BROWARD COUNTY Transit

CONNECTED

BCT CONNECTED

Transit Development Plan

Major Update

FY 2014-FY2023

Tindale-Oliver & Associates, Inc.
Planning and Engineering

August 2013

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DRAFT

BCT *Connected*

BROWARD COUNTY TRANSIT

Transit Development Plan, Major Update

FY 2014 – FY 2023

Prepared for
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Project Number 670001-01.12

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AAA	American Automobile Association
AC Transit	Alameda-Contra Costa Transit District
ACS	American Community Survey
ADA	Americans with Disabilities Act
APC	Automatic Passenger Counter
APTS	Advanced Public Transportation System
ARC	Advisory Review Committee
ATMS	Advanced Traffic Management System
AVL	Automatic Vehicle Locators
BAT	Business Access and Transit
BCC	Board of County Commissioners
BCCB	Broward County Community Bus
BCT	Broward County Transit
BCTED	Broward County Traffic Engineering Department
BLS	Bureau of Labor Statistics
BPAC	Bicycle/Pedestrian Advisory Committee
BT	Broward Central Terminal
CAD	Computer-Aided Dispatch
CATS	Charlotte Area Transit System
CBT	Computer-based Training
CCTV	Closed Circuit Television
CDC	Center for Disease Control and Prevention
CEDS	Comprehensive Economic Development Strategies

CIR	Community Involvement Roundtable
CNG	Compressed Natural Gas
COA	Comprehensive Operations Analysis
CPI	Consumer Price Index
CTC	Community Transportation Coordinator
CRA	Community Redevelopment Agency
CUTR	Center for Urban Transportation Research
DDA	Downtown Development Authority
DO	Directly Operated
DOR	Department of Revenue
DTA	Density Threshold Assessment
FDOT	Florida Department of Transportation
FTE	Full-Time Equivalent
FTP	Florida Transportation Plan
EBS	Enhanced Bus Service
EJ	Environmental Justice
EPA	Environmental Protection Agency
FA	Fleet Anywhere
FAC	Florida Administrative Code
FEC	Florida East Coast
FS	Florida Statutes
FTA	Federal Transit Administration
FTIS	Florida Transit Information System
FSUTMS	Florida Standard Urban Transportation Model Structure
FY	Fiscal Year
GDP	Gross Domestic Product
HOV	High-Occupancy Vehicle
HRT	Hampton Roads Transit
HUD	Department of Housing and Urban Development
JARC	Job Access and Reverse Commute
INTDAS	Integrated National Transit Database Analysis System
IP	Internet Protocol
IT	Information Technology
LOS	Level of Service
LPA	Locally Preferred Alternative
LRTP	Long Range Transportation Plan
LYNX	Central Florida Regional Transportation Authority
MAP-21	Moving Ahead for Progress in the 21st Century Act
MIC	Miami Intermodal Center
MDT	Miami-Dade Transit
MPO	Metropolitan Planning Organization

MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NTD	National Transit Database
OD	Origin-Destination
PAC	Project Advisory Committee
PD&E	Project Development and Environment
PPH	Passengers per Hour
PT	Purchased Transportation
PTAC	Planning Technical Advisory Committee
PTBG	Public Transit Block Grant
RTSMP	Regional Transit System Master Plan
SFECC	South Florida East Coast Corridor
SFRTA	South Florida Regional Transportation Authority
SFTC	South Florida Transportation Council
SFRP	Southeast Florida Regional Partnership
TAC	Technical Advisory Committee
STS	Special Transportation Service
TAZ	Traffic Analysis Zone
TBEST	Transit Boardings Estimation and Simulation Tool
TCC	Technical Coordinating Committee
TCRP	Transportation Cooperative Research Program
TD	Transportation Disadvantaged
TIGER	Transportation Investment Generating Economic Recovery
TDP	Transit Development Plan
TOA	Tindale-Oliver & Associates, Inc.
TOD	Transit Oriented Development
TOPS	Transportation Options
TSM&O	Transportation System Management and Operation
TSP	Transit Signal Priority
VAS	Voice Annunciation System
V/C	Volume-Demand-to-Capacity Ratios
VTA	Santa Clara Valley Transportation Authority

BROWARD COUNTY Transit
CONNECTED

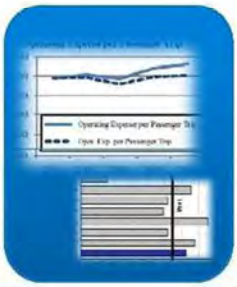
SECTION 1

Introduction

Public Outreach

Conditions Analysis

Evaluation of Services



Needs Assessment

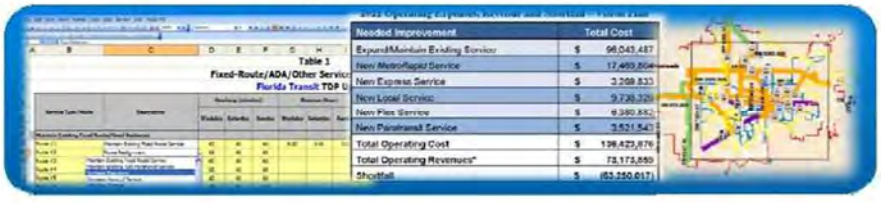
Goals & Objectives

Efficient & Accessible Regional Intermodal Transportation Network

Goal 1: Increase community awareness and support to improve and fund public transit meeting the multi-modal mobility needs of the community.
Goal 2: Enhance our efficient, safe, clean, attractive, and interconnected multi-modal transportation systems.
Goal 3: Develop and enhance sustainable transportation facilities at the Port and Airport to meet the demands of travelers, businesses and the community.

Resource Assessment

Final Plan: Phasing & Finances



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Section 1

Introduction

The 2014–2023 Transit Development Plan (TDP), known as BCT *Connected*, for Broward County Transit (BCT) serves as the strategic guide for public transportation in Broward County over the next 10 years. Development of the TDP includes a number of activities: documentation of study area conditions and demographic characteristics, evaluation of existing transit services in Broward County, market research and public involvement efforts, development of a situation appraisal and needs assessment, and preparation of a 10-year TDP document that provides guidance during the 10-year planning horizon.

ORGANIZATION OF REPORT

The report is broken into eight sections, including this one. Detailed supporting documentation is provided in appendices.

Section 2, Baseline Conditions, analyzes demographic data for BCT's service area. **Section 3, Evaluation of Existing Transit System**, examines changes to BCT's operating statistics over time and compares those statistics to other transit systems. **Section 4**, **Public Involvement**, presents the results of public outreach for this project. **Section 5**, **Situation Appraisal**, examines the environment in which BCT operates. **Section 6**, **Goals and Objectives**, presents the goals, objectives, and measures for BCT. **Section 7**, **Alternatives**, presents the improvements to be implemented over the 10-year timeframe. **Section 8, Financial Plan**, analyzes the financial impacts of implementing these improvements and resources available to pay for the improvements.

TDP REQUIREMENTS

BCT *Connected* is consistent with the requirements for the State of Florida Public Transit Block Grant (PTBG) program, a program enacted by the Florida Legislature to provide a stable source of funding for public transit. The Block Grant program requires public transit service providers to develop and adopt a 10-Year TDP using the requirements formally adopted by the Florida Department of Transportation (FDOT) on February 20, 2007 (Rule 14-73.001 – Public Transit). Chief requirements of the rule include the following:

- Major updates must be completed every five years, covering a 10-year planning horizon.
- A public involvement plan must be developed and approved by FDOT or be consistent with the approved Metropolitan Planning Organization (MPO) public involvement plan.
- FDOT, the Regional Workforce Development Board, and the MPO must be advised of all public meetings where the TDP is presented and discussed, and these entities must be given the

opportunity to review and comment on the TDP during the development of the mission, goals, objectives, alternatives, and 10-year implementation program.

- Estimation of the community's demand for transit service (10-year annual projections) must be made using the planning tools provided by FDOT or a demand estimation technique approved by FDOT.
- Consistency with the approved local government comprehensive plans and the MPO's Long Range Transportation Plans (LRTP) is required.

An additional requirement for the TDP was added by the Florida Legislature in 2007 when it adopted House Bill 985. This legislation amended Section 341.071 of the Florida Statutes (FS), requiring transit agencies to "… specifically address potential enhancements to productivity and performance which would have the effect of increasing farebox recovery ratio." FDOT subsequently issued guidance requiring the TDP and each annual update to include a one- to two-page summary report on the farebox recovery ratio, and strategies implemented and planned to improve it (provided in Appendix A of this plan).

TDP CHECKLIST

This 10-year plan meets the requirement for a major TDP update in accordance with Rule 14-73.001 – Public Transit, Florida Administrative Code (F.A.C.). Table 1-1 is a list of TDP requirements from Rule 14-73.001. The table serves as a checklist that all requirements are addressed in the BCT *Connected* plan documentation.

Table 1-1

TDP Checklist

Public Involvement Process		TDP Section
√	Public Involvement Plan (PIP)	Appendix D
√	PIP approved by FDOT	Section 4
√	TDP includes description of Public Involvement Process	Section 4
√	Provide notification to FDOT	Section 4
√	Provide notification to Regional Workforce Board	Section 4
Situation Appraisal		
√	Land use	Section 5
√	State and local transportation plans	Section 5
√	Other governmental actions and policies	Section 5
√	Socioeconomic trends	Section 5
√	Organizational issues	Section 5
√	Technology	Section 5
√	10-year annual projections of transit ridership using approved methodology	Section 7
√	Assessment of whether land uses and urban design patterns support transit service provision	Section 5
√	Calculate farebox recovery	Appendix A
Mission and Goals		
√	Provider's vision	Section 6
√	Provider's mission	Section 6
√	Provider's goals	Section 6
√	Provider's objectives	Section 6
Alternative Courses of Action		
√	Develop and evaluate alternative strategies and actions	Section 7
√	Benefits and costs of each alternative	Section 7
√	Financial alternatives examined	Section 8
Implementation Program		
√	10-year implementation program	Section 8
√	Maps indicating areas to be served	Section 8
√	Maps indicating types and levels of service	Section 8
√	Monitoring program to track performance measures	Section 6
√	10-year financial plan listing operating and capital expenses	Section 8
√	Capital acquisition or construction schedule	Section 8
√	Anticipated revenues by source	Section 8
Relationship to Other Plans		
√	Consistent with Florida Transportation Plan	Section 5
√	Consistent with local government comprehensive plans	Section 5
√	Consistent with MPO long-range transportation plans	Section 5
√	Consistent with regional transportation goals and objectives	Section 5
Submission		
Pending	Adopted by BCT Governing Board	N/A
Pending	Submitted to FDOT by September 1, 2013	N/A

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BROWARD COUNTY Transit
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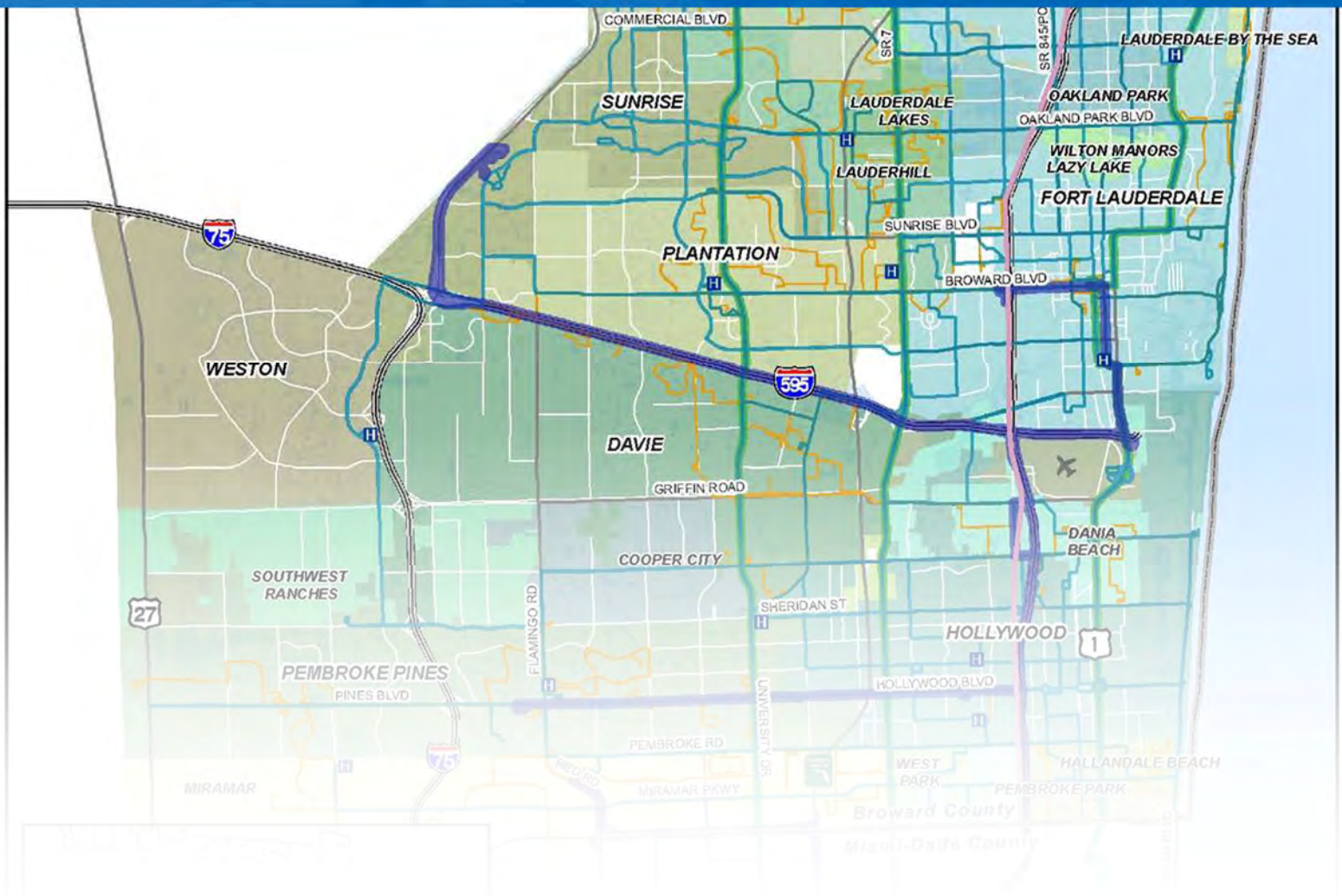
SECTION 2

Baseline Conditions



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Section 2

Baseline Conditions

This section of BCT *Connected* summarizes existing conditions and demographic characteristics within the transit service area. Baseline conditions establish the context for the delivery of transit services in Broward County and provide background information needed to understand BCT's service operating environment. A service area description, demographic characteristics, land use information, commuting patterns data, and roadway conditions are presented. Information and data reflect the most recent information available at the time of preparation of this Plan.

SERVICE AREA DESCRIPTION

Broward County is located in southeast Florida and is bordered to the north by Palm Beach County, to the south by Miami-Dade County, and to the west by Collier and Hendry counties. About two-thirds of Broward County comprises conservation area, including the Everglades. BCT service operates in the remaining one-third of the county that consists of urbanized area. Ninety-nine percent of the population in Broward County resides in 31 incorporated municipalities. Among incorporated municipalities, the largest city, Fort Lauderdale, has more than 165,000 residents as of 2010.

Other municipalities with a population greater than 100,000 in 2010 include Coral Springs, Miramar, Hollywood, and Pembroke Pines. Map 2-1 presents a physical representation of the county and its municipal areas. To better understand the study area conditions and demographic characteristics of Broward County, a review of pertinent information was conducted as part of the TDP update process. The sources for this information include the U.S. Census Bureau, American Community Survey (ACS), the Broward County MPO, and BCT.

POPULATION PROFILE

As of the 2010 U.S. Census, the total population of Broward County was 1,748,066. Table 2-1 shows the population levels for Broward County and Florida. The county population increased from 1,623,018 in 2000 to 1,748,066 in 2010, a growth of 7.7 percent over the 10-year period. This growth was not as strong as the population growth of Florida as a whole. A similar trend is true for growth in the number of households and the number of workers. Although Broward County greatly surpasses Florida in terms of population density, Florida's population density increased much more than Broward County's did over the time period between 2000 and 2010. Table 2-2 shows growth in population, households, and employment in Broward County from 1990 to 2010. Table 2-3 shows population and population density in Broward County, Miami-Dade County, and Palm Beach County.

Map 2-1: Study Area

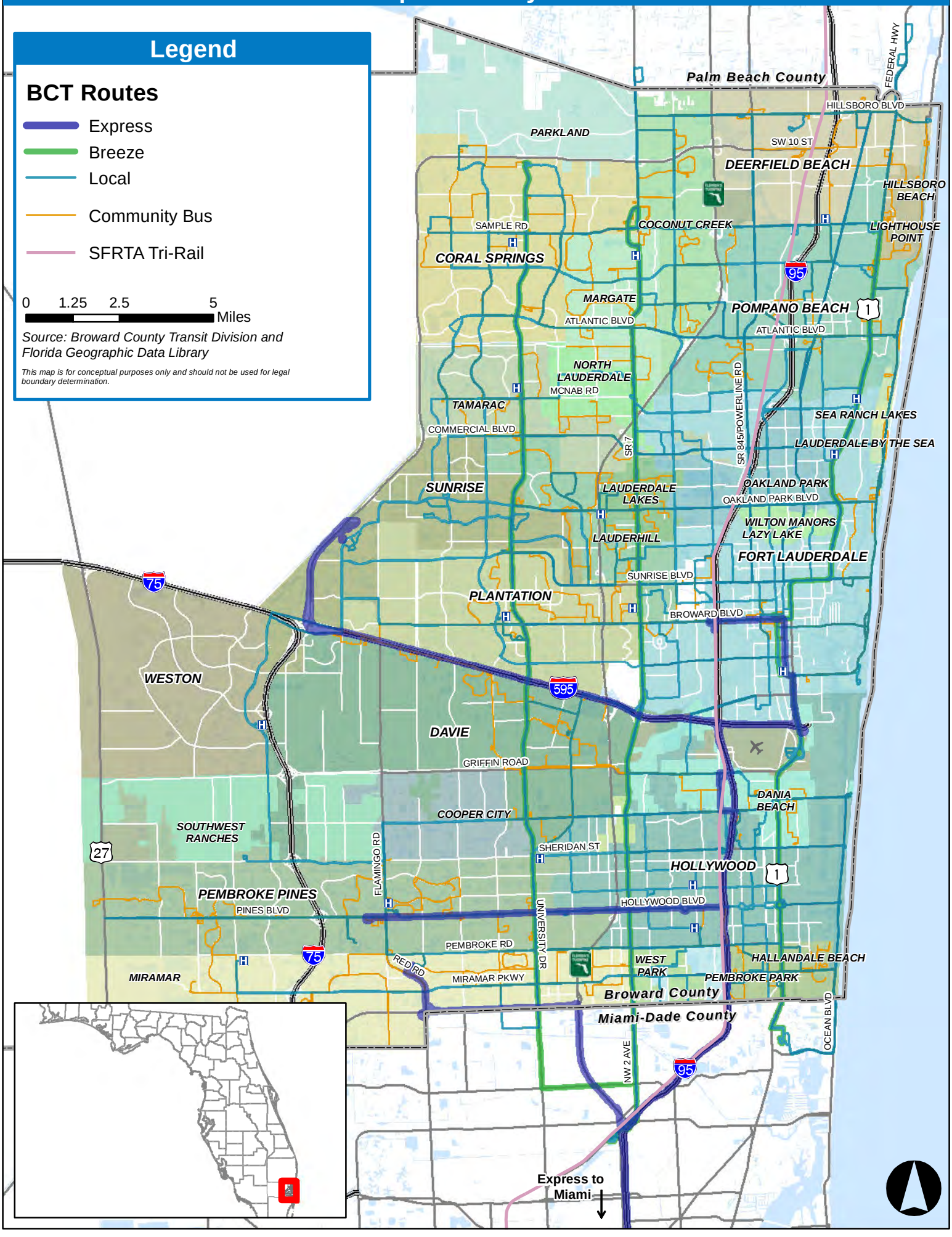


Table 2-1
Population Characteristics

Population Data	2000		2010		% Change (2000–2010)	
	Broward County	Florida	Broward County	Florida	Broward County	Florida
Persons	1,623,018	15,982,824	1,748,066	18,801,310	7.7%	17.6%
Households	654,445	6,337,929	686,047	7,420,802	4.8%	17.1%
Number of Workers (employed)	758,939	7,221,000	850,849	8,159,000	12.1%	13.0%
Urbanized Area (sq. mi.)	1,205.4	53,926.8	1,209.8	53,926.8	0.8%	0.0%
Conservation Area (sq. mi.)	114.2	11,827.8	113.1	12,132.9	1.0%	2.6%
Persons per Household	2.48	2.52	2.55	2.53	2.7%	0.4%
Workers per Household	1.16	1.14	1.24	1.10	6.9%	-3.5%
Persons per Square Mile	1,346.5	296.4	1,444.9	350.6	7.7%	18.3%
Workers per Square Mile	629.6	133.9	703.3	152.1	12.1%	13.6%

Source: U.S. Census Bureau, 2000 Census, 2010 Census, and 2007–2011 American Community Survey

Table 2-2
Broward County Population Trends

Population Data	1990	2000	2010	% Change (1990–2000)	% Change (2000–2010)	% Change (1990–2010)
Persons	1,255,488	1,623,018	1,748,066	29.3%	7.7%	39.2%
Households	528,442	654,445	686,047	23.8%	4.8%	29.8%
Number of Workers (employed)	616,278	758,939	850,849	23.1%	12.1%	38.1%

Source: U.S. Census Bureau, 1990 Census, 2000 Census, and 2010 Census

Table 2-3
Regional Population and Density (2010)

Location	Population	Density (Persons per Square Mile)
Broward County	1,748,066	1,444.9
Miami-Dade County	2,496,435	1,315.5
Palm Beach County	1,320,134	670.2

Source: U.S. Census Bureau, 2010 Census

Table 2-4 presents the population and population change between 2000 and 2010 for incorporated and unincorporated areas in Broward County. Lauderdale-by-the-Sea, Parkland, and Miramar experienced the top three population changes between 2000 and 2010, with 136.3 percent, 73.2 percent, and 67.8 percent growth, respectively.

Table 2-4

Broward County Population Trends for Cities, Towns, Villages, and Unincorporated Areas

Municipality	2000	2010	% Change (2000–2010)
Coconut Creek	43,566	52,909	21.4%
Cooper City	27,939	28,547	2.2%
Coral Springs	117,549	121,096	3.0%
Dania Beach	20,061	29,639	47.7%
Davie	75,720	91,992	21.5%
Deerfield Beach	64,583	75,018	16.2%
Fort Lauderdale	152,397	165,521	8.6%
Hallandale Beach	34,282	37,113	8.3%
Hillsboro Beach	2,163	1,875	-13.3%
Hollywood	139,357	140,768	1.0%
Lauderdale Lakes	31,705	32,593	2.8%
Lauderdale-by-the-Sea	2,563	6,056	136.3%
Lauderhill	57,585	66,887	16.2%
Lazy Lake	38	24	-36.8%
Lighthouse Point	10,767	10,344	-3.9%
Margate	53,909	53,284	-1.2%
Miramar	72,739	122,041	67.8%
North Lauderdale	32,264	41,023	27.1%
Oakland Park	30,966	41,363	33.6%
Parkland	13,835	23,962	73.2%
Pembroke Park	6,299	6,102	-3.1%
Pembroke Pines	137,427	154,750	12.6%
Plantation	82,934	84,955	2.4%
Pompano Beach	78,191	99,845	27.7%
Sea Ranch Lakes	1,392	670	-51.9%
Southwest Ranches*	-	7,345	-
Sunrise	85,779	84,439	-1.6%
Tamarac	55,588	60,427	8.7%
West Park*	-	14,156	-
Weston	49,286	65,333	32.6%
Wilton Manors	12,697	11,632	-8.4%
Incorporated	1,493,581	1,731,709	15.9%
Unincorporated	129,437	16,357	-87.4%
Total	1,623,018	1,748,066	**7.7%**

*Southwest Ranches and West Park were not incorporated in 2000.

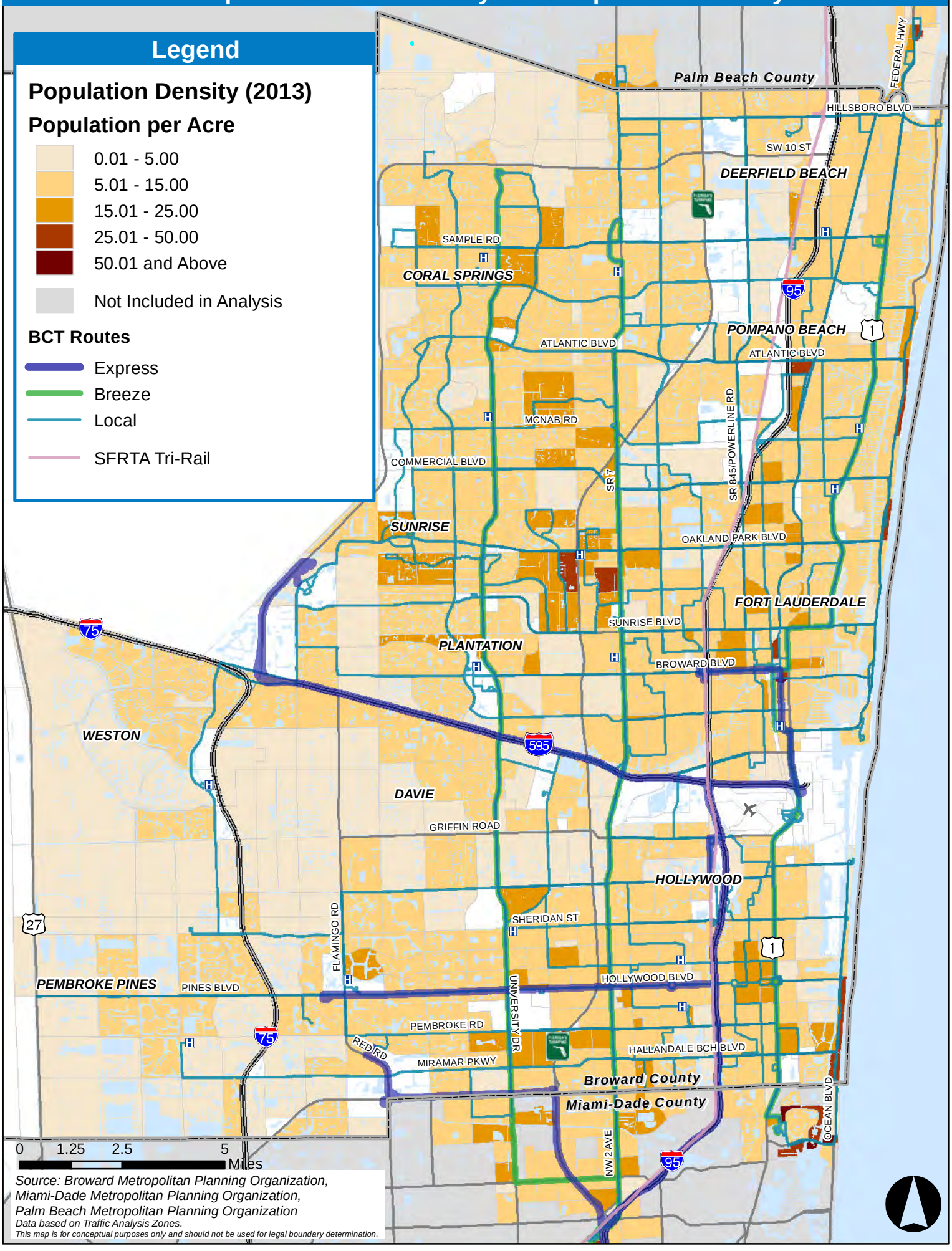
Note: Some increases in population from 2000 to 2010 are due to annexation.

