Guidelines for Forecasting TD Transportation Demand at the County Level* and the 2002 Bay County Transportation Disadvantaged Service Plan prepared by the West Florida Regional Planning Council.

Also shown in Table IV-9 are estimates for the demand, supply, and unmet demand for TD service (trips) in Bay County. Two types of trips are provided in Florida's TD program: program

trips and general trips. Program trips are trips made by clients of social service agencies for the purpose of participating in agency programs. Examples of program trips are trips to congregate dining facilities, Head Start, and job training facilities. Generally, these trips are purchased by the agencies for their clients. Members of the Potential TD Population (which includes the TD Population) are eligible for program trips. General trips are trips made by the TD Population to destinations of their choice, not to agency-sponsored programs. Examples of general trips are trips to work or grocery stores. General trips are typically purchased through the TD Trust Fund or local sources. Only persons in the TD Population are eligible for general trips purchased through the TD Trust Fund.

INTERVIEWS, SURVEY RESULTS, AND CITIZEN INPUT

Findings from interviews with key local officials were discussed in detail in Chapter One. The general opinions of those interviewed were that there is a demand or potential demand for public transportation. It is believed that latent demand exists that could be realized with increased service frequency and an increased span of service (particularly later evening hours). Current users of the system were noted to be primarily senior citizens and the transit-dependent who use the Trolley for work, school, and other errands. Most interview participants are seeing ridership increase as service gradually improves, and take that as an indication that usage will only continue to grow as the system expands service through new routes, increased frequency, and later evening hours. Access to jobs was discussed often in the interviews. Some can use BTT to get to work, but are unable to use it for the return trip because it does not operate late enough. This is especially true for service workers who are employed at the Mall or on the Beach. While Bay County was found to have a relatively high unemployment rate, interviewees representing Beach businesses noted that, at any given time, there are approximately 1,000 jobs that need to be filled. With more frequent, later evening services that also operated on the weekends, it is believed that the Trolley could play a much greater role in providing access to work.

The results of the on-board Trolley survey conducted for this TDP also indicate that the primary BTT user is transit-dependent. Nearly 50 percent of the survey respondents have annual household incomes of less than \$10,000. Many riders indicate they use the system for work and school, and approximately one-quarter (26 percent) use the system for shopping or other errands. In addition, a majority of riders responding to the survey indicated that they use the system five days per week. One-half of BTT riders, according to the survey, use the Trolley because there is no car available to them, and nearly one-quarter (24 percent) would not be able to make their trip if BTT did not exist. Not surprisingly, BTT riders expressed a high level of

satisfaction with the Trolley services. However, the item that riders are least satisfied with is the service frequency, followed by the time the latest Trolleys run, the number and ease of transfers, and the travel time. If these items were to improve, the satisfaction of current customers would be enhanced, and the system would also become more attractive to individuals who are less transit-dependent.

CUTR attended a meeting of the MPO Citizens Advisory Committee (CAC) to gain further insight into public transportation in Bay County. Members of the CAC noted that, while ridership is still low, it has been increasing steadily, without substantial increases in service. According to participants in the CAC meeting, passenger amenities such as shelters are needed to further spur demand. Also, increases in service frequency would be needed to attract additional ridership. It was noted that people in the community are beginning to become more familiar with the Trolley, and the transit-dependent now rely on it for their basic mobility needs.

NEEDS AND OPPORTUNITIES

The previous sections of this chapter evaluated the existing services and outlined demand estimates for transit and paratransit services in Bay County. In this section, approaches are discussed to continue efforts to make public transit a more meaningful resource to the Bay County community. Opportunities exist for the Bay Town Trolley to take a more strategic approach in expanding services, improving its image and meaning to the community, and expanding its customer base and community support. The transit industry operates in a competitive environment; automobile travel and roadways tend to dominate discussions about transportation. Exclusive focus on the automobile and road expansions, however, result in lost opportunities for those who cannot drive or do not have access to a car and ignore the inevitable impact of population growth and subsequent traffic congestion. In the public sector arena, transit competes with other essential services that are often more popular to a wider audience of taxpayers. For these reasons, transit must position itself in a competitive marketplace and become more meaningful to the community while at the same time becoming a part of community life. It could be said that future survival of the Bay Town Trolley rests on its ability to seize opportunities and increase viability.

Existing Public Transportation Services

Route Network

BTT should continue to move toward the full implementation of the six-route network outlined in the 1999 TDP. Because the low service frequency was identified during the course of this TDP as being a source of dissatisfaction among current riders (the item with which they were least satisfied) as well as an inhibiting factor to attracting new ridership, new resources should be allocated to ensure that all routes have a frequency no greater than 60 minutes. As new vehicles are procured for the system, the focus should be on increasing frequency as opposed to expanding service area coverage. Nonetheless, BTT should continue to be attentive to the needs of the community and keep apprised of the growth and development that is expected to occur over the next ten years, especially in the north/northwest portions of the county and along the Beaches. In addition, BTT should continue to keep informed of plans for a new airport in the county.

Span of Service

Access to jobs was a recurring theme during the interview process for this TDP. The 8:00 a.m. to 5:00 p.m. work shift is the staple of most workers. However, service workers usually work on rotating shifts that do not conform to the standard 8:00 to 5:00 timeframe. Some current riders are able to use the Trolley to get to their jobs, but not to get back home. In addition, some are not able to use it for work at all due to the limited service hours. Seniors are usually more flexible in their travel patterns and school children have a set pattern of morning and afternoon trips. As BTT begins to cultivate new markets for transit service, attention should be given to the needs of those markets with service span adjusted accordingly. Service spans could also be applied in a flexible manner based on the nature of the service. For example, routes serving hotels on the beaches from Panama City could run earlier to accommodate service workers and dedicated routes on the beaches could run later at night for tourists to extend their nighttime entertainment activities. There are several transit agencies in the state that operate separate schedules (frequency and service span) on their beach services; sometimes, the enhanced services are seasonal in nature.

Days of Service

Although weekend service is desirable for recreational trips, tourist trips, and service worker commutes, the message from the community continues to be for BTT to focus on the basics

and become better and more efficient at operating the current system. The risk of implementing Saturday and Sunday service in the short run is that low weekend ridership would only create greater image problems than already exist. However, the implementation of Saturday, and then Sunday, service will be needed as the service continues to grow and mature, although such implementation would be beyond the timeframe of this TDP.

Passenger Amenities

Another issue identified through the CAC workshop discussion, community leader interviews, and the on-board survey was the lack of shelters and benches at Trolley stops. Without proper amenities to allow riders to wait comfortably for the Trolley, sheltered from the heat and rain, it will be difficult to attract potential riders and transfer additional paratransit users to the fixed-route system. While obstacles to the procurement of shelters exist due to the failure of any contractors to bid on the shelter RFP issued by the MPO, a definite need exists and BTT should continue to work with local communities to ensure the infrastructure around the Trolley stops is adequate to allow access to stops and that amenities are provided at the most frequently used stops and transfer locations.

Improved Coordination Between Fixed-Route and Paratransit Systems

While the number of users of the paratransit system (BCT) has been growing, the number of paratransit vehicles and drivers has remained the same, leading to the stretching of resources. Because of the higher cost per trip associated with paratransit service, it would be beneficial to ensure that the maximum number of paratransit riders who could be utilizing the Trolley for their trips do so. To fully achieve this, improvements are needed in the fixed-route system; however, there might be steps that can be taken to better coordinate the two services given existing resources that would ease the burden on the paratransit system while increasing ridership on the fixed-route system.

Data Collection and Analysis

To continue providing service planning that will make public transportation more attractive and beneficial to current and potential riders, it is essential that the in-house collection and analysis of operating data continue to be accurate and consistent. For BTT, the collection of such data is not only necessary for federally-required National Transit Database reporting, but provides the transit operator with a historical database that can aid in allocating scarce resources most efficiently. For BCCOA, the collection of information is mandated by the Florida Commission for the Transportation Disadvantaged.

Community Outreach

It is clear that awareness of the Bay Town Trolley has increased significantly over the past three years since the 1999 TDP. As stated in the previous TDP, one of the most important components of building community support is the transit system knowing its community and the community knowing its transit system. Potential messages to be conveyed include:

- We want to be a viable *resource for the community*.
- Transit is a part of an *overall balanced transportation system* including cars, pedestrian and bicycle travel, and public transportation.
- As your transit system, we want to be *accomplishing those things that you as a community want us to accomplish*.
- We want to help *solve the traffic congestion problems during peak tourist season* so our tourist industry can continue to grow and we can *keep Bay County livable*.
- We want to maximize the talents of all members of our community, even those who cannot afford a car, so we can *increase the quality of life for all citizens*.

When people in the community do not understand the role of transit, it is up to the transit system to communicate that role. This can be accomplished through speaking engagements, school programs, senior centers, chambers of commerce, club gatherings, on the GCCC campus, etc. One attitude BTT could take is that wherever two or more people congregate, BTT will be there to deliver the message about transit.

Sponsorship of Community Events

Visibility for transit can be achieved through sponsorships of community events such as arts festivals, beach festivals, theater, charity events, running and bicycling events, Spring Break, etc. Sponsorships should further the objective of the transit system becoming part of the life of the community such that people become aware of its presence and importance. Companies often use this method to gain corporate exposure and target events wherein potential customers might be present. The other advantage of sponsorship is that it gets the logo of the transit system into posters, advertisements, and event t-shirts. However, the exposure comes without draining huge financial resources for the transit system because BTT would not be bearing the full media costs.

Special Event Transportation Services

Any time there is an event wherein traffic and parking are an issue, there may be an opportunity for BTT to alleviate the congestion problems by providing specified transportation from park-and-rides to the event. Obviously, the number of vehicles available for such service must be considered, as well as labor costs; however, so long as there is no regular scheduled service on weekends, BTT may be able to devote additional resources for weekend events. One important outcome of Special Event transportation is product sampling, i.e., giving members of the community who might not otherwise have ridden a bus will have an experience on transit, thus increasing exposure and visibility.

Community Service

Community service enables the transit system to provide one-time special transportation services for a community group as a complimentary service. As with special event transportation, community service can be used as a product sampling opportunity. However, it can also be used to target specific markets that BTT is attempting to expand. Community service is a cost-efficient way to use spare equipment and extra-board labor when available.

Source of Local Funding

Monetary support from the local community is essential for the long-term viability of the Bay Town Trolley. As discussed in Chapter Two, BTT is the only one of its peers (eight transit systems operating between one and nine peak vehicles) that does not receive any local assistance for its fixed-route services. In Florida, as of FY 2001, BTT is the only one, out of 26 systems that currently receive State Block Grant funds, that does not receive any local funding. Sources of funding at the federal level have been declining in recent years, and there is a growing sentiment at the federal level to provide funds to those areas who have made a local commitment to the service. BTT should work toward securing a local source of funding for the Trolley service. Possible sources of local funds include county general revenues, funds from local municipalities, property tax revenues, local-option gas tax revenues, and contributions from hotels and businesses along the Beach for services provided on the Beach.

CHAPTER FIVE: RECOMMENDATIONS AND FIVE-YEAR CAPITAL AND OPERATING PLAN

INTRODUCTION

At this point in the TDP process, the focus shifts from a descriptive, analytical approach to a future-oriented perspective. The findings presented earlier are now brought together and used to examine alternatives for public transportation in Bay County and to make recommendations for improvements to existing services. To help achieve the public transportation system's proposed goals, the next section develops a series of recommendations and initiatives to be implemented over the next five years. The final section estimates the costs associated with each recommendation.

BTT has been operating for nearly seven years, which still classifies it as a relatively young system. Currently, it is operated by the Bay County Council on Aging (BCCOA), Inc., under the direction of the Panama City Urbanized Area MPO. The current deviated fixed-route network consists of four rubberized trolleys operating on five routes. Ridership began at low levels, but has steadily grown; nearly doubling between FY 1997 and FY 2001, and is poised to reach approximately 90,000 trips for FY 2002, an increase of 20 percent over FY 2001. Grants from the Federal Transit Administration (FTA) and the Florida Department of Transportation (FDOT) supported the Trolley during its initial three-year demonstration period, and have continued support to the present time. As discussed in the two previous major TDP updates, it was expected that BTT's operator would begin exploring other funding sources immediately to supplement and/or match state and federal funds if the Trolley was deemed successful.

Paratransit service has been coordinated by BCCOA since 1983 when it was selected as the Community Transportation Coordinator (CTC) for Bay County. In FY 1998, BCCOA provided or contracted for 147,960 trips. In FY 2001, the number of paratransit trips generated was 184,674, an increase of 25 percent from FY 1998.

In the 1999 TDP update, the MPO adopted a plan for Bay Town Trolley to redesign its route network to six routes operated with seven vehicles. The estimated annual cost for the system was \$615,000. Since that time, the MPO has made progress toward implementing the route network; however, there is still more to do in completing the effort.

FUTURE DIRECTION FOR PUBLIC TRANSPORTATION IN BAY COUNTY

The remaining questions that must be addressed regarding public transportation in Bay County over the next five years and beyond concern the future of the existing system. There are myriad issues to consider in determining this direction, most importantly how to allocate resources for fixed-route services. Based on all of the information collected in the TDP process to this point, including the analysis of study area base data, interviews with key local officials and community leaders, surveys of BTT riders, development of system goals and initiatives, performance evaluations of existing services, estimates of public transportation demand, an assessment of mobility needs and opportunities in Bay County, and based on the previous major TDP update, the following transit services plan is included in this TDP.

Five-Year Transit Services Plan

In the 1999 major TDP update, the recommended alternative involved major changes to the fixed-route network. While not all of the recommended changes have been implemented up to this time, it is clear from recent ridership figures that the changes were successful and BTT has made significant progress toward the goals and initiatives outlined in the 1999 TDP. Throughout all of the tasks of this TDP process, it has been clear that the Trolley system has done its part to prove itself as a viable young system, and those in the community are taking notice.

As such, this TDP update calls for the MPO to continue the implementation of the redesigned route network outlined in the 1999 TDP, moving toward a nine-bus system operating on six routes. The objective of the new route network was to intensify ridership on corridors with the highest ridership, and to implement multiple transfer points with attractive facilities and timepoints. The redesigned system, fully implemented, would maximize travel options for those in the community and would minimize the travel time for those choosing to ride the Trolley.

This update also focuses on local commitment to the Trolley system. The peer review analysis in Chapter Two found that, as of FY 2001, BTT is the only agency out of 26 State Block Grant recipients that does not receive any local funds. It was also discovered that, on average, other small transit systems in Florida and the southeastern United States that are considered to be BTT's peers cover approximately 26 percent of their operating costs with local dollars. Hence, this alternative proposes the development of a local cost-sharing model for jurisdictions to participate in funding the fixed-route services.

An additional facet of local commitment is to have Federal grantee status and responsibility for transportation services under local control in Bay County. Currently, the Panama City MPO is the designated grantee; however, MPO staff is located in Pensacola. Clearly, local transit systems should be under local control, and this alternative would provide a mechanism by which status and responsibility would be transferred from the MPO to a local eligible grant recipient.

As designed, the route network has bi-directional travel, a maximum of one-hour headways, and shorter travel times that would attract additional riders. Overall, schedules and user information would be simpler for riders and potential riders to understand. Also, by dedicating a portion of the route network exclusively to the beaches, BTT would be able to provide significantly improved service to this area and would be well-positioned to attract additional market segments such as tourists, visitors, and service workers. There are advantages to local commitment, as well, including local dollars that can help improve services, as well as a safeguard against any future declines in state and federal dollars. Also, it is clearly advantageous to have the grant recipient and responsibility in the local area as opposed to MPO staff managing transit from Pensacola.

Phased Implementation of Redesigned Route Network (Goal 2, Initiative B)

Over the past three years, significant progress has been made in achieving the stated goals and initiatives from the 1999 TDP. Route changes that have been made so far have been well-received by customers, and ridership continues to steadily grow. Members of the community have noticed the increasing visibility and usage of the system. It is recommended, then, that BTT continue this progress over the next five years.

Year One – 2002-2003

By the end of FY 2003, the East Route and Route 4A should be eliminated to create Routes 2 and 3 to serve the east side of the urban area, as recommended in the 1999 TDP. Both Routes will be interlined and served with one vehicle. In addition, the Beach route is scheduled for implementation in this year with 60-minute frequencies and one vehicle.

Year Two – 2003-2004

In this year, the only major change scheduled is to Route 5, serving Target to Panama City Beach. This route should gain one additional vehicle and 11.75 daily revenue hours to increase the frequency from 150 minutes to 75 minutes.

Year Three – 2004-2005

During this year, Route 4, serving Downtown Panama City to Gulf Coast Community College via 11th and 15th Streets, should operate with one additional vehicle. Also, 12 daily revenue hours should be added to increase the service frequency from 60 minutes to 30 minutes.

Year Four – 2005-2006

One additional vehicle should be added to Route 1, operating from Downtown Panama City to Lynn Haven. With 12 additional daily revenue hours, the frequency of this route will increase from 60 minutes to 30 minutes.

Year Five – 2006-2007

No major service changes are scheduled for implementation in this year, according to the recommended alternative. At this time, the system will operate with nine vehicles on six routes. Route 5 will have a frequency of 75 minutes, Routes 2, 3, and 6 will have service frequencies of 60 minutes, and Routes 1 and 4 will have service frequencies of 30 minutes.

Finally, this TDP update calls for frequency improvements to the most successful of the newly-designed routes, including Route 5 (Target to the Beaches), Route 1 (Lynn Haven to Downtown), and Route 4 (Downtown to Gulf Coast Community College). Tables V-1 through V-6 provide an outline of the current status and a detailed five-year plan. Figure V-1 presents a map of the full system route network implementation as shown in the 1999 TDP update.

Figure V - 1
Bay Town Trolley
Recommended Route Network (1999 TDP)

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Table V-1
Operational and Cost Characteristics - Bay Town Trolley Route Network, FY 2002

		Weekday Span of Service						
Route Name	Status	Start	End	Frequency	Vehicle Requirement	Total Weekday Revenue Hours	Annual Revenue Hours	Estimated FY 2002 Annual Cost (\$23.04/hr.)
Route 1 - Downtown Panama City to Lynn Haven	This route was the first implemented and has been in service for two years	6:00 AM	6:00 PM	60	1	12	3,024	\$69,673
East Route	In FY 2002, the East Route and the Route 4A are interlined (1 bus operating both routes).	6:00 AM	6:00 PM	90	0.5	7.14	1,799	\$41,455
Route 4A				120	0.5	3.72	937	\$21,599
Route 4 - Downtown Panama City to GCCC via 11th and 15th Streets	Route 4 is not scheduled for any service changes this year.	6:00 AM	6:00 PM	60	1	12	3,024	\$69,673
Route 5 - Target to Panama City Beach	Route 5 serves Target to Panama City Beach as recommended from the 1999 TDP update	6:30 AM	6:15 PM	150	1	11.75	2,961	\$68,221
Totals					4	46.61	11,746	\$270,621

Table V-2
Operational and Cost Characteristics - Bay Town Trolley Route Network, FY 2003

		Weekday Span of Service						
Route Name	Status	Start	End	Frequency	Vehicle Requirement	Total Weekday Revenue Hours	Annual Revenue Hours	Estimated FY 2003 Annual Cost (\$24.00/hr.)
Route 1 - Downtown Panama City to Lynn Haven	There are no service changes to this route in FY 2003.	6:00 AM	6:00 PM	60	1	12	3,024	\$72,576
East Route	By the end of FY 2003, the East Route and the Route 4A are to be eliminated by creating Routes 2 and 3 to serve the east side of the urban area, as recommended in 1999 TDP update	6:00 AM	6:00 PM	90	0.5	7.14	1,799	\$43,183
Route 4A				120	0.5	3.72	937	\$22,499
Route 4 - Downtown Panama City to GCCC via 11th and 15th Streets	This route will have no service changes in FY 2003	6:00 AM	6:00 PM	60	1	12	3,024	\$72,576
Route 5 - Target to Panama City Beach	This route will have no service changes in FY 2003	6:30 AM	6:45 PM	150	1	11.75	2,961	\$71,064
Route 6 - Beach Route	The Beach route is scheduled for implementation in FY 2003	6:00 AM	6:00 PM	60	1	12	3,024	\$72,576
Totals					5	58.61	14,770	\$354,473

Table V-3
Operational and Cost Characteristics - Bay Town Trolley Route Network, FY 2004

Route Name	Status	Weekday Span of Service		Frequency	Vehicle Requirement	Total Weekday Revenue Hours	Annual Revenue Hours	Estimated FY 2004 Annual Cost (\$24.96/hr.)
		Start	End					
Route 1 - Downtown Panama City to Lynn Haven	This route will have no service changes in FY 2004	6:00 AM	6:00 PM	60	1	12	3,024	\$75,479
Route 2 - City Hall to Tyndale Wal-Mart and Parker	Route 2 will be in full service in FY 2004	6:00 AM	6:00 PM	60	1	12	3,024	\$75,479
Route 3 - Target to Tyndale Wal-Mart via East 15th Street	Route 3 will be in full service in FY 2004	6:00 AM	6:00 PM	60	1	12	3,024	\$75,479
Route 4 - Downtown Panama City to GCCC via 11th and 15th Streets	This route will have no service changes in FY 2004	6:00 AM	6:00 PM	60	1	12	3,024	\$75,479
Route 5 - Target to Panama City Beach	This is the most successful route in the system and will have one additional bus and 11.75 additional revenue hours to increase frequency in FY 2004	6:00 AM	6:45 PM	75	2	23.5	5,922	\$147,813
Route 6 - Beach Route	This route will have no service changes in FY 2004	6:00 AM	6:00 PM	60	1	12	3,024	\$75,479
Totals					7	83.5	21,042	\$525,208

Table V-4
Operational and Cost Characteristics - Bay Town Trolley Route Network, FY 2005

Route Name	Status	Weekday Span of Service		Frequency	Vehicle Requirement	Total Weekday Revenue Hours	Annual Revenue Hours	Estimated FY 2005 Annual Cost (\$25.96/hr.)
		Start	End					
Route 1 - Downtown Panama City to Lynn Haven	This route will have no service changes in FY 2005	6:00 AM	6:00 PM	60	1	12	3,024	\$78,498
Route 2 - City Hall to Tyndale Wal-Mart and Parker	This route will have no service changes in FY 2005	6:00 AM	6:00 PM	60	1	12	3,024	\$78,498
Route 3 - Target to Tyndale Wal-Mart via East 15th Street	This route will have no service changes in FY 2005	6:00 AM	6:00 PM	60	1	12	3,024	\$78,498
Route 4 - Downtown Panama City to GCCC via 11th and 15th Streets	This route will have one additional bus and 12 additional revenue hours in FY 2005	6:00 AM	6:00 PM	30	2	24	6,048	\$156,996
Route 5 - Target to Panama City Beach	This route will have no service changes in FY 2005	6:00 AM	6:45 PM	75	2	23.5	5,922	\$153,726
Route 6 - Beach Route	This route will have no service changes in FY 2005	6:00 AM	6:00 PM	60	1	12	3,024	\$78,498
Totals					8	95.5	24,066	\$624,715

Table V-5
Operational and Cost Characteristics - Bay Town Trolley Route Network, FY 2006

Route Name	Status	Weekday Span of Service		Frequency	Vehicle Requirement	Total Weekday Revenue Hours	Annual Revenue Hours	Estimated FY 2006 Annual Cost (\$26.99/hr.)
		Start	End					
Route 1 - Downtown Panama City to Lynn Haven	This route will have one additional bus and 12 additional revenue hours in FY 2006	6:00 AM	6:00 PM	30	2	24	6,048	\$163,276
Route 2 - City Hall to Tyndale Wal-Mart and Parker	This route will have no service changes in FY 2006	6:00 AM	6:00 PM	60	1	12	3,024	\$81,638
Route 3 - Target to Tyndale Wal-Mart via East 15th Street	This route will have no service changes in FY 2006	6:00 AM	6:00 PM	60	1	12	3,024	\$81,638
Route 4 - Downtown Panama City to GCCC via 11th and 15th streets	This route will have no service changes in FY 2006	6:00 AM	6:00 PM	30	2	24	6,048	\$163,276
Route 5 - Target to Panama City Beach	This route will have no service changes in FY 2006	6:00 AM	6:45 PM	75	2	23.5	5,922	\$158,875
Route 6 - Beach Route	This route will have no service changes in FY 2006	6:00 AM	6:00 PM	60	1	12	3,024	\$81,638
Totals					9	107.5	27,090	\$731,342

Table V-6
Operational and Cost Characteristics - Bay Town Trolley Route Network, FY 2007

Route Name	Status	Weekday Span of Service		Frequency	Vehicle Requirement	Total Weekday Revenue Hours	Annual Revenue Hours	Estimated FY 2007 Annual Cost (\$28.07/hr.)
		Start	End					
Route 1 - Downtown Panama City to Lynn Haven	This route will have no service changes in FY 2007	6:00 AM	6:00 PM	30	2	24	6,048	\$169,807
Route 2 - City Hall to Tyndale Wal-Mart and Parker	This route will have no service changes in FY 2007	6:00 AM	6:00 PM	60	1	12	3,024	\$84,904
Route 3 - Target to Tyndale Wal-Mart via East 15th Street	This route will have no service changes in FY 2007	6:00 AM	6:00 PM	60	1	12	3,024	\$84,904
Route 4 - Downtown Panama City to GCCC via 11th and 15th streets	This route will have no service changes in FY 2007	6:00 AM	6:00 PM	30	2	24	6,048	\$169,807
Route 5 - Target to Panama City Beach	This route will have no service changes in FY 2007	6:00 AM	6:45 PM	75	2	23.5	5,922	\$166,270
Route 6 - Beach Route	This route will have no service changes in FY 2007	6:00 AM	6:00 PM	60	1	12	3,024	\$84,904
Totals					9	107.5	27,090	\$760,595

Vehicle Requirements – Bay Coordinated Transportation and Bay Town Trolley

To continue paratransit operations and to implement the five-year transit services plan for fixed-route services, a total of 27 vehicles will be replaced and 6 expansion vehicles purchased. A vehicle replacement and expansion plan for BCT and BTT (Goal 1, Initiative A; Goal 2, Initiative F) is outlined in Table V-7 below.

Table V-7
Bay County Vehicle Inventory

Model Year	Manufacturer/Model	Type	2002 Number of Inventory Vehicles	Years					
				FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
1994	Goshen	Minibus	1	1	1	0			
1995	Ford	Minibus	2	2	2	0			
1996	Ford Super Duty	Minibus	8	8	8	8	0		
1997	Ford	Minibus	5	5	5	5	5	0	
1998	Chevrolet	Minivan	1	1	1	0	0		
1998	Ford Supreme	Minibus	3	3	3	3	3	3	0
1999	Dodge	Minivan	4	4	4	4	0		
1999	Ford Supreme	Minibus	5	5	5	5	5	5	5
2000	Chevrolet	Minivan	5	5	5	5	5	5	5
2000	Chrysler	Minivan	2	2	2	2	2	2	0
2001	Chevrolet	Sedan	1	1	1	1	1	1	0
2001	Supreme	Trolley	4	4	4	4	4	4	4
2001	El Dorado	Minibus	6	6	6	6	6	6	6
2002	Champion	Minibus	4	4	4	4	4	4	4
2002	Supreme	Trolley	1	1	1	1	1	1	1
2003	Expansion	Trolley			2	2	2	2	2
2004	Expansion	Trolley				2	2	2	2
2004	Replacement	Minibus				1	1	1	1
2004	Replacement	Minibus				2	2	2	2
2005	Expansion	Trolley					2	2	2
2005	Replacement	Minibus					8	8	8
2004	Replacement	Minivan				1	1	1	1
2005	Replacement	Minivan					4	4	4
2006	Replacement	Minibus						5	5
2007	Replacement	Minibus							3
2007	Replacement	Sedan							1
2007	Replacement	Minivan							2
TOTAL			52	52	56	56	58	58	58

RECOMMENDATIONS AND STRATEGIC INITIATIVES

Paratransit Services

1. *Continue to replace paratransit vehicles as necessary and expand based on system growth (Goal 1, Initiative A).*

In Bay County, Federal and State funds for transportation have been used primarily for capital and operating needs for Bay Coordinated Transportation (BCT). It is recommended that, as vehicles are operated throughout their useful life, BCT should continue to replace vehicles and expand based on system growth.

2. *Monitor more closely the variability and number of roadcalls for paratransit service (Goal 1, Initiative B).*

The number of vehicle miles between roadcalls has varied considerably over the trend period examined in this TDP (FY 1996 to FY 2001). Vehicle miles have grown steadily from FY 1996 to FY 2001, and the variation in this measure is due primarily to annual fluctuations in the number of roadcalls. These variations should be monitored to determine whether the fluctuations are due to maintenance issues or reporting issues.

3. *Improve coordination between paratransit services and fixed-route services (Goal 1, Initiative C).*

While the number of users of the paratransit system continues to grow, the resources to operate the system have not grown significantly. Due to the higher cost per trip associated with paratransit service, it is beneficial to ensure that those users of the paratransit system who could utilize the fixed-route Trolley service do so. In addition, improved coordination and alignment between the two modes will ensure that they operate in the most complementary and efficient manner.

Fixed-Route Services

4. *Develop a cost-sharing model for local jurisdictions to participate in funding fixed-route services (Goal 2, Initiative A).*

Funding support at the local level is essential for the long-term viability of the Bay Town Trolley. As discussed in other sections of this TDP, it was discovered that, on average, BTT's fixed-route peer systems cover approximately 19 percent of their operating expenses with general revenues from their local governments. Overall, the peers cover, on average, more than 26 percent of operating expenses with local assistance, including general revenues. These systems were shown in this peer review to outperform BTT in the level of service provided as well as the level of ridership generated. It can be concluded, then, that systems with monetary support from their local governments can afford to provide better services and, therefore, realize higher levels of ridership. Out of 26 Florida transit systems that receive State Block Grant funds, BTT is currently the only system that receives no local assistance at all. Possible sources of funding at the local level include General Revenue from the County, funds from local municipalities that are served by BTT, property tax revenue, local-option gas tax revenue, and support from businesses and hotels along the Beach that can fund fixed-route services on the Beach.

Several options exist for the development of a cost-sharing model to fund fixed-route transit services. Such a model could be determined on a per capita basis in each jurisdiction, or it could be based on the proportion of transit service hours or transit service coverage within each jurisdiction.

For example, if Bay County and its jurisdictions wanted to help fund the system at a rate on average with its peers, it should strive to cover approximately 20 percent of BTT's operating expenses. For FY 2003, this would mean a contribution of approximately \$71,000 (based on FY 2003 projected operating expenses of \$354,473). In FY 2007, this contribution would grow to approximately \$152,000 (based on FY 2007 operating expenses of \$760,595). It should be noted that the 20 percent benchmark is simply the average of BTT's peer transit systems, and local funding could be provided at a rate above or below this level, depending on resource availability.

5. *Continue to implement fixed-route network recommended in the 1999 TDP (Goal 2, Initiatives B and C; Goal 3, Initiative E).*

Since the 1999 TDP update, BTT has been making progress on the implementation of the proposed route network. Changes made thus far have been well-received by passengers, and ridership continues to increase considerably in FY 2002. According to the phased implementation plan discussed previously in this section, changes would be

made in each of the first four years of this five-year plan. In the fifth year, FY 2007, the Trolley service will operate on six routes with nine vehicles.

6. *Continue to acquire vehicles for the provision of fixed-route transit service, and replace as necessary (Goal 2, Initiatives B, C, and F).*

According to the fixed-route peer review analysis conducted in Chapter Two, BTT is one of the smallest transit systems currently operating service. To implement all aspects of the route network outlined in the 1999 TDP, and to ensure an adequate spare ratio, the system should continue to work toward fleet expansion. This expansion should occur based on available funding from Federal, State, and local sources.

7. *Establish partnerships with at least one major community resource to fund transit improvements (Goal 2, Initiative E).*

Potential partners include the jurisdictions, the Bay County School Board, and the hospitality industry on the beaches. This initiative is important to building relationships in the community that can make transit more viable in the long run. The Gulf Coast Women's Club approaching BTT regarding the sponsorship of a passenger shelter at Panama City's City Hall is an example of this. While various segments of the community need to be brought together to produce the desired result, this approach serves as a good model for the formation of such partnerships.

8. *Continue to monitor Trolley system performance according to service standards (Goal 2, Initiative H).*

As the fixed-route network continues to undergo changes, it is expected that the performance of the system will also change. As designed, the redesigned route network should continue to attract additional riders as well as additional usage from existing riders. Although increased ridership is expected, it is also necessary to continue to allow for the maturation of the new services over time.

In the 1999 TDP, service standards were established for the Trolley system covering FY 2000 to FY 2004. It was shown in Table II-16 (on page 122) that BTT has thus far been meeting or exceeding these goals. Given the fact that BTT has been meeting or exceeding the service standards, and given the current status of the route network implementation, the service standards were updated based on the most recent peer

system information. Table V-8 outlines the performance measures for the five-year period as well as the most recent fiscal year, FY 2002.