Source: U.S. Census Bureau, 2000 and 2010 Census

Maps 2-2 and 2-3 illustrate 2013 and 2035 population density by Traffic Analysis Zone (TAZ) for Broward County. TAZs are geographic units used in the transportation planning process to assist in forecasting travel demand. Broward County has an extremely high population density compared with Florida as a whole – 1,445 versus 351 people per square mile of land area, respectively. The highest population growth areas are located near Hollywood Boulevard & US 1, between Oakland Park Boulevard and Sunrise Boulevard near the Florida Medical Center, and in Deerfield Beach.

Maps 2-4 and 2-5 illustrate the 2013 and 2035 employment density by TAZ for Broward County. The highest growth areas for employment density between 2013 and 2035 are anticipated to occur in Deerfield Beach, Pompano Beach, and Hollywood. Maps 2-6 and 2-7 display total existing (2013) and future (2035) dwelling unit densities in the county. The highest dwelling unit densities are found in downtown Fort Lauderdale and along the Atlantic coast. The highest growth in dwelling unit density between 2013 and 2035 is expected to occur between Oakland Park Boulevard and Sunrise Boulevard near the Florida Medical Center and in downtown Fort Lauderdale.

Map 2-2: Broward County 2013 Population Density

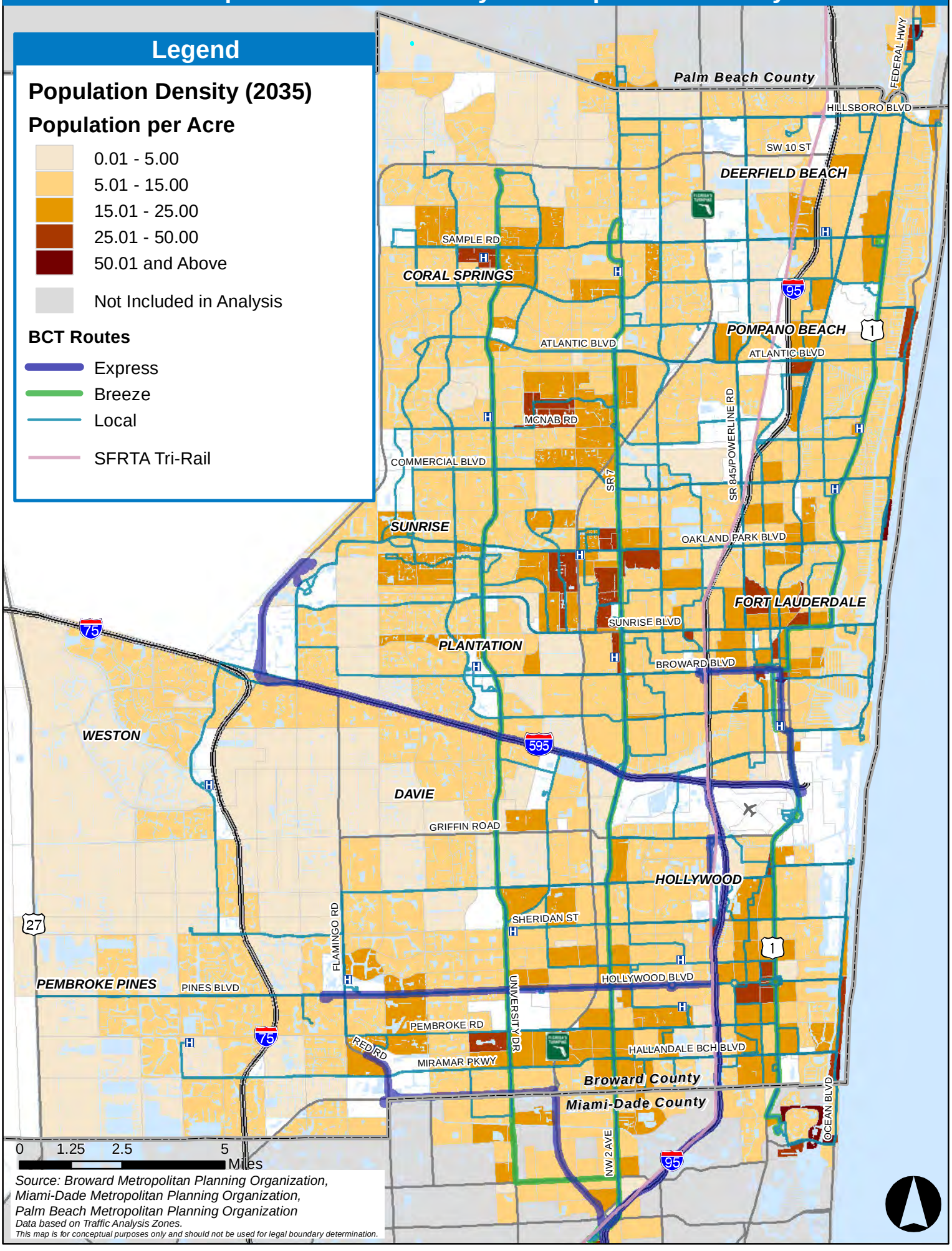


Source: Broward Metropolitan Planning Organization, Miami-Dade Metropolitan Planning Organization, Palm Beach Metropolitan Planning Organization

Data based on Traffic Analysis Zones.

This map is for conceptual purposes only and should not be used for legal boundary determination.

Map 2-3: Broward County 2035 Population Density



Source: Broward Metropolitan Planning Organization, Miami-Dade Metropolitan Planning Organization, Palm Beach Metropolitan Planning Organization

Data based on Traffic Analysis Zones.

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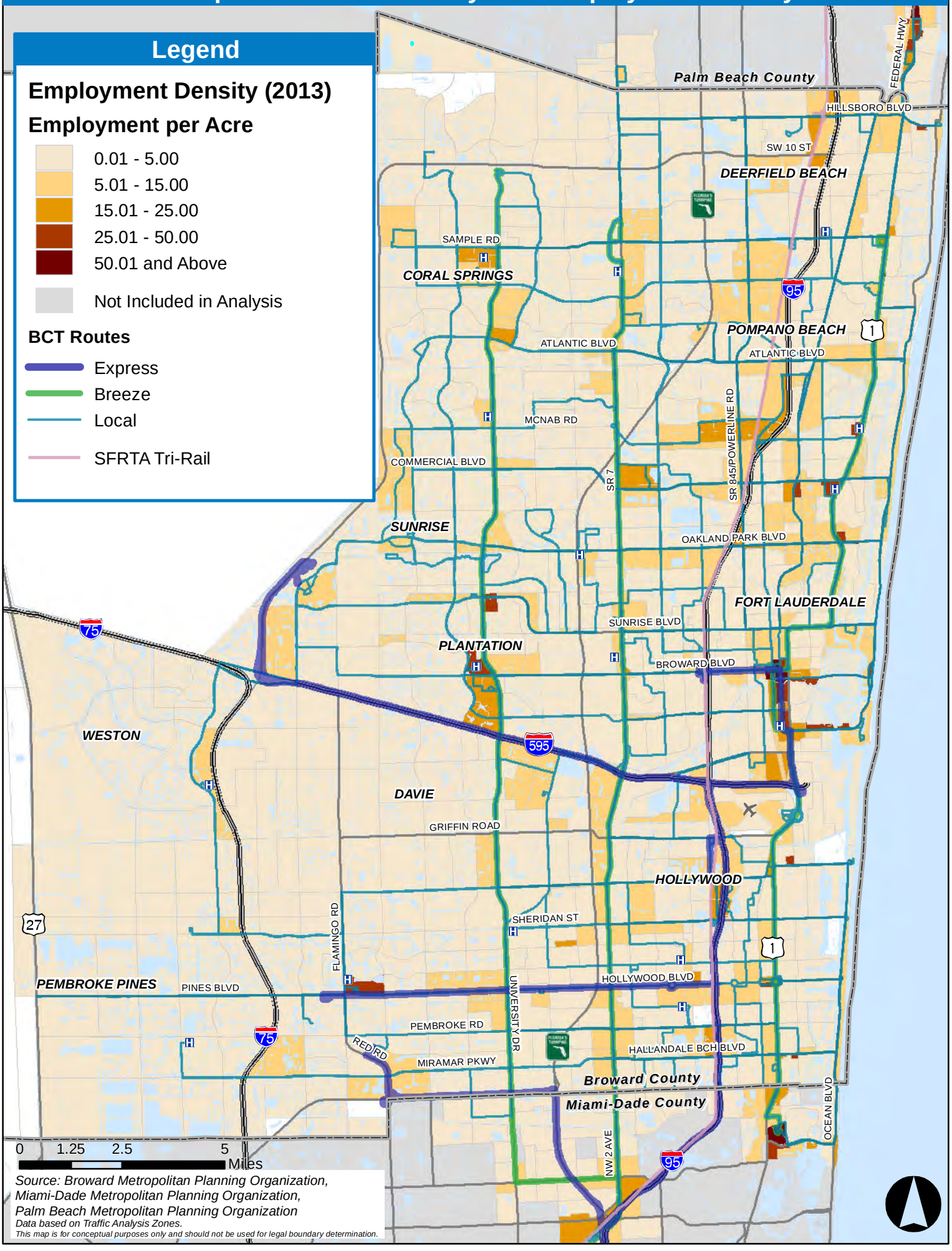
Map 2-4: Broward County 2013 Employment Density



Source: Broward Metropolitan Planning Organization, Miami-Dade Metropolitan Planning Organization, Palm Beach Metropolitan Planning Organization

Data based on Traffic Analysis Zones.

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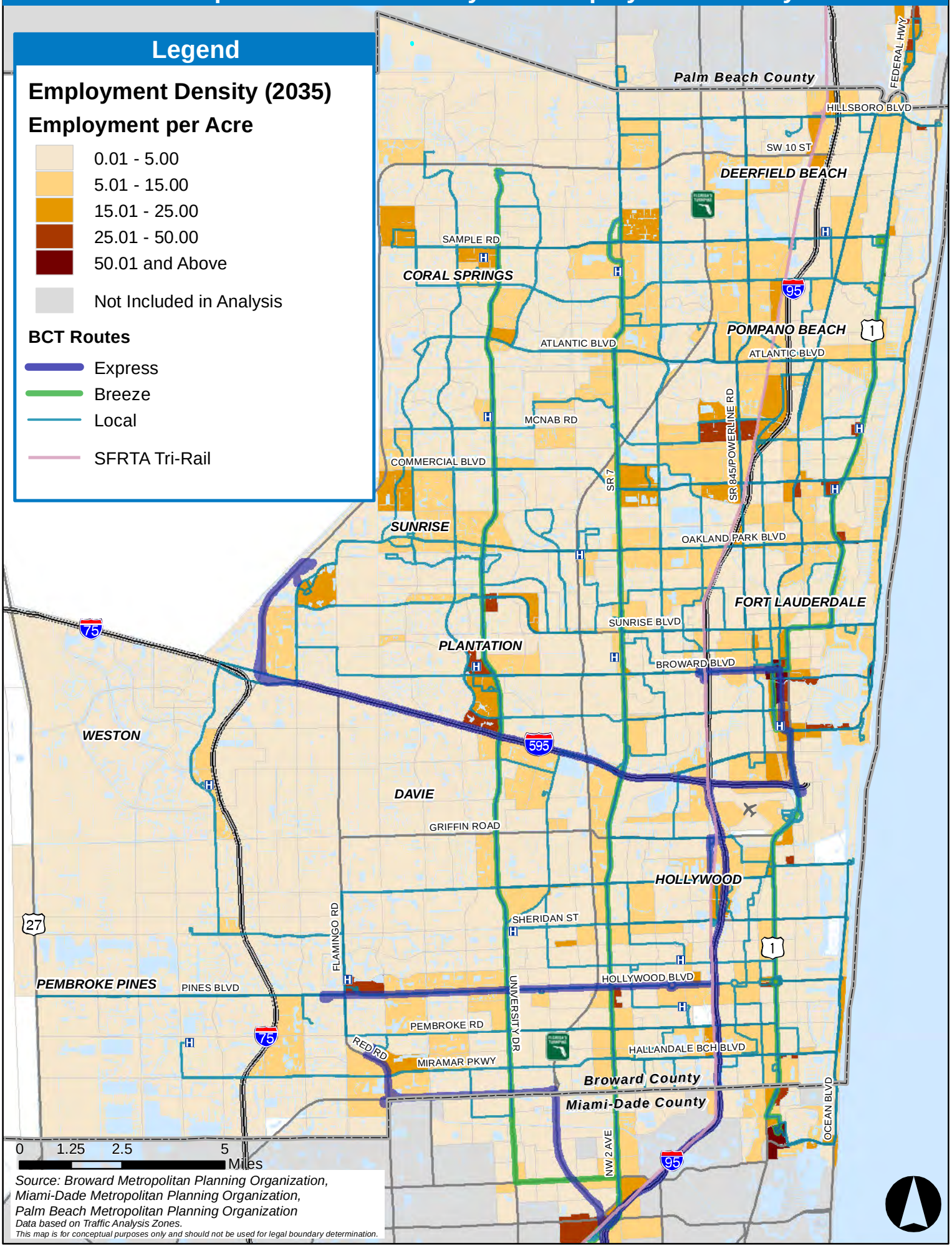
Map 2-5: Broward County 2035 Employment Density



Source: Broward Metropolitan Planning Organization, Miami-Dade Metropolitan Planning Organization, Palm Beach Metropolitan Planning Organization

Data based on Traffic Analysis Zones.

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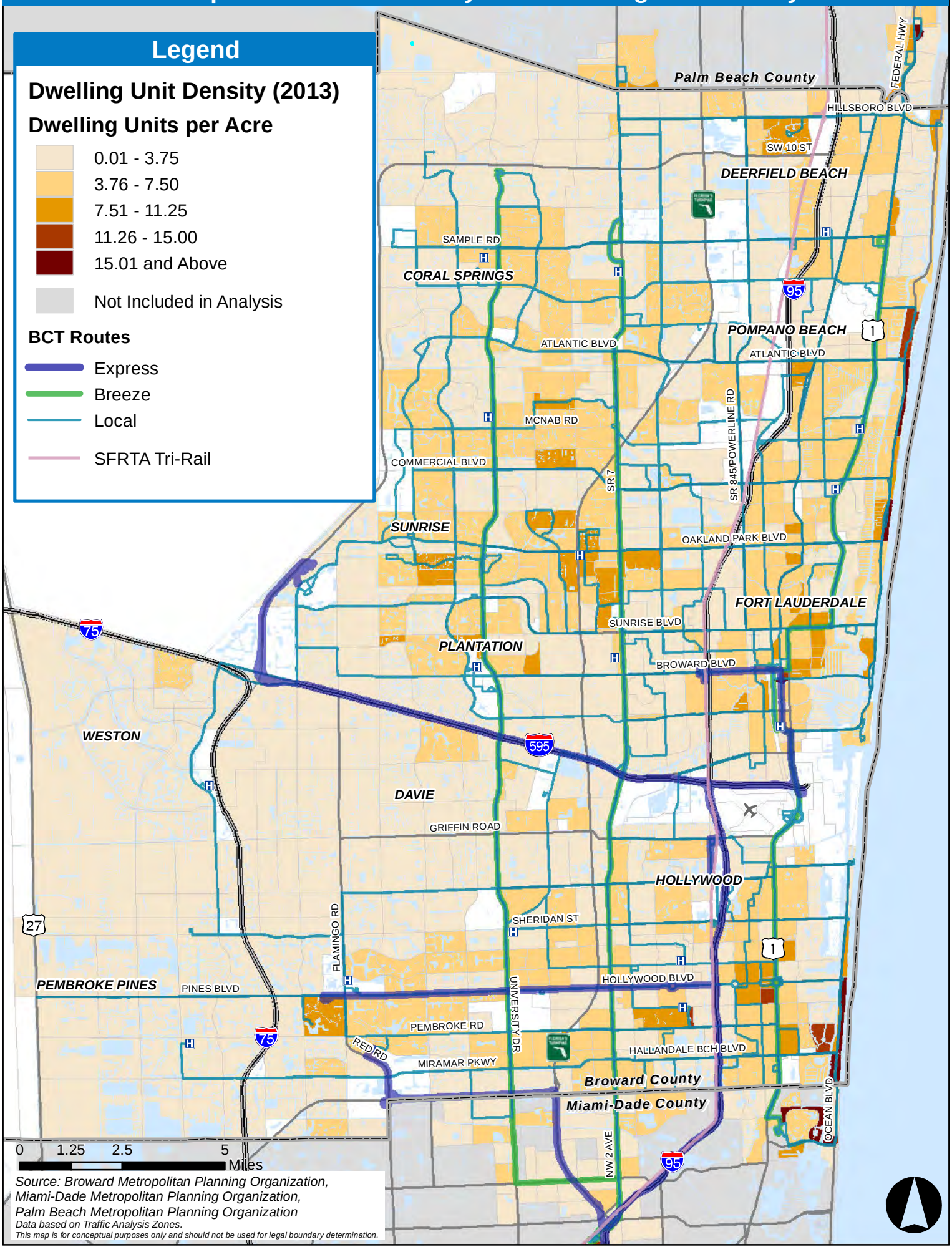
Map 2-6: Broward County 2013 Dwelling Unit Density



Source: Broward Metropolitan Planning Organization, Miami-Dade Metropolitan Planning Organization, Palm Beach Metropolitan Planning Organization

Data based on Traffic Analysis Zones.

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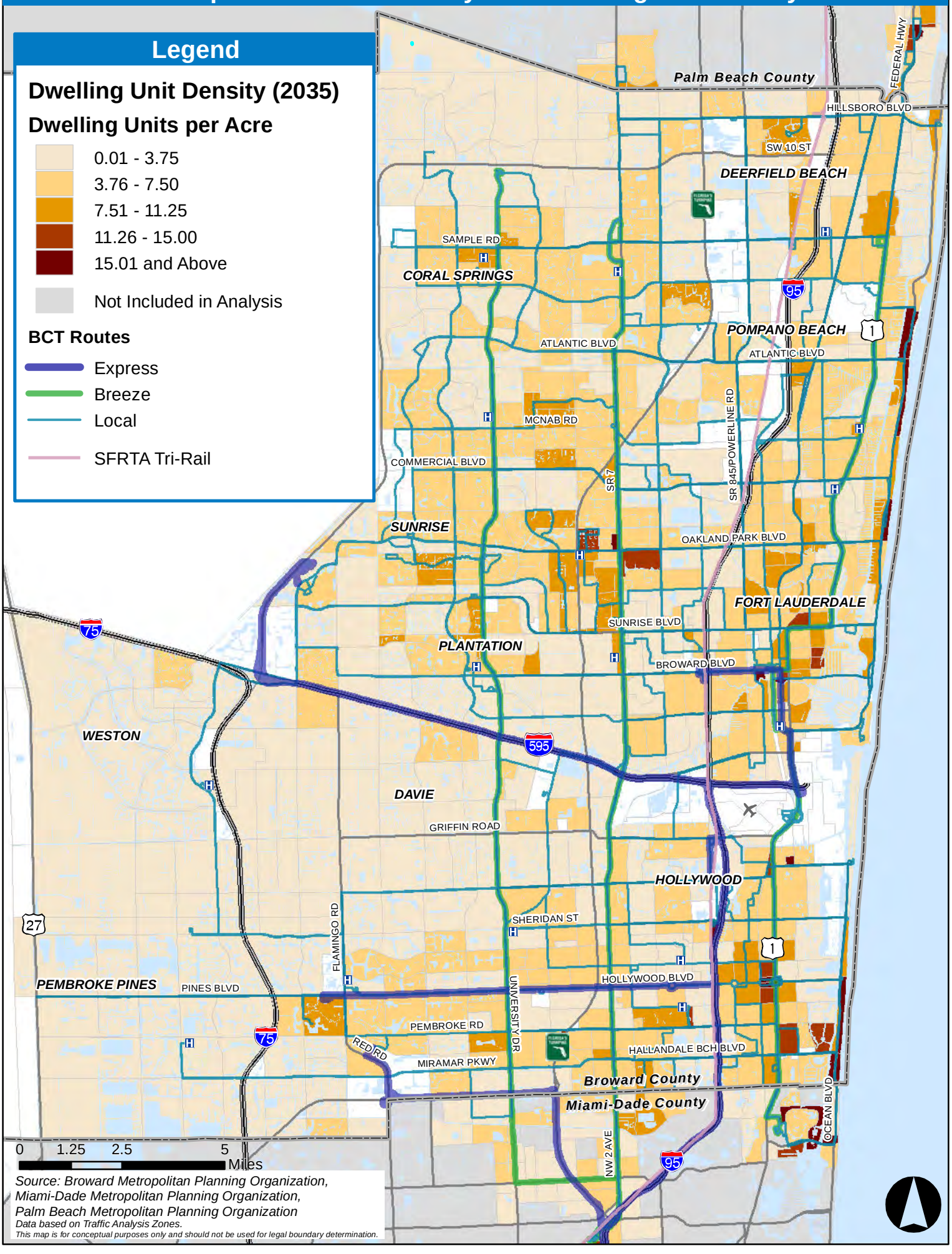
Map 2-7: Broward County 2035 Dwelling Unit Density



Source: Broward Metropolitan Planning Organization, Miami-Dade Metropolitan Planning Organization, Palm Beach Metropolitan Planning Organization

Data based on Traffic Analysis Zones.

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TRANSPORTATION DISADVANTAGED POPULATION ESTIMATES

As shown in Table 2-5, Transportation Disadvantaged (TD) population estimates are split into two categories. Category I refers to the entire TD population and includes persons with disabilities (Disabled), older adults (Elderly), low-income persons, and "high-risk" or "at-risk" children. Category II is a subset of Category I and includes only those who are not able to transport themselves or cannot afford transportation. TD populations in both categories increased by more than 10 percent from 2008 to 2013, indicating the potential for an increase in demand for paratransit services in the future.

Table 2-5

Broward County Potential Transportation Disadvantaged Population

TD Segments	Population Estimates (2008)	Percent of Total	Population Estimates (2013)	Percent of Total	% Change (2008–2013)
Category I					
Disabled, Non-Elderly, Low Income	9,251	1.5%	9,536	1.4%	3.1%
Disabled, Non-Elderly, Non-Low Income	78,025	12.3%	80,424	11.5%	3.1%
Disabled, Elderly, Low Income	13,979	2.2%	16,053	2.3%	14.8%
Disabled, Elderly, Non-Low Income	139,641	22.1%	160,357	22.8%	14.8%
Non-Disabled, Elderly, Low Income	25,070	4.0%	28,789	4.1%	14.8%
Non-Disabled, Elderly, Non-Low Income	250,415	39.6%	287,565	41.0%	14.8%
Non-Disabled, Non-Elderly, Low Income	115,766	18.3%	119,326	17.0%	3.1%
Total (Category I)	**632,147**	**100.0%**	**702,050**	**100.0%**	**11.1%**
Category II					
Transportation Disabled, Non-Elderly, Low Income, No Transport	3,125	2.7%	3,222	2.5%	3.1%
Transportation Disabled, Non-Elderly, Non-Low Income, No Transport	26,360	22.8%	27,170	21.3%	3.1%
Transportation Disabled, Elderly, Low Income, No Transport	6,248	5.4%	7,175	5.6%	14.8%
Transportation Disabled, Elderly, Non-Low Income, No Transport	62,409	54.0%	71,667	56.2%	14.8%
Non-Transportation Disabled, Low Income, No Auto, No Fixed-Route Transit	17,444	15.1%	18,341	14.4%	5.1%
Total (Category II)	**115,586**	**100.0%**	**127,575**	**100.0%**	**10.4%**

Source: BCT 2009-2018 Transit Development Plan, Broward County 2012 Transportation Disadvantaged Service Plan

DEMOGRAPHIC AND JOURNEY-TO-WORK CHARACTERISTICS

Demographic information including data regarding minority populations, age, and income along with journey-to-work characteristics such as household vehicle availability, labor force rates, commuting patterns, travel time to work, means of travel to work, and roadway conditions are provided in this section.

MINORITY POPULATION

Table 2-6 displays the percent distribution of minority populations within Broward County compared to Florida. Broward County is a majority-minority county, with a minority population of 55.4 percent, about 14 percentage points more than Florida as a whole. As illustrated in Map 2-8, the highest concentrations of minority populations in Broward County are located in located in the northeast, north central, and southern portions of Broward County.