**Table V-8
BTT Performance Goals, FY 2002 – 2007**

Performance Measure	FY 2000 Peer Mean	BTT Performance Goals					
		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Passenger Trips per Revenue Hour	11.43	6.86	8.57	8.57	9.14	11.43	11.43
Passenger Trips Per Revenue Mile	0.76	0.46	0.57	0.57	0.61	0.76	0.76
Op. Expense per Passenger Trip	\$3.82	\$3.44	\$3.58	\$3.72	\$3.87	\$4.02	\$4.18

NOTE: As in the 1999 TDP, FY 2002 goals are based on 60% of the peer average for trips per revenue hour and revenue mile. For these two measures, the goal is 75% of the peer average in FYs 2003 and 2004, 80% of the peer average in FY 2005, and 100% of the peer average in FYs 2006 and 2007. The goal for expense per trip is set at 10% below the peer average for FYs 2002 to 2006, and 15% below the peer average in FY 2007 (this goal also increases four percent each year to account for inflation).

9. Increase transit fares from a base price of \$0.50 to \$1.00 (Goal 2, Initiative J).

The peer review analysis conducted for Chapter Two of this TDP showed that BTT has one of the lowest base fares among other similar small transit systems. Since the demand for transit ridership is considered to be relatively inelastic with respect to the fare, raising the fare will result in increased revenues for the system.

10. Continue contract with marketing firm to increase marketing and communications activities (Goal 2, Initiative G; Goal 3, Initiatives A and C).

Funds for marketing should be increased to conduct marketing and communications activities contemplated under this TDP.

11. Conduct at least 12 Community Outreach activities per year (Goal 3, Initiative A).

Including speaking engagements and booths at community events, BTT should target at least one opportunity per month to engage in community outreach.

12. Sponsor at least three community events per year (Goal 3, Initiative A).

To continue to gain exposure and visibility for transit, BTT should target three community events per year to provide some level of sponsorship, whether through transportation services or paid sponsorship.

13. Conduct rider promotions as new Trolley services continue to be implemented (Goal 2, Initiative G; Goal 3, Initiatives A and C).

Future rider promotions should be centered around the implementation of new Trolley routes as set forth in the implementation section outlined previously. Generating a sense of excitement, free gift giveaways, and celebrations of new services should be the focus of these promotions.

14. Conduct focus groups with GCCC students (Goal 3, Initiative A).

Focus groups should continue to be held with GCCC students to determine the current level of appeal of the Trolley system as well as enhancements that would make the system more appealing to college students.

15. Conduct promotions for GCCC students at least twice annually (Goal 2, Initiative G; Goal 3, Initiatives A and C).

One of these promotions should focus on the Fall semester with incoming freshman and other students. BTT should maintain a presence on campus during the first week of classes and provide schedules, system maps, and other promotional items. In the Spring, another promotion should be conducted.

16. Continue to create transit alliances (Goal 3, Initiative B).

BTT staff has worked closely with Bay High School over the past three years. In addition, the MPO created a portable display that staff can take to various events. In the past, the League of Women has taken an official position supporting transit. The challenge for BTT staff continues to be to locate other community groups who have an interest in transportation. Natural alliances include the Bicycle/Pedestrian committee of the MPO and the TD Local Coordinating Board. Potential alliances could include Gulf

Coast Community College, the Bay County School Board, and the Tourist Development Council.

17. Develop a mission and/or vision statement (Goal 3, Initiative D).

BTT would benefit from developing a mission and/or vision statement that will help the system focus on its goals, its purpose, and its role in the community. A mission and vision statement, while seemingly simple, will help the system set priorities and guide the system as it gradually grows and expands. The statement should become a part of the system's identity and be included on route maps and schedules, etc., and also assists community leaders in communicating with their constituencies.

18. Create individual schedules and a new system map for the Bay Town Trolley (Goal 4, Initiative A).

As services are redesigned, BTT should create new schedules and a system map. In addition, BTT should keep apprised of ongoing research regarding the design of system route maps and information (specifically, a study being conducted by CUTR) and incorporate any lessons learned into the design of their maps and schedules.

19. Expand the Passenger Amenities Program (Goal 4, Initiative C).

Since the 1999 TDP update, jurisdictions serving on the MPO agreed to permit and allow the installation of passenger shelters. Locations would be major stops and transfer locations including the system transfer point at Target, GCCC, Wal-Mart on Tyndall Parkway, and the proposed Downtown Panama City City Hall location. In addition to shelters, passenger amenities should include information kiosks at Trolley stops, street furniture, trash cans, lighting, etc.

20. Provide community service to seniors, GCCC students, school students, and/or other groups at least 12 times per year (Goal 5, Initiatives A and B).

BTT should strive to provide community service when opportunities arise. In addition, as resources allow, BTT should provide transportation to community events.

21. Upgrade radio system to Bay County's new 800 MHZ technology (Goal 1, Initiative C; Goal 2, Initiative I; and Goal 5, Initiative B).

The radio system currently being operated by BCCOA does not adequately cover the county. There are far reaches of the county wherein the system cannot establish any contact. Bay County recently installed a new 800 MHZ radio system that provides excellent coverage. The County has indicated that there is sufficient space on the system and that BCCOA would be considered approved users. The system has capabilities beyond the basic two-way radio system, and has advantages including the sharing of information in emergency situations among local county, city, and law enforcement personnel who are all using this system.

- 22. Begin discussions with Bay County and the Panama City MPO to transfer administrative functions for paratransit and fixed-route services to a local, public agency (Goal 6, Initiative A).*

The primary advantage of this initiative for Bay County is that there is a local, established and longstanding transportation provider in the region that can assume a vast majority of the operational and administrative responsibilities. Therefore, the County would be taking on a program that does have a significant revenue stream including Federal, State, Commission for the Transportation Disadvantaged, and funds from local sponsors of paratransit service to cover system expenses. The County would also be able to use Federal grants to fund a position to oversee grants administration and transportation services.

- 23. Develop a transition plan to Bay County to assume Federal and State grantee status (Goal 6, Initiative B).*

In keeping with its planning responsibility, the MPO should develop a detailed transition plan for the County in order to have the smoothest possible transition with minimal impact on the public. This plan should address all responsibilities of Federal and State grantee status, CTC responsibilities, and a 12-month implementation plan that could be executed at any time.

CAPITAL AND OPERATING PLAN

Table V-9 on the following pages provides the five-year capital and operating improvement program to implement the fixed-route and paratransit service plan. Following Table V-9, Table V-10 provides a summary of capital and operating expenses and revenues, and shows funded and unfunded projects for the five-year period.

Table V-9
Bay County Capital and Operating Plan, FY 2003 -- 2007

PROJECT ITEM	PROJECT DESCRIPTION		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FIVE-YEAR TOTAL	FUND SOURCE
1	Operating Assistance		\$401,000 \$329,867 \$1,469,128	\$401,000 \$329,867 \$1,527,893	\$401,000 \$341,278 \$1,589,009	\$401,000 \$354,284 \$1,652,569	\$401,000 \$364,249 \$1,718,672	\$2,005,000 \$1,719,545 \$7,957,271	FTA FDOT Block Grant Other Local
		Total:	\$2,199,995	\$2,258,760	\$2,331,287	\$2,407,853	\$2,483,921	\$11,681,816	
2	FDOT Corridor Project Service to and on U.S. 98		\$85,000	\$165,000	\$165,000	\$165,000	\$165,000	\$745,000	FDOT Corridor
3	Trolleys: # Expansion (6)		2 \$300,000	2 \$300,000	2 \$300,000			\$900,000	FTA Section 5307 Toll Revenue
4	Minibuses: # Replacement (19)	Total:		3 \$165,000	8 \$440,000	5 \$275,000	3 \$165,000	19 \$1,045,000	FTA Section 5307 Toll Revenue
5	Minivans: # Replacement (7)	Total:		1 \$35,000	4 \$140,000		2 \$70,000	7 \$245,000	FTA Section 5307 Toll Revenue
6	Sedan: # Replacement (1)	Total:					1 \$20,000	1 \$20,000	FTA Section 5307 Toll Revenue
7	Fixed Route Service Enhancements -Implementation of Routes 2, 3 and 6 -Frequency improvements to Routes 5, 1, and 4	Total:	\$83,852	\$170,735	\$99,507	\$106,627	\$29,253	\$135,880	Local Funds

Table V-9, continued
Capital and Operating Plan

PROJECT ITEM	PROJECT DESCRIPTION		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FIVE-YEAR TOTAL	FUND SOURCE
8	Shelters and Passenger Amenities	Total:	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000	FTA Section 5307 Toll Revenue Credits
9	Marketing and Communications	Total:	\$87,500	\$87,500	\$87,500	\$87,500	\$87,500	\$87,500	FTA Section 5307 Toll Revenue Credits
10	Schedules and System Map: Design	Total:	\$10,000						FTA Section 5307 Toll Revenue Credits
11	Schedules and System Map: Printing	Total:	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000	Local Funds
12	Focus Groups			\$8,500					Local funds
13	Operating/Maintenance Base PD&E \$150,000 Land Acquisition/Construction \$1,375,000	Total:	\$150,000	\$1,375,000				\$1,525,000	FDOT Candidate
21	Bay County 800 MHZ Radio System	Total:				\$150,000		\$150,000	FTA Section 5307

Table V-10
Bay County Operating and Capital Financial Summary

ITEM	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Operating Expenses & Revenues					
Expenses					
Fixed-Route Operating Cost*	\$379,473	\$558,708	\$649,715	\$756,342	\$785,595
Other transportation services	\$1,878,616	\$1,953,761	\$2,031,912	\$2,113,188	\$2,197,716
Total Operating Expenses	\$2,258,089	\$2,512,469	\$2,681,627	\$2,869,530	\$2,983,311
Revenues					
FTA Funding	\$401,000	\$401,000	\$401,000	\$401,000	\$401,000
FDOT Block Grant	\$330,759	\$329,867	\$329,867	\$341,278	\$354,284
Fixed-Route Farebox Revenue**	\$40,000	\$65,000	\$76,000	\$83,000	\$99,000
FODT Corridor	\$85,000	\$165,000	\$165,000	\$165,000	\$165,000
Local Funds (Purchase of Service)	\$1,469,128	\$1,527,893	\$1,589,009	\$1,652,569	\$1,718,672
Total Revenues	\$2,325,887	\$2,488,760	\$2,560,876	\$2,642,847	\$2,737,956
Current Unfunded Operating	-\$67,797	\$23,709	\$120,751	\$226,683	\$245,355
Capital Expenses & Revenues					
Expenses					
Trolleys	\$300,000	\$300,000	\$300,000	\$0	\$0
Sedans	\$0	\$0	\$0	\$0	\$20,000
Minivans	\$0	\$35,000	\$140,000	\$0	\$70,000
Minibuses	\$0	\$165,000	\$440,000	\$275,000	\$165,000
Shelters & Passenger Amenities	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Marketing and Communications Outreach	\$87,500	\$87,500	\$87,500	\$87,500	\$87,500
Schedules and System Map: Design	\$10,000	\$0	\$0	\$0	\$0
Operating and Maintenance Base	\$150,000	\$1,375,000	\$0	\$0	\$0
Bay County 800 MHZ Radio System	\$0	\$0	\$0	\$150,000	\$0
Total Expenses	\$567,500	\$1,982,500	\$987,500	\$532,500	\$362,500
Revenues					
FTA Section 5307	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
Total Revenues	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
Current Unfunded Capital	-\$32,500	\$1,382,500	\$387,500	-\$67,500	-\$237,500
*Includes costs of printing system maps and schedules and the conduct of focus groups. **Based on anticipated fare increase and projected ridership increases shown in Table IV-6 (base case).					

APPENDICES

APPENDIX A

Bay County Census Data Tables

Table A-1
Population and Population Density
Bay County, 2000

Tract	Population	Land Area	Population Density
000200	7829	322.88	24.25
000300	6988	169.28	41.28
000400	7134	33.44	213.35
000500	3751	142.01	26.41
000600	1017	30.92	32.89
000700	2757	123.66	22.30
000801	7017	5.70	1230.71
000802	8695	7.31	1189.29
000900	4583	3.89	1179.49
001000	2431	2.10	1155.74
001100	5087	2.01	2527.42
001200	2815	2.66	1059.94
001300	8366	9.44	886.38
001401	7678	7.63	1006.92
001402	5572	4.94	1126.91
001501	3651	4.60	793.33
001502	5677	2.85	1988.83
001600	3760	2.29	1641.19
001700	3067	1.20	2552.72
001800	1680	1.02	1646.07
001900	4506	2.41	1870.24
002000	1960	2.17	902.61
002200	4098	2.25	1817.37
002300	3953	2.09	1887.06
002400	4395	3.26	1347.25
002500	3031	4.92	616.67
002601	1555	5.37	289.32
002602	13393	61.91	216.34
002700	11771	73.34	160.51

Table A-2
Age Distribution
Bay County, 2000

Tract	0-17 years	18-29 years	30-39 years	40-49 years	50-64 years	65 years and over
000200	2090	1168	1248	1259	1334	730
000300	1714	1001	1338	1218	1111	606
000400	1896	973	1190	1194	1286	595
000500	837	640	683	653	598	340
000600	113	80	100	129	286	309
000700	1045	788	711	188	22	3
000801	1923	1236	1099	1115	1011	633
000802	2319	1382	1325	1379	1508	782
000900	1011	749	687	661	767	708
001000	648	389	280	305	390	419
001100	1536	919	766	711	697	458
001200	810	541	448	354	377	285
001300	2227	1245	1389	1298	1215	992
001401	1941	1009	1117	1342	1316	953
001402	1326	559	705	995	1188	799
001501	953	447	603	640	614	394
001502	1202	779	753	843	1067	1033
001600	971	593	408	484	540	764
001700	927	433	376	466	438	427
001800	444	279	250	225	264	218
001900	898	607	596	709	779	917
002000	260	315	311	266	263	545
002200	980	817	506	456	530	809
002300	816	706	622	610	603	596
002400	1104	904	673	660	543	511
002500	632	275	334	496	725	569
002601	333	277	258	211	241	235
002602	2686	1899	2209	2302	2417	1880
002700	2000	1494	1697	1851	2422	2307

Table A-3
Households and Household Density
Bay County, 2000

Tract	Households	Land Area	Household Density
200	2923	322.88	9.05
300	2323	169.28	13.72
400	2613	33.44	78.14
500	1214	142.01	8.55
600	526	30.92	17.01
700	663	123.66	5.36
801	2802	5.70	491.44
802	3327	7.31	455.06
900	1985	3.89	510.86
1000	930	2.10	442.14
1100	1944	2.01	965.86
1200	1146	2.66	431.51
1300	3229	9.44	342.11
1401	3035	7.63	398.02
1402	2142	4.94	433.21
1501	1413	4.60	307.03
1502	2359	2.85	826.43
1600	1524	2.29	665.21
1700	1201	1.20	999.61
1800	684	1.02	670.19
1900	2016	2.41	836.75
2000	856	2.17	394.20
2200	1789	2.25	793.38
2300	1745	2.09	833.02
2400	1854	3.26	568.33
2500	1238	4.92	251.88
2601	604	5.37	112.38
2602	6095	61.91	98.45
2700	5417	73.34	73.86

APPENDIX B

BTT On-Board Survey Instrument and Interview Discussion Guide

BAY TOWN TROLLEY (BTT) CUSTOMER SURVEY

DEAR TROLLEY CUSTOMER: BTT would like your input to help improve its transit service. PLEASE take a few minutes to complete the following survey. Your participation is totally **voluntary**. Your responses will **not** identify you *personally* in any way! Whether you complete the entire survey or not, please return it to the surveyor as you exit the bus. **THANK YOU!**

Please complete this survey **EVERY** time you board a bus that is being surveyed. Over the next several days we will be trying to collect information about BTT customers and all of the trips you make on the Trolley. Thanks!