Table 2-6
Minority and Non-Minority Population within Broward County

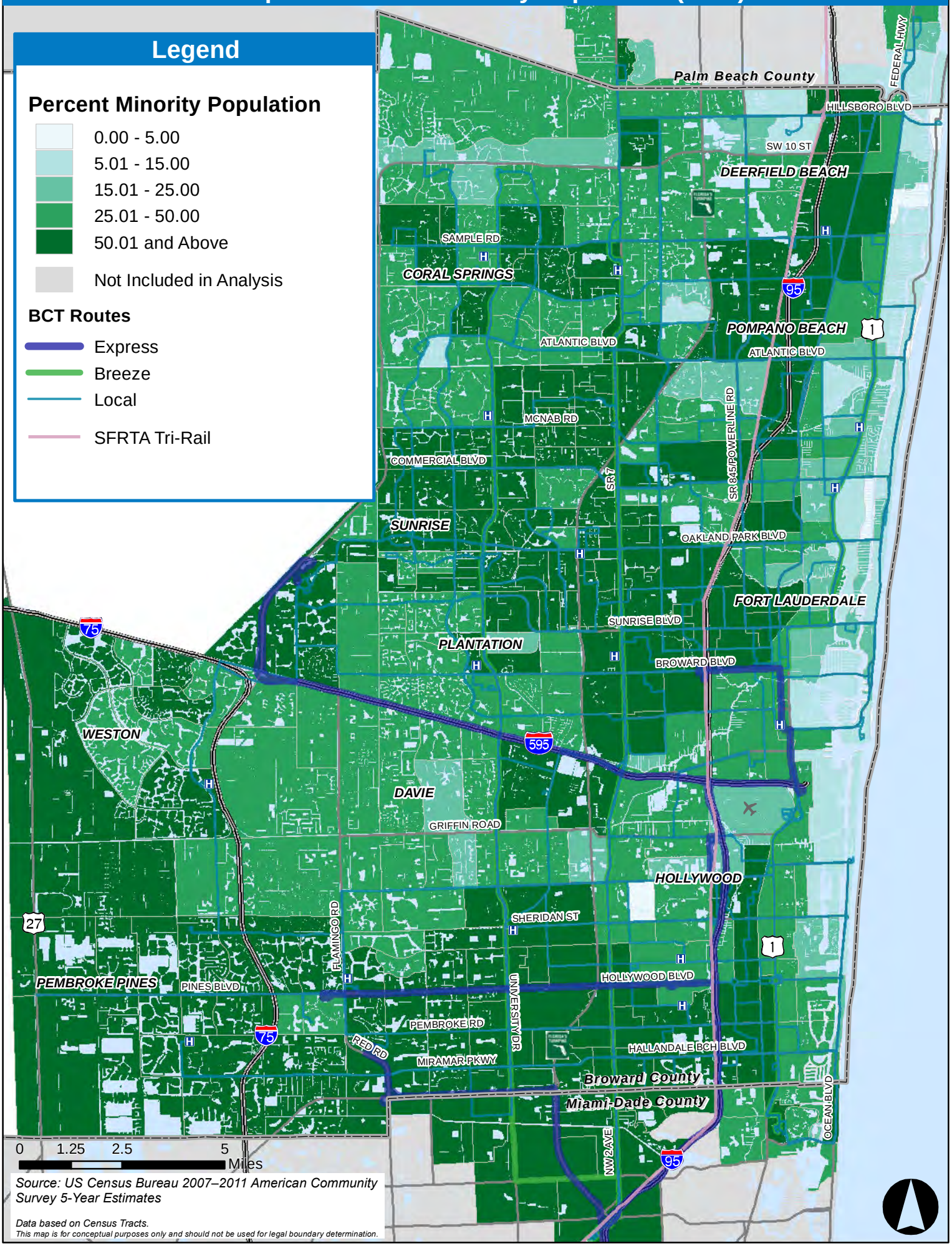
Location	Minority Population	% of Total Population	Non-Hispanic White Population	% of Total Population
Broward County	965,236	55.4%	776,876	44.6%
Florida	7,771,368	41.6%	10,917,419	58.4%

Source: U.S. Census Bureau, 2007–2011 American Community Survey

AGE DISTRIBUTION

The age distribution of Broward County is similar to the age distribution of Florida as a whole, as shown in Table 2-7. The population cohorts that are most closely associated with transit-dependency—persons under age 18 and persons age 65 and over—represent 36.7 percent of the total population in Broward County. Table 2-8 shows age trends in Broward County from 1980 to 2010. In 2010, a smaller proportion of the population is aged 65 and over than in any of the previous years.

Map 2-8: Percent Minority Population (2011)



Source: US Census Bureau 2007–2011 American Community Survey 5-Year Estimates

Data based on Census Tracts.

This map is for conceptual purposes only and should not be used for legal boundary determination.

Table 2-7

Population and Age Distribution (2011)

Location	Age				
	Under 18	18–24	25–44	45–64	65 Years and Over
Broward County	392,112	146,454	481,438	474,720	247,288
% of total population	22.5%	8.4%	27.6%	27.3%	14.2%
Florida	4,005,833	1,733,738	4,749,797	4,992,966	3,206,453
% of total population	21.4%	9.3%	25.4%	26.7%	17.2%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Table 2-8

Broward County Age Trends

Year	Age			
	Under 15	15–44	45–64	65 Years and Over
1980	16.7%	39.4%	21.9%	22.0%
1990	17.4%	43.4%	18.6%	20.7%
2000	19.9%	42.4%	21.7%	16.1%
2010	18.3%	39.8%	27.7%	14.3%

Source: Bureau of Economic and Business Research

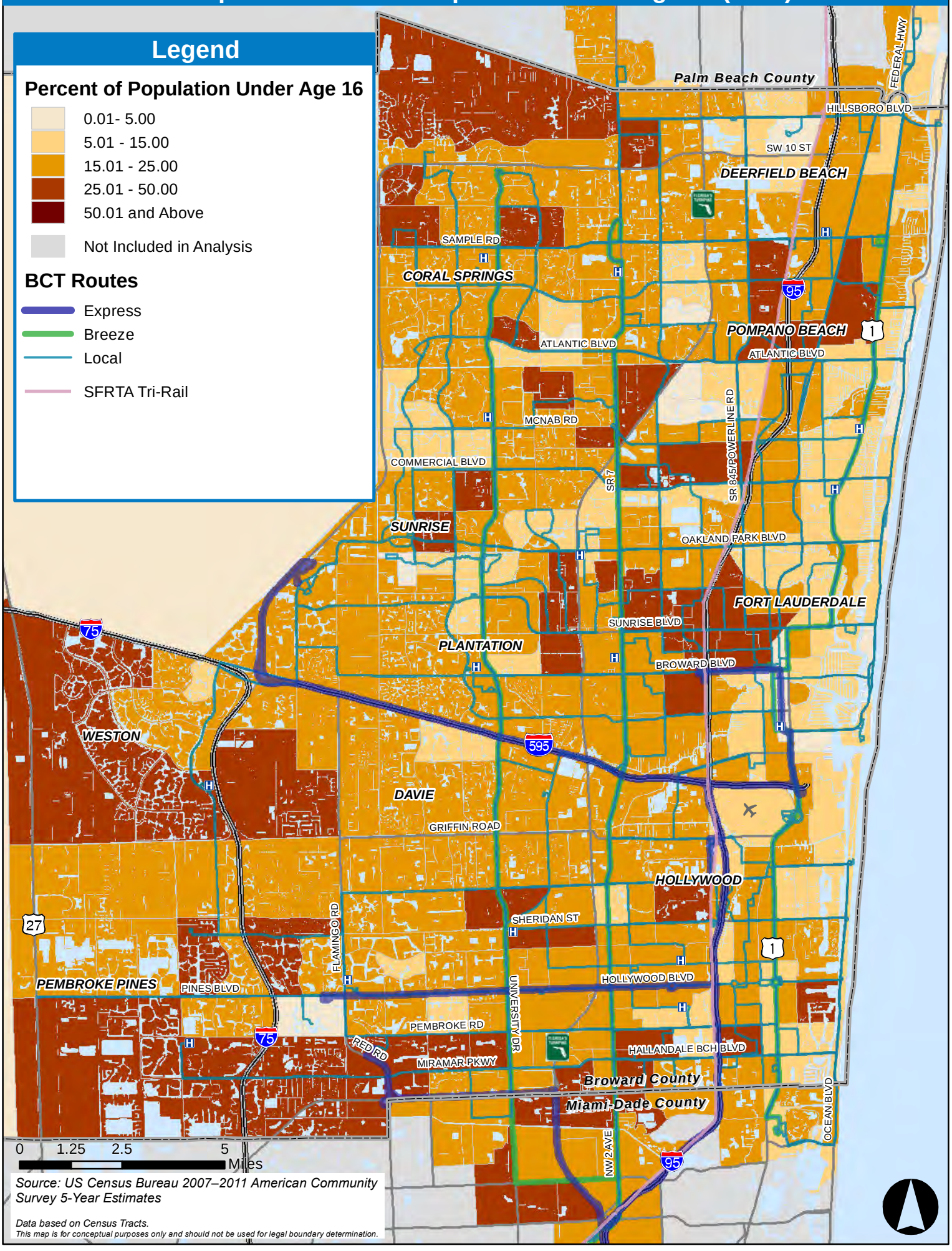
As indicated, young people and older adults are more likely than the rest of the population to use public transportation. These populations include youth under age 16 who cannot legally operate a motor vehicle and, therefore, typically have a higher propensity for using transit, as well as older adults, who often are no longer able to drive due to impairments from aging. Maps 2-9 and 2-10 illustrate the concentrations of residents under age 16 and those who are over age 60 within the county.

INCOME

As shown in Table 2-9, the distribution of household incomes for Broward County is similar to that of Florida. The biggest difference between Broward County and the state are in the "$50,000 and Over" household income category, with Florida at 48.1 percent and Broward County at 51.8 percent.

Map 2-11 shows the geographic distribution of families living below the poverty level in Broward County. The U.S. Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is living in poverty. To determine poverty status, the Census Bureau compares the household's total family income in the last 12 months with the poverty threshold appropriate for that household's family size and composition.

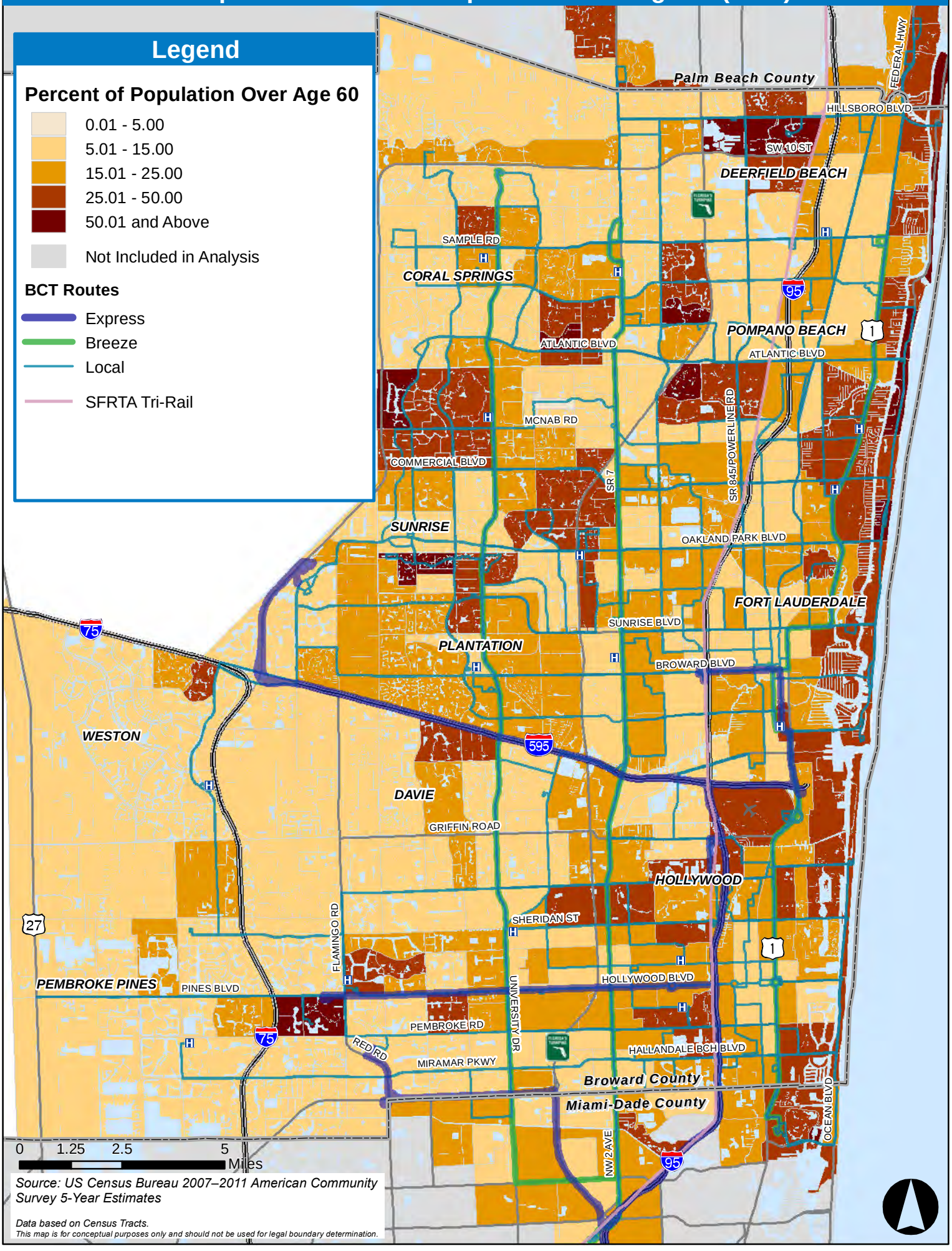
Map 2-9: Percent of Population Under Age 16 (2011)



Source: US Census Bureau 2007–2011 American Community Survey 5-Year Estimates

Data based on Census Tracts.
This map is for conceptual purposes only and should not be used for legal boundary determination.

Map 2-10: Percent of Population Over Age 60 (2011)



Source: US Census Bureau 2007–2011 American Community Survey 5-Year Estimates

Data based on Census Tracts.
This map is for conceptual purposes only and should not be used for legal boundary determination.

Table 2-9
Household Income Distribution (2011)

Location	Household Income					
	$0–$9,999	$10,000–$14,999	$15,000–$24,999	$25,000–$34,999	$35,000–$49,999	$50,000 and Over
Broward County	45,430	35,854	72,992	73,602	92,987	344,172
% of total households	6.8%	5.4%	11.0%	11.1%	14.0%	51.8%
Florida	522,572	405,372	840,479	839,473	1,094,185	3,437,915
% of total households	7.3%	5.7%	11.8%	11.8%	15.3%	48.1%

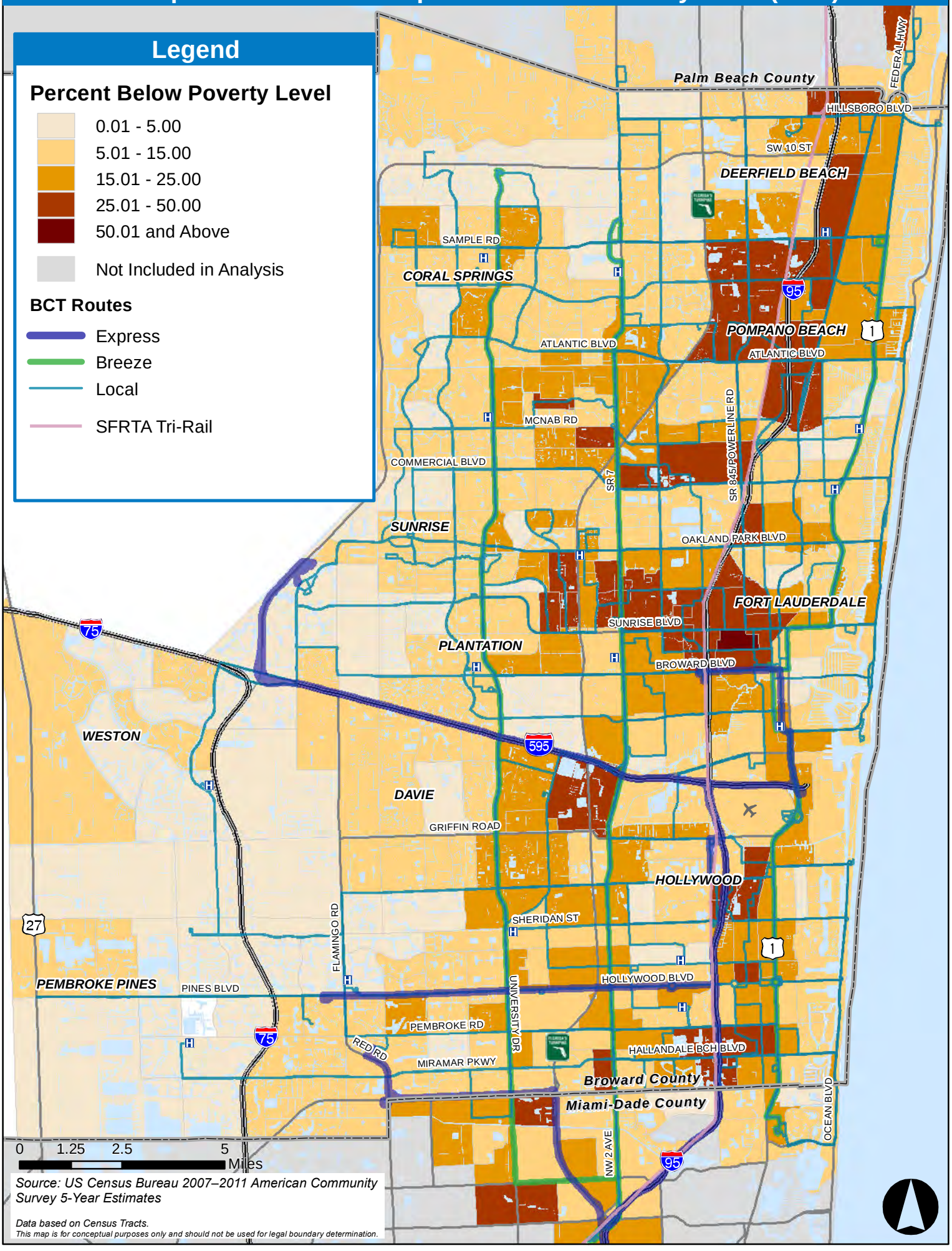
Source: U.S. Census Bureau, 2007-2011 American Community Survey

For example, consider a family of three with one child under 18 years of age, interviewed in July 2011 and reporting a total family income of $14,000 for the last 12 months (July 2010 to June 2011). The appropriate poverty threshold for this family type based on Census thresholds is $17,788. Comparing the family's income of $14,000 with the poverty threshold shows that the family and all people in the family are considered to have been living in poverty at the time of the data collection. In Broward County, Pompano Beach and Fort Lauderdale have the highest proportion of those living below the poverty level.

HOUSEHOLD VEHICLE AVAILABILITY

Table 2-10 shows the number of vehicles available by household within Broward County and Florida. As shown, the County's distribution of household vehicle availability is similar to that for Florida. Almost three-quarters of the households in the county have at least two vehicles available to them. Household vehicle availability plays an important role in determining public transit needs. Persons living in zero-vehicle households are traditionally considered transit-dependent as they rely heavily upon transit to fulfill their transportation needs. Map 2-12 illustrates the geographic distribution of those zero-vehicle households within the county by census tract.

Map 2-11: Percent of Population Below Poverty Level (2011)



Source: US Census Bureau 2007–2011 American Community Survey 5-Year Estimates

Data based on Census Tracts.
This map is for conceptual purposes only and should not be used for legal boundary determination.

Table 2-10
Distribution of Vehicle Availability by Household (2011)

Location	Number of Vehicles Available			
	Zero	One	Two	Three or More
Broward County	24,278	209,133	374,574	216,653
% of total households	2.9%	25.4%	45.4%	26.3%
Florida	234,449	1,958,332	3,731,877	2,148,015
% of total households	2.9%	24.3%	46.2%	26.6%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

LABOR FORCE

Table 2-11 displays the total labor force and the average percentage of those laborers who were unemployed in the time period from March 2012 to February 2013. At 7.2 percent, Broward County has a lower unemployment rate than the State as a whole.

Table 2-11
Average Labor Force Participation (March 2012 to February 2013)

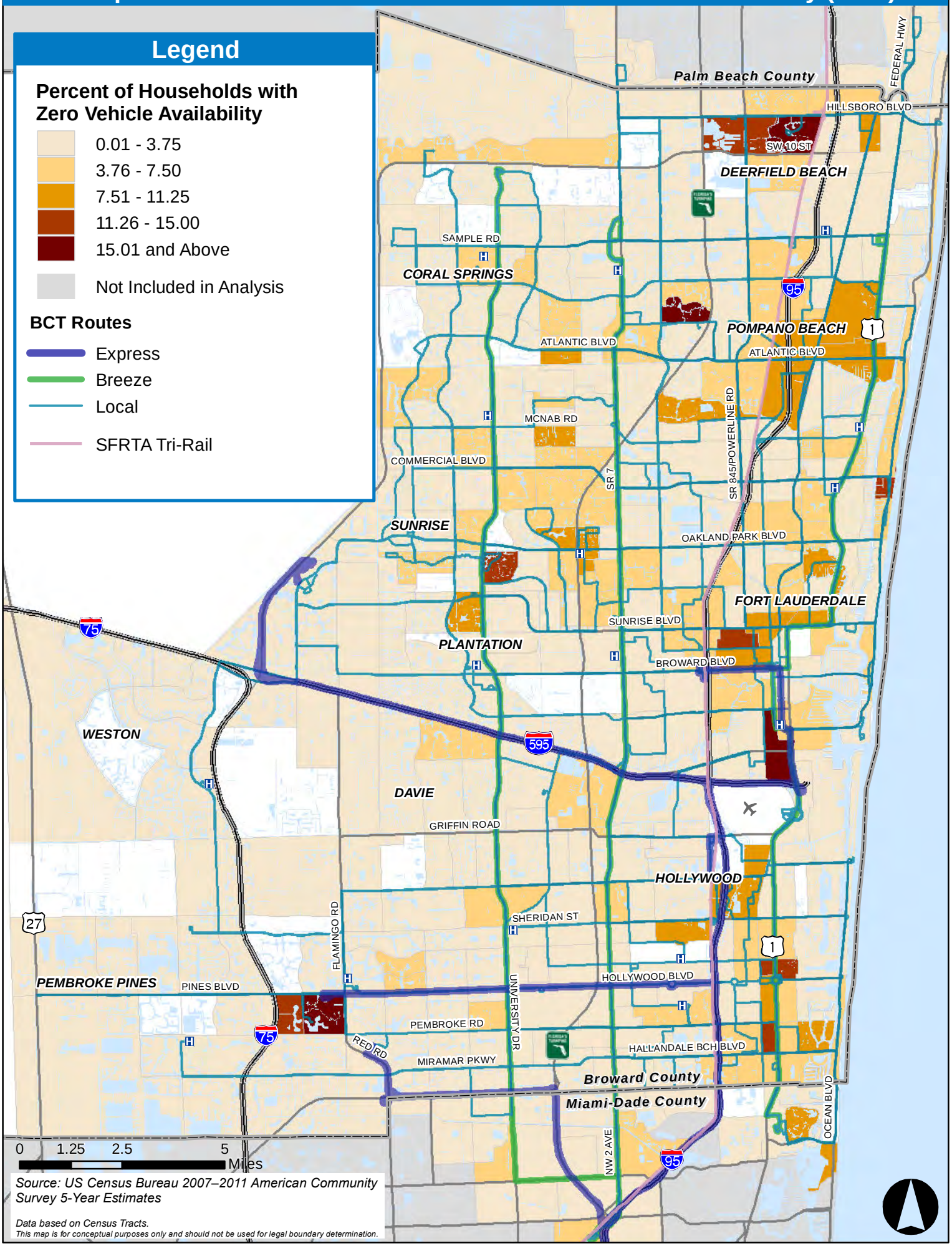
Location	Total Labor Force	Employed	Unemployed	Unemployment Rate
Broward County	1,018,350	945,272	73,078	7.2%
Florida	9,385,748	8,598,647	787,101	8.4%

Source: Bureau of Labor Statistics

COMMUTING PATTERNS

Table 2-12 summarizes commuter flows for workers living in Broward County. The analysis of 2010 data indicates that more than 60 percent of the workers residing in Broward County also work in Broward County. Nearly 40 percent of Broward County workers commute to neighboring counties. Miami-Dade County is the most common destination for workers commuting to destinations outside Broward County (19.4%). Compared with 2009, the total number of workers who both resided and worked in Broward County in 2010 experienced a 1.1 percentage point increase.

Map 2-12: Percent of Households with Zero Vehicle Availability (2011)



Source: US Census Bureau 2007–2011 American Community Survey 5-Year Estimates

Data based on Census Tracts.
This map is for conceptual purposes only and should not be used for legal boundary determination.

Table 2-12

County of Work for Workers Residing in Broward County (2009 and 2010)

County of Residence		County of Work							
		Broward	Miami-	Palm	St. Lucie	Martin	Monroe	Other	Total
Broward (2010)	# of Workers	418,761	130,108	56,946	1,539	1,502	828	62,158	671,842
	% Distribution	62.3%	19.4%	8.5%	0.2%	0.2%	0.1%	9.3%	100.0%
Broward (2009)	# of Workers	414,217	129,534	57,346	1,580	1,469	1,004	69,219	674,369
	% Distribution	61.4%	19.2%	8.5%	0.2%	0.2%	0.1%	10.3%	100.0%
% Change (2009–2010)		1.1%	0.4%	-0.7%	-2.6%	2.2%	-17.5%	-10.2%	-0.4%

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics

Table 2-13 reflects commuting flows for persons living outside the county and commuting into Broward County for work. More than 60 percent of the work trips terminating in Broward County originate inside the county. Miami-Dade County makes up the largest (14.8%) trip origin for workers commuting to Broward County from other counties.

Table 2-13

Commuting from Neighboring Counties to Broward County (2009 and 2010)

County of Work		County of Residence							
		Broward	Miami-Dade	Palm Beach	St. Lucie	Monroe	Martin	Other	Total
Broward (2010)	# of Workers	418,761	96,150	61,299	3,925	2,814	2,395	65,776	651,120
	% Distribution	64.3%	14.8%	9.4%	0.6%	0.4%	0.4%	10.1%	100.0%
Broward (2009)	# of Workers	414,217	94,576	61,419	3,802	2,790	2,422	68,651	647,877
	% Distribution	63.9%	14.6%	9.5%	0.6%	0.4%	0.4%	10.6%	100.0%
% Change (2009–2010)		1.1%	1.7%	-0.2%	3.2%	0.9%	-1.1%	-4.2%	0.5%

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics

TRAVEL TIME TO WORK

Table 2-14 conveys the distribution of travel time to work in Broward County and Florida. More than 60 percent of workers in Broward County and the State as a whole travel less than 30 minutes to reach their place of employment.