1. What BTT route are you currently riding on? (please ✓ only ONE)

1 ___ Route 1 2 ___ Route 2 3 ___ Route 4 4 ___ Route 4A 5 ___ Route 5

2. Where did you come from before you got on the trolley for THIS trip?

1 ___ Home 4 ___ College 7 ___ Visiting/Recreation
2 ___ Work 5 ___ Doctor/Dentist 8 ___ Church
3 ___ School 6 ___ Shopping/Errands 9 ___ Other _____ (please specify)

3. You got on this trolley at? _____ & _____
(nearest street intersection/place to the trolley stop)

4. How did you get to the trolley stop for THIS trip? (please ✓ only ONE)

1 ___ Walked 3 blocks or less 5 ___ Rode with someone who parked
2 ___ Walked more than 3 blocks 6 ___ Bicycle
3 ___ Drove _____ miles (please estimate) 7 ___ Taxi
4 ___ Got dropped off 8 ___ Other _____ (please specify)

5. Where are you going on THIS trip? (please ✓ only your FINAL destination)

1 ___ Home 4 ___ College 7 ___ Visiting/Recreation
2 ___ Work 5 ___ Doctor/Dentist 8 ___ Church
3 ___ School 6 ___ Shopping/Errands 9 ___ Other _____ (please specify)

6. Do you need to transfer to complete THIS trip?

1 ___ Yes 2 ___ No

IF YES → Transferring TO trolley route 1 2 4 4A 5 (Please circle only one)

7. How many days per week do you usually make THIS trip? (please ✓ only ONE)

1 ___ 5 days per week 4 ___ 2 days per week 7 ___ 1 - 3 times per month
2 ___ 4 days per week 5 ___ 1 day per week 8 ___ First time riding
3 ___ 3 days per week 6 ___ Visitor/tourist - ride only for duration of stay

8. You will get off this trolley at? _____ & _____
(nearest street intersection/place to the trolley stop)

9. When you finish your trolley travel, how will you get to your final destination? (please ✓ only ONE)

1 ___ Walk 3 blocks or less 5 ___ Ride with someone who parked
2 ___ Walk more than 3 blocks 6 ___ Bicycle
3 ___ Drive _____ miles (please estimate) 7 ___ Taxi
4 ___ Get picked up 8 ___ Other _____ (please specify)

10. What type of fare do you usually pay when you ride the trolley?

1 ___ Regular Fare (50¢) 4 ___ Student Fare (25¢)
2 ___ Double Fare—Traveling to Beach Route 5 5 ___ Trolley Pass (monthly)
3 ___ Senior Citizens, Person w/ Disability (25¢)

11. How often do you ride the trolley? (please ✓ only ONE)

1 ___ 5 days per week 4 ___ 2 days per week 7 ___ 1 - 3 times per month
2 ___ 4 days per week 5 ___ 1 day per week 8 ___ First time riding
3 ___ 3 days per week 6 ___ Visitor/tourist - ride only for duration of stay

12. What is the most important reason you ride the trolley? (please ✓ only ONE)

1 ___ I don't drive 5 ___ Parking is difficult/expensive
2 ___ Car is not available 6 ___ Trolley is more convenient
3 ___ Trolley is more economical 7 ___ I don't have a valid driver's license
4 ___ Traffic is too bad 8 ___ Prefer convenience of parking garage

13. How would you make this trip if not by trolley? (please ✓ only ONE)

1 ___ Drive 4 ___ Walk 7 ___ Other _____ (please specify)
2 ___ Ride with someone 5 ___ Taxi
3 ___ Bicycle 6 ___ Wouldn't make trip

14. How long have you been using BTT services?

1 ___ This is the first day 4 ___ 7 to 12 months 7 ___ More than 4 years
2 ___ Less than 1 month 5 ___ 1 to 2 years
3 ___ 1 to 6 months 6 ___ 2 to 4 years

15. Your age is...

1 ___ Under 15 4 ___ 25 to 34 7 ___ 50 to 54
2 ___ 15 to 18 5 ___ 35 to 44 8 ___ 55 to 64
3 ___ 19 to 24 6 ___ 45 to 49 9 ___ 65 or older

(PLEASE COMPLETE OTHER SIDE OF SURVEY)

16. Your gender is... 1 ___ Male 2 ___ Female

17. Your ethnic heritage is... (please ✓ only ONE)

1 ___ White 3 ___ Hispanic 5 ___ Native American
2 ___ Black 4 ___ Asian 6 ___ Other _____ (please specify)

18. What was the range of your total household income for 2001?

1 ___ Less than \$10,000 4 ___ \$30,000-\$39,999 7 ___ \$60,000-\$79,999
2 ___ \$10,000-\$19,999 5 ___ \$40,000-\$49,999 8 ___ \$80,000 or over
3 ___ \$20,000-\$29,999 6 ___ \$50,000-\$59,999

19. How many persons are in your household?

1 ___ One 3 ___ Three 5 ___ Five
2 ___ Two 4 ___ Four 6 ___ Six or more

20. How many licensed drivers are in your household (include yourself if you are licensed)?

0 ___ None 1 ___ One 2 ___ Two 3 ___ Three or more

21. How many working vehicles (cars, vans, and/or light-duty trucks) are available in your household?

0 ___ None 1 ___ One 2 ___ Two 3 ___ Three or more

22. Do you have a car or other personal vehicle that you could have used for THIS trip?

0 ___ Yes 1 ___ No

23. How many months out of the year do you reside in Bay County?

1 ___ 12 months (full-time resident) 3 ___ 6-9 months 5 ___ 0-2 months
2 ___ 10-11 months 4 ___ 3-5 months 6 ___ Tourist/Visitor

24. Do you think that BTT should provide service on the weekends?

0 ___ Yes 1 ___ No

IF YES → Which weekend day(s) should BTT operate?

1 ___ Saturday 2 ___ Sunday 3 ___ Saturday & Sunday

25. What is the zip code of your residence? _____

26. How satisfied are you with each of the following?

Please circle the number that best reflects your opinion

Very Satisfied

Neutral

Very Unsatisfied

- a. Your overall satisfaction with BTT
b. Frequency of service (how often trolleys run)
c. Your ability to get where you want to go using the trolley
d. The number of times you have to transfer trolleys to get to where you want to go
e. How easy it is to transfer between trolleys
f. How regularly trolleys arrive on time
g. The time it takes to make a trip by trolley
h. Value of trolley fare (service you get for what you pay)
i. How easy it is to obtain trolley route & schedule information
j. How easy it is to use trolley route & schedule information
k. Time of day *earliest* trolleys run on weekdays
l. Time of day *latest* trolleys run on weekdays
m. How clean the trolleys and trolley stops are
n. Safety/security at the trolley stop
o. Safety while riding the trolley
p. Safety/security after getting off the trolley
q. Temperature inside the trolleys
r. Availability of seats on the trolleys
s. The trolley driver's ability to drive the trolley
t. The trolley driver's courtesy

5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1
5	4	3	2	1

27. Using letters "a" through "t" in Question 26, please list the three service characteristics that would most help YOU if Bay Town Trolley were to improve them:

_____, _____, and _____.

THANK YOU FOR COMPLETING THE SURVEY!

PANAMA CITY TDP INTERVIEW & WORKSHOP DISCUSSION GUIDE

A. WHERE WE ARE

1. How much awareness of and support for transit is there in the community? Have the levels of awareness and support changed in the last two years?
2. How is Bay Town Trolley perceived in the community? What is your perception of transit's role in the community?
3. Is the transit system responsive to community needs? How are those needs communicated to the transit system?
4. Is information on transit readily available in the community?
5. What is your opinion of the transit fare?
6. Is traffic congestion a problem in Bay County? If so, what role can transit play in alleviating this problem?
7. Is there a parking problem in Bay County? If so, how does this affect transit's role in the community? What about the parking situation along the beaches?

B. WHERE WE WANT TO GO

8. What goals have the community and elected officials voiced for transit? What do you see as appropriate goals for the transit system?
9. How can Bay Town Trolley better meet community needs?
10. What is happening in Bay County in terms of residential and commercial development? How much? Where? How can transit best respond to these trends?
11. Is the establishment of service guidelines a worthwhile goal for transit?
12. Should Bay Town Trolley be looking at new markets for transit service, or should it concentrate on its existing markets? Which is more important: geographic coverage or more effective/efficient service?
13. Is there a willingness in the community to consider additional local funding sources for transit? Are you aware of the \$0.05 local option gas tax for transportation projects?

C. HOW WE GET THERE

14. What improvements are needed in the transit system to attract more riders and meet community goals?
15. Is there a need for park and ride lots, possibly in conjunction with express or limited-stop bus service?
16. Are there areas currently not served or under-served by transit that should receive a higher priority?
17. Are there other policies that should be changed to help the transit system reach its goals?

D. SUMMARY

18. What are the major strengths and accomplishments of the transit system?
19. How have perceptions of the transit system changed over the last two years?
20. If you could pick one thing to change about the transit system, what would it be?

APPENDIX C

Bay Coordinated Transportation (BCT) Customer Satisfaction Survey Results

**Bay County Coordinated Transportation (BCT)
Customer Satisfaction Survey Results
April 2002**

From the West Florida Regional Planning Council

Background and Methodology

This year a mail-in response survey was conducted to be used as a portion of the Community Transportation Coordinator's evaluation and the annual update of the Transportation Disadvantaged Service Plan (TDSP). The survey was conducted on April 3rd and 4th with the BCT drivers handing out surveys. A total of 61 survey post cards were returned. Respondents were asked to rate various aspects of BCT's service on this years on-board survey. The results indicate satisfaction levels with each of the particular areas and an overall satisfaction rating for system. Based on these observations, decisions can be made by BCT to direct efforts for future improvements in the system based on the perception of their patrons.

Areas Rated

The following aspects of BCT's services were rated by respondents to this years survey:

- Dependability
- Runs when needed (Time of Operation)
- Easy to arrange trips (scheduling)
- Comfort and cleanliness
- Waiting Time
- Cost of Trip
- Employee courtesy
- Overall rating

Overall Performance Rating

In 2001, 90.7% of the respondents rated the service as good' or very good. The 2002 survey resulted in a rate 84.7. This shows a 3.6 percent decrease in overall satisfaction.

**Table C-1
Overall Rating**

Rating	Number of Responses	Percent of Responses
Very Good	37	37.3
Good	13	22.0
Fair	6	10.1
Poor	1	1.7
Very Poor	2	3.4

Service Availability Characteristics

The first three questions and the fifth question on this years survey addressed the dependability, hours of operation, ease of arranging trips, and waiting time for BCT's transportation services. Tables C-2 and C-3 present the detailed results of the survey. It should be noted that 88.1% of the respondents rated the dependability of the services as very good or good; 96% of the respondents rated the hours of operation (runs when I need it) as very good or good; 87.4% of the respondents rated the ease to arrange a trip as very good or good; and 82.7% of the respondents rated the waiting time for a trip as very good or good. The relatively low ratings in the hours of operations and waiting time could indicate a combination of a desire for additional hours of operations to accommodate work related issues as well as a dissatisfaction in the time waiting for a vehicle for a return trip.

**Table C-2
Service Availability Characteristics**

	Dependability		Runs When I Need It	
Rating	Number of Responses	Percent of Responses	Number of Responses	Percent of Responses
Very Good	38	64.4	30	49.2
Good	14	23.7	16	26.2
Fair	6	10.2	9	14.8
Poor	0	0	6	9.8
Very Poor	1	1.7	0	0

Table C-3
Service Availability Characteristics

	Easy to Arrange Trips		Waiting Time	
Rating	Number of Responses	Percent of Responses	Number of Responses	Percent of Responses
Very Good	32	55.2	33	56.9
Good	12	20.7	8	13.8
Fair	8	13.8	9	15.5
Poor	5	8.6	4	6.9
Very Poor	0	0	4	6.9

Staff, Vehicle and External Factors

The remaining three questions addressed the cost of using the system, comfort and cleanliness of BCT's vehicles, and BCT employee courteousness. On the question of cost of the system, 82.9% of the survey respondents rated the cost as very good or good. The complete breakdown for this category is presented in Table C-4.

Table C-4
Cost of Services

Rating	Number of Responses	Percent of Responses
Very Good	47	78.3
Good	7	11.7
Fair	4	6.7
Poor	1	1.7
Very Poor	1	1.7

The data for the comfort and cleanliness of the vehicles is presented in Table C-5 while Table C-6 contains the data regarding employee courteousness. For comparison purposes Tables C-5 and C-6 contain the data for the 1999, 2000, 2001 and 2002 surveys. For comfort and cleanliness, 97.4% of the respondents rated BCT's vehicles as very good or good, while 94.8% indicated the same response for employee courteousness. It should be noted at both these areas show improvement in this year's survey.

**Table C-5
Vehicle Comfort and Cleanliness**

	1998	2000	2001	2002
Rating	Percent of Responses	Percent of Responses	Percent of Responses (Number of Responses)	Percent of Responses (Number of Responses)
Very Good	36	55.3	74.4 (58)	73.2 (41)
Good	46	28.9	23.0 (18)	21.4 (12)
Fair	11	15.8	1.3 (1)	8.9 (5)
Poor	6	0	0 (0)	0 (0)
Very Poor	1	0	1.3 (1)	0 (0)

**Table C-6
Employee Courteousness**

	1998	2000	2001	2002
Rating	Percent of Responses	Percent of Responses	Percent of Responses (Number of Responses)	Percent of Responses (Number of Responses)
Very Good	64	74.4	80.3 (61)	73.2 (41)
Good	25	12.8	14.5 (11)	19.6 (11)
Fair	80	7.7	2.6 (2)	5.4 (3)
Poor	3	2.6	0 (0)	1.8 (1)
Very Poor	0	2.6	2.6 (2)	1.8 (1)

Written comments were received on 37 of the responses. Table C-7 presents a summary of the topics of these comments.

**Table C-7
Written Comments**

Topic	Number of Comments
Drivers	10 positive, 4 negative
General	10 positive, 3 negative
Scheduling	6 negative, 1 general
Waiting Time	1 negative
Trip Length	0 comments
Vehicle Comfort	1 negative
Hours of Operation	1 general comment

Tables C-1 through C-7 indicate user satisfaction responses for each of the above system characteristics. Overall, the majority of BCT passengers rated the service Very Good. Most satisfaction measures received high ratings from the passengers. These ratings are unusually high, thus clearly indicating that existing passengers are very satisfied with BCT's services.

Comparison with the Service Plan Goals, Objectives, Strategies and Measures

Strategies 1.2g which states Revise, implement and update annual rider surveys to assess program performance, 3.1d which states Use surveys to receive feedback from riders and agencies, and 3.2c which states Use rider and agency surveys to receive feedback on users perceptions of comfort and safety have all been met with this survey.

Measure 1.2g which states Maintain rider survey in rating of overall system performance at an 85% excellent/good rating was not met as the survey indicated an overall system performance rating of 90.7%.

APPENDIX D

Trip Attractors and Generators

Schools

Number	Name	Address
9	A. D. Harris High	819 E. 11th St. Panama City, FL 32401
1	Bay High	1204 Harrison Ave. Panama City, FL 32401
3	Callaway Elementary	7115 Hwy. 22 Callaway, FL 32404
4	Cedar Grove Elementary	2826 E. 15th St. Panama City, FL 32405
	Deane Bozeman Learning Center	13410 Hwy 77 South Port Fl. 32409
5	Everitt Middle	608 School Ave. Springfield, FL 32401
6	Florida State University	4750 W. Collegiate Dr. Panama City, FL 32405
7	Gulf Coast Community College	5230 W. Hwy. 98 Panama City, FL 32401
8	Haney Vocational Technical Center	3016 Hwy. 77 Panama City, FL 32405
2	Hutchison Beach Elementary	12900 Hutchinson Blvd Panama City Bch Fl. 23407
10	Hiland Park Elementary	2507 Baldwin Rd. Panama City, FL 32405
	J. R. Arnold High	550 Alf Coleman Rd. Panama City Bch, FL 32407
11	Jinks Middle	600 W. 11th St. Panama City, FL 32401
12	Lucille Moore Elementary	1900 Michigan Ave. Panama City, FL 32405
13	Lynn Haven Elementary	301 W. 9th St. Lynn Haven, FL 32444
14	Margaret K Lewis Center	1527 Lincoln Ave. Panama City, FL 32405
15	Merriam Cherry Street Elementary	1125 Cherry St. Panama City, FL 32401
16	Merritt Brown Middle	5044 Merritt Brown Way Panama City, FL 32404
17	Millville Elementary	203 N. East Ave. Panama City, FL 32401
18	Mosley High	501 Mosley Dr. Lynn Haven, FL 32444
19	Mowat Middle	1903 Hwy. 390 Lynn Haven, FL 32444
	New Horizons Learning Center	3100 Minnesota Ave. Panama City, FL 32405
21	Northside Elementary	2001 Northside Dr. Panama City, FL 32405
22	Oakland Terrace Elementary	2010 W. 12th St. Panama City, FL 32401
23	Parker Elementary	640 S. Hwy. 22A Panama City, FL 32404
24	Patronis Elementary	7400 Patronis Dr. Panama City Beach, FL 32408
25	Patterson Middle	1025 Redwood Ave. Panama City, FL 32444

Schools (Continued)

Number	Name	Address
26	Rosenwald Middle	1310 E. 11th St. Panama City, FL 32401
27	Rutherford High	
29	Southport Elementary	1835 Bridge St. Southport, FL 32409
30	Springfield Elementary	520 School Ave. Panama City, FL 32401
31	St Andrews Elementary	3001 W. 15 th St. Panama City, FL 32401
32	Surf Side Middle	300 Nautilus St. Panama City Beach, FL 32413
33	Tommy Smith Elementary	5044 Tommy Smith Dr. Panama City, FL 32404
34	Tyndall Elementary	7800 Tyndall Pkwy. Tyndall AFB, FL 32403
35	Waller Elementary	11332 E. Hwy. 388 Youngstown, FL 32466
36	West Bay Elementary	114813 School Dr. Panama City Beach, FL 32413

Hospitals and Medical Centers

Number	Name	Address
	Artificial Kidney Center	510 N. McArthur Ave. Panama City, FL 32401
48	Bay County Behavioral Center	1940 Harrison Ave. Panama City, FL 32405
40	Bay Medical Center	615. N Bonita Ave. Panama City, FL 32401
275	Bay Walk-in Clinic	2306 Hwy 77 Panama City, FL 32405
	Dr. Adhal	2195 Jenks Ave. Panama City, FL 32405
	Dr. Ebied/Dr Elzawahry	2202 State Ave. Panama City, FL 32405
	Dr. Cofer	211 E. 11th St. Panama City, FL 32401
	Dr Combs	412 W. 19th St. Panama City, FL 32405
	Dr. Grantham	340 W. 23rd St. Panama City, FL 32405
	Dr. Khan	3808 E. 3rd St. Panama City, FL 32401
	Dr. Kovaleski	1900 Harrison Ave. Panama City, FL 32405
	Dr. M Walker	2011 Harrison Ave. Panama City, FL 32405
	Dr. McArthur	406 W. 19th St. Panama City, FL 32405
	Dr. Meyer/Dr. Mullis	1600 Jenks Ave. Panama City, FL 32405
	Dr. Obid	951 W. 23rd St. Panama City, FL 32405

Hospitals and Medical Centers (Continued)

Number	Name	Address
	Dr. R. Walker	504 N. McArthur Ave. Panama City, FL 32401
	Dr. S. Rahman	825 Florida Ave. Lynn Haven, FL 32444
55	Dr. Zawahry	756 Harrison Ave. Panama City, FL 32401
257	HCA Gulf Coast	449 W. 23rd St. Panama City, FL 32405
276	HealthSouth Emerald Coast Rehabilitation Center	1847 Florida Ave. Panama City, FL 32405
277	Northwest Florida Surgery Center	767 Airport Rd. Panama City, FL 32404
57	Tyndall Hospital	340 Magnolia Cir. Tyndall Air Force Base, FL

Low Income Housing

Number	Name	Address
96	Briarwood Garden Apartments	2508 Minnesota Ave. Lynn Haven, FL 32444
60	Callaway Manor Apartments	5807 Butler Dr. Callaway, FL 32404
	Edgewood Garden Apartments	3325 W. 23rd St. Panama City, FL 32405
	Fletcher A Black Memorial Homes	11 Bob Sikes Dr. Panama City, FL 32401
64	Fox Garden Apartments	162 Fox Ave. Callaway, FL 32404
132	Foxwood Apartments	1701 Hamilton Ave. Panama City, FL 32405
66	Gardner Dickinson Memorial Homes	1025 Everitt Ave. Panama City, FL 32401
67	Gatewood Apartments	7100 Noel Rd. Panama City, FL 32404
	Gibb Gulf Coast Village	6200 N. Lagoon Dr. Panama City Beach, FL 32408
140	Havenwood Garden Apartments	600 Florida Ave. Lynn Haven, FL 32444
70	Henry T Kirkland Garden Apartments	261 N. Everitt Ave. Panama City FL 32401
71	James R Asbell Memorial Homes	2051 Lisenby Ave. Panama City, FL 32405
72	Lake Garden Apartments	5707 Lake Dr. Callaway, FL 32404

Low Income Housing (Continued)

Number	Name	Address
73	Panama City Housing Authority	804 E. 15th St. Panama City, FL 32405
74	Oakland Gardens Apartments	1918 Mack Lewis Dr. Panama City, FL 32401
75	Pana-Villa Garden Apartments	1802 Flower Ave. Panama City, FL 32405
76	Macedonia Garden Apartments	1722 W. 17th St. Panama City, FL 32405
77	Pinehurst Garden Apartments	201 E. 25th St. Lynn Haven, FL 32444
78	Royal Arms Garden Apartments	1420 Balboa Ave. Panama City, FL 32401
79	Sand Dunes Apartments	8011 Front Beach Rd. Panama City Beach, FL 32407
80	St. Andrews Towers Apartments	24 Harrison Ave. Panama City, FL 32401

Mobile Home Parks

Number	Name	Address
81	Ammies	2300 N. Sherman Ave. Cedar Grove, FL 32405
82	Anchorage	4302 W. 19th St. Panama City, FL 32405
83	Anderson	5102 E. 12th St. Panama City, FL 32404
84	Austin	9502 Clarence St. Panama City Beach, FL 32407
85	Bay Oaks	4501 Pitts Ave. Panama City, FL 32401
86	Bay Oaks Village	409 School Ave. Springfield, FL 32401
87	Bay Pines	5811 E. Hwy. 22 Callaway, FL 32404
88	Bayside	6325 Big Daddy Dr. Panama City Beach, FL 32407
89	Blair	1510 Gainer Ave. Cedar Grove, FL 32405
90	Breckenwood	4513 Pipeline Rd. Panama City, FL 32404
92	Buena Vista	1320 Buena Vista Blvd. Panama City, FL 32401
93	Carriage Way	6000 Harvey St. Callaway, FL 32404
94	Cedar Grove	1836 East Ave. Panama City, FL 32405
95	Chase Woods	2200 Laurie Ave. Panama City Beach, FL 32408
96	Chavers	3120 Minnesota Ave. Panama City, FL 32405

Mobile Home Parks (Continued)

Number	Name	Address
97	Circle J	607 W. 11th St. Panama City, FL 32401
98	Conrads	7118 Resota Ln. Southport, FL 32409
99	Cornerstone	1800 East Ave. Panama City FL 32405
100	Country Pines Estates I	300 E. 25th St. Lynn Haven, FL 32444
101	Countryside Estates	1128 S. Gay Ave. Callaway, FL 32404
102	Douglas	12318 S. Dale Ave. Panama City, FL 32405
103	Gulf Breeze	1532 June Ave. Panama City, FL 32505
104	Isle of View	518 Everitt Ave. Panama City, FL 32401
105	Jeanettes	4400 W. US98 Panama City, FL 32401
106	Landever	6123 Roche Ct. Callaway, FL 32404
107	Legears	511 E. 23rd St. Panama City, FL 32405
108	Lisenby	Lisenby Ave. and 29th St. Panama City, FL 32405
109	Lynn Haven	201 W. 14th St. Lynn Haven, FL 32444
110	Miracle Strip	10510 Front Beach Rd. Panama City Beach, FL 32413
111	Mobile Home Gardens	238 Tyndall Pkwy. Panama City, FL 32404
112	Panama City Beach KOA	8800 Thomas Dr. Panama City Beach, FL 32408
113	Panama City Mobile Home Estates	700 Transmitter Rd. Springfield, FL 32401
114	Pines	250 Nelle Ave. Panama City, FL 32404
115	Reid's Court	14806 Front Beach Rd. Panama City Beach, FL 32413
116	Sea Gull	14700 Front Beach Rd. Panama City Beach, FL 32413
117	Shady Knoll	Second St. Southport, FL 32409
118	Shady Oaks	750S Hwy. 22A Panama City, FL 32404
119	Southern Living	286 N. Hwy 22A Panama City, FL 32404
120	Sherman Pines	6513 Bay Line Dr. Panama City, FL 32404
121	Spring	1709 Chaucer Cir. Panama City, FL 32405
122	Spears	149 S. Sims Ave. Panama City, FL 32404
	Waldrops	5000 W. 18th St. Panama City, FL 32401
123	Willow Wood	7300 Willow Wood Rd. Southport, FL 32409

Retirement Homes and Assisted Living Facilities

Number	Name	Address
124	Bay Convalescent and Rehabilitation Center	1336 St. Andrews Blvd. Panama City, FL 32405.
278	Bay Crest Nursing Center	3611 Transmitter Rd. Panama City, FL 32404
	Blue Haven Retirement Center	2734 E. SR 390 Panama City, FL 32405
126	Cove Manor Retirement Center	521 E. Beach Dr. Panama City, FL 32401
128	Fountain House Retirement Services	17919 US 231 Fountain, FL 32438
	Glencove Nursing Pavilion	1027 E. Business US 98 Panama City, FL 32401
246	Life Management Center	525 E. 15 th St. Panama City, FL 32405
245	Lisenby Retirement Center	1400 W. 11th St. Panama City, FL 32401
	Mary Ella Villa	526 Mary Ella Ave. Panama City, FL 32404
131	National Healthcare Center of Panama City	2100 Jenks Ave. Panama City, FL 32405
132	Panama City Nursing Center	924 W. 13 th St. Panama City, FL 32401
138	Robinson Residential Center	11921 Caruso Dr. Panama City, FL 32404
139	St Andrew Bay Center	1804 Carolina Ave. Lynn Haven, FL 32444
140	Summers Landing Retirement Center	615 Florida Ave. Lynn Haven, FL 32444
	Sea Breeze	937 Jenks Ave. Panama City, FL 32405
279	Sea Breeze	626 N. Tyndall Pkwy. Callaway, FL 32404
	The Retirement Center of Panama City	1313 E. 11th St. Cedar Grove, FL 32401

Libraries

Number	Name	Address
143	Bay County	25 W. Government St. Panama City, FL 32401
144	Lynn Haven	901 Ohio Ave. Lynn Haven, FL 32444
145	Panama City Beach	110 S. Arnold Rd. Panama City Beach, FL 32413
146	Parker	1001 W. Park St. Parker, FL 32404
147	Springfield	408 School Ave. Springfield, FL 32401

Post Offices

Number	Name	Address
148	Bay County	1336 Sherman Ave. Panama City Beach FL 32401
149	Bay Point	100 Delwood Beach Rd. Panama City Beach, FL 32408
150	Bayou George	Hwy 2301, Cherokee Landing Fl. 32466
151	Callaway	225 N. Tyndall Pkwy. Callaway, FL 32404
153	Cove	Palo Alto, Panama City, Fl 32401
153	Downtown	421 Jenks Ave. Panama City, FL 32401
154	Eastside	5310 E. US Business 98 Panama City, FL 32401
155	Fountain	12606 Silver Lake Rd. Fountain, FL 32438
156	Holiday Plaza	6640 W. US98 Panama City Beach, FL 32407
158	Lynn Haven	2319 S. SR 77 Lynn Haven, FL 32444
159	Mexico Beach	US 98 and 9th St. Mexico Beach, FL 32456
160	Naval Coastal Systems Center	6703 W. US 98 Panama City Beach, FL 32408
161	Northside	1315 W. 17th St. Panama City, FL 32401
162	Panama City Beach	420 Churchwell Dr. Panama City Beach, FL 32407
163	Southport	7526 SR 77 Southport, FL 32409
164	Springfield	3213 E. US 98 Springfield, FL 32401
165	St Andrew	1131 Beck Ave. Panama City, FL 32401
	Sunnyside	21906 Front Beach Rd. Panama City Beach, FL 32413
	Thomas Drive	7900 Thomas Dr Panama City Beach, FL 32408
167	Tyndall Air Force Base	730 Suwannee Rd. Tyndall AFB, FL 32403
	West Beach	19401 Front Beach Rd. Panama City Beach, FL 32413
170	West Panama City Beach	268 S. Hwy 79 Panama City Beach, FL, 32413
169	Youngstown	11703 Hwy. 231 Youngstown, FL 32466

Social Service Agencies

Number	Name	Address
170	Bay County Health Dept	17109 Back Beach Rd. Panama City Beach, FL 32413
	Bay County Health Dept	597 W. 11th St. Panama City, FL 32401
281	Bay County Health Dept.- Childrens Medical Services	1308 Florida Ave. Panama City, FL 32401
	Catholic Social Services	3128 E. 11th St. Springfield, FL 32401
	Council on Aging	1116 Frankford Ave. Panama City, FL 32401
	Dept of Children and Families	3127 Lisenby Ave. Panama City, FL 32405
	Dept of Children and Families	500 W. 11th St. Panama City, FL 32401
	Dept of Children and Families	705 W. 15th St. Panama City, FL 32401
	Division of Labor and Employment	114 E. 9th St. Panama City, FL 32401
	Division of Labor and Employment	705 W. 15th St. Panama City, FL 32401
	Division of Labor and Employment - Blind Services	2611 Jenks Ave. Panama City, FL 32405
	Division of Labor and Employment - Vocational Rehabilitation	2939 SR77 Panama City, FL 32405
	Division of Jobs and Benefits-	1002 W. 23rd St. Panama City, FL 32405
282	Elder Affairs	101 W. 5th St. Panama City, FL 32401
	Family Service Agency	890 W. 11th St. Panama City, FL 32401
	Rescue Mission	609 Allen Ave. Panama City, FL 32401
	Salvation Army	1609 Lisenby Ave. Panama City, FL 32405
	Salvation Army	1824 W. 15th St. Panama City, FL 32401
283	Salvation Army	700 Jenks Ave. Panama City, FL 32401

City Hall/Government

Number	Name	Address
	Bay County Courthouse	300 E. 4th St. Panama City, FL 32401
	Callaway	6601 Cherry St. Panama City, FL 32404
	Cedar Grove	2728 E. 14th St. Panama City, FL 32401
	Lynn Haven	825 Ohio Ave. Lynn Haven, FL 32444
	Mexico Beach	118 N. 14th St. Mexico Beach, FL 32410
	Panama City	9 Harrison Ave. Panama City, FL 32401
	Panama City Beach	110 S. Arnold Rd. Panama City Beach, FL 32413
	Parker	1001 W. Park St. Parker, FL 32404
	Springfield	3529 E. 3rd St. Springfield, FL 32401

Military

Number	Name	Address
	Coast Guard	1 Naval Coastal Systems Center Panama City Beach, FL
	Naval Coastal Systems Center	W. Hwy 98 Panama City Beach, FL 32407
	Tyndall Air Force Base	Suwannee Ave. Bldg. 1127 Tyndall Air Force Base, FL 32403

Transportation

Number	Name	Address
286	Bay Coordinated Transportation	1021 Massalina Dr. Panama City, FL 32401
285	Bay Town Trolley	1021 Massalina Dr. Panama City, FL 32401
	Greyhound Bus Station	917 Harrison Ave. Panama City, FL 32401
284	Greyhound Bus Station	15821 Hwy 231 Youngstown, FL 32466
	Panama City/Bay County Regional Airport	3173 Airport Rd. Panama City, FL 32405

Civic Centers

Number	Name	Address
203	Kaleidoscope Theatre	207 E. 24 th St. Lynn Haven, FL 32444
201	Marina	8 Harrison Ave. Panama City, FL 32401
204	Martin Theatre	409 Harrison Ave. Panama City, FL 32401

Tourist Attractions

Number	Name	Address
287	Grand Maze	9807 Front Beach Rd. Panama City Beach, FL 32407
	Gulf World Marine Park	15412 Front Beach Rd. Panama City Beach, FL 32413
	Junior Museum of Bay County	1731 N. Jenks Ave. Panama City, FL 32405
	Miracle Strip Amusement Park	12000 Front Beach Rd. Panama City Beach, FL 32407
	Museum of Man in the Sea	17314 Back Beach Rd. Panama City Beach, FL 32413
	Ocean Opry Auditorium	8400 Front Beach Rd. Panama City Beach, FL 32407
288	St. Andrews State Recreation Area	4607 State Park Lane Panama City Beach, FL 32408
	Visual Art Center of Northwest Florida	19 E. 4th St. Panama City, FL 32401
	Zoo World	9008 Front Beach Rd. Panama City Beach, FL 32407

Shopping Centers

Number	Name	Address
	Albertsons Plaza	2329 SR 77 Panama City, FL 32405
	Beachwalk Center	7157 Front Beach Rd. Panama City Beach, FL 32408
	Callaway Square Plaza	229 N. Tyndall Pkwy. Panama City, FL 32404
	Coronado Village	105 W. 23rd St. Panama City, FL 32405
	K-Mart	1329 W. 15th St. Panama City, FL 32401
	Magnolia Beach Plaza	2419 Thomas Dr. Panama City Beach, FL 32408
	Hathaway Crossing	7100 W. US 98 Panama City Beach, FL 32407
	Miracle Mile Plaza	7328 Thomas Dr. Panama City Beach, FL 32408
	Panama City Mall	2150 Martin Luther King Jr. Blvd. Panama City, FL 32405
	Panama City Square	513 W. 23rd St. Panama City, FL 32405
	Panama Plaza	1344 W. 15th St. Panama City, FL 32405
	Parker	208 S. Tyndall Pkwy. Callaway, FL 32404
	Promenade Mall	8317 Front Beach Rd. Panama City Beach, FL 32408
	Sams Club	1707 W. 23rd St. Panama City, FL 32405
	Shoppes at Edgewater	513 Beckrich Rd. Panama City Beach, FL 32407
	Stanford Station	820 W. 23rd St. Panama City, FL 32405
	Target	2340 SR 77 Panama City, FL 32405
	The Y	17188 Front Beach Rd. Panama City Beach, FL 32413
	Twenty-third Street Plaza	650 W. 23rd St. Panama City, FL 32405
	Tyndall Air Force Base Exchange	950 Mall Ln. Tyndall Air Force Base, FL 32403
	Wal-Mart SuperCenter	10270 Front Beach Rd. Panama City Beach, FL 32407
	Wal-Mart SuperCenter	725 N. Tyndall Pkwy. Panama City, FL 32404
	West Plaza	297 W. 15th St. Panama City, FL 32401