Table 2-14
Travel Time to Work (2011)

Location	Travel Time to Work (Minutes)						
	Fewer than 10	10–19	20–29	30–44	45–59	60–89	90 or More
Broward County	8.7%	25.6%	22.6%	27.4%	8.7%	5.2%	1.8%
Florida	10.5%	28.7%	22.8%	23.2%	8.1%	4.8%	1.9%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

MEANS OF TRAVEL TO WORK

Table 2-15 provides the distribution of the primary commute modes of transportation used in Broward County and Florida. Approximately 80 percent of workers in Broward County and the State as a whole drive alone to work. Compared to the overall state distribution, a larger proportion of people in Broward County use public transit to access work (2.8%), but a lower percentage (9.6%) carpool to work.

Table 2-15
Journey-to-Work Mode Split (2011)

Area	Travel Mode					
	Drive Alone	Carpool	Public	Walk	Work at	Other*
Broward County	80.1%	9.6%	2.8%	1.3%	4.3%	1.8%
Florida	79.9%	10.2%	1.9%	1.4%	4.4%	2.2%

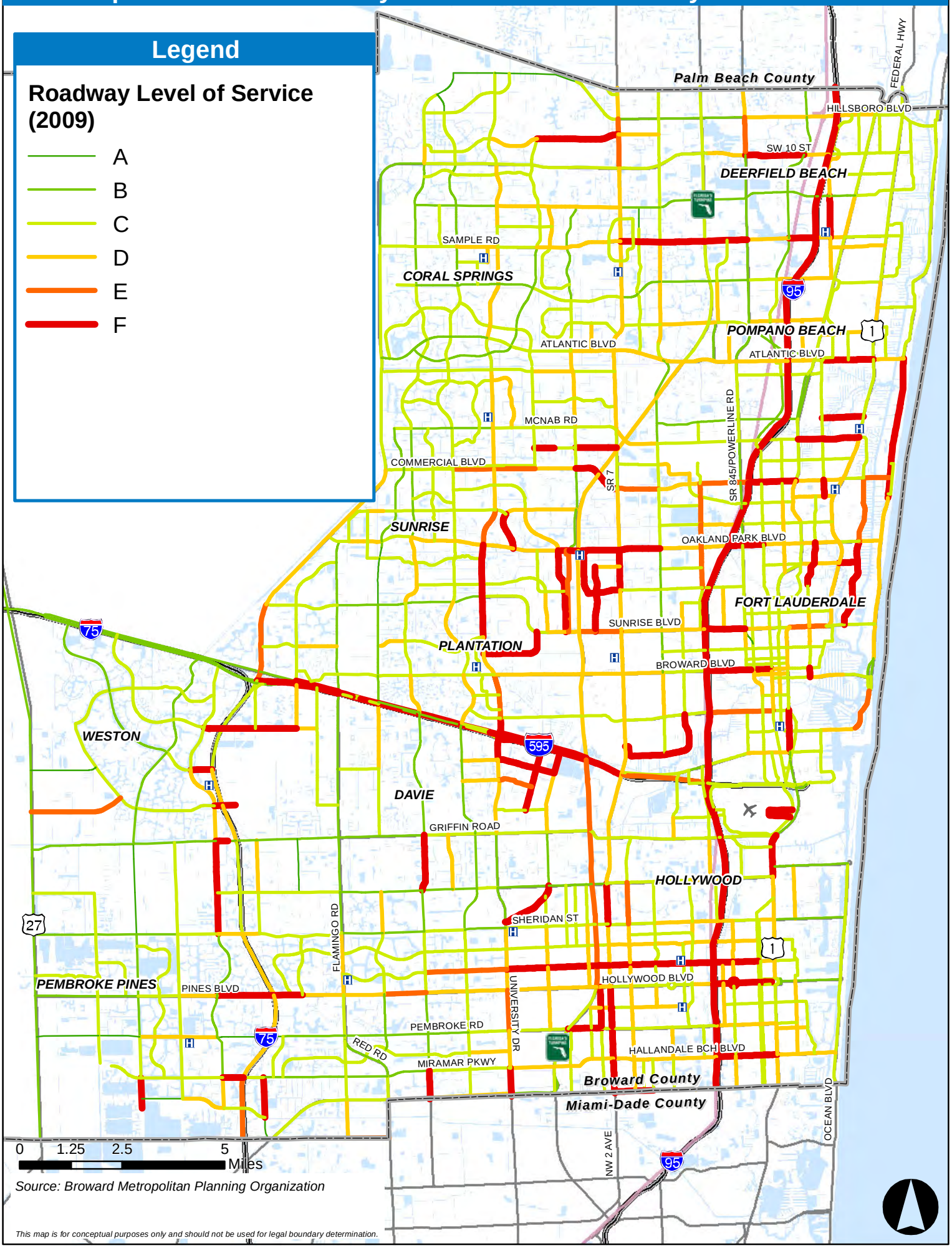
* Includes motorcycle, bicycle, taxicab, and other means of transportation.

Source: U.S. Census Bureau, 2007-2011 American Community Survey

ROADWAY CONDITIONS

Maps 2-13 and 2-14 illustrate peak-hour level-of-service information for major roadways within Broward County for 2009 and 2035, respectively. The maps display Volume-Demand-to-Capacity Ratios (V/C), a measure that reflects mobility and quality of travel of a facility or a section of a facility. It compares roadway demand (vehicle volumes) with roadway supply (carrying capacity). A significant number of roadways, including Hallandale Beach Boulevard, Hollywood Boulevard, Sunrise Boulevard, Oakland Park Boulevard, Atlantic Boulevard, I-75, and I-95 have notable level-of-service deterioration by 2035.

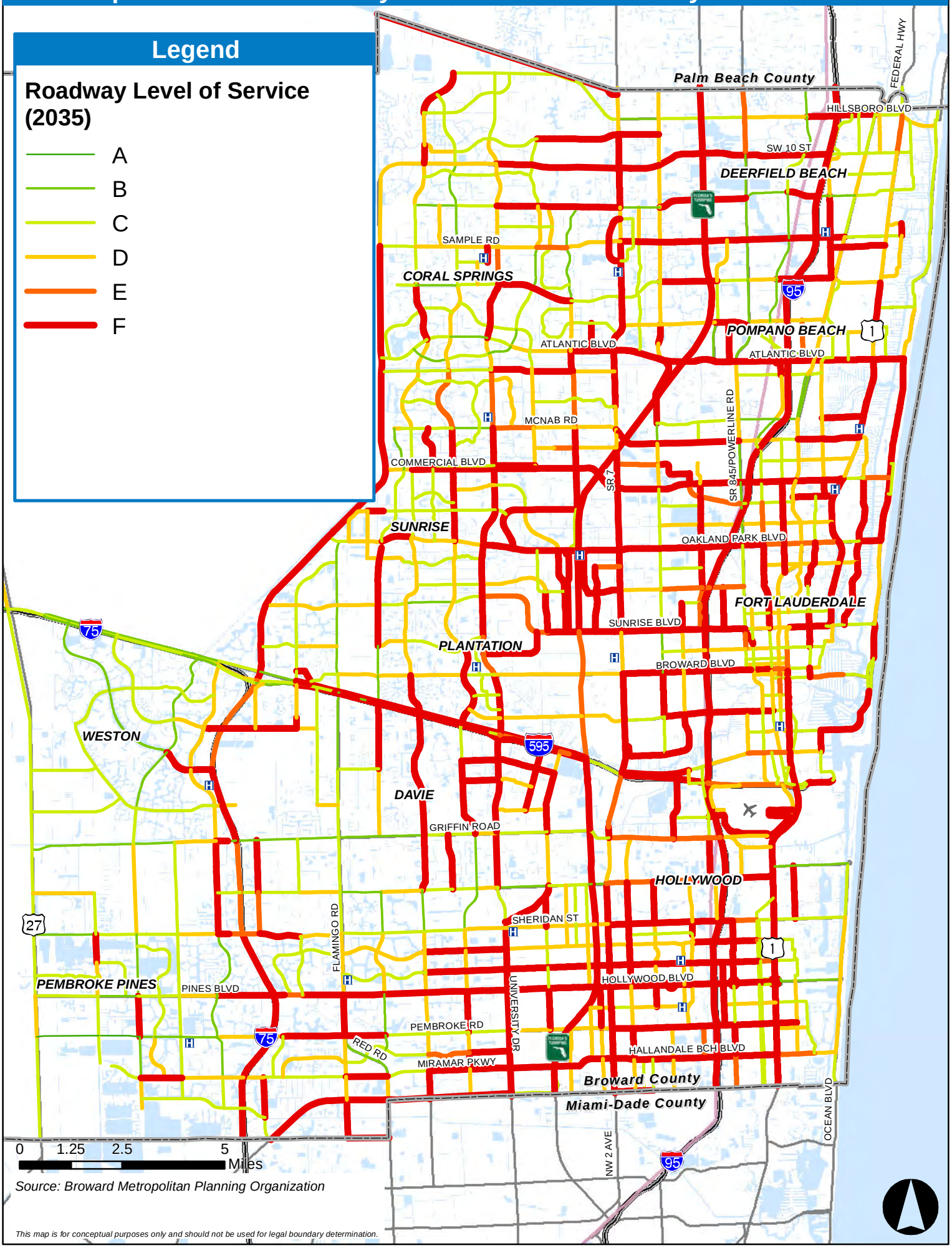
Map 2-13: Broward County 2009 Peak-Hour Roadway Level of Service



Source: Broward Metropolitan Planning Organization

This map is for conceptual purposes only and should not be used for legal boundary determination.

Map 2-14: Broward County 2035 Peak-Hour Roadway Level of Service



Source: Broward Metropolitan Planning Organization

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MAJOR EMPLOYERS

As part of the baseline conditions analysis, data on major employers in Broward County were reviewed and summarized. The major industries in Broward County include trade, transportation, and utilities; professional and business services; education and health services, and leisure and hospitality. Table 2-16 shows employment by industry for Broward County and Florida.

With nearly 27,000 employees, the largest employer in Broward County is the Broward County School Board, followed by the Memorial Healthcare System and Broward Health. Nova Southeastern University and American Express remain two of the largest private-sector employers. The top 30 public and private employers, listed in Table 2-17, employ nearly 90,000 people. Both geographies have a similar distribution of workers in each industry. Approximately one-fifth of workers have jobs in educational services, health care, and social assistance, followed by professional services, retail, and service sector professions.

Table 2-16
Employment by Industry (2011)

Industry	Broward	Florida
Agriculture, forestry, fishing and hunting, and mining	0.3%	1.1%
Construction	6.7%	7.7%
Manufacturing	5.2%	5.6%
Wholesale trade	4.0%	3.0%
Retail trade	13.1%	13.1%
Transportation and warehousing, and utilities	5.3%	5.1%
Information	2.7%	2.2%
Finance and insurance, and real estate and rental and leasing	8.9%	7.9%
Professional, scientific, and management, and administrative and waste	13.4%	12.0%
Educational services, and health care and social assistance	19.9%	20.2%
Arts, entertainment, and recreation, and accommodation and food services	10.2%	11.2%
Other services (except public administration)	5.7%	5.3%
Public administration	4.4%	4.9%
Armed forces	0.2%	0.7%

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Table 2-17

Broward County Top 30 Employers, 2012

Rank	Company	Sector	South Florida Employment
1	Broward County School Board	Public Schools and Adult Education	26,933
2	Memorial Healthcare System	Hospital District	10,700
3	Broward Health	Hospital District	8,207
4	Broward County Commission	County Government	5,493
5	Broward County Sheriff	County Law Enforcement	5,315
6	Nova Southeastern University	University – Bachelors, Masters, Doctoral Degrees	3,971
7	American Express	Commercial/Consumer Financial Services and Traveling Consulting	3,000
8	Kaplan Higher Education	Online Educational Provider	2,800
9	The Answer Group	Custom Computer Programming, Business Consulting	2,800
10	Interbond Corporation of America dba BrandsMart USA	Consumer Electronics Retailer	2,600
11	City of Fort Lauderdale	City Government	2,487
12	Alorica	Business Services Provider Delivering Customer Management and Sales/Marketing Solutions	2,000
13	Spirit Airlines	Air Carrier	1,450
14	Citrix Systems	Computer Network Software	1,428
15	JM Family Enterprises, Inc.	Diversified Automotive Corporation	1,400
16	Motorola	Connected Home Solutions, Government and Enterprise Mobility Solutions, Mobile Devices and Networks	1,400
17	City of Hollywood	City Government	1,239
18	SFN Group	Employment Services	1,208
19	Sun Sentinel Co./WSFL-TV	Publishes and Prints Daily and Weekly Newspapers, Niche Publications, Commercial Printing, Television	1,133
20	DHL Express	Air Courier Services	1,075
21	City of Miramar	City Government	938
22	Saveology.com	Comparison Shopping Website	900
23	City Furniture	Home Furniture Retailer	883
24	City of Pembroke Pines	City Government	859 Full Time; 218 Part Time
25	Aviall	New Aviation Parts and Related Aftermarket Operations	842
26	First Data	Electronic Commerce and Payment Processing	800
27	Zimmerman Advertising	Advertising Agency	800
28	Rick Case Automotive Group	Automotive Sales and Services	796
29	American Changer Corporation	Developer and Manufacturer of Innovative Bill Changers and Token Dispensers	590
30	Ed Morse Automotive Group	Automotive Sales and Services	558

Source: Greater Fort Lauderdale Alliance, Largest Employers - Ranked by Employees and Largest Public Sector Employers (Government and Tax assisted), 2012

TOURISM

Tourism is one of the largest employment sectors in the county. In 2012, Broward County had a total of 12 million visitors, including 2.8 million international visitors, according to the Greater Fort Lauderdale Convention & Visitors Bureau. Broward County offers 550+ lodging establishments with 33,000+ hotel rooms, 5,000+ restaurants, and 132 nightclubs. Visitors spent $9.81 billion in Broward County in 2012. Florida's Office of Economic and Demographic Research estimates that Broward County's Fiscal Year (FY) 2013 realized tax revenues from tourist development taxes will be $43,532,515, compared with a projected statewide county average of $905,058.

LAND USE CHARACTERISTICS

FDOT's updated TDP guidelines promote the review of ongoing and anticipated residential and commercial development activities. Broward County and its municipalities have established land use and zoning maps to guide future developments in the county. Map 2-15 shows the existing land uses in Broward County and Map 2-16 presents future land use designations for Broward County. Map 2-17 illustrates the local and regional activity centers identified in future land use data. This map also contains areas designated for transit-oriented development or as a transit-oriented corridor to demonstrate emphasis areas in Broward County.

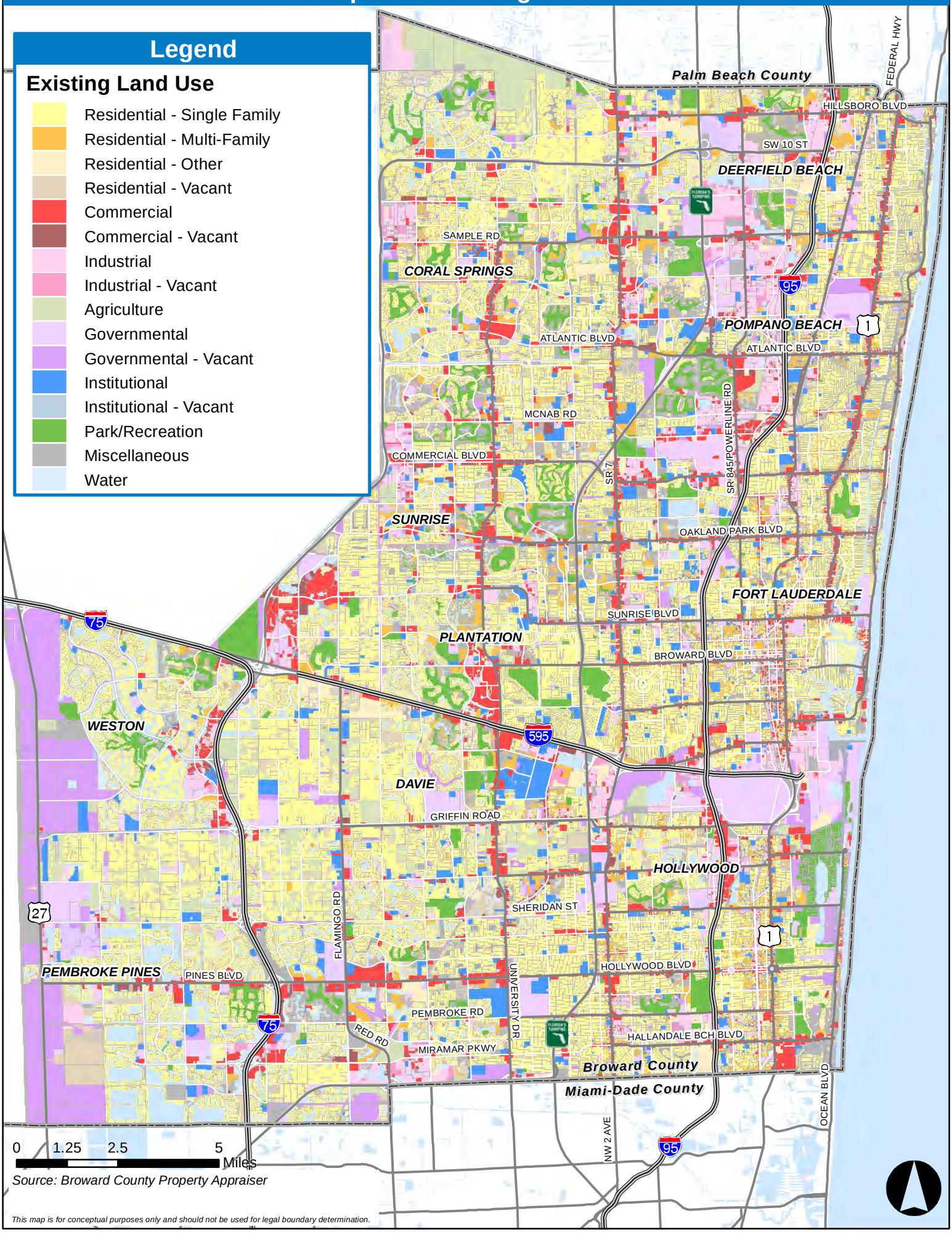
DISCRETIONARY MARKET ASSESSMENT

A Density Threshold Assessment (DTA) is an analysis tool for conducting a market analysis. The DTA tool can be used to determine whether existing transit routes are serving areas of the county considered to be transit-supportive for the corresponding transit market. The discretionary market refers to potential riders living in higher density areas of the county who may choose to use transit as a commuting or transportation alternative. A DTA was conducted based on industry standard relationships to identify those areas of Broward County that experience transit-supportive residential and commercial density levels in 2013. TAZ data from the Broward MPO were obtained to conduct the DTA.

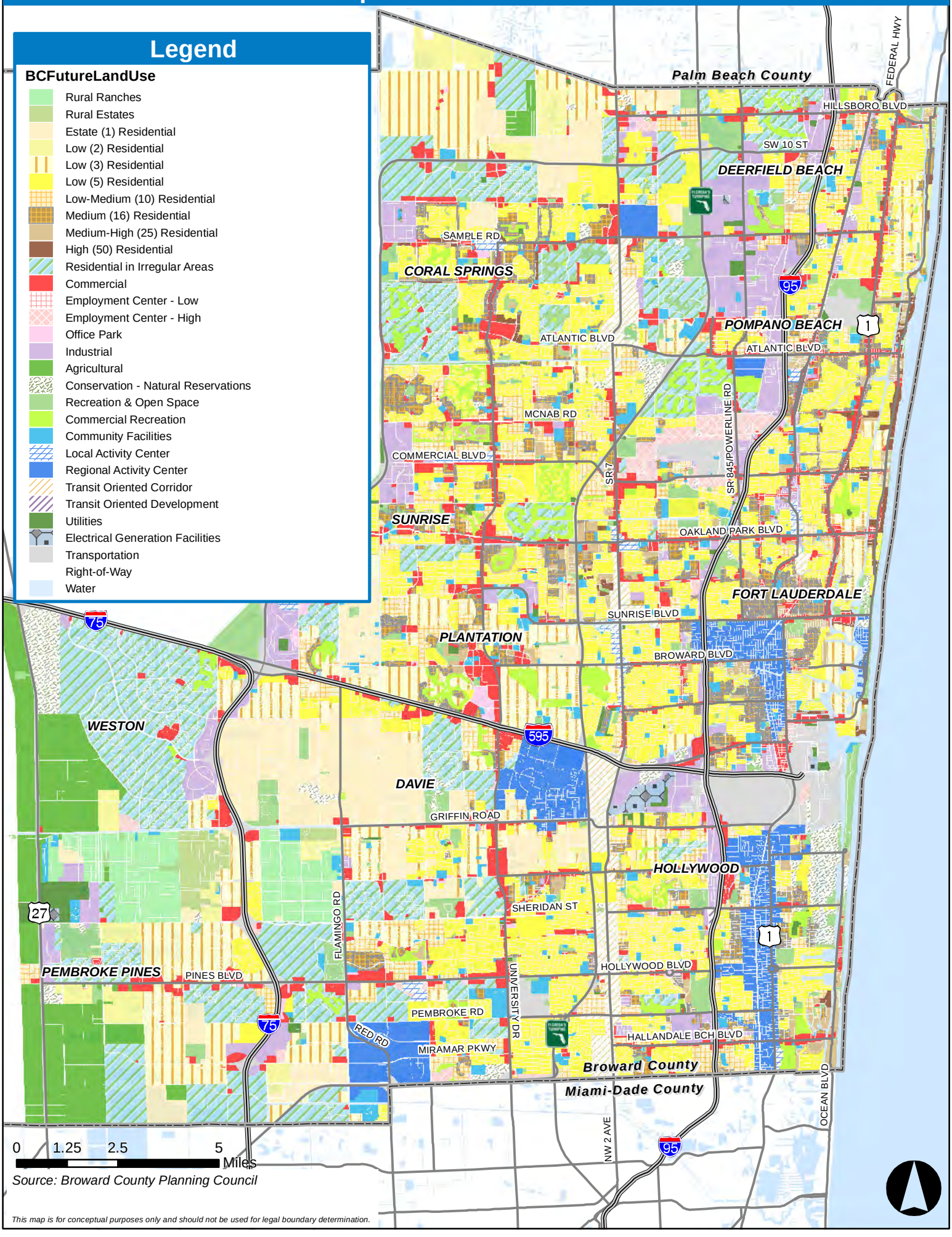
Three levels of density thresholds were developed to indicate whether or not an area contains sufficient densities to sustain efficient fixed-route transit operations:

- *Minimum* – Reflects minimum population or employment densities to consider basic fixed-route transit services (i.e., fixed-route bus service).

Map 2-15: Existing Land Use



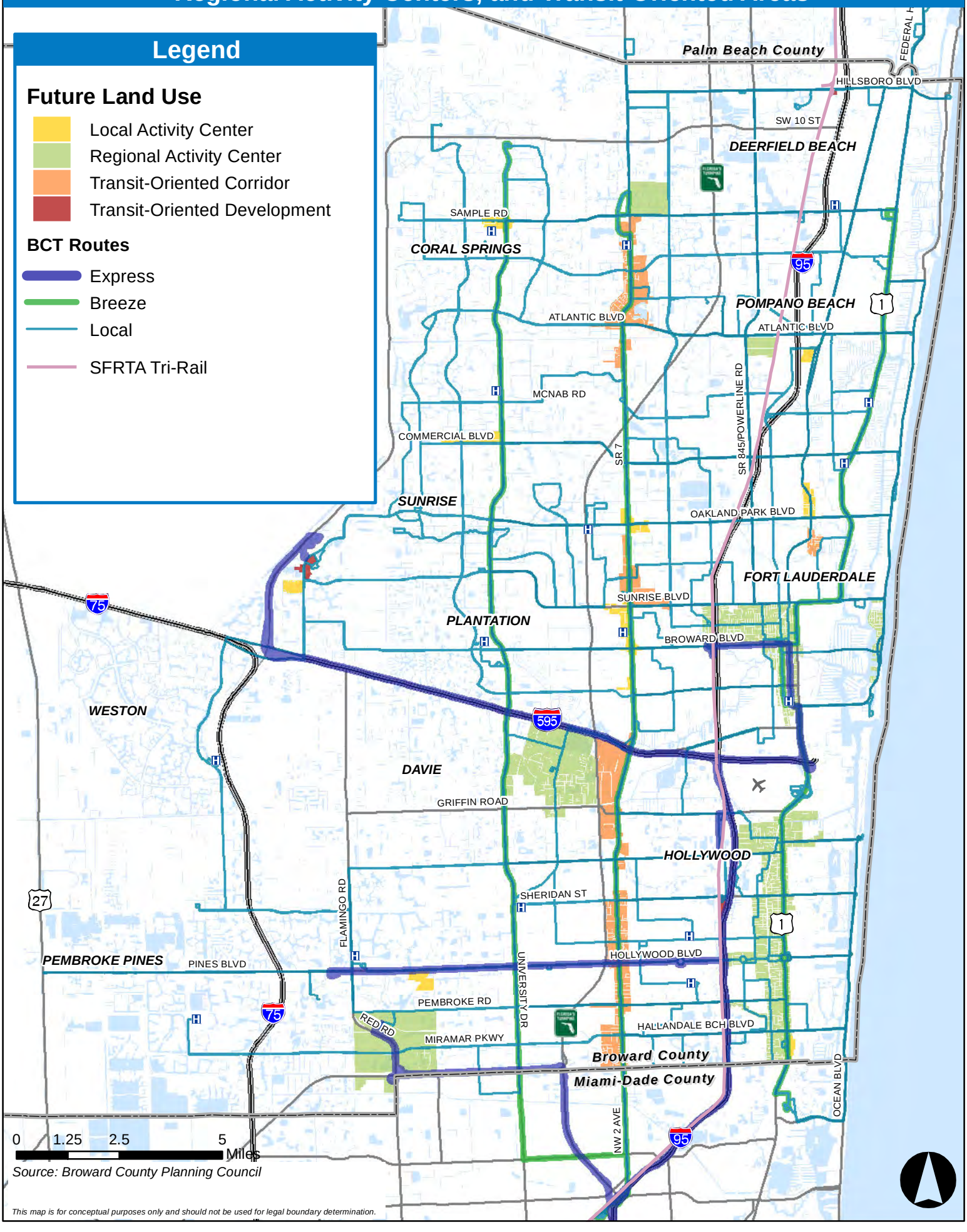
Map 2-16: Future Land Use



Source: Broward County Planning Council

This map is for conceptual purposes only and should not be used for legal boundary determination.