Major Employers

Number	Name	Address
	Albertsons	2329 Highway 77 Panama City FL 32404
	Allied Signal Friction Materials Division	1006 Arthur Dr. Lynn Haven, FL 32444
290	Applied Research Associates	215 Harrison Ave. Panama City, FL 32401
	Arizona Chemical	2 S. Everitt Ave. Panama City, FL 32401
	Bay County Behavioral Health Center	1940 Harrison Ave. Panama City, FL 32405
	Bay County School District	1311 Balboa Ave. Panama City, FL 32401
	Bay High School	1204 Harrison Ave. Panama City, FL 32401
	Everitt Middle School	608 School Ave. Panama City, FL 32401
	Bay Medical Center	615 Bonita Ave. Panama City, FL 32401
291	Bell Signs	1200 Bell Ave. Panama City, FL 32401
	Bell South	1000 W. 15th St.
	Bell South	1602 Martin Luther King Jr. Blvd.
	Berg Steel Pipe	5315 W. 19th St. Panama City, FL 32401
	Boardwalk Beach Resort	9450 S. Thomas Dr. Panama City Beach, FL 32408
	Buffalo Rock Pepsi	2377 Sherman Ave. Panama City, FL 32405
292	C & C Manufacturing	6725 Bay Line Dr. Panama City, FL 32404
	Coastal Systems Station	W. Hwy 98 Panama City Beach, FL 32407
	Corrections Corporation of America	314 Harmon Ave. Panama City, FL 32401
293	Eastern Shipbuilding, Inc.	2200 Nelson St. Panama City, FL 32401
	Edgewater Beach Resort	11212 Front Beach Rd. Panama City Beach, FL 32407
294	Ewell Industries, Inc.	1901-B E. 15th St. Panama City, FL 32405
295	Fagens Inc.	730 N. Hwy 231 Panama City, FL 32405
296	Grolier Telemarketing, Inc.	1515 Tennessee St. Lynn Haven, FL 32444
297	Gulf Asphalt	4116 Hwy. 231N Panama City, FL 32404
	Gulf Coast Community College	5230 W. US 98 Panama City, FL 32401
	Gulf Power	1230 E. 15th St. Panama City, FL 32405
	Gulf Coast Medical Center	449 W. 23rd St. Panama City, FL 32405

Major Employers (Continued)

Number	Name	Address
298	Health South Rehabilitation Hospital	1847 Florida Ave. Panama City, FL 32405
	Holiday Inn Sunspree Resort	11127 Front Beach Rd. Panama City, FL 32407
299	Home Depot	409 E. 23rd St. Panama City, FL 32405
300	Honeywell	1006 Arthur Dr. Lynn Haven, FL 32444
	J. R. Arnold High	550 Alf Coleman Rd. Panama City Bch. FL 32407
	Lucille Moore Elementary	1900 Michigan Ave. Panama City, FL 32405
301	Lowes	300 E. 23rd St. Panama City, FL 32405
302	Marine Transportation Services Inc.	3830 Frankford Ave. 32405
	Marriotts Bay Point Resort	4200 Marriot Dr. Panama City Beach, FL 32408
	Merrick Industries Inc	10 Arthur Dr. Lynn Haven, FL 32444
	Mosley High	501 Mosley Dr. Lynn Haven, FL 32444
	Panama City News Herald	501 W. 11th St. Panama City, FL 32401
	Panama City Police Dept	1209 E. 15th St. Panama City, FL 32405
	Panama City Public Works	731 Massalina Dr. Panama City, FL 32401
303	Queen Craft	3615 Calhoun Ave. Panama City, FL 32401
	Ramada Inn	12907 Front Beach Rd. Panama City Beach, FL 32407
	Rutherford High School	1000 School Ave. Springfield, FL 32401
	Sallie Mae Servicing Corporation	1002 Arthur Dr. Panama City, FL 32401
	Sams Club	1707 W 23rd St. Panama City, FL 32405
304	Sears Roebuck & Company	733 N. Hwy 231 Panama City, FL 32405
	Smurfit-Stone Container	1 Everitt Ave. Panama City, FL 32401
	Super Wal-Mart	10270 Front Beach Rd. Panama City Beach, FL 32407
	Super Wal-Mart	725 N. Tyndall Pkwy. Panama City, FL 32404
305	Trane Company	200 Aberdeen Loop Lynn Haven, FL 32444
	Target	2340 SR 77 Panama City, FL 32405
	Tommy Thomas Chevrolet	2251 W. 23rd St. Panama City, FL 32405
	Tyndall Air Force Base	Suwannee Ave. Bldg. 1127 Tyndall Air Force Base, FL
	Waste Management	6319 Hwy. 22 Panama City, FL 32404
	Wellstream Corporation	1700 C. Ave. Port Panama City, FL 32401

APPENDIX E

Inventory of Transportation Providers Serving Bay County

A Airport Transportation Services

ADDRESS: 9851 S. Thomas Dr. Suite 103
Panama City, FL
32408

PHONE: (850)236-4400

FAX:

SERVICE AGREEMENTS/CONTRACTS

GENERAL INFORMATION:

Type of Service: limousine, airport transfers and local transfers

Service Area: all over, mainly Bay County

Service Users: General Public

SERVICE HOURS:

24 hrs./day; 7 days/ week

OPERATING STATISTICS

Number of Vehicles Operated: 10-15

vans, town cars, cadillacs, 4door
sedans, lincoln limos, ans shuttle buses

PERSONNEL:

Total Employees 12-15

Average Passenger Trips

=

FINANCIAL INFORMATION:

Budgeted Operating Expense

Budgeted Capital Expense

FARE STRUCTURE:

\$10 min taxis, 3 hr min for limo

Comments:

aka: affordable limousine

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

BCCOA – Bay Coordinated Transportation

ADDRESS: 1116 Frankford Drive
Panama City, FL
32401

PHONE: (850)769-2140

FAX:

SERVICE AGREEMENTS/CONTRACTS

GENERAL INFORMATION:

Type of Service: paratransit

Service Area: Bay County

Service Users:

SERVICE HOURS:

OPERATING STATISTICS

Number of Vehicles Operated: 47

PERSONNEL:

Total Employees 51, plus drivers

Average Passenger Trips

=

FINANCIAL INFORMATION:

Budgeted Operating Expense 2,000,000

Budgeted Capital Expense

FARE STRUCTURE:

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Bay Behavior

ADDRESS: 1940 Harrison Avenue
Panama City, FL
32405

PHONE: (850)763-0017

FAX:

SERVICE AGREEMENTS/CONTRACTS

GENERAL INFORMATION:

Type of Service: Psychiatric crisis stabilization facility
Transporting patients from two local hospitals
Service Area: Bay County and surrounding counties as needed
Service Users: Bay Behavior patients.

SERVICE HOURS:

24 hrs./day, 7 days/ week.

OPERATING STATISTICS

Number of Vehicles Operated: 1

PERSONNEL:

Total Employees

Average Passenger Trips

=

FINANCIAL INFORMATION:

Budgeted Operating Expense

Budgeted Capital Expense

FARE STRUCTURE:

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Bay County School District

ADDRESS: 1650 June Avenue
Panama City, FL
32401

PHONE: (850)872-4100

FAX:

SERVICE AGREEMENTS/CONTRACTS

elementary, middle and high schools

GENERAL INFORMATION:

Type of Service: Busing.
School busing.
Service Area: Bay County
Service Users: K-12 students

SERVICE HOURS:

5:30 a.m. - 5:30 p.m. office, 5:45 a.m. -
4:45 p.m. bus routes

OPERATING STATISTICS

Number of Vehicles Operated: 188

Regular and Handicapped (17)

PERSONNEL:

Total Employees 190 drivers and
substitutes

Average Passenger Trips Daily
= 3

FINANCIAL INFORMATION:

Budgeted Operating Expense 5,000,000
Budgeted Capital Expense 5,000,000

FARE STRUCTURE:

n/a

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Bay Medical Center Non-Emergency Transport

ADDRESS: 615 N. Bonita Avenue
Panama City, FL
32401

PHONE: (850)747-6080 (850)769-1638

FAX:

SERVICE AGREEMENTS/CONTRACTS

GENERAL INFORMATION:

Type of Service: Special Medical Needs

Service Area: Bay County

Service Users:

SERVICE HOURS:

8:00 a.m. to 5:00 p.m.

OPERATING STATISTICS

Number of Vehicles Operated: 5

PERSONNEL:

Total Employees 7

Average Passenger Trips

=

FINANCIAL INFORMATION:

Budgeted Operating Expense

Budgeted Capital Expense

FARE STRUCTURE:

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Bay Town Trolley

ADDRESS: 1116 Frankfurt Ave.
Panama City, FL
32401

PHONE: (850)769-0557

FAX:

SERVICE AGREEMENTS/CONTRACTS

Service agreements with handicapped schools, senior centers

GENERAL INFORMATION:

Type of Service: Public Transit
fixed-route transit
Service Area: Bay County
Service Users: General Public

SERVICE HOURS:

6:00 a.m. - 6:30 p.m. Mon.- Fri.
Emergency all hours.

OPERATING STATISTICS

Number of Vehicles Operated: 4
Trolleys, Motor coach bus.

PERSONNEL:

Total Employees 51, plus drivers

Average Passenger Trips Daily
= 800

FINANCIAL INFORMATION:

Budgeted Operating Expense 260,000
Budgeted Capital Expense

FARE STRUCTURE:

paratransit- medicaid; trolley- 50 cents fair, discount 25 cents

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Executive Taxi

ADDRESS: 2705 Joan Avenue
Panama City, FL
32408

PHONE: (850)784-6611 (850)223-1007

FAX:

SERVICE AGREEMENTS/CONTRACTS

GENERAL INFORMATION:

Type of Service: Taxi service
Taxi, limousine, shuttle services

Service Area: Mostly Bay County

Service Users: General public

SERVICE HOURS:

24 hrs/day, 7 days/week

OPERATING STATISTICS

Number of Vehicles Operated: 25

15 taxis, 5 executive sedans, 5 12-person shuttle buses

PERSONNEL:

Total Employees 3

Average Passenger Trips

=

FINANCIAL INFORMATION:

Budgeted Operating Expense

Budgeted Capital Expense

FARE STRUCTURE:

\$1.50 for pick-up, \$1.25/mile, \$0.25/1-mn waiting, After 2 people, \$0.50/person,

Comments:

aka. Your Taxi and Emerald Coast Shuttle Number of employees excludes drivers who are independent contractors.

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Greyhound Bus Lines

ADDRESS: 917 Harrison Ave.
Panama City, FL
32401

PHONE: (850)785-7861

FAX:

SERVICE AGREEMENTS/CONTRACTS

GENERAL INFORMATION:

Type of Service: Bus service

Service Area: U.S., Canada, Mexico

Service Users: General public

SERVICE HOURS:

M-St 7 am - 9 pm; S: 7 am - 2 pm, 5 pm -
9 pm; closed on holidays

OPERATING STATISTICS

Number of Vehicles Operated:

PERSONNEL:

Total Employees 5 at this location

Average Passenger Trips

=

FINANCIAL INFORMATION:

Budgeted Operating Expense

Budgeted Capital Expense

FARE STRUCTURE:

Based on mileage

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Happy Day Child Care

ADDRESS: 2724 E. 17th Street
Panama City, FL
32405

PHONE: (850)769-5536

FAX:

SERVICE AGREEMENTS/CONTRACTS

GENERAL INFORMATION:

Type of Service: Cedar Grove Elementary students

Service Area: Cedar Grove, Millville

Service Users: elementary students

SERVICE HOURS:

6:30 a.m. - 5:30 p.m. Mon.- Fri.

OPERATING STATISTICS

Number of Vehicles Operated: 1

15 passenger van

PERSONNEL:

Total Employees 15

Average Passenger Trips

=

FINANCIAL INFORMATION:

Budgeted Operating Expense

Budgeted Capital Expense

FARE STRUCTURE:

Comments:

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Yellow Checker Cab

ADDRESS: 703 W. 13th Street
Panama City, FL
32401

PHONE: (850)763-0211

FAX:

SERVICE AGREEMENTS/CONTRACTS

GENERAL INFORMATION:

Type of Service: Taxi service

Service Area: Bay County

Service Users: General public

SERVICE HOURS:

24 hours/day, 7 days/week

OPERATING STATISTICS

Number of Vehicles Operated: 6

PERSONNEL:

Total Employees 13

Average Passenger Trips

=

FINANCIAL INFORMATION:

Budgeted Operating Expense

Budgeted Capital Expense

FARE STRUCTURE:

\$1.50 for pick-up, \$1.25/mile. After 2 people, \$0.50/person

Comments:

13 employees do not include drivers who work as independent contractors.

*CATEGORIES LEFT BLANK INDICATES THE INFORMATION WAS NOT APPLICABLE OR NOT PROVIDED.

Beach Taxi**Taxi cab**

(850)769-8265
703 W. 13th Street
Panama City, FL
32401

aka: Deluxe Coach Taxi Service and Yellow
Checker Cab.

California Limousines

(850)872-1796
2915 E. Hwy 98
Panama City, FL
32401

**Early Childhood Services
Child transportation.**

(850)872-7550
450 Jenks Avenue
Panama City, FL
32401

Florida Limousine

(850)874-9995

Panama City, Florida
32407

J & R Limousine Service

(850)871-2828
920 E. Park St.
Parker, FL
32404

Professionally Yours Tours

(850)234-3459
9123 Back Beach Road
Panama City Beach, FL
32407

APPENDIX F

List of Definitions For Selected Performance Indicators and Measures, and Peer Transit System Selection Methodology

GENERAL PERFORMANCE INDICATORS

Service Area Population - The number of persons residing within the area for which a system provides transit service. According to FTA requirements, this *service area* is defined according to ADA definitions, i.e., $\frac{3}{4}$ -mile boundary around all fixed routes. Therefore, all area covered by this $\frac{3}{4}$ -mile route buffer zone is considered to be a system's service area, and the area's size and population characteristics are reported to FTA for NTD purposes. It should be noted that some systems rely on estimates or proxies (such as county population) to report this particular indicator.

National Inflation Rate - Used to deflate the operating expense data to constant 1984 dollars. Inflation-adjusted dollars provide a more accurate representation of spending changes resulting from agency decisions by factoring out the general price inflation. The inflation rate reported is the percentage change in the Consumer Price Index (CPI) for all items (including commodities and services) from year to year. During the 1984 to 1997 period, service and labor costs tended to increase at a faster rate than did commodity prices. Therefore, transit operating expenses, which are predominantly comprised of service and labor costs, may be expected to have increased somewhat faster than inflation even if the amount of service provided were not increased.

Passenger Trips - Annual number of passenger boardings on the transit vehicles. A trip is counted each time a passenger boards a transit vehicle. Thus, if a passenger has to transfer between buses to reach a destination, he/she is counted as making two passenger trips.

Passenger Miles - Number of annual passenger trips multiplied by the system's average trip length (in miles). This number provides a measure of the total number of passenger miles of transportation service consumed.

Vehicle Miles - Total distance traveled annually by revenue service vehicles, including both revenue miles and deadhead miles.

Revenue Miles - Number of annual miles of vehicle operation while in active service (available to pick up revenue passengers). This number is smaller than vehicle miles because of the exclusion of deadhead miles such as vehicle miles from the garage to the start of service, vehicle miles from the end of service to the garage, driver training, and other miscellaneous miles that are not considered to be in direct revenue service.

Vehicle Hours - Total hours of operation by revenue service vehicles including hours consumed in passenger service and deadhead travel.

Revenue Hours - Total hours of operation by revenue service vehicles in active revenue service.

Route Miles - Number of directional route miles as reported in NTD data; defined as the mileage that service operates in each direction over routes traveled by public transportation vehicles in revenue service.

Total Operating Expense - Reported total spending on operations, including administration, maintenance, and operation of service vehicles.

Total Operating Expense (1997 \$) - Total operating expenses deflated to 1997 dollars for purposes of determining the real change in spending for operating expenses.

Total Maintenance Expense - Sum of all expenses categorized as maintenance expenses; a subset of total operating expense.