Map 2-17: Future Land Use Local Activity Centers, Regional Activity Centers, and Transit-Oriented Areas



Source: Broward County Planning Council

This map is for conceptual purposes only and should not be used for legal boundary determination.

- *High* – Reflects high population or employment densities that may be able to support higher levels of transit investment than areas that meet only the minimum density threshold (i.e., increased frequencies).
- *Very High* – Reflects very high population or employment densities that may be able to support higher levels of transit investment than areas that meet the minimum or high density thresholds (i.e., premium transit services, etc.).

Table 2-18 presents the density thresholds for each of the noted categories.

Table 2-18

Transit Service Density Threshold

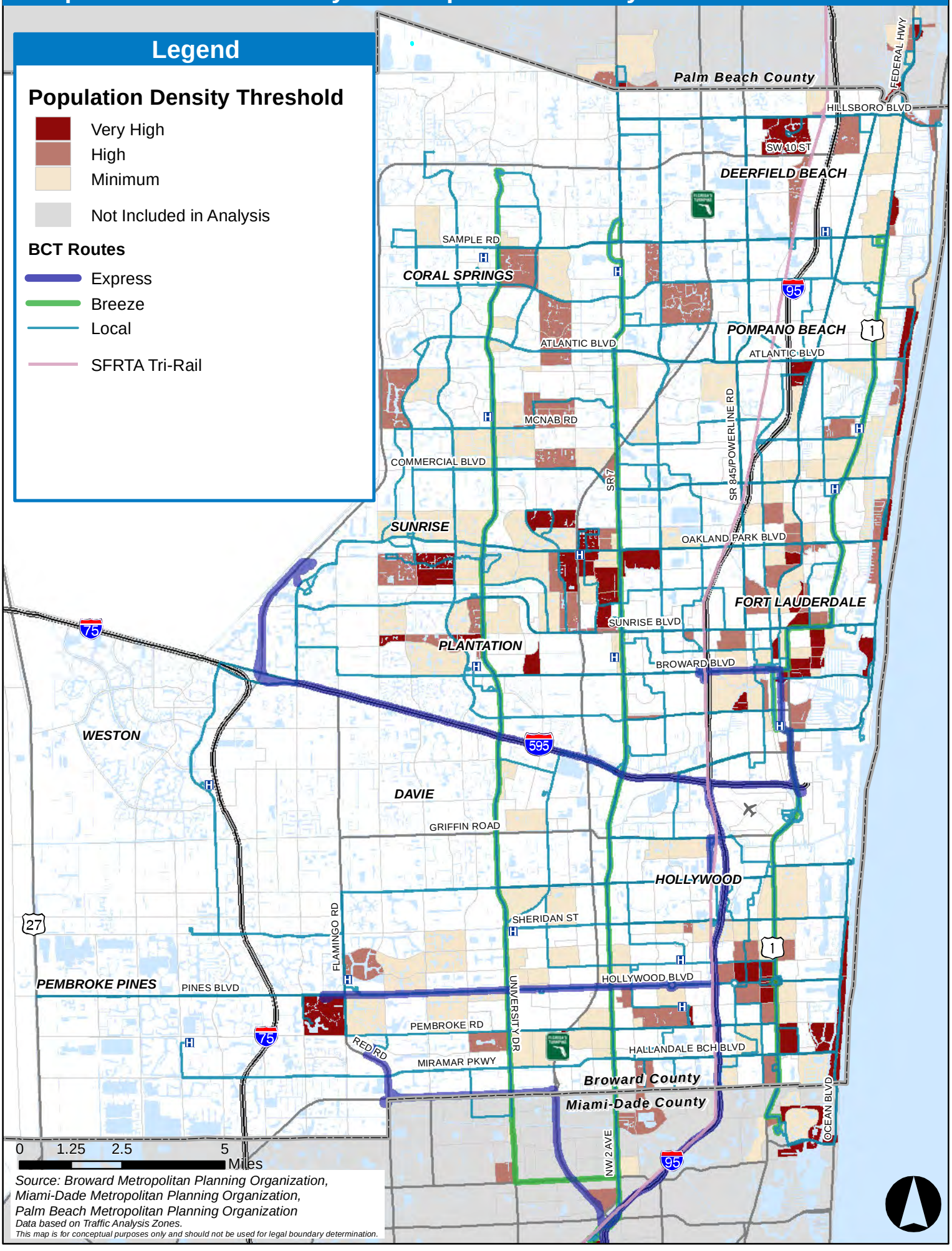
Transit Mode	Population Density Threshold[1]	Employment Density Threshold[2]
Minimum	4.5–5 dwelling units/acre	4 employees/acre
High	6–7 dwelling units/acre	5–6 employees/acre
Very High	≥=8 dwelling units/acre	≥=7 employees/acre

[1] TRB, National Research Council, Transportation Cooperative Research Program (TCRP) Report 16, Volume 1 (1996), *Transit and Land Use Form,* November 2002, MTC Resolution 3434 TOD Policy for Regional Transit Expansion Projects.

[2] Based on a review of research on the relationship between transit technology and employment densities.

Map 2-18 and 2-19 illustrates high and very high threshold areas identified in the 2013 DTA analysis. As shown on the map, there are many areas in Broward County that qualify as transit-supportive in terms of density, including areas of Deerfield Beach, Pompano Beach, Fort Lauderdale, Sunrise, Coral Springs, Plantation, and Hollywood. Each of these areas is currently served by transit and should continue to be transit emphasis areas in the future. Weston and Davie appear to be less transit supportive than these other locations in Broward County.

Map 2-18: Broward County 2013 Population Density Threshold Assessment

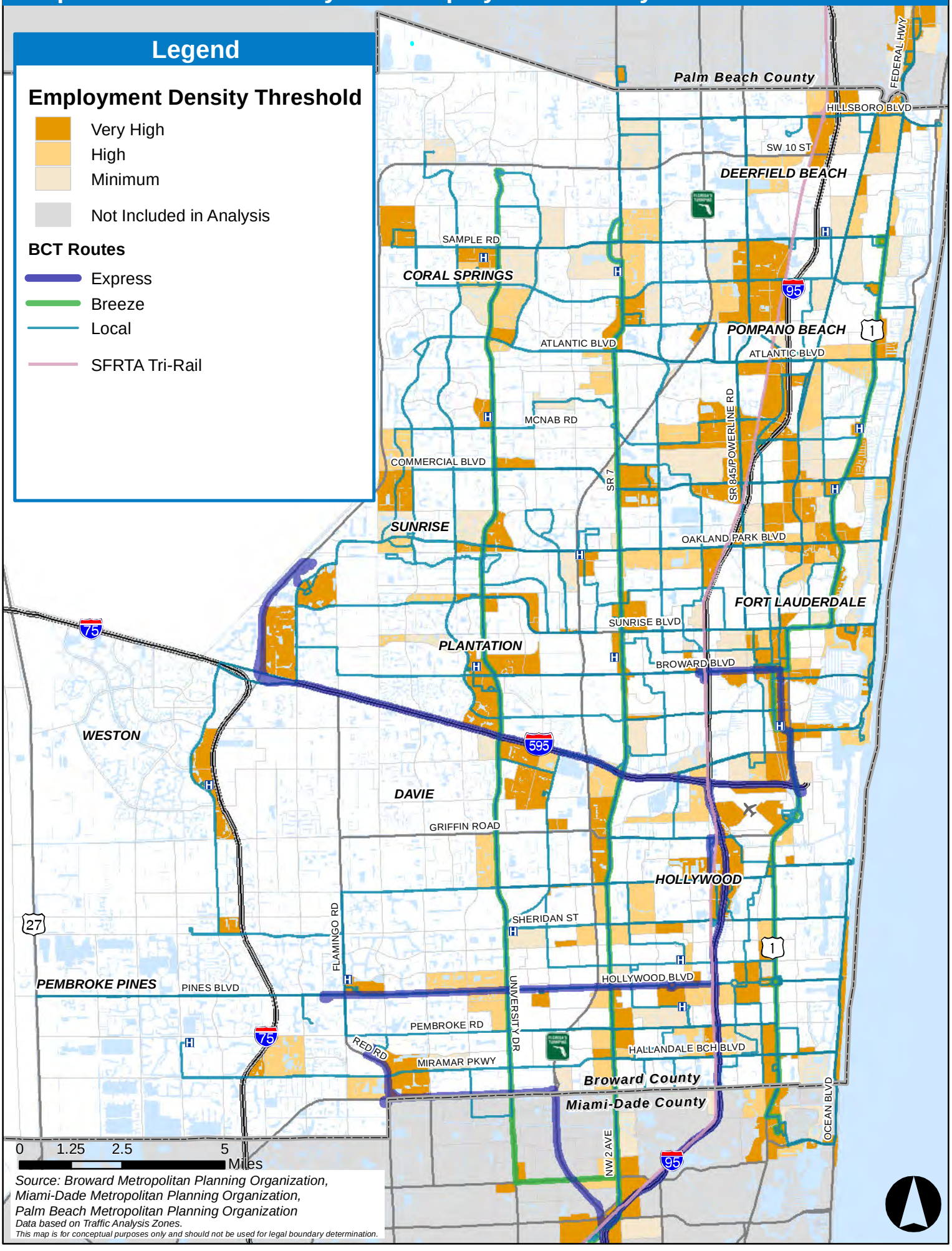


Source: Broward Metropolitan Planning Organization, Miami-Dade Metropolitan Planning Organization, Palm Beach Metropolitan Planning Organization

Data based on Traffic Analysis Zones.

This map is for conceptual purposes only and should not be used for legal boundary determination.

Map 2-19: Broward County 2013 Employment Density Threshold Assessment



Source: Broward Metropolitan Planning Organization, Miami-Dade Metropolitan Planning Organization, Palm Beach Metropolitan Planning Organization

Data based on Traffic Analysis Zones.

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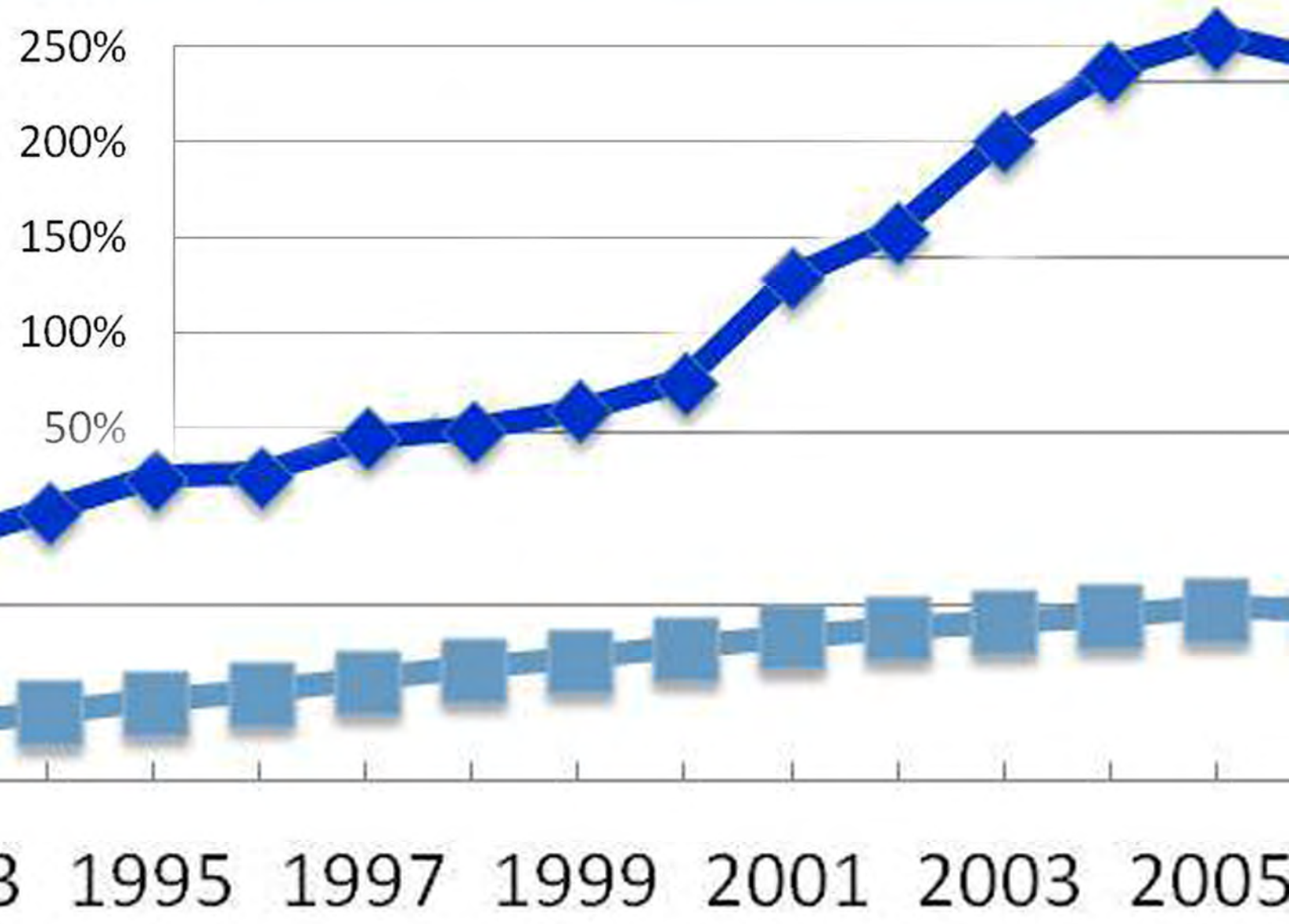
Evaluation of Existing Transit System



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Section 3

Evaluation of Existing Transit System

Section 3 includes an overview of the existing transit system and is divided into four main components:

- Existing service - A description of those services offered by BCT as well as those transit services that interact with and impact BCT's transit services.
- Trend analysis - Comparison of BCT's performance over time.
- Peer analysis - Comparison of BCT's performance to other similar transit agencies' performance.
- Organization and governmental assessment – Examination of BCT's staffing structure and levels as compared to other transit agencies' staffing levels.

EXISTING SERVICE

Included under existing service are those services offered by BCT: fixed-route services, Community Bus service, and paratransit service. It also includes a description of services offered by other providers that impact and interact with BCT.

FIXED-ROUTE SERVICE

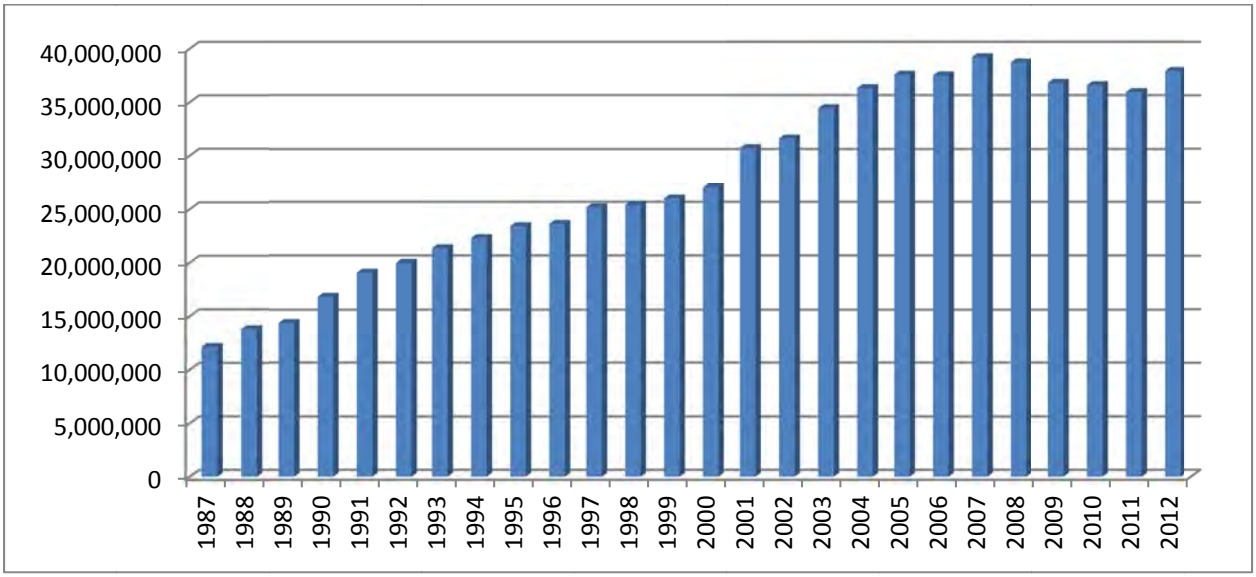
BCT provides public transportation services in Broward County. Fixed-route bus services include 42 weekday routes, 30 Saturday routes, and 28 Sunday routes providing 13.7 million miles of service annually. Fixed routes provide connections to the community's multimodal transportation network as well as to system-wide connections at four transfer terminals: Broward Central Terminal (downtown Fort Lauderdale), West Regional Terminal (Plantation), Lauderhill Mall Transfer Facility (Lauderhill), and Northeast Transit Center (Pompano Beach). Major transfer locations can be found at Miramar Town Center, Golden glades, Aventura Mall, Young Circle, Fort Lauderdale – Hollywood International Airport Tri-Rail, Sawgrass Mills Mall, Galt Ocean Mile, and Pompano Citi Center.

The standard one-way fare on BCT is $1.75. An unlimited daily pass is $4, an unlimited 7-Day pass is $16, a 10-Ride pass is $16, and a 31-Day unlimited pass is $58. BCT provided 37,917,737 passenger trips in FY 2012. Historical ridership data from the National Transit Database (NTD) are shown in Figure 3-1. Ridership has grown steadily since 1987, with significant growth occurring since 2000. Figure 3-2 depicts a comparison of the percent change in ridership and population since 1987. As shown in the figure, BCT ridership has grown as a rate that significantly outpaces population growth during the same time period.

In addition to regular fixed-route bus services, BCT also operates Breeze and express service, coordinates Community Bus service, and provides paratransit service. Map 3-1 displays BCT's Breeze, fixed-route local, express, and Community Bus network. Breeze serves limited stops along the route at major intersections only, with headways of 30 minutes during morning and afternoon peak travel hours.

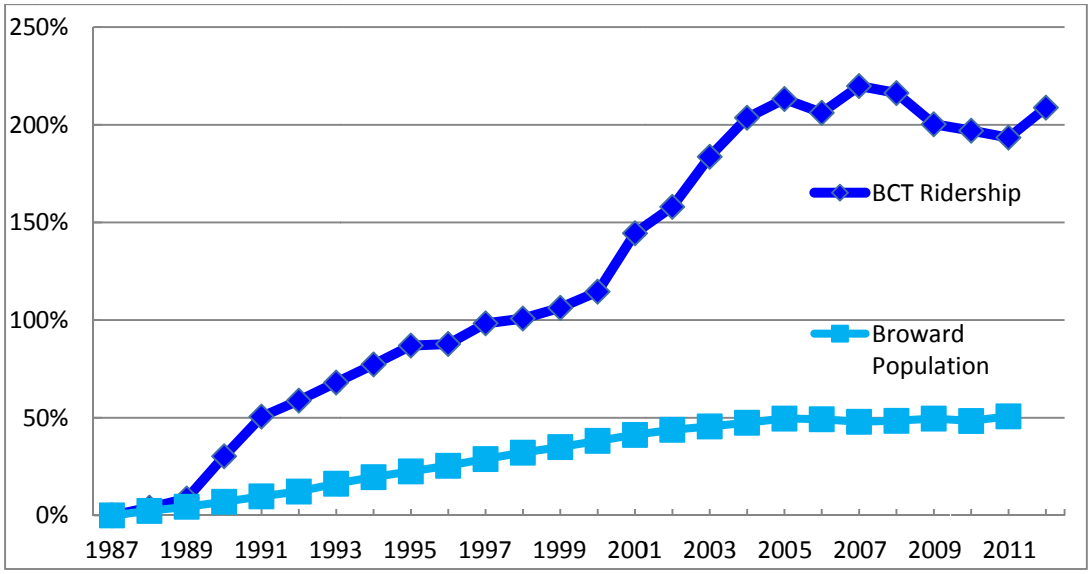
Express bus service travels along the major interstate highways to downtown Fort Lauderdale and Miami on weekdays during morning and afternoon peak travel hours. Free commuter park-and-ride locations are available for express bus riders.

Figure 3-1
BCT Fixed-Route Bus Historical Ridership Data (1987–2012)



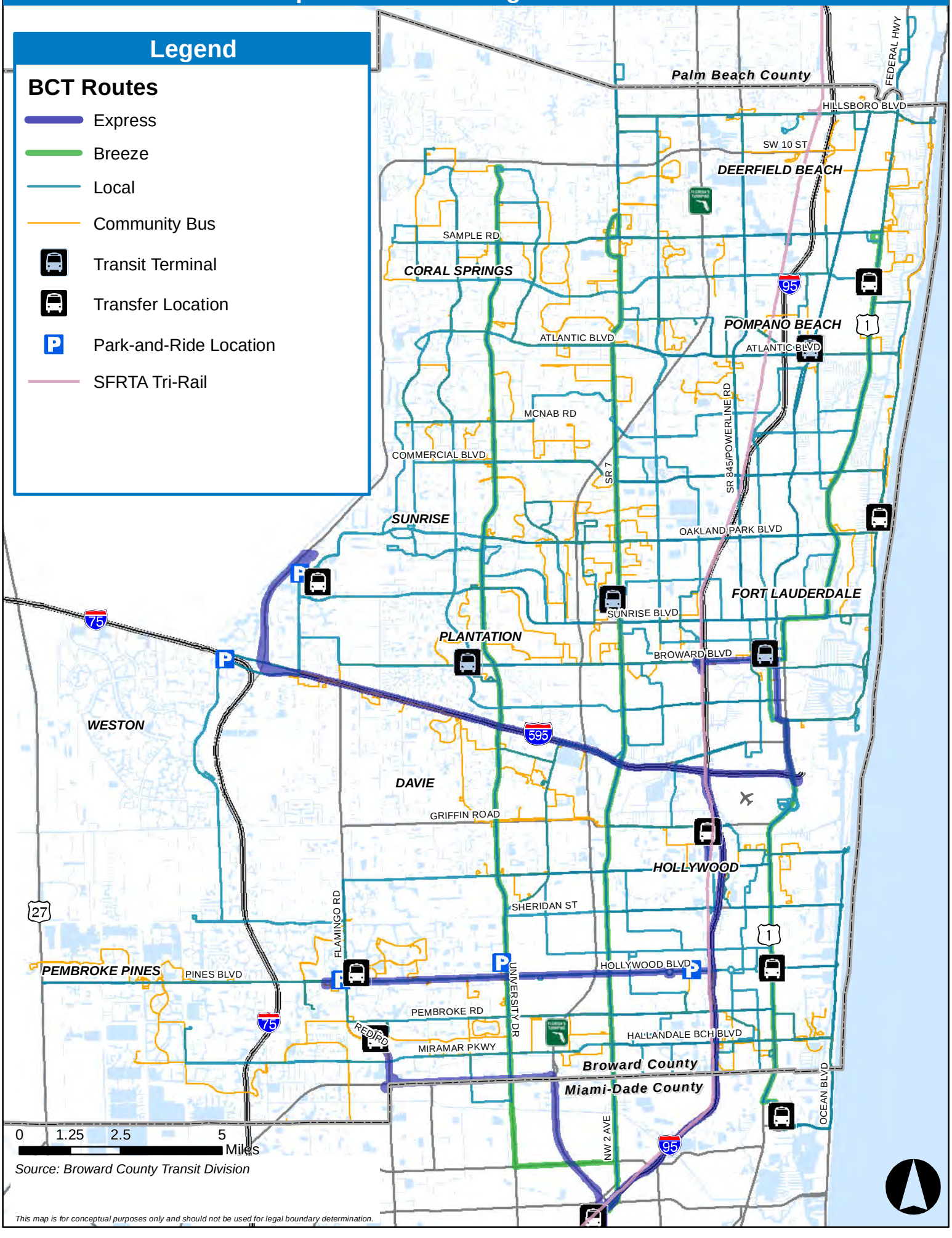
Source: National Transit Database

Figure 3-2
BCT Ridership and Broward County Population Growth (1987–2012)



Source: Broward County Transit Division

Map 3-1: BCT Existing Transit Service



Source: Broward County Transit Division

This map is for conceptual purposes only and should not be used for legal boundary determination.

As of April 2013, BCT services cover an area of approximately 410 square miles with a total active fleet of 320 fixed-route buses, 76 community buses, and 238 paratransit vehicles in contracted service. Table 3-1 outlines service characteristics as of the first quarter of 2013 and FY 2012 ridership information for BCT's fixed-route local bus, Breeze, and express bus services by route.

BCT also provides links to the transit systems in Miami-Dade and Palm Beach counties and to Tri-Rail commuter rail service. BCT Routes 10 and 18 connect with Palm Tran in Palm Beach County. Routes 1, 2, 18, 28, US 1 Breeze, 441 Breeze, University Breeze, 95 Express—Hollywood, 95 Express—Pembroke Pines, 95 Express—Miramar, 595 Express—Sunrise to Miami/Brickell, and 595 Express—Westgate Square to Miami Civic Center connect to Miami-Dade Transit (MDT) in Miami-Dade County.

BCT does not have a robust and reliable means of tracking transfers among the Southeast Florida agencies. A system-wide Origin-Destination (OD) study conducted in 2010 considered inter-agency transfers as part of the BCT Comprehensive Operations Analysis (COA). This analysis flagged origin or destination information that contained an address outside of Broward County. In an analysis of district-to-district flows, the OD study found that transfers between Broward County and Palm Beach County accounted for 0.9 percent of total trips. Transfers between Broward County and Miami-Dade County occurred at a slightly higher rate—4.5 percent of total trips. Additionally, the on-board survey conducted as part of the 2014–2023 TDP asks questions about inter-agency transfers.