Total Maintenance Expense (1997 \$) - Total maintenance expenses deflated to 1997 dollars for purposes of determining the real change in spending for maintenance purposes.

Total Capital Expense - Dollar amount of spending related to the purchase of tangible property or other items eligible to be capitalized. Property includes tangible assets with an expected life of more than one year at the time of their installation, and a unit cost greater than \$1,000.

Federal Revenue - Financial assistance obtained from the Federal government to assist in paying the operating costs of providing transit service. Such assistance is available from the Urbanized Area Formula Programs of 49 U.S.C. (Formerly Section 9), other transportation grant programs administered by the U.S. Department of Transportation, as well as other Federal agency programs.

State Revenue - Financial assistance obtained from a State government or agency to assist in paying the operating costs of providing transit service.

Total Local Revenue - All revenues originating at the local level (excluding state and federal assistance). Includes all operating revenue plus any local funds that are provided to the transit agency. *Local funds* are defined as any financial assistance obtained from a local government or agency (below the State level) to assist in paying the operating costs of providing transit service.

Operating Revenue - All revenues generated through the operation of the transit agency. Includes passenger fares, special transit fares, school bus service revenues, freight tariffs, charter service revenues, auxiliary transportation revenues, subsidy from other sectors of operations, and non-transportation revenues.

Passenger Fare Revenue - Revenue generated annually from carrying passengers in regularly scheduled service.

Total Employees - Total number of payroll employees of the transit agency in terms of full-time equivalents (FTEs). It is useful to note that the increasing tendency to contract out for services may result in some significant differences in this measure between otherwise similar properties. It is important to understand which services are contracted before drawing conclusions based on employee levels. All employees classified as capital are not included in this report.

Transportation Operating Employees - All employees, in terms of FTEs, classified as operating employees: vehicle drivers, supervisory personnel, direct personnel.

Maintenance Employees - All employees, in terms of FTEs, classified as maintenance employees who are directly or indirectly responsible for vehicle maintenance.

Administrative Employees - All personnel positions, in terms of FTEs, classified as administrative in nature. This report includes all general administration, ticketing/fare collection, and system security employees as classified by FTA in Form 404.

Vehicles Available for Maximum Service - Number of vehicles available for use by the transit agency to meet the annual maximum service requirement. Vehicles available for maximum service include spares, out-of-service vehicles, and vehicles in or awaiting maintenance, but exclude vehicles awaiting sale and emergency contingency vehicles.

Vehicles Operated in Maximum Service - Number of revenue vehicles operated to meet the annual maximum service requirement, i.e., the revenue vehicle count during the peak hours of the peak days/weeks of the peak season (typically the rush period). Vehicles operated in maximum service exclude atypical days or one-time special events.

Spare Ratio - Vehicles operated in maximum service subtracted from vehicles available for maximum service divided by vehicles operated in maximum service. This measure is an indicator of the number of spare vehicles available for service. A spare ratio of approximately 20 percent is considered appropriate in the industry. However, this varies depending on the size and age of fleet as well as the condition of equipment.

Total Gallons Consumed - Total gallons of fuel consumed by the vehicle fleet.

Total Energy Consumed - Kilowatt hours of propulsion power consumed by a transit system (rail and automated guideway).

Average Age of Fleet - Traditionally, a standard transit coach is considered to have a useful life of 12 years. However, longer service lives are not uncommon. The vehicle age and the reliability record of the equipment, the number of miles and hours on the equipment, the sophistication and features (i.e., wheelchair lifts, electronic destination signs, etc.), and operating environment (weather, roadway grades, and passenger abuse) all affect the maintenance needs and depreciation of the bus fleet.

Number of Incidents - Total number of unforeseen occurrences resulting in casualty (injury/fatality), collision, or property damage in excess of \$1,000. For an incident to be reportable, it must involve a transit vehicle or occur on transit property.

Revenue Service Interruptions - A revenue service interruption during a given reporting period caused by failure of some mechanical element of the revenue vehicle or for other reasons not included as mechanical failures.

Weekday Span of Service - The number of hours that transit service is provided on a representative weekday in the operation of the transit agency. This indicator is determined by computing the number of hours between the values reported for average weekday *time service begins* and *time service ends* on Form 406. For transit agencies with more than one mode, the system total span of service takes into account the hours of operation for all modes and reports the span of hours that any transit service is provided on a typical weekday.

EFFECTIVENESS MEASURES

Vehicle Miles Per Capita - Total number of annual vehicle miles divided by the service area's population. This can be characterized as the number of miles of service provided for each man, woman, and child in the service area and is a measure of the extensiveness of service provided in the service area.

Passenger Trips Per Capita - Average number of transit boardings per person per year. This number is larger in areas where public transportation is emphasized and in areas where there are more transit dependents, and is a measure of the extent to which the public utilizes transit in a given service area.

Passenger Trips Per Revenue Mile - The ratio of passenger trips to revenue miles of service; a key indicator of service effectiveness that is influenced by the levels of demand and the supply of service provided.

Passenger Trips Per Revenue Hour - The ratio of passenger trips to revenue hours of operation; reports on the effectiveness of the service since hours are a better representation of the resources consumed in providing service.

Average Speed - Average speed of vehicles in revenue service operation (i.e., not including travel to and from the garage or any other deadhead) calculated by dividing total revenue miles by total revenue hours.

Average Headway - Average headway, in minutes, for the system as a whole that is computed utilizing the following performance indicators: directional route miles, revenue miles, revenue hours, and the number of vehicles operated in maximum service. The equation used to determine this measure first doubles the directional route mileage to produce an estimate of system size in terms of total (non-directional) route miles. The resulting mileage figure is then

divided by the system's calculated average speed (revenue miles per revenue hour) to produce an estimate of the time it would take, in hours, to traverse all of the system's total route miles. Finally, this time figure is divided by the system's number of peak vehicles (then multiplied by 60 to convert time in hours to minutes) to determine the number of minutes it takes for a vehicle to complete its portion of the total route miles one time.

Revenue Miles Between Incidents - Number of revenue miles divided by the number of incidents; reports the average interval, in miles, between incidents.

Revenue Miles Between Interruptions - Number of revenue miles divided by the number of revenue service interruptions; an indicator of the average frequency of delays because of a problem with the equipment.

Revenue Miles Per Route Mile - Number of revenue miles divided by the number of directional route miles of service; an indicator of the availability of transit service.

Route Miles Per Square Mile of Service Area - Number of directional route miles of service divided by the service area size (in square miles); another indicator of the availability of transit service within the service area.

EFFICIENCY MEASURES

Operating Expense Per Capita - Annual operating budget divided by the service area population; a measure of the resource commitment to transit by the community.

Operating Expense Per Peak Vehicle - Total operating expense per vehicle operated in maximum service (peak vehicle); provides a measure of the resources required per vehicle to have a coach in operation for a year.

Operating Expense Per Passenger Trip - Operating expenditures divided by the total annual ridership; a measure of the efficiency of transporting riders; one of the key indicators of comparative performance of transit properties since it reflects both the efficiency with which service is delivered and the market demands for the service.

Operating Expense Per Passenger Mile - Operating expense divided by the number of passenger miles; takes into account the impact of trip length on performance since some operators provide lengthy trips while others provide short trips.

Operating Expense Per Revenue Mile - Operating expense divided by the number of revenue miles of service; a measure of the efficiency with which service is delivered and is another key comparative indicator.

Operating Expense Per Revenue Hour - Operating expense divided by revenue hours of operation; a key comparative measure which differs from operating expense per vehicle mile in

that the vehicle speed is factored out. This is often important since vehicle speed is strongly influenced by local traffic conditions.

Maintenance Expense Per Revenue Mile - Maintenance cost divided by the revenue miles.

Maintenance Expense Per Operating Expense - Calculated by dividing maintenance expense by operating expense; expressed as a percent of total operating expense.

Farebox Recovery - Ratio of passenger fare revenues to total operating expenses; an indicator of the share of total operating costs that is covered by the passengers' fares.

Local Revenue Per Operating Expense - Ratio of total local commitment with respect to total operating expense.

Operating Revenue Per Operating Expense - Ratio of revenue generated through operation of the transit agency with respect to total operating expense.

Vehicle Miles Per Peak Vehicle - Vehicle miles divided by the number of vehicles operated in maximum service. It is an indicator of how intensively the equipment is used and is influenced by the bus travel speeds as well as by the levels of service in the off-peak time periods. A more uniform demand for service over the day would result in a higher number.

Vehicle Hours Per Peak Vehicle - Substitutes vehicle hours for vehicle miles and again reflects how intensively equipment is utilized.

Revenue Miles Per Vehicle Mile - Reflects how much of the total vehicle operation is in passenger service. Higher ratios are favorable, but garage location, training needs, and other considerations may influence the ratio.

Revenue Miles Per Total Vehicles - Total revenue miles of service that are provided by each vehicle available for maximum service.

Revenue Hours Per Total Vehicles - Total revenue hours of service that are provided by each vehicle available for maximum service.

Revenue Hours Per Employee - Ratio of total revenue hours of service to system total FTEs; reflects overall labor productivity.

Passenger Trips Per Employee - Ratio of total passenger trips to system total FTEs. Another measure of overall labor productivity.

Vehicle Miles Per Gallon - Vehicle miles of service divided by total gallons consumed and is a measure of energy utilization.

Vehicle Miles Per Kilowatt-Hour - Vehicle miles of service divided by total kilowatt-hours consumed and is another measure of energy utilization.

Average Fare - Passenger fare revenues divided by the total number of passenger trips.

PEER SELECTION PROCESS – FDOT ANNUAL PERFORMANCE EVALUATION STUDY

The methodology for the selection of peer systems for the statewide peer review is relatively simple in nature. The selection is based foremost on geographic location. The specified geographic area consists of 12 states in the southeastern United States, as shown below.

Fixed-route systems operating in these states and falling into the specified peer groups for the number of vehicles operated in maximum service (1 to 9, 10 to 49, and 50 to 200) were analyzed based on eight indicators including six operating characteristics (vehicles operated in maximum service, passenger trips, revenue miles, revenue hours, average speed, and total operating expense) and two exogenous variables (service area population and service area population density).

The performance of each of the potential non-Florida peers was compared to the average of the Florida systems for each of the three peer groups. A peer received one point for each measure for which it was within one standard deviation of the Florida systems' mean. One-half point was given for each measure that fell between one and two standard deviations from the Florida systems' mean.

Three of the measures (service area population density, revenue miles, and average speed) are considered to be primary measures of comparison. To give weight to systems that are close to Florida's averages for these three variables, one half-point extra was awarded to peers falling within one or two standard deviations of the Florida systems' means (for density, revenue miles, and speed) in each of the motorbus vehicle categories.

After the total scores were determined, the potential peers were ranked in descending order. For the 1-to-9 and 10-to-49 groups, the top five and eight scorers were recommended as peers for Florida systems, respectively. In the 50-to-200 group, the top seven peers were selected. It should be noted that some of the recommended peers elected not to participate in the peer review analysis or were unable to provide their NTD reports in a timely manner. In these cases, several of the next-highest scoring systems that had been chosen in each category to serve as backup peers were utilized instead.

To illustrate the peer selection process, consider the example of the Sun Metro system in the City of El Paso, Texas. In fiscal year 1998 (the year on which the selection process was based since this was the most recent year that FTA-validated NTD data were available for all potential peer systems), El Paso operated 115 vehicles in maximum service placing it into the 50-to-200 peer group. Using service area population density as a representative variable, it was determined that El Paso's density of 2,130 persons per square mile was within one standard deviation of the Florida average for this peer group. Therefore, El Paso was given one point for this measure. In addition, because density is considered to be one of the three key measures on which the selection process is based (along with revenue miles and average speed), El Paso was awarded one-half point extra since its density was within one standard deviation of the Florida average. In total, El Paso scored 10.5 points in the analysis, which was the highest score in the group (two other systems also scored 10.5 points). As one of the top seven scorers in the 50-to-200 category, El Paso was, then, chosen as a peer for Florida systems operating between 50 and 200 vehicles in maximum service.

Comparison of peers utilizing standard deviations is different from the past methodology, which selected systems based on whether they were 10 or 15 percent within the Florida averages. It is important to note that the results of this analysis were not radically different than the results derived from the previous approach. However, the use of standard deviations is a widely-employed, statistically valid technique that proved to produce expected, common-sense results.

APPENDIX G

Fixed-Route Trend and Peer Data Tables

TABLE G-1
Bay Town Trolley
Directly-Operated Motorbus Performance Indicators

GENERAL PERFORMANCE INDICATORS	1997	1998	1999	2000	2001	% Change 1997-2001	% Change 2000-2001
Service Area Population (000)	122.901	122.901	122.901	122.901	122.901	0.00%	0.00%
Service Area Size (square miles)	78.500	78.500	78.500	78.500	78.500	0.00%	0.00%
Passenger Trips (000)	38.052	48.694	61.479	66.482	74.787	96.54%	12.49%
Passenger Miles (000)	117.936	134.034	153.571	166.205	191.979	62.78%	15.51%
Vehicle Miles (000)	155.988	153.863	163.691	165.773	190.180	21.92%	14.72%
Revenue Miles (000)	151.452	151.353	153.571	158.158	175.531	15.90%	10.98%
Vehicle Hours (000)	8.568	9.287	9.867	9.432	11.565	34.98%	22.61%
Revenue Hours (000)	8.316	9.036	9.361	9.036	10.537	26.71%	16.61%
Route Miles	106.000	106.000	106.000	106.000	118.000	11.32%	11.32%
Total Operating Expense (000)	203.259	231.522	206.093	225.434	255.810	25.85%	13.47%
Total Operating Expense (000 of 1984 \$)	129.426	145.063	126.290	133.445	147.186	13.72%	10.30%
Total Maintenance Expense (000)	18.995	17.508	19.830	33.766	18.316	-3.57%	-45.76%
Total Maintenance Expense (000 of 1984 \$)	12.095	10.970	12.151	19.988	10.538	-12.87%	-47.27%
Total Capital Expense (000)	43.417	431.032	514.691	673.589	909.508	1994.82%	35.02%
Passenger Fare Revenues (000)	15.708	16.652	20.586	20.546	26.292	67.38%	27.97%
Total Employees	7.400	7.300	6.100	6.240	8.730	17.97%	39.90%
Transportation Operating Employees	7.000	6.300	5.100	5.130	7.000	0.00%	36.45%
Maintenance Employees	0.000	0.300	0.500	0.550	1.140	n/a	107.27%
Administrative Employees	0.400	0.700	0.500	0.560	0.590	47.50%	5.36%
Vehicles Available for Maximum Service	4.000	3.000	3.000	6.000	6.000	50.00%	0.00%
Vehicles Operated in Maximum Service	3.000	3.000	3.000	3.000	4.000	33.33%	33.33%
Spare Ratio	0.333	0.000	0.000	1.000	0.500	50.00%	-50.00%
Total Gallons Consumed (000)	23.569	26.136	30.855	26.464	26.690	13.24%	0.85%

TABLE G-2
Bay Town Trolley
Directly-Operated Motorbus Effectiveness Measures

EFFECTIVENESS MEASURES	1997	1998	1999	2000	2001	% Change 1997-2001	% Change 2000-2001
SERVICE SUPPLY							
Vehicle Miles Per Capita	1.269	1.252	1.332	1.349	1.547	21.92%	14.72%
SERVICE CONSUMPTION							
Passenger Trips Per Capita	0.310	0.396	0.500	0.541	0.609	96.54%	12.49%
Passenger Trips Per Revenue Mile	0.251	0.322	0.400	0.420	0.426	69.58%	1.36%
Passenger Trips Per Revenue Hour	4.576	5.389	6.568	7.357	7.098	55.11%	-3.53%
QUALITY OF SERVICE							
Average Speed (R.M./R.H.)	18.212	16.750	16.405	17.503	16.659	-8.53%	-4.83%
Average Headway (in minutes)	232.812	253.134	258.451	242.243	212.504	-8.72%	-12.28%
Average Age of Fleet (in years)	2.000	3.800	2.500	3.500	4.500	125.00%	28.57%
Number of Incidents	0.000	0.000	0.000	0.000	0.000	n/a	n/a
Revenue Service Interruptions	61.000	9.000	6.000	14.000	17.000	-72.13%	21.43%
Revenue Miles Between Incidents (000)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Revenue Miles Between Interruptions (000)	2.483	16.817	25.595	11.297	10.325	315.87%	-8.60%
AVAILABILITY							
Revenue Miles Per Route Mile (000)	1.429	1.428	1.449	1.492	1.488	4.11%	-0.30%
Weekday Span of Service (in hours)	12.666	12.500	12.500	12.500	12.500	-1.31%	0.00%
Route Miles Per Sq. Mile of Service Area	1.350	1.350	1.350	1.350	1.503	11.32%	11.32%