Table 3-1
BCT Fixed-Route Bus Operating Characteristics (2013)

Route	Route Name	FY 2012 Passenger Trips	Days and Hours of Operation		Frequency
1	Aventura Mall to Broward Central Terminal via US 1	2,445,919	Weekday	5:05 am - 12:00 am	15 min
			Saturday	5:15 am - 12:00 am	20 min
			Sunday	6:45 am - 10:00 pm	
2	207th Street to Westview Drive via University Drive	2,042,512	Weekday	5:00 am - 12:25 am	20 min peak / 30 min off-peak
			Saturday	5:20 am - 12:20 am	30 min
			Sunday	7:55 am - 8:50 pm	60 min
4	Hallandale Beach Boulevard to Fort Lauderdale/Hollywood Airport Tri-Rail Station via A1A	327,244	Weekday	5:15 am - 10:20 pm	45 min
			Saturday	6:00 am - 9:35 pm	
			Sunday	8:15 am - 8:50 pm	
5	Pembroke Lakes Mall to Hallandale Beach City Hall via Pembroke Road	492,626	Weekday	6:00 am - 10:15 pm	30 min peak / 45 min off-peak
			Saturday	7:00 am - 9:50 pm	60 min
			Sunday	8:00 am - 8:50 pm	
6	County Line Road & Dixie Highway to Broward Central Terminal	637,018	Weekday	5:15 am - 10:55 pm	30 min
			Saturday	5:20 am - 10:55 pm	60 min
			Sunday	8:20 am - 9:05 pm	

Table 3-1 (Continued)

BCT Fixed-Route Bus Operating Characteristics (2013)

Route	Route Name	FY 2012 Passenger Trips	Days and Hours of Operation		Frequency
7	US 27 & Pines Boulevard to Young Circle via Hollywood/Pines Boulevard	1,452,907	Weekday	5:00 am - 11:20 pm	20 min
			Saturday	5:00 am - 11:15 pm	30 min
			Sunday	8:45 am - 9:28 pm	
9	Young Circle to Broward Central Terminal	628,633	Weekday	5:30 am - 10:15 pm	45 min
			Saturday	5:50 am - 10:20 pm	60 min
			Sunday	8:30 am - 8:10 pm	
10	Broward Central Terminal to Camino Real and Dixie Highway via US 1	1,289,047	Weekday	5:21 am - 11:37 pm	30 min
			Saturday	5:10 am - 11:10 pm	
			Sunday	8:20 am - 8:45 pm	40 min
11	Broward Central Terminal to Copans Road & US 1; Broward Central Terminal to Commercial Boulevard & Highway 441	1,030,395	Weekday	5:00 am - 11:15 pm	30 min
			Saturday	5:00 am - 11:15 pm	40 min
			Sunday	7:00 am - 9:15 pm	45 min
12	onal Terminal to North Beach Park via Sheri	582,411	Weekday	5:20 am - 8:04 pm	45 min
			Saturday	6:00 am - 8:13 pm	60 min
			Sunday	10:00 am - 7:41 pm	
14	Broward Central Terminal - Oakland Park Boulevard - McNab Road - Copans Road - Hillsboro Boulevard	1,146,794	Weekday	5:00 am - 10:51 pm	20 min peak / 30 min off-peak
			Saturday	5:30 am - 10:50 pm	40 min
			Sunday	9:00 am - 7:55 pm	60 min
15	Griffin Road to County Line Road—Fort Lauderdale/Hollywood Airport Tri-Rail Station	43,278	Weekday	6:00 am - 10:00 am / 3:00 pm - 7:00 pm	60 min
16	Pembroke Lakes Mall to Dania Beach City Hall	299,156	Monday - Saturday	6:00 am - 8:50 pm	30 min peak / 60 min off-peak
18	Golden Glades Park-and-Ride to Sandalfoot Cove Boulevard & Highway 441	4,779,008	Weekday	4:40 am - 12:35 am	15 min
			Saturday	5:00 am - 12:30 am	20 min
			Sunday	6:00 am - 11:01 pm	30 min
20	Broward Central Terminal to North Broward Hospital	364,831	Weekday	5:40 am - 9:50 pm	45 min
			Saturday	6:00 am - 8:50 pm	60 min
			Sunday	10:00 am - 7:45 pm	
22	Sawgrass Mills to Broward Central Terminal via Broward Boulevard	1,410,155	Weekday	5:00 am - 11:55 pm	15 min
			Saturday	5:25 am - 11:35 pm	30 min
			Sunday	8:10 am - 9:50 pm	
23	Pembroke Lakes Mall to Sawgrass Mills	77,151	Weekday	6:30 am - 10:20 am / 3:30 pm - 7:20 pm	60 min
28	Memorial Hospital Miramar to Aventura Mall	1,478,451	Weekday	5:10 am - 11:40 pm	20 min peak / 30 min off-peak
			Saturday	6:00 am - 11:40 pm	30 min
			Sunday	9:00 am - 8:30 pm	45 min
30	West Regional Terminal to Broward Central Terminal via Peters Road/Davie Boulevard	773,914	Weekday	5:30 am - 10:35 pm	20 min
			Saturday	6:00 am - 10:35 pm	30 min
			Sunday	9:30 am - 7:05 pm	45 min
31	Broward Central Terminal - BCC North Campus - Hillsboro Boulevard & Lyons Road	1,121,488	Weekday	5:05 am - 10:55 pm	20 min peak / 30 min off-peak
			Saturday	5:35 am - 10:55 pm	45 min
			Sunday	9:00 am - 8:55 pm	

Table 3-1 (Continued)

BCT Fixed-Route Bus Operating Characteristics (2013)

Route	Route Name	FY 2012 Passenger Trips	Days and Hours of Operation		Frequency
34	Sample Road & Coral Ridge Drive to Sample Road & US 1	1,052,079	Weekday	5:00 am - 10:45 pm	20 min peak / 30 min off-peak
			Saturday	5:40 am - 9:45 pm	40 min
			Sunday	7:55 am - 7:45 pm	60 min
36	Sawgrass Mills - Galt Ocean Mile via Sunrise Boulevard	1,818,214	Weekday	5:10 am - 12:00 am	20 min
			Saturday	5:40 am - 12:00 am	30 min
			Sunday	7:20 am - 9:00 pm	
40	Lauderhill Mall to Galleria Mall via Sistrunk Boulevard/17 Street Causeway/A1A	1,284,104	Weekday	5:30 am - 11:25 pm	20 min peak / 30 min off-peak
			Saturday	5:30 am - 11:00 pm	30 min
			Sunday	7:40 am - 8:05 pm	40 min
42	Atlantic Boulevard & Coral Ridge Drive to Atlantic Boulevard & A1A	719,800	Weekday	5:20 am - 11:00 pm	30 min
			Saturday	5:40 am - 10:15 pm	60 min
			Sunday	8:45 am - 8:20 pm	
48	US 441 to A1A via Hillsboro Boulevard	212,397	Weekday	5:40 am - 8:57 pm	45 min
			Saturday	6:15 am - 8:57 pm	
50	Broward Central Terminal - Sample Road & Dixie Highway - Deerfield Beach/A1A	1,401,433	Weekday	5:20 am - 10:58 pm	20 min peak / 30 min off-peak
			Saturday	5:30 am - 11:00 pm	45 min
			Sunday	7:45 am - 8:55 pm	
55	Hiatus Road to A1A via Commercial Boulevard	817,438	Weekday	5:05 am - 9:50 pm	30 min
			Saturday	6:00 am - 9:30 pm	45 min
60	Broward Central Terminal to Highway 441 & NW 15th Street via Andrews Avenue and MLK Boulevard/Coconut Creek Pkwy	1,325,645	Weekday	5:26 am - 10:52 pm	20 min peak / 30 min off-peak
			Saturday	5:30 am - 11:11 pm	30 min
			Sunday	9:05 am - 7:58 pm	45 min
62	Westview Drive & University Drive to NE 62 Street & US 1	692,797	Weekday	5:00 am - 9:41 pm	40 min
			Saturday	6:20 am - 8:11 pm	60 min
			Sunday	8:20 am - 8:05 pm	
72	Sawgrass Mills to Galt Ocean Mile & A1A via Oakland Park Boulevard	2,695,643	Weekday	5:00 am - 12:35 am	15 min
			Saturday	5:35 am - 12:35 am	20 min
			Sunday	8:10 am - 9:55 pm	30 min
81	Broward Central Terminal - Lauderhill Mall - NW 36 Street & NW 43 Avenue	1,394,493	Weekday	5:10 am - 11:35 pm	20 min peak / 30 min off-peak
			Saturday	5:40 am - 11:35 pm	30 min
			Sunday	8:00 am - 8:55 pm	45 min
83	Coral Ridge Drive & Sample Road to Pompano City Centre via Royal Palm Boulevard/Copans Road	381,313	Weekday	5:40 am - 9:25 pm	30 min peak / 40 min off-peak
			Saturday	6:20 am - 9:05 pm	60 min
			Sunday	9:00 am - 7:45 pm	50 min
60	Broward Central Terminal to Highway 441 & NW 15th Street via Andrews Avenue and MLK Boulevard/Coconut Creek Pkwy	1,325,645	Weekday	5:26 am - 10:52 pm	20 min peak / 30 min off-peak
			Saturday	5:30 am - 11:11 pm	30 min
			Sunday	9:05 am - 7:58 pm	45 min
62	Westview Drive & University Drive to NE 62 Street & US 1	692,797	Weekday	5:00 am - 9:41 pm	40 min
			Saturday	6:20 am - 8:11 pm	60 min
			Sunday	8:20 am - 8:05 pm	

Table 3-1 (Continued)

BCT Fixed-Route Bus Operating Characteristics (2013)

Route	Route Name	FY 2012 Passenger Trips	Days and Hours of Operation		Frequency
72	Sawgrass Mills to Galt Ocean Mile & A1A via Oakland Park Boulevard	2,695,643	Weekday	5:00 am - 12:35 am	15 min
			Saturday	5:35 am - 12:35 am	20 min
			Sunday	8:10 am - 9:55 pm	30 min
81	Broward Central Terminal - Lauderhill Mall - NW 36 Street & NW 43 Avenue	1,394,493	Weekday	5:10 am - 11:35 pm	20 min peak / 30 min off-peak
			Saturday	5:40 am - 11:35 pm	30 min
			Sunday	8:00 am - 8:55 pm	45 min
83	Coral Ridge Drive & Sample Road to Pompano City Centre via Royal Palm Boulevard/Copans Road	381,313	Weekday	5:40 am - 9:25 pm	30 min peak / 40 min off-peak
			Saturday	6:20 am - 9:05 pm	60 min
			Sunday	9:00 am - 7:45 pm	50 min
88	West Regional Terminal to Holmberg Road & Coral Ridge Drive via Pine Island Road/Coral Springs Drive	247,506	Weekday	6:00 am - 8:45 pm	30 min peak / 60 min off-peak
101	US 1 Breeze	272,581	Weekday	6:00 am - 9:26 am / 3:50 pm - 7:23 pm	30 min
102	University Breeze	269,907	Weekday	5:30 am - 9:21 am / 3:30 pm - 7:25 pm	30 min
107	95 Express—Hollywood	87,114	Weekday	5:30 am - 9:47 am / 3:42 pm - 7:44 pm	30 min
108	95 Express—Miramar	239,225	Weekday	5:45 am - 9:09 am / 3:07 pm - 8:16 pm	15 min
109	95 Express—Pembroke Pines	N/A	Weekday	5:40 am - 9:43 am / 3:38 pm - 7:27 pm	15 min peak/ 30 min off-peak
110	595 Express—Sunrise to Miami/Brickell	9,918	Weekday	5:10 am - 9:23 am / 3:05 pm - 7:56 pm	30 min
112	595 Express—Sunrise to Fort Lauderdale	3,771	Weekday	6:00 am - 9:28 am / 3:30 pm - 7:31 pm	30 min
114	595 Express—Westgate Square to Miami Civic Center	N/A	Weekday	5:20 am - 9:17 am / 3:10 pm - 8:39 pm	30 min
441	441 Breeze	562,045	Weekday	5:07 am - 11:03 am / 2:37 pm - 7:52 pm	30 min

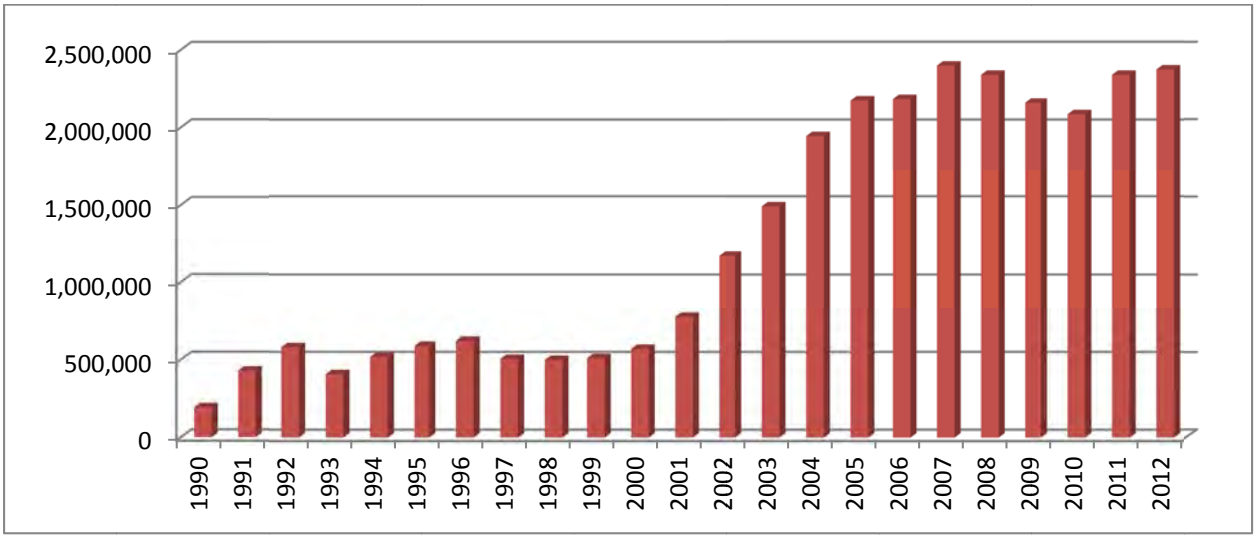
Source: Broward County Transit Division

COMMUNITY BUS SERVICE

Broward County Community Bus (BCCB) service operates in partnership with 18 Broward County municipalities to provide 50 routes. Community buses serve residential areas, freeing larger fixed-route buses to travel along major thoroughfares as part of a regional bus network. BCCB routes provide local circulation to passengers traveling short distances, as well as "first-mile" and "last-mile" connections to BCT fixed routes. BCCB service is designed to increase the number of destinations within city limits that residents can access through public transit. All community buses connect to BCT fixed routes, are wheelchair accessible, and are equipped with bike racks. BCCB provided 2,370,715 passenger trips in FY

2012. Figure 3-3 shows historical ridership trends for BCCB since 1990. Rapid ridership growth has occurred since 2001. Table 3-2 outlines BCCB service characteristics.

Figure 3-3
BCCB Historical Ridership Data (1990-2012)



Source: National Transit Database

Table 3-2
BCCB Operating Characteristics (2013)

Route	Days and Hours of Operation		Frequency	Fare
Coconut Creek North	Monday - Saturday	7:00 am - 6:00 pm	60 min	Free
Coconut Creek South	Monday - Saturday	6:30 am - 6:02 pm	60 min	Free
Coral Springs Blue	Weekday	8:00 am - 5:55 pm	60 min	$0.50
	Saturday	8:00 am - 4:55 pm	60 min	$0.50
	Sunday	12:00 pm - 4:55 pm	60 min	$0.50
Coral Springs Green	Weekday	8:00 am - 5:54 pm	60 min	$0.50
	Saturday	8:00 am - 4:54 pm	60 min	$0.50
	Sunday	12:00 pm - 4:54 pm	60 min	$0.50
Dania Beach East	Monday - Saturday	9:00 am - 5:30 pm	30 min	Free
Dania Beach West	Monday - Saturday	9:00 am - 5:47 pm	60 min	Free
Davie Blue	Weekday	5:50 am - 7:40 pm	45 min	Free
	Saturday	8:00 am - 6:05 pm	45 min	Free
Davie Green	Weekday	7:00 am - 7:54 pm	90 min	Free
	Saturday	8:00 am - 4:45 pm	95 min	Free
Davie SFEC—Tri-Rail Express	Weekday	6:45 am - 8:30 pm	30 min	Free
Deerfield Beach Express I	Weekday	8:00 am - 4:00 pm	60 min	Free
Deerfield Beach Express II	Weekday	8:00 am - 4:00 pm	60 min	Free
Fort Lauderdale Convention Connection	Friday - Monday	9:30 am - 6:30 pm	30 min	$0.50

Table 3-2 (Continued)

BCT Community Bus Operating Characteristics (2013)

Route	Days and Hours of Operation		Frequency	Fare
Fort Lauderdale Courthouse Loop	Weekday	7:30 am - 5:50 pm	20 min	Free
Fort Lauderdale Galt Ocean Mile A	Monday, Wednesday, Friday, Saturday,	8:30 am - 4:30 pm	60 min	Free
Fort Lauderdale Galt Ocean Mile B	Monday, Wednesday, Friday, Saturday,	8:30 am - 4:30 pm	60 min	Free
Fort Lauderdale Las Olas/Beaches	Friday - Monday	9:30 am - 6:30 pm	30 min	$0.50
Fort Lauderdale Neighborhood Link	Weekday	8:30 am - 2:45 pm	95 min	Free
Hallandale Route 1	Monday - Saturday	7:00 am - 7:00 pm	60 min	Free
Hallandale Route 2	Monday - Saturday	7:00 am - 7:00 pm	60 min	Free
Hallandale Route 3	Monday - Saturday	7:00 am - 7:00 pm	60 min	Free
Hillsboro Beach	Weekday	9:00 am - 4:50 pm	60 min	Free
Lauderdale Lakes East/West	Weekday	9:00 am - 5:53 pm	60 min	Free
Lauderdale Lakes North/South	Weekday	9:00 am -5:55 pm	60 min	Free
Lauderdale-By-the-Sea Pelican Hopper	Weekday	9:00 am - 5:25 pm	60 min	Free
	Saturday	10:00 am - 7:55 pm	45 min	Free
	Sunday	8:00 am - 6:00 pm	30 min	Free
Lauderhill Route 1	Weekday	6:30 am - 6:30 pm	60 min	Free
Lauderhill Route 2	Weekday	6:30 am - 6:30 pm	30 min	Free
Lauderhill Route 3	Weekday	6:30 am - 6:30 pm	60 min	Free
Lauderhill Route 4	Weekday	6:30 am - 6:30 pm	60 min	Free
Lauderhill Route 5	Weekday	8:30 am - 8:30 pm	60 min	Free
Lighthouse Point	Weekday	9:00 am - 3:25 pm	60 min	Free
Margate Route A	Weekday	7:30 am - 4:30 pm	60 min	$0.75
Margate Route C	Weekday	7:30 am - 4:30 pm	60 min	$0.75
Margate Route D	Weekday	7:20 am - 4:20 pm	60 min	$0.75
Miramar Green	Weekday	6:15 am - 6:15 pm	80 min	Free
Miramar Orange	Weekday	6:30 am - 6:26 pm	90 min	Free
Miramar Red	Weekday	6:30 am - 6:30 pm	80 min	Free
Miramar Yellow	Weekday	7:00 am - 7:00 pm	72 min	Free
Pembroke Pines Blue West	Tuesday, Wednesday, Friday	9:00 am - 3:15 pm	75 min	Free
Pembroke Pines Blue East	Tuesday, Wednesday, Friday	8:00 am - 3:25 pm	90 min	Free
Pembroke Pines Gold	Monday - Saturday	7:00 am - 7:28 pm	30/60 min	Free
Pembroke Pines Green	Monday - Saturday	7:38 am - 7:37 pm	60 min	Free
Plantation Routes A	Weekday	7:10 am - 7:45 pm	45 min	Free
	Saturday	8:10 am - 5:00 pm	90 min	Free
Plantation Route B	Weekday	7:00 am - 7:35 pm	45 min	Free
	Saturday	8:00 am - 4:50 pm	90 min	Free
Pompano Beach Blue	Weekday	8:45 am - 4:42 pm	60 min	Free
Pompano Beach Green	Weekday	9:00 am - 4:52 pm	60 min	Free
Pompano Beach Red	Weekday	9:05 am - 5:02 pm	60 min	Free
Pompano Beach Orange	Weekday	9:00 am - 4:57 pm	60 min	Free
Sunrise Lakes	Weekday	6:30 am - 7:10 pm	45 min	Free
Tamarac Red	Weekday	7:00 am - 6:55 pm	60 min	$0.50
Tamarac Yellow	Tuesday & Thursday	9:00 am - 4:56 pm	60 min	$0.50

Source: Broward County Transit Division

TOPS

BCT also offers TOPS (Transportation Options) complementary paratransit service for qualified individuals with disabilities. The service is for persons with physical, cognitive, emotional, visual, or other disabilities that functionally prevent them from using the BCT fixed-route bus system. TOPS service is available during BCT's fixed-route hours of service, and reservations must be made in advance. The estimated travel time of a TOPS trip is similar to the same trip, including transfers, if made by a fixed-route bus. The one-way fare per trip is $3.50. Additionally, any registered TOPS rider with current eligibility may use the fixed-route service free of charge. In 2011, 685,998 passenger trips were made on TOPS.

OTHER TRANSIT OPTIONS

This section includes information from several other transit options in the region. These options include the following:

- South Florida Regional Transportation Authority (SFRTA),
- MDT,
- Metrobus,
- Metrorail,
- Metromover,
- Special Transportation Service (STS),
- Palm Tran, and
- Private Transportation Service Providers.

South Florida Regional Transportation Authority

SFRTA operates Tri-Rail commuter rail services in Miami-Dade, Broward, and Palm Beach counties. The rail line goes as far south as Miami International Airport and as far north as Mangonia Park in Palm Beach County. Service operates from 4:00 AM until 11:35 PM with a peak frequency of approximately 30 minutes. Service runs every 120 minutes on weekends and holidays. The Tri-Rail system comprises six zones. Weekday fare is determined by the number of zones through which a passenger travels. Fares range from $2.50 to $6.90 per one-way trip and $4.40 to $11.55 per round trip. SFRTA also operates shuttle bus services from many of its stations to areas surrounding the rail stations and the airport. These shuttle buses offer free and convenient service for Tri-Rail riders.

There are seven rail stations within Broward County, and BCT serves each station. Table 3-3 describes the location of Tri-Rail stations in Broward County and the routes serving them. Historical ridership data

for Tri-Rail and SFRTA shuttle bus services can be found in Figures 3-4 and 3-5. Map 3-2 shows Tri-Rail and MDT Metrorail service in Southeast Florida.

Table 3-3

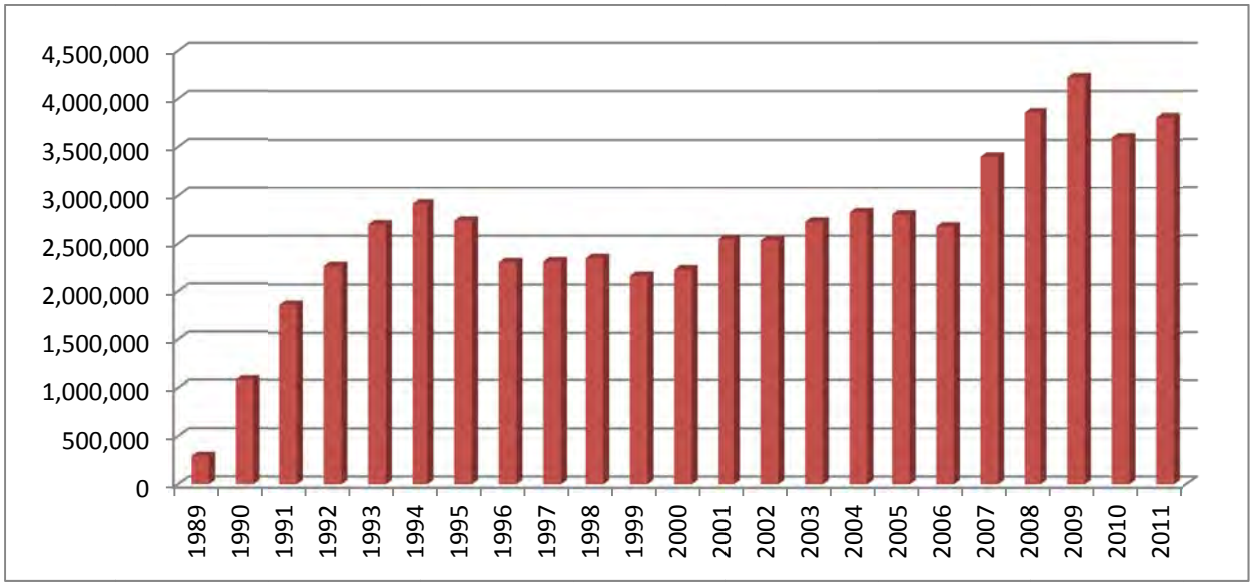
Broward County Tri-Rail Stations

Tri-Rail Station	Street Address	SFRTA Shuttle Bus	BCT	BCCB	MDT
Deerfield Beach Station	1300 W Hillsboro Boulevard	DB1, DB2	48	Deerfield Beach Express II	-
Pompano Beach Station	3491 NW 8th Avenue	PB1	34	-	-
Cypress Creek Station	6151 N Andrews Way	CC1, CC2, CC3	60, 62	-	-
Fort Lauderdale Station	200 SW 21st Terrace	FL1, FL2, FL3	9, 22, 81, 595 Express–Sunrise to Fort Lauderdale	TMA-Fort Lauderdale Neighborhood Link	95 Express
Fort Lauderdale/ Hollywood Intl. Airport at Dania Beach Station	500 Gulf Stream Way	FLA1, SFEC	4, 6, 15, 16, 595 Express–Sunrise to Miami/Brickell	Dania Beach East West	-
Sheridan Street Station	2900 Sheridan Street	SS1	12	-	95 Express
Hollywood Station	3001 Hollywood Boulevard	-	7, 95 Express–Hollywood	Hallandale Beach 3	-

Source: Broward County Transit Division, SFRTA, and Miami-Dade Transit

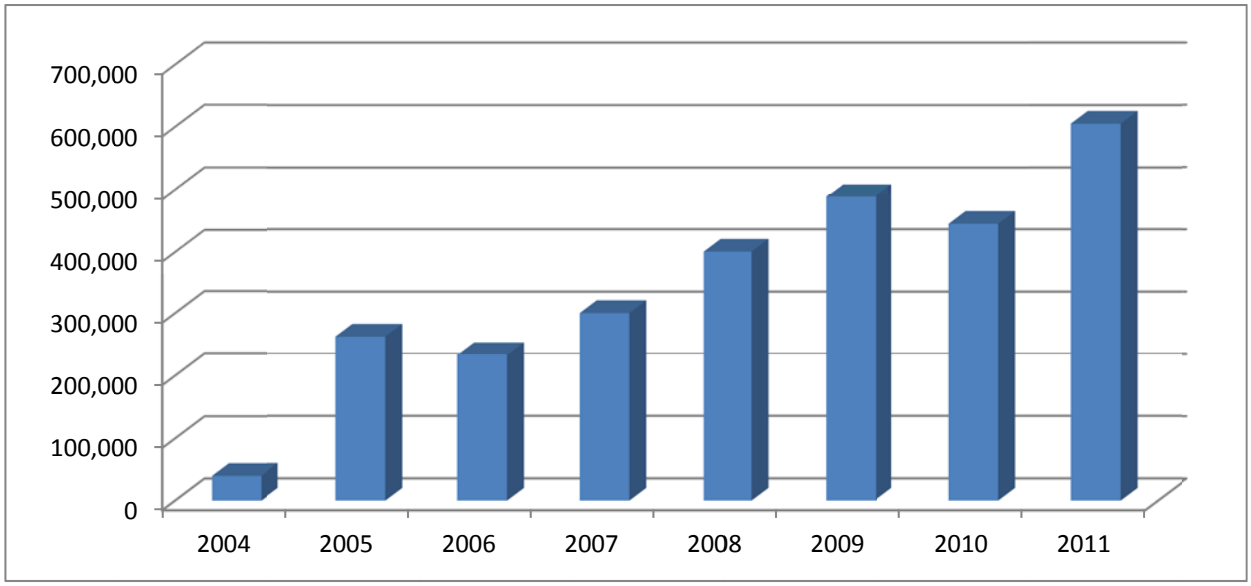
Figure 3-4

SFRTA Tri-Rail Historical Ridership Data (1989–2011)



Source: National Transit Database

Figure 3-5
SFRTA Shuttle Bus Historical Ridership Data (2004–2011)



Source: National Transit Database

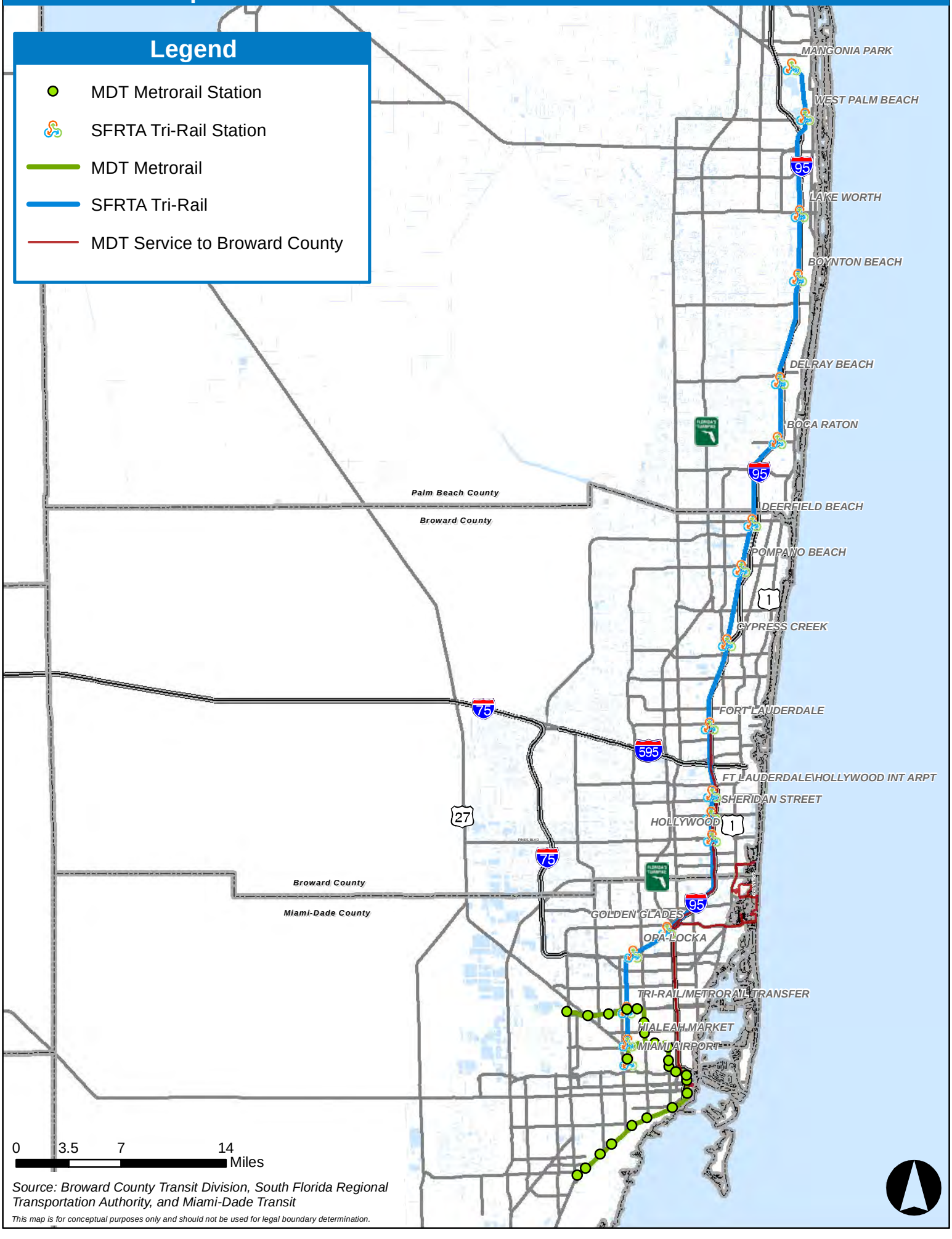
Miami-Dade Transit

MDT, a department of Miami-Dade County government, is the largest transit agency in Florida. It operates fixed-route bus service known as Metrobus; a 24.4-mile elevated heavy rail system known as Metrorail; a 4.4-mile, elevated, electric people-mover system known as Metromover; and paratransit service called STS. MDT's regular fixed-route fare is $2, and monthly passes are $100. In 2011, MDT provided a system-wide total of 103,025,698 passenger trips.

Metrobus

Metrobus offers countywide service from Miami Beach to West Miami-Dade and from the Middle Keys to Broward Boulevard in Broward County. All buses are wheelchair accessible. In addition, Metrobus connects with Metrorail and Metromover. More than 90 Metrobus routes travel approximately 29 million miles per year using 800+ buses. Several bus routes operate 24 hours per day and 3 routes provide overnight service between 11:00 PM and 6:00 AM. MDT Route 105 E and Route 95 Dade-Broward Express travel into Broward County, as shown in Map 3-2. Figure 3-6 shows historical ridership data for MDT Metrobus services.

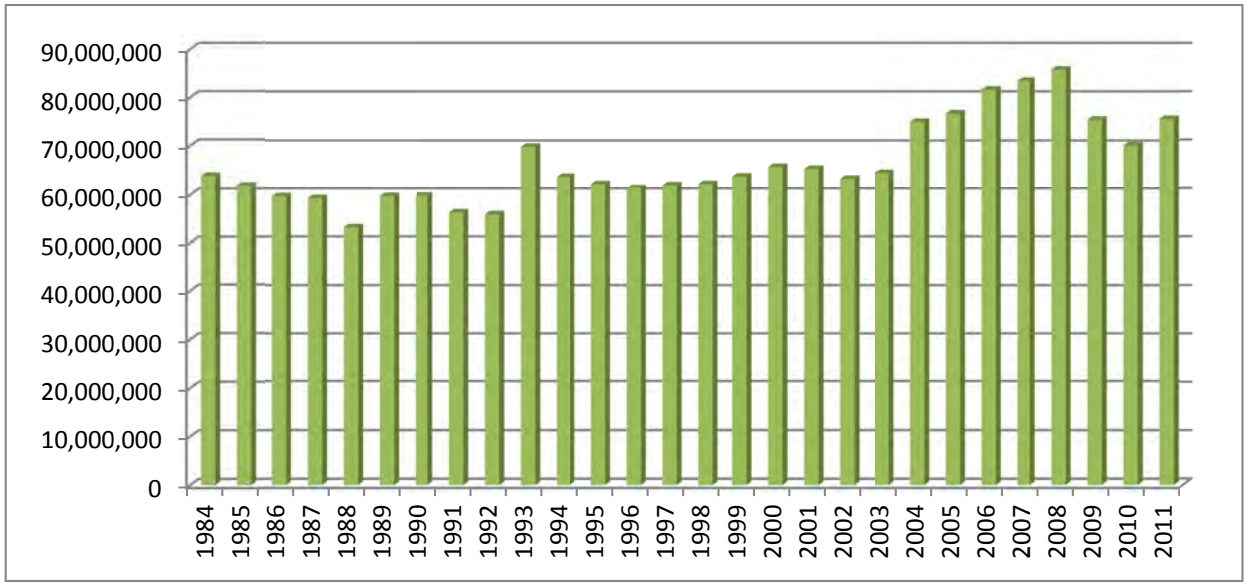
Map 3-2: SFRTA Tri-Rail and Miami-Dade Transit Service



Source: Broward County Transit Division, South Florida Regional Transportation Authority, and Miami-Dade Transit

This map is for conceptual purposes only and should not be used for legal boundary determination.

Figure 3-6
MDT Metrobus Historical Ridership Data (1984–2011)



Source: National Transit Database

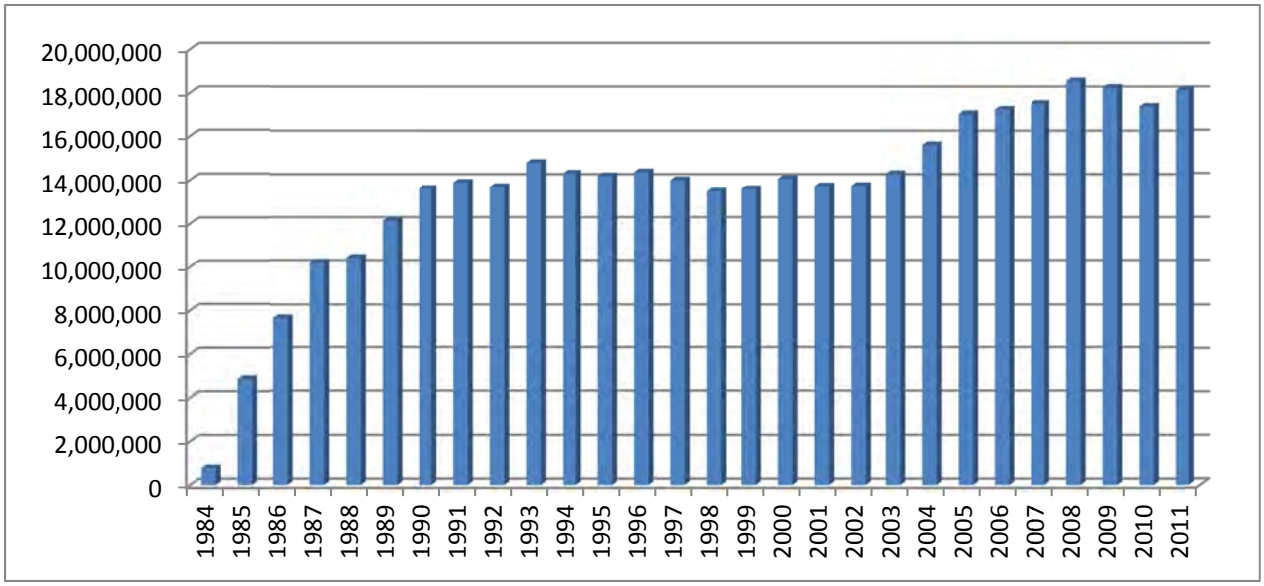
Metrorail

Miami-Dade County's 24.4-mile elevated rail system runs from Kendall through South Miami, Coral Gables, and downtown Miami to the Civic Center/Jackson Memorial Hospital area, and to Brownsville, Liberty City, Hialeah, and Medley in northwest Miami-Dade, with connections to Broward and Palm Beach counties at the Tri-Rail/Metrorail transfer station. Metrorail trains run from Dadeland South Metrorail station to either the new MIA Metrorail station (Orange Line) or the Palmetto Metrorail station (Green Line). The 23 accessible Metrorail stations are about one mile apart, providing easy access for bus riders, pedestrians, and passengers dropped off and picked up. Metrorail operates from 5:00 AM to 12:00 midnight seven days per week. Trains arrive every 10 minutes during weekday peak hours, every 15 minutes at midday, every 30 minutes from about 7:30 PM until closing, and every 30 minutes on weekends. Figure 3-7 presents historical ridership data for Metrorail.

Metromover

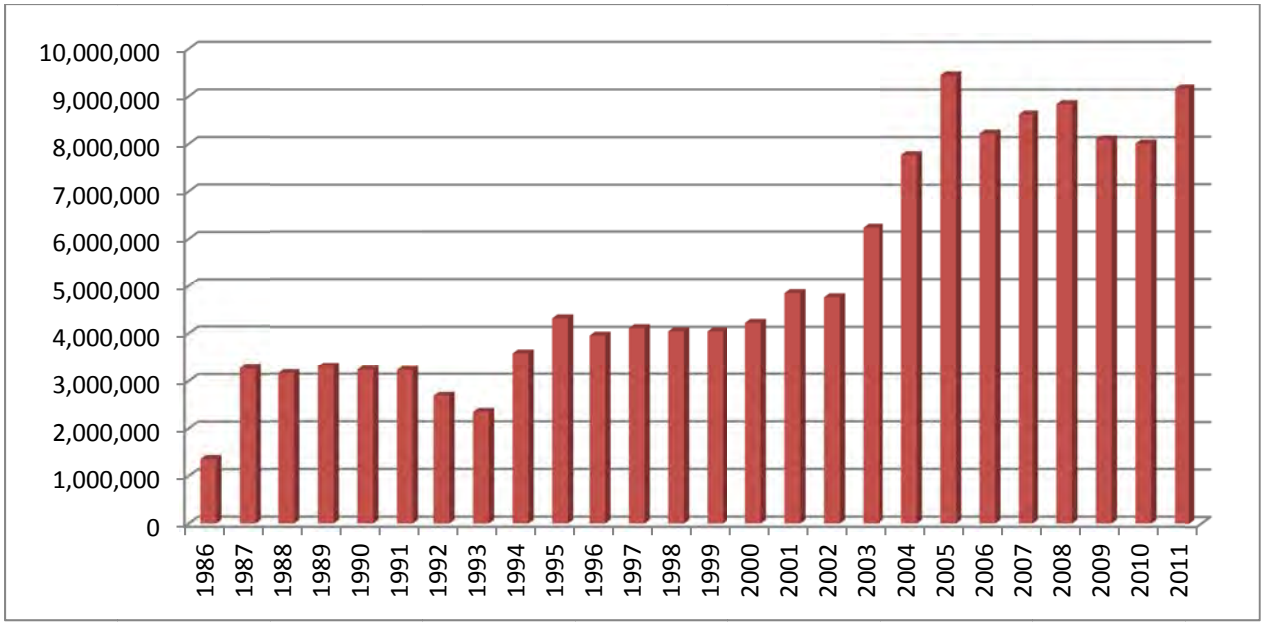
Metromover is a 4.4-mile elevated electric people-mover system. The Metromover inner loop and outer loop to Omni and Brickell operate in the downtown Miami area. Trains run from 5:00 AM to 12:00 midnight seven days per week. Trains arrive frequently, and all fares are free on the Metromover. Figure 3-8 shows historical ridership data for Metromover.

Figure 3-7
MDT Metrorail Historical Ridership Data (1984–2011)



Source: National Transit Database

Figure 3-8
MDT Metromover Historical Ridership Data (1986–2011)



Source: National Transit Database

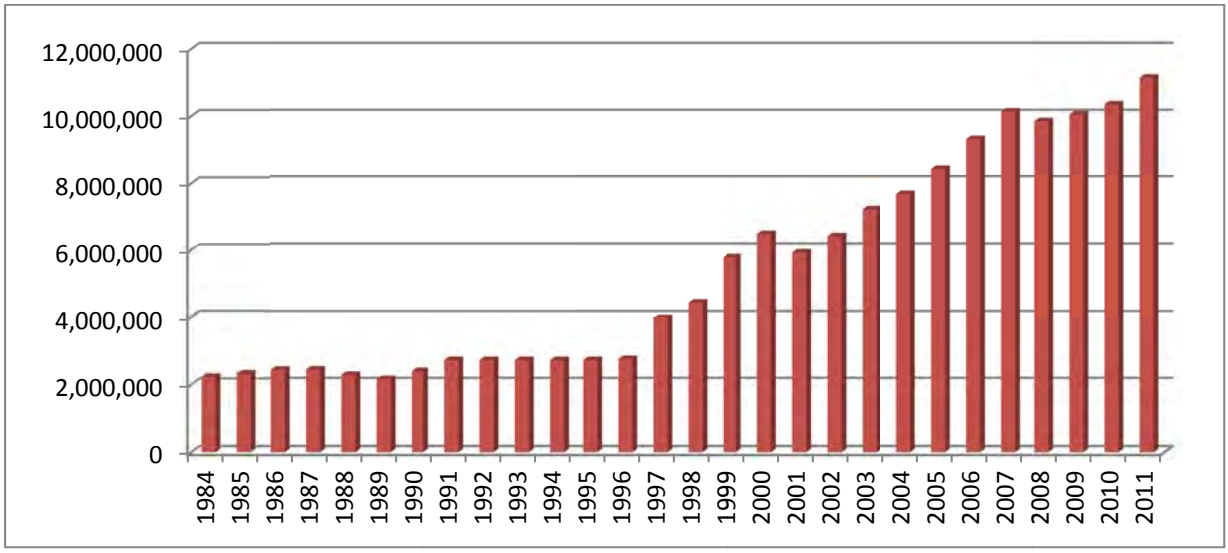
Special Transportation Service

STS is MDT's complementary paratransit service. Established in 1976 to meet the special transportation needs of Miami-Dade County's citizens with disabilities, STS is available to anyone deemed eligible. Privately-contracted sedans, vans, and vans equipped with lifts provide door-to-door service for eligible customers. Service is offered with no restrictions on trip purpose. Passengers made 1,593,806 trips on STS in 2011.

Palm Tran

Palm Tran, a department of Palm Beach County, currently operates 34 fixed routes. Palm Tran runs seven days per week and provides more than 10 million trips per year. Generally speaking, weekday peak service runs every 30 minutes, and off-peak and weekend service runs every 60 minutes. The majority of service is concentrated in the eastern portions of the county as far north as Jupiter and as far south as Boca Raton. Three routes (1, 91, and 92) provide connections with BCT Routes 10 and 18. Palm Tran Route 92 travels into Broward County. The standard one-way fare on Palm Tran buses is $1.50, 1-Day passes are $4, and 31-Day passes are $60. Historical ridership data for Palm Tran are shown in Figure 3-9.

Figure 3-9
Palm Tran Fixed-Route Bus Historical Ridership Data (1984–2011)



Source: National Transit Database

In addition to its directly-operated service, Palm Tran also serves as the Community Transportation Coordinator (CTC) and provides demand response service known as Palm Tran Connection. Connection is a shared ride, door-to-door paratransit service that provides transportation for residents and visitors in Palm Beach County with disabilities. Connection travels in Palm Beach County from Jupiter to Boca

Raton and from Palm Beach to South Bay. The fare is $3 for each one-way trip. A total of 913,057 paratransit trips were made on Palm Tran Connection in 2011.

Private Transportation Service Providers

This section includes an inventory of existing private transportation service providers in Broward County. Each provider was contacted by email, mail, or telephone to obtain information about its transportation services. A short questionnaire was prepared for each provider to complete. A copy of the questionnaire can be found in Appendix B. Table 3-4 includes information for agencies that completed the questionnaire. Of the 65 service providers contacted, seven returned a completed form. Service providers that did not respond to the questionnaire are listed in Table 3-5.

Table 3-4

Broward County Private Transportation Service Providers: Survey Responses

Name	Address	Type	Service Area	Service Period	Annual Ridership	Regular Fare	Vehicles in Maximum Service	Coordinate with Broward County
City of Deerfield Beach Dept of Senior Services/ Northeast Focal Point Senior Center	227 NW 2nd St, Deerfield Beach, FL 33441	Fixed Route, Demand Response	Northeast Broward County	Weekdays, 8:30 am – 4:30 pm	70,000	Free (donation accepted)	8	Yes
City of Hallandale Beach Human Services Department	750 NW 8th Ave, Hallandale Beach, FL 33009	Fixed Route	Hallandale Beach	Weekdays, 8:00 am – 6:00 pm	44,460	Free	5	Yes
City of Lauderhill	7500 W Oakland Park Blvd, Lauderhill, FL 33313	Fixed Route, Demand Response	Lauderhill	Weekdays, 6:30 am – 8:30 pm	334,100	Free	7	Yes
City of Tamarac Senior Center	6001 Nob Hill Rd, Tamarac, FL 33321	Fixed Route, Demand	Tamarac	Weekdays, 7:00 am – 7:00 pm	88,416	$0.50	9	Yes
Joseph Meyerhoff Senior Center/ Southeast Focal	3081 Taft St, Hollywood, FL 33021	Fixed Route	Dade County Line–Griffin Road	Daily, 8:00 am – 4:00 pm	29,469	Free	4	Yes
Southwest Focal Point Senior Center	301 NW 103rd Ave, Pembroke Pines, FL 33026	Fixed Route, Demand Response	Fixed Route: Pembroke Rd (South), US 27 (West), Taft St (North), University Dr (East); Demand Response: County Line Rd (South), US 27 (West), State Rd 84 (North); US 441 (East)	Fixed Route: Monday - Saturday, 7:00 am – 7:30 pm Demand Response: Weekdays, 8:00 am – 4:00 pm	255,000	Free	28	Yes
Water Taxi	413 SW 3rd Ave, Fort Lauderdale, FL 33315	Water Taxi	Oakland Park Blvd - Hallandale Beach Blvd on Intracoastal, New River to Las Olas Riverfront	Daily, 10:00 am – 12:00 midnight	500,000	20 (1-Day Pass)	13	No

Source: Information collected through questionnaire distributed to each private transportation service provider in Broward County

Table 3-5

Additional Broward County Private Transportation Service Providers

Business Name	Street Address	City
A&B Advance Transportation	4060 Galt Ocean Mile	Fort Lauderdale
A1A Airport & Limousine	1990 NW Boca Raton Blvd	Boca Raton
ABC Limousine	300 S Pine Island Rd	Fort Lauderdale
ACTS – Agency for Community Treatment Services, Inc.	4612 N 56th St	Tampa
Ambassador Taxi Services, Inc.	201 W Sunrise Blvd	Fort Lauderdale
American Coach Lines	3595 NW 110th St	Miami
American Taxi	300 W Sunrise Blvd, #7	Fort Lauderdale
AMT – Allied Medical Transport	5896 Rodman St	Hollywood
Ann Storck Center	1790 SW 43rd Way	Fort Lauderdale
ARC Broward-Achievement and Rehabilitation Center	10250 NW 53rd St	Sunrise
Archways, Inc.	919 NE 13th St	Fort Lauderdale
Austin Hepburn Senior Mini Center	750 NW 8th Ave	Hallandale Beach
B & L Service, Inc. dba Yellow Cab of Fort Lauderdale	PO Box 950	Fort Lauderdale
BARC Housing, Inc.	10250 NW 53rd St	Sunrise
Broward Airport Taxi dba Broward Taxi	2106 N Dixie Hwy	Hollywood
Broward Children's Center, Inc.	200 SE 19th Ave	Pompano Beach
Broward County Paratransit Services	1 N University Dr	Plantation
Cerebral Palsy Adult Home, Inc.	1405 NE 10th St	Dania Beach
City of Margate	6009 NW 10th St	Margate
City of Miramar	6700 Miramar Pkwy	Miramar
City of North Lauderdale	701 SW 71st Ave	North Lauderdale
City of Pembroke Pines	301 NW 103rd Ave	Pembroke Pines
Cordiality Transportation	1500 Weston Rd	Weston
Daniel D Cantor Senior Center	5000 Nob Hill Rd	Sunrise
Douglas Gardens North	705 SW 88th Ave	Pembroke Pines
Fred Lippman Multi-Purpose Center	2030 Polk St	Hollywood
Friendly Checker Cab Company	2223 Pembroke Pines	Hollywood
Go Airport Shuttle (Yellow Airport Limousine Service)	221 W Oakland Park Blvd	Fort Lauderdale
Greyhound	515 NE 3rd St	Fort Lauderdale
Gulf Coast Jewish Family & Community Services	14041 Icot Blvd	Clearwater
Henderson Mental Health /John Aquino	4740 N State Rd	Lauderdale Lakes
Inktel Direct – Tops Reservation Center	13975 NW 58th Ct	Miami Lakes
Intercity Taxi	1255 S Flagler Ave	Pompano Beach
Lucanus Developmental Center	6411 Taft St	Hollywood
Medex Transportation, Inc.	2025 Harding St	Hollywood
Medicaid Subcontracted Transportation Provider – TMS of Brevard, Inc.	13825 Icot Blvd, #613	Clearwater
Miramar Satellite Senior Center	6700 Miramar Pkwy	Miramar
Northeast Focal Point Senior Center	227 NW 2nd St	Deerfield Beach
Northwest Focal Point Senior Center	6009 NW 10th St	Margate
NW Federated Woman's Club	2185 NW 19th St	Fort Lauderdale
Quality Community Services, Inc.	3700 Georgia Ave, #10-C	Palm Beach

Table 3-5 (Continued)
Additional Broward County Private Transportation Service Providers

Business Name	Street Address	City
Rayfield Family Literacy	427 S SR 7	Hollywood
Soref Jewish Community Center	6501 W Sunrise Blvd	Plantation
Southeast Focal Point Senior Center	3081 Taft St	Hollywood
St. Elizabeth Gardens	801 NE 33rd St	Pompano Beach
St. Joseph's Tower	3475 NW 30th St	Lauderdale Lakes
Sun Trolley	305 S Andrews Ave, #710	Fort Lauderdale
Sunrise Community, Inc.	5450 Stirling Rd	Davie
Sunrise Opportunities, Inc.	5450 Stirling Rd	Davie
Super Shuttle	200 NE 2nd St	Fort Lauderdale
Sylvia L. Poitier & Theodora S. Williams Senior Center	2185 NW 19th St	Fort Lauderdale
Tender Loving Care Transportation Services, Inc.	611 NW 31st Ave	Pompano Beach
TMS Management Group, Inc.	13825 Icot Blvd, #613	Clearwater
Total Intervention Early Services	4699 N SR 7	Tamarac
United Cerebral Palsy of Broward County, Inc.	3117 SW 13th Ct	Fort Lauderdale
USA Executive Taxi of South Florida	250 Florida Ave	Fort Lauderdale
USA Transportation	3017 Ravenswood Rd, #103	Fort Lauderdale
Woodhouse, Inc.	1001 NE 3rd Ave	Pompano Beach

Sources: Broward County Transportation Department, Broward MPO, Florida Commission for the Transportation Disadvantaged, Fort Lauderdale-Hollywood International Airport, Aging & Disability Resource Center of Broward County, Greater Fort Lauderdale Convention & Visitors Bureau

TREND ANALYSIS

A trend analysis of critical performance indicators was conducted to examine the performance of BCT and BCCB fixed-route services over time. Data were compiled from the NTD for FY 2008 to 2012 and represent combined figures of Directly Operated (DO) Motorbus and Purchased Transportation (PT) Motorbus. Data from 2012 were provided by BCT for use in the trend analysis. This analysis includes statistics and tables that present selected performance indicators, effectiveness measures, and efficiency measures for the specified time period. Highlights of the trend analysis are presented below, and summary results are provided at the conclusion of this section.