TABLE G-3
Bay Town Trolley
Directly-Operated Motorbus Efficiency Measures

EFFICIENCY MEASURES	1997	1998	1999	2000	2001	% Change 1997-2001	% Change 2000-2001
COST EFFICIENCY							
Operating Expense Per Capita	1.654	1.884	1.677	1.834	2.081	25.85%	13.47%
Operating Expense Per Peak Vehicle (000)	67.753	77.174	68.698	75.145	63.953	-5.61%	-14.89%
Operating Expense Per Passenger Trip	5.342	4.755	3.352	3.391	3.421	-35.96%	0.87%
Operating Expense Per Passenger Mile	1.723	1.727	1.342	1.356	1.332	-22.69%	-1.76%
Operating Expense Per Revenue Mile	1.342	1.530	1.342	1.425	1.457	8.59%	2.24%
Operating Expense Per Revenue Hour	24.442	25.622	22.016	24.948	24.277	-0.67%	-2.69%
Maintenance Expense Per Revenue Mile	0.125	0.116	0.129	0.213	0.104	-16.80%	-51.12%
Maintenance Expense Per Operating Expense	0.093	0.076	0.096	0.150	0.072	-23.38%	-52.20%
OPERATING RATIOS							
Farebox Recovery	7.7%	7.2%	10.0%	9.1%	10.3%	32.99%	12.77%
VEHICLE UTILIZATION							
Vehicle Miles Per Peak Vehicle (000)	51.996	51.288	54.564	55.258	47.545	-8.56%	-13.96%
Vehicle Hours Per Peak Vehicle (000)	2.856	3.096	3.289	3.144	2.891	1.23%	-8.04%
Revenue Miles Per Vehicle Miles	0.971	0.984	0.938	0.954	0.923	-4.94%	-3.26%
Revenue Miles Per Total Vehicles (000)	37.863	50.451	51.190	26.360	29.255	-22.73%	10.98%
Revenue Hours Per Total Vehicles (000)	2.079	3.012	3.120	1.506	1.756	-15.53%	16.61%
LABOR PRODUCTIVITY							
Revenue Hours Per Employee (000)	1.124	1.238	1.535	1.448	1.207	7.40%	-16.65%
Passenger Trips Per Employee (000)	5.142	6.670	10.079	10.654	8.567	66.60%	-19.59%
ENERGY UTILIZATION							
Vehicle Miles Per Gallon	6.618	5.887	5.305	6.264	7.126	7.66%	13.75%
FARE							
Average Fare	0.413	0.342	0.335	0.309	0.352	-14.84%	13.76%

TABLE G-4
System Total Performance Indicators
1-9 Motorbus Vehicle Category

GENERAL PERFORMANCE INDICATORS	Indian River Total	Key West Total	SumTran Total	Bay County Total	Johanson City Total	Houma Total	Port Arthur Total	San Angelo Total	Tuscaloosa Total	Peer Group Mean
Service Area Population (000)	109.00	32.47	59.21	122.90	49.38	56.61	56.72	90.47	150.50	80.81
Service Area Size (square miles)	543.00	19.00	47.00	79.00	33.00	36.00	39.00	49.00	1,340.00	242.79
Service Area Population Density	0.20	1.71	1.26	1.56	1.50	1.57	1.45	1.85	0.11	1.25
Passenger Trips (000)	153.77	350.22	154.72	66.48	304.44	226.75	160.78	168.61	174.72	194.72
Passenger Miles (000)	218.01			166.21	855.16	1,079.00	836.14	966.57	1,234.23	765.04
Vehicle Miles (000)	231.04	269.68	336.03	165.77	304.16	290.25	235.37	278.02	338.84	272.32
Revenue Miles (000)	226.62	229.55	317.55	158.16	300.09	289.25	232.34	262.69	314.80	257.99
Vehicle Hours (000)	20.12	21.18	20.02	9.43	21.46	17.00	14.87	18.05	24.75	18.65
Revenue Hours (000)	19.61	14.73	19.40	9.04	20.87	16.75	14.62	17.52	22.95	17.28
Route Miles	208.00	31.60	108.20	108.00	88.30	97.90	79.80	77.00	102.00	95.21
Total Operating Expense (000)	\$548.20	\$1,212.94	\$706.30	\$225.43	\$1,004.29	\$701.67	\$841.64	\$888.02	\$617.95	727.49
Total Maintenance Expense (000)	\$87.39	\$147.43	\$105.87	\$33.77	\$248.17	\$189.39	\$194.88	\$155.10	\$175.52	148.47
Total Capital Expense (000)		\$0.00	\$184.82	\$673.59	\$87.95	\$9.34	\$121.42	\$61.18	\$248.47	174.58
Federal Contribution (000)	538.11	144.11	384.52	178.78	439.50	324.09	508.63	605.59	549.37	410.30
State Contribution (000)	662.21	318.90	146.00	451.89	256.74	85.28	502.72	393.57	0.00	313.03
Total Local Revenue (000)	4.15	33.03	34.76	56.22	11.97	0.83	0.00	0.00	0.00	15.89
Local Contribution (000)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Directly-Generated Non-Fare Rev (000)	4.15	33.03	34.76	56.22	11.97	0.83	0.00	10.64	0.00	17.07
Passenger Fare Revenue (000)	\$35.52	\$112.44	\$97.44	\$20.55	\$186.07	\$158.09	\$120.69		\$95.66	103.31
Total Employee FTEs	14.94	n/a	n/a	8.24	21.44	14.77	12.41	14.08	17.00	14.41
Transportation Operating Employee FTEs	12.34	n/a	n/a	5.13	14.04	11.91	8.70	14.00	13.06	11.31
Maintenance Employee FTEs	0.51	n/a	n/a	0.55	4.62	2.12	2.45	0.08	1.72	1.72
Administrative Employee FTEs	2.09	n/a	n/a	0.56	2.78	0.74	1.26	0.00	2.22	1.38
Vehicles Available for Maximum Service	12.00	12.00	7.00	6.00	14.00	8.00	10.00	7.00	11.00	9.87
Vehicles Operated in Maximum Service	8.00	5.00	5.00	3.00	7.00	6.00	5.00	5.00	7.00	5.67
Spare Ratio	50.00%	140.00%	40.00%	100.00%	100.00%	33.33%	100.00%	46.00%	57.14%	0.73
Total Gallons Consumed (000)	20.08	54.62	84.25	26.46	84.86	48.84	63.02	49.86	54.43	51.62

TABLE G-5
System Total Effectiveness Measures
1-9 Motorbus Vehicle Category

EFFECTIVENESS MEASURES	Indian River Total	Koy West Total	SunTran Total	Bay County Total	Johnson City Total	Houma Total	Port Arthur Total	San Angelo Total	Tuscaloosa Total	Peer Group Mean
SERVICE SUPPLY										
Vehicle Miles Per Capita	2.13	8.31	5.67	1.35	8.16	5.13	4.15	3.08	2.25	4.25
SERVICE CONSUMPTION										
Passenger Trips Per Capita	1.41	10.79	2.81	0.54	6.17	3.99	2.83	1.84	1.16	3.47
Passenger Trips Per Revenue Mile	0.68	1.58	0.49	0.42	1.01	0.76	0.69	0.63	0.56	0.75
Passenger Trips Per Revenue Hour	7.84	23.77	7.97	7.36	14.89	13.18	11.00	9.51	7.61	11.43
QUALITY OF SERVICE										
Average Speed (R.M./R.H.)	11.25	14.97	18.37	17.50	14.38	17.27	15.90	14.99	13.72	15.18
Average Headway (in minutes)	287.47	50.87	159.68	242.24	105.27	87.66	120.63	123.25	127.47	140.30
Average Age of Fleet (in years)	2.50	7.25	1.71	3.59	6.57	3.78	8.50	5.60	5.60	5.20
Number of Incidents	2.00	4.00	2.00	0.00	4.00	3.00	1.00	0.00	0.00	2.00
Number of Vehicle System Failures	2.00	91.00	68.00	14.00	45.00	23.00	94.00	63.00	63.00	51.44
Revenue Miles Between Incidents (000)	113.26	55.14	158.77	n/a	75.02	96.42	232.34	n/a	n/a	121.83
Revenue Miles Between Failures (000)	113.26	2.42	4.67	11.30	6.87	12.58	2.47	4.17	5.00	18.08
AVAILABILITY										
Revenue Miles Per Route Mile (000)	1.10	6.88	2.93	1.49	3.40	5.00	2.91	3.41	3.09	3.37
Weekday Span of Service (in hours)	8.00	16.50	12.50	12.50	12.00	12.00	12.00	12.00	19.00	13.18
Route Miles Per Sq. Mile of Service Area	0.38	1.66	2.30	1.34	2.68	1.61	2.05	1.57	0.08	1.52

TABLE G-6
System Total Efficiency Measures
I-9 Motorbus Vehicle Category

EFFICIENCY MEASURES	Indian River Total	Key West Total	SunTran Total	Bay County Total	Johnson City Total	Houma Total	Port Arthur Total	San Angelo Total	Tuscaloosa Total	Peer Group Mean
COST EFFICIENCY										
Operating Expense Per Capita	\$5.03	\$37.35	\$11.93	\$1.83	\$20.34	\$12.39	\$14.84	\$7.62	\$4.11	12.83
Operating Expense Per Peak Vehicle (000)	\$68.52	\$242.59	\$141.28	\$75.14	\$143.47	\$116.94	\$168.33	\$137.80	\$58.28	131.37
Operating Expense Per Passenger Trip	\$3.57	\$3.46	\$4.57	\$3.39	\$3.30	\$3.18	\$5.23	\$4.14	\$3.54	3.82
Operating Expense Per Passenger Mile	\$2.51	n/a	n/a	\$1.36	\$1.17	\$0.85	\$1.01	\$0.71	\$0.50	1.13
Operating Expense Per Revenue Mile	\$2.42	\$5.59	\$2.22	\$1.43	\$3.35	\$2.43	\$3.62	\$2.62	\$1.96	2.84
Operating Expense Per Revenue Hour	\$27.96	\$82.32	\$36.40	\$24.95	\$48.12	\$41.89	\$57.58	\$39.33	\$26.03	42.83
Maintenance Expense Per Revenue Mile	\$0.39	\$0.67	\$0.33	\$0.21	\$0.83	\$0.59	\$0.84	\$0.59	\$0.56	0.66
Maintenance Expense Per Operating Expense	15.94%	12.15%	14.95%	14.98%	24.61%	24.13%	23.15%	22.61%	28.40%	0.20
OPERATING RATIOS										
Farebox Recovery	6.48%	9.27%	13.80%	9.11%	18.53%	22.53%	14.34%	0.00%	15.48%	0.12
Local Revenue Per Operating Expense	0.70%	2.72%	5.20%	24.94%	1.18%	n/a	0.00%	0.00%	0.00%	0.04
Operating Revenue Per Operating Expense	7.24%	11.99%	19.00%	34.05%	10.72%	n/a	14.34%	1.54%	15.48%	0.15
VEHICLE UTILIZATION										
Vehicle Miles Per Peak Vehicle (000)	28.99	53.94	67.21	55.26	43.45	48.38	47.07	55.80	48.38	49.83
Vehicle Hours Per Peak Vehicle (000)	2.52	4.24	4.00	3.14	3.07	2.83	2.97	3.81	3.54	3.35
Revenue Miles Per Vehicle Mile	0.96	0.82	0.95	0.85	0.89	1.00	0.99	0.94	0.93	0.95
Revenue Miles Per Total Vehicles (000)	18.88	18.38	45.36	28.36	21.43	36.16	23.23	37.53	28.62	28.44
Revenue Hours Per Total Vehicles (000)	1.63	1.23	2.77	1.51	1.49	2.09	1.40	2.50	2.09	1.89
LABOR PRODUCTIVITY										
Revenue Hours Per Employee FTE (000)	1.31	n/a	n/a	1.46	0.97	1.13	1.18	1.24	1.35	1.23
Passenger Trips Per Employee FTE (000)	10.28	n/a	n/a	10.65	14.20	14.95	12.96	11.82	10.28	12.16
ENERGY UTILIZATION										
Vehicle Miles Per Gallon	11.55	4.84	5.23	6.26	3.58	5.94	3.74	5.90	6.22	5.90
FARE										
Average Fare	\$0.23	\$0.32	\$0.63	\$0.31	\$0.61	\$0.72	\$0.75	\$0.90	\$0.55	0.40

APPENDIX H

Transportation Disadvantaged Population Estimation Methodology

To investigate the transportation needs of a given area, certain distinct segments of the population must be examined. One step in the development of the TDP requires the analysis of segments of the study area population that consist of persons who use transit service as a primary source for mobility requirements. Florida has a classification for such persons as defined by Chapter 427 Florida Statutes which provides a definition for those persons who are "Transportation Disadvantaged" (TD). Traditional transit markets include:

- Youth (persons under the age of 18);
- Elderly (persons 60 years of age and older);
- Disabled (persons with a public transportation disability);
- Low income (persons with incomes below the federally-established poverty level); and
- Zero-car households (households in which no car is available).

This Appendix provides a description of the demographic characteristics of Bay County in terms of the traditional transit markets listed above.

Transportation Disadvantaged Population

Chapter 427 of the Florida Statutes defines transportation disadvantaged (TD) persons as:

"...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 children who are handicapped or high-risk or at risk as defined in s. 411.202."

The Florida Coordinated Transportation System serves two population groups. The first group, now being referred to by the Florida Commission for the Transportation Disadvantaged (CTD) as the "Potential" TD population, includes persons who are disabled, elderly, low-income, and children who are "high-risk" or "at-risk." These Potential TD persons are eligible for trips that are sponsored by social service or other governmental agencies.

The second population group, referred to by the CTD as the Transportation Disadvantaged (TD) population, is a subset of the Potential TD population. The TD population includes those persons who are unable to transport themselves or to purchase transportation and are not able to receive transportation under other sponsored programs. Persons in this subset may be eligible to receive trips subsidized by the TD Trust Fund monies allocated to local community transportation coordinators (CTCs). Often, there is a local process developed to determine the eligibility under this category and may become required by the CTD.

The 2001 estimate for persons who are included in the Potential TD population, 53,648, represents approximately 36 percent of the county's 2001 population of 150,287 (estimated by Bay County).

Tables H-1 and H-2 contain projections for the Potential TD population and the TD population of Bay County to the year 2007. From 2001 to 2007, the Potential TD population is projected to grow from 53,648 to 59,994. The TD population is estimated to reach 17,163 by 2007.

Table H-1
2002-2007 Bay County
Potential Transportation Disadvantaged Population Projections

Market Segment	2002	2003	2004	2005	2006	2007
Disabled, Non-Elderly, Low Income	1,389	1,406	1,423	1,441	1,452	1,464
Disabled, Non-Elderly, Non-Low Income	8,198	8,290	8,392	8,494	8,564	8,635
Disabled, Elderly, Low Income	1,498	1,532	1,566	1,602	1,653	1,706
Disabled, Elderly, Non-Low Income	9,049	9,254	9,464	9,678	9,989	10,310
Non-Disabled, Elderly, Low Income	2,496	2,552	2,611	2,669	2,755	2,844
Non-Disabled, Elderly, Non-Low Income	15,083	15,425	15,773	16,130	16,648	17,182
Non-Disabled, Non-Elderly, Low Income	16,886	17,093	17,302	17,513	17,658	17,803
Potential Transportation Disadvantaged Population	54,599	55,552	56,531	57,527	58,719	59,994

SOURCE: CUTR methodology described in *Methodology Guidelines for Forecasting TD Transportation Demand at the County Level* and the 2002 Bay County Transportation Disadvantaged Service Plan prepared by the West Florida Regional Planning Council.

Table H-2
2002-2007 Bay County
Transportation Disadvantaged (TD) Population Projections

Market Segment	2002	2003	2004	2005	2006	2007
Transportation Handicapped, Non-Elderly, Low Income	512	518	524	531	535	539
Transportation Handicapped, Non-Elderly, Non-Low Income	3,017	3,054	3,092	3,129	3,155	3,182
Transportation Handicapped, Elderly, Low Income	1,070	1,095	1,119	1,145	1,181	1,219
Transportation Handicapped, Elderly, Non-Low Income	6,468	6,613	6,764	6,916	7,139	7,368
Non-Transportation Handicapped, Low Income, No Auto, No Public Transit	4,579	4,638	4,699	4,759	4,807	4,855
Transportation Disadvantaged Population	15,646	15,918	16,198	16,480	16,817	17,163

SOURCE: CUTR methodology described in *Methodology Guidelines for Forecasting TD Transportation Demand at the County Level* and the 2002 Bay County Transportation Disadvantaged Service Plan prepared by the West Florida Regional Planning Council.