Three categories of indicators were analyzed for the trend analysis:

- *Performance Indicators* – quantity of service supply, passenger and fare revenue generation, and resource input
- *Effectiveness Measures* – extent to which the service is effectively provided
- *Efficiency Measures* – extent to which cost efficiency is achieved

FIXED-ROUTE TREND ANALYSIS

Table 3-6 lists the measures used in the performance trend analysis conducted for BCT and BCCB fixed-route bus services. Highlights of the trend analysis are presented in the remainder of this section.

Table 3-6
Fixed-Route Performance Review Measures for Trend Analysis (2008–2012)

General Performance	Effectiveness	Efficiency
Passenger Trips	Vehicle Miles per Capita	Operating Expense per Capita
Passenger Miles	Passenger Trips per Capita	Operating Expense per Passenger Trip
Vehicle Miles	Passenger Trips per Revenue Mile	Operating Expense per Passenger Mile
Revenue Miles	Passenger Trips per Revenue Hour	Operating Expense per Revenue Mile
Total Operating Expense	Average Age of Fleet	Operating Expense per Revenue Hour
Vehicles Operated in Maximum Service	Average Headway (in minutes)	Farebox Recovery (%)
	Number of Vehicle System Failures	Revenue Miles per Vehicle Mile
	Revenue Miles Between Failures	Revenue Hours per Employee FTE
	Weekday Span of Service (in hours)	Vehicle Miles per Gallon
		Average Fare

Performance Indicators

The performance indicators are used to gauge the overall system operating performance. Table 3-7 and Figures 3-10 through 3-15 present the selected performance indicators from 2008 to 2012 for BCT. The following is a summary of the trends for BCT that are evident from the performance indicators analysis.

- Passenger trips for BCT decreased from 38.7 million in 2008 to 37.9 million in 2012, a decrease of 2.1 percent. At the same time, passenger miles increased from 178.2 million to 180.3 million, an increase of 1.2 percent. Service area population remained relatively constant during this time period.

- Total vehicle miles of service decreased slightly between 2008 and 2012. Similarly, revenue miles of service decreased by 4.0 percent during this time period.

- Total operating expense (in current dollars) decreased slightly, from $99.2 million in 2008 to $97.4 million in 2012, a decrease of 1.8 percent. When removing the effects of inflation, total operating expenses actually decreased by 14.1 percent.

- The total number of vehicles needed to operate peak service increased slightly from 255 in 2008 to 257 in 2012, an increase of 0.8 percent.

Table 3-7

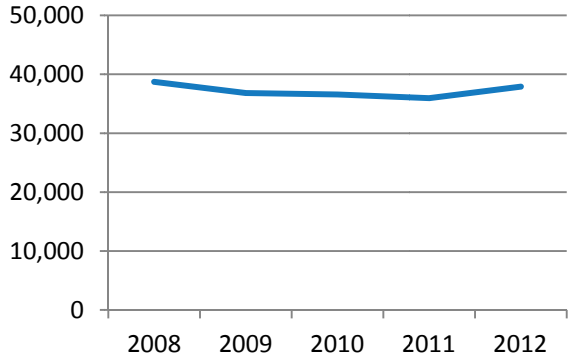
2008–2012 Performance Indicators, BCT Fixed-Route Trend Analysis

General Performance Indicator	2008	2009	2010	2011	2012	% Change (2008-2012)
Service Area Population	1,787,636	1,751,234	1,766,476	1,748,066	1,780,172	-0.4%
Passenger Trips	38,716,000	36,805,000	36,585,000	35,943,000	37,917,735	-2.1%
Passenger Miles	178,201,000	166,672,000	172,113,000	169,764,000	180,294,000	1.2%
Vehicle Miles	15,942,000	15,544,000	15,837,000	15,291,000	15,607,558	-2.1%
Revenue Miles	14,246,000	13,878,000	14,049,000	13,461,000	13,675,110	-4.0%
Total Operating Expense	$99,228,000	$93,434,000	$98,323,000	$100,025,000	$97,432,000	-1.8%
Total Operating Expense (in 2008$)	$99,228,000	$90,267,000	$91,770,000	$90,194,000	$85,269,000	-14.1%
Vehicles Operated in Maximum Service	255	240	249	245	257	0.8%

Notes: Inflation calculated according to changes in Consumer Price Index. Percent change calculations may vary due to rounding.
Source: Integrated National Transit Database Analysis System (INTDAS) component from Florida Transit Information System (FTIS), DO, and PT Motorbus combined statistics

Figure 3-10

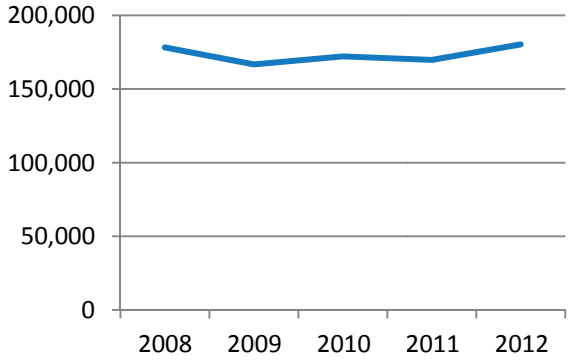
Fixed-Route Passenger Trips (000)



Source: National Transit Database

Figure 3-11

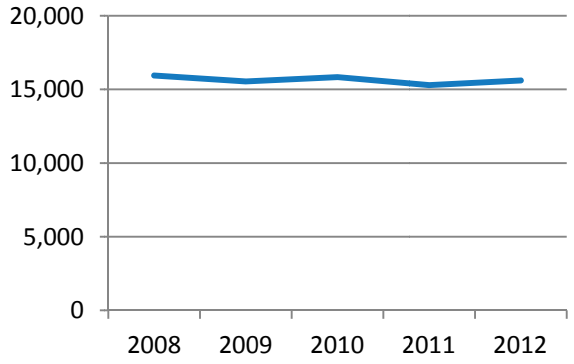
Fixed-Route Passenger Miles (000)



Source: National Transit Database

Figure 3-12

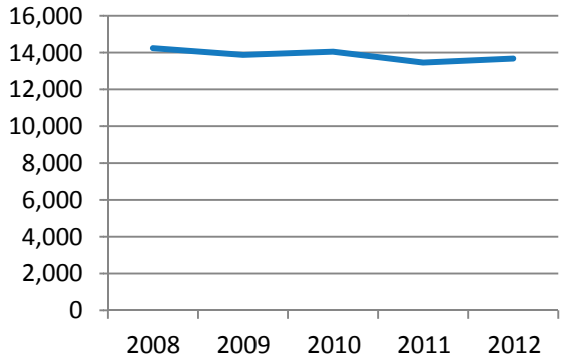
Fixed-Route Vehicle Miles (000)



Source: National Transit Database

Figure 3-13

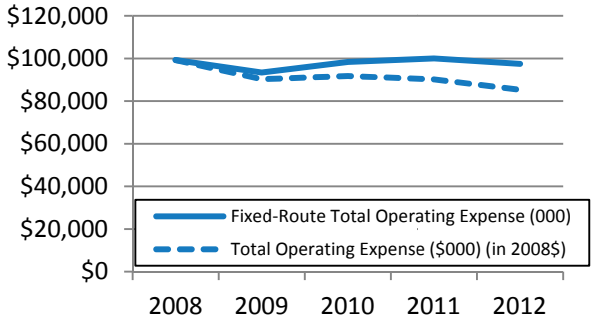
Fixed-Route Revenue Miles (000)



Source: National Transit Database

Figure 3-14

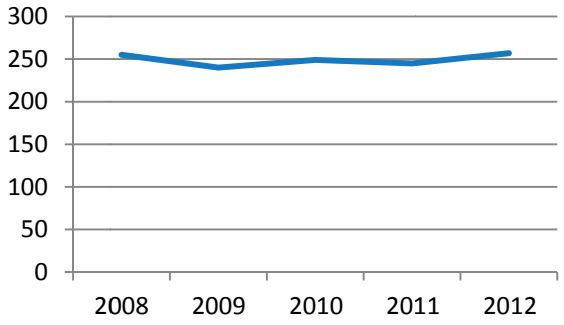
Fixed-Route Total Operating Expense (000)



Source: National Transit Database

Figure 3-15

Fixed-Route Vehicles Operated in Max. Service



Source: National Transit Database

Table 3-8 and Figures 3-16 through 3-21 present the selected performance indicators from 2008 to 2012 for BCCB. The following is a summary of performance trends for BCCB.

- Although passenger trips declined after 2008, they rebounded by 2011 and 2012. During the same time period, passenger miles increased from 8.4 million to 8.9 million, an increase of 6.8 percent.

- Total vehicle miles of service declined from 3.1 million miles in 2008 to 2.4 million miles in 2012, a decrease of 23.2 percent. Revenue miles of service decreased by 23.1 percent during this time period.

- Total operating expense (in current dollars) decreased from $8.9 million in 2008 to $6.3 million in 2012, a decrease of 29.5 percent. When deflated to year 2008 dollars, total operating expense decreased by 38.3 percent.

- Similar to the trends for vehicle miles and revenue miles, the total number of vehicles needed to operate peak service experienced a 17.1 percent decrease, from 76 vehicles in 2008 to 63 in 2012.

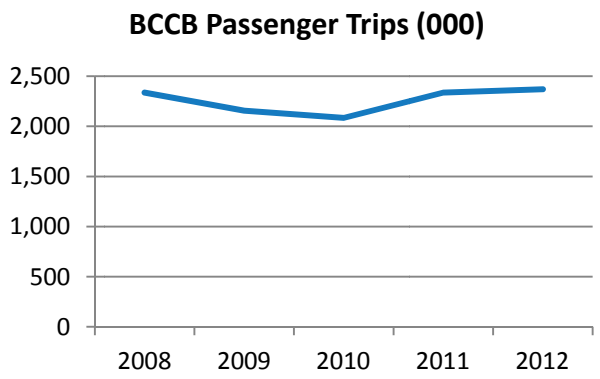
Table 3-8

2008–2012 Performance Indicators, BCCB Trend Analysis

General Performance Indicator	2008	2009	2010	2011	2012	% Change (2008-2012)
Passenger Trips	2,336,414	2,155,535	2,084,976	2,336,302	2,370,943	1.50%
Passenger Miles	8,399,118	7,384,600	7,510,610	8,660,126	8,971,474	6.80%
Vehicle Miles	3,095,046	2,635,524	2,488,608	2,529,273	2,377,188	-23.20%
Revenue Miles	2,858,239	2,455,051	2,322,918	2,337,768	2,197,997	-23.10%
Total Operating Expense	$8,917,802	$7,373,636	$6,701,906	$6,460,811	$6,287,752	-29.50%
Total Operating Expense (in 2008$)	$8,917,802	$7,123,670	$6,255,219	$5,825,769	$5,502,769	-38.30%
Vehicles Operated in Maximum Service	76	63	58	64	63	-17.10%

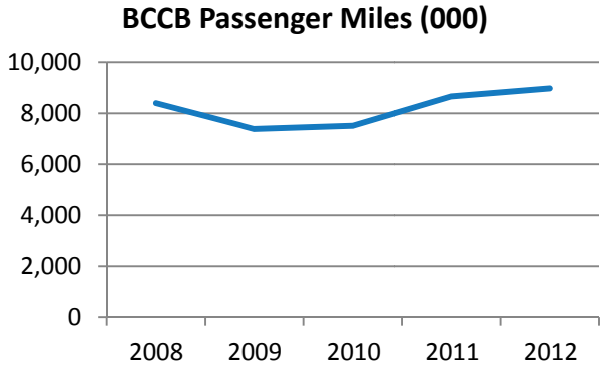
Note: Percent change calculations may vary due to rounding.
Source: INTDAS component from FTIS, DO, and PT Motorbus combined statistics.

Figure 3-16



Source: National Transit Database

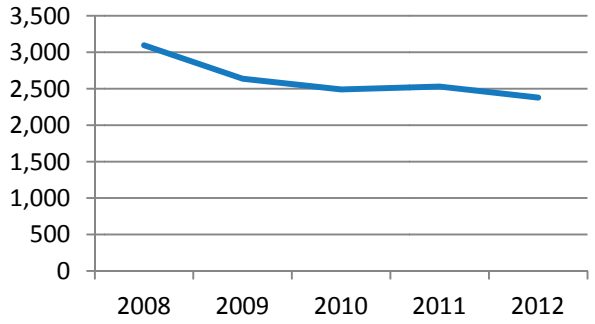
Figure 3-17



Source: National Transit Database

Figure 3- 18

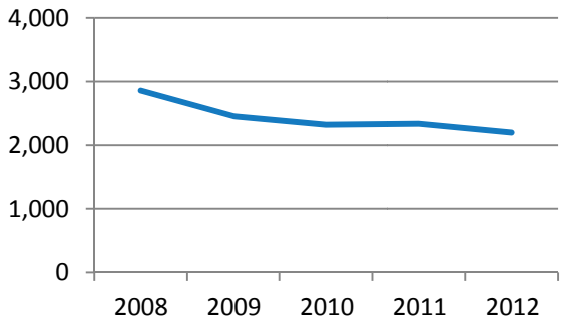
BCCB Vehicle Miles (000)



Source: National Transit Database

Figure 3-19

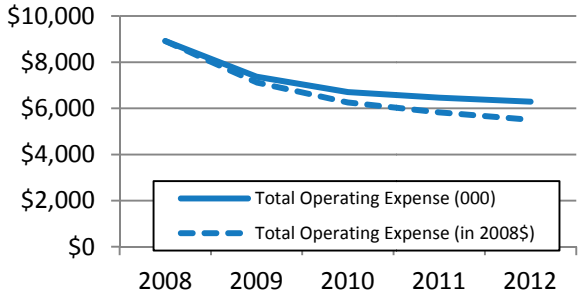
BCCB Revenue Miles (000)



Source: National Transit Database

Figure 3-20

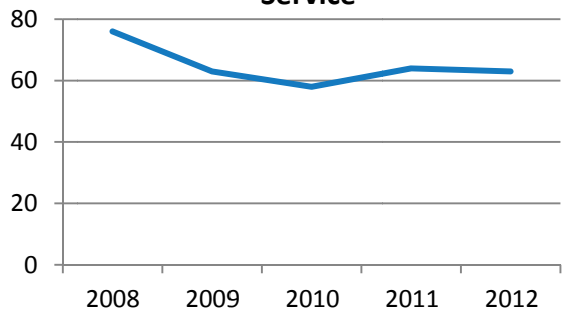
BCCB Total Operating Expense (000)



Source: National Transit Database

Figure 3-21

BCCB Vehicles Operated in Max. Service



Source: National Transit Database

Effectiveness Measures

Table 3-9 presents four categories of effectiveness measures: service supply, service consumption, quality of service, and service availability. Figures 3-22 through 3-30 present trends in effectiveness for BCT. Effectiveness measures for average age of fleet, average headway, and weekday service span of service are presented for DO and PT separately due to the nature of the reporting format for these three measures. Following is a summary of the trends for BCT that are evident from the analysis of effectiveness measures:

- Vehicle miles per capita for BCT decreased from 8.92 miles in 2008 to 8.77 miles in 2012, a decrease of 1.7 percent. For the same time period, passenger trips per capita also decreased by 1.7 percent, from 21.66 trips in 2008 to 21.30 trips in 2012.

- Passenger trips per revenue mile increased slightly from 2.72 trips in 2008 to 2.77 trips in 2012, an increase of 2.0 percent. Passenger trips per revenue hour also increased from 36.83 trips in 2008 to 38.16 trips in 2012, an increase of 3.6 percent.

- Average age of fleet for DO motorbus increased slightly from 5.64 years in 2008 to 5.84 years in 2012.

- Average headway for DO motorbus decreased from 19.13 minutes in 2008 to 17.82 minutes in 2012, indicating an improved system-wide level of service.

- The number of vehicle system failures experienced a decrease from 513 in 2008 to 432 in 2012, which resulted in a 14 percent increase in revenue miles between failures during this time period.

- Weekday span of service remained relatively constant during the five-year period for DO motorbus.

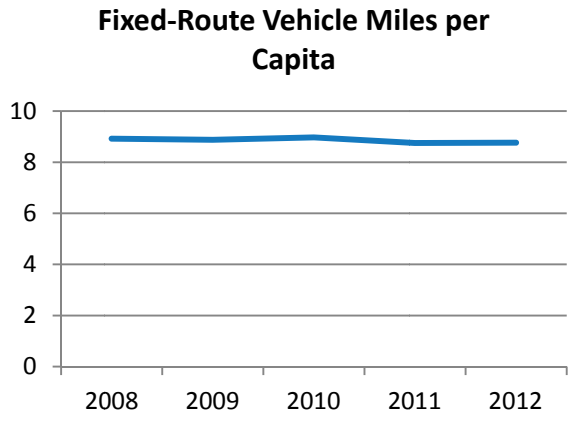
Table 3-9

2008–2012 Effectiveness Measures, BCT Fixed-Route Trend Analysis

Effectiveness Measures	2008	2009	2010	2011	2012	% Change (2008-2012)
Service Supply						
Vehicle Miles per Capita	8.92	8.88	8.97	8.75	8.77	-1.70%
Service Consumption						
Passenger Trips per Capita	21.66	21.02	20.71	20.56	21.3	-1.70%
Passenger Trips per Revenue Mile	2.72	2.65	2.6	2.67	2.77	2.00%
Passenger Trips per Revenue Hour	36.83	36.28	35.71	36.5	38.16	3.60%
Quality of Service						
Average Age of Fleet (DO)	5.64	5.37	5.97	5.39	5.84	3.50%
Average Age of Fleet (PT)	4	N/A	N/A	1	2	-50.00%
Average Headway (in minutes) (DO)	19.13	18.82	19.07	18.32	17.82	-6.90%
Average Headway (in minutes) (PT)	10.49	N/A	N/A	55.37	N/A	428.10%
Number of Vehicle System Failures	513	404	454	461	432	-15.80%
Revenue Miles Between Failures	27,770	34,353	30,945	29,201	31,655	14.00%
Service Availability						
Weekday Span of Service (in hours) (DO)	19.97	19.97	19.97	19.92	19.92	-0.30%
Weekday Span of Service (in hours) (PT)	13	N/A	N/A	13.33	13.33	2.60%

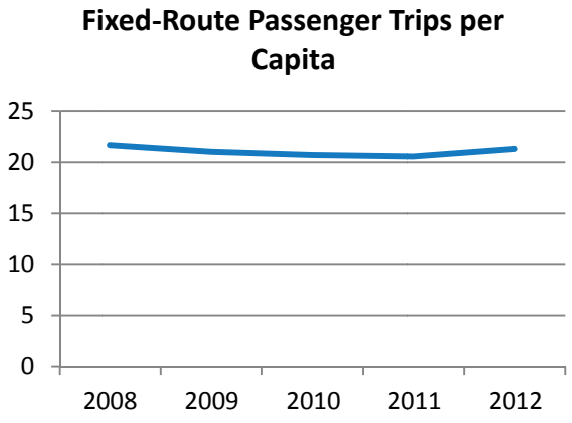
Note: Percent change calculations may vary due to rounding.
Source: INTDAS component from FTIS, DO, and PT Motorbus combined statistics, unless otherwise noted.

Figure 3-22



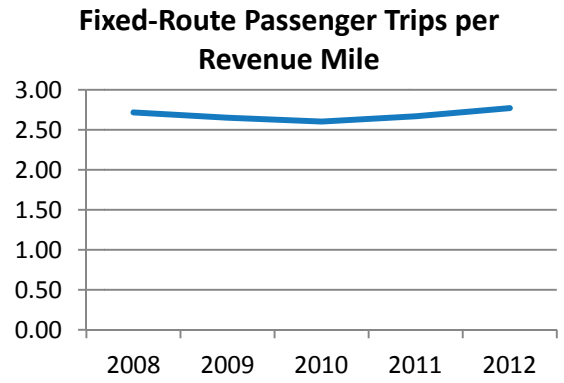
Source: National Transit Database

Figure 3-23



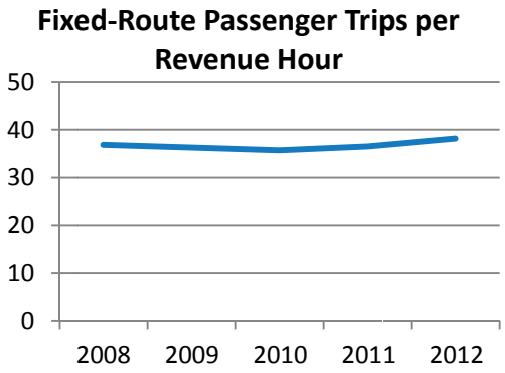
Source: National Transit Database

Figure 3-24



Source: National Transit Database

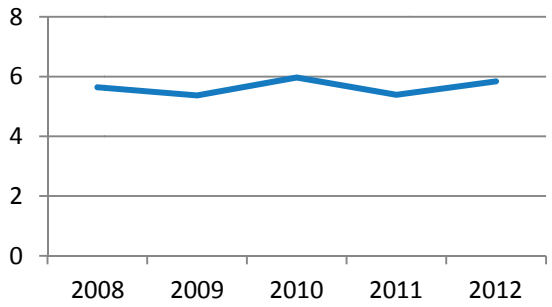
Figure 3-25



Source: National Transit Database

Figure 3-26

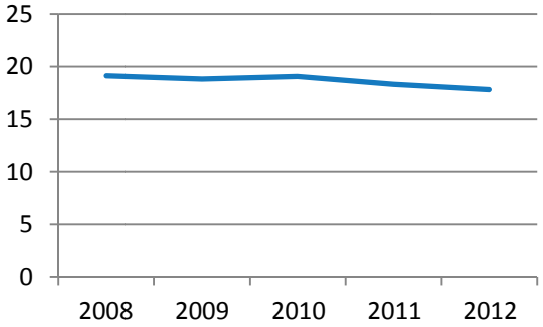
Fixed-Route Average Age of Fleet (DO)



Source: National Transit Database

Figure 3-27

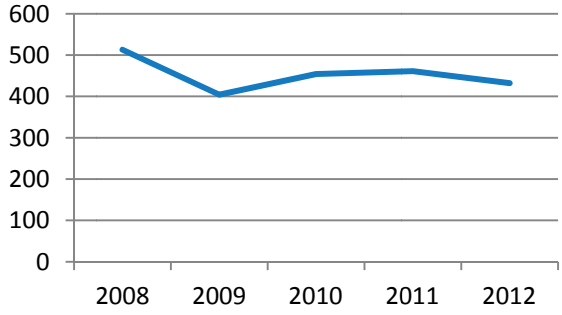
Fixed-Route Average Headway (in minutes) (DO)



Source: National Transit Database

Figure 3-28

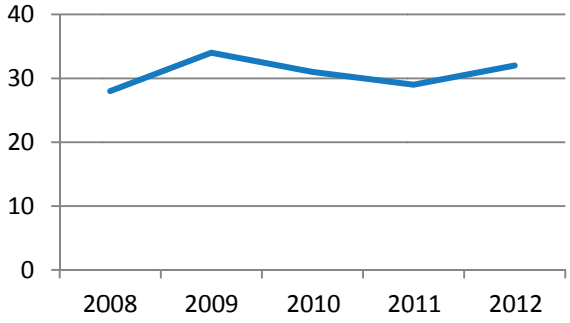
Fixed-Route Number of Vehicle System Failures



Source: National Transit Database

Figure 3-29

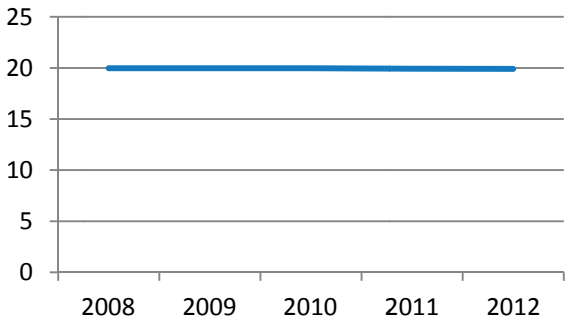
Fixed-Route Revenue Miles Between Failures (000)



Source: National Transit Database

Figure 3-30

Fixed-Route Weekday Span of Service (DO)



Source: National Transit Database

Table 3-10 presents the four categories of effectiveness measures for BCCB. Figures 3-31 through 3-42 present trends in effectiveness for BCCB. As was the case with fixed-route service data, effectiveness measures for average age of fleet, average headway, and weekday span of service are presented for DO and PT separately due to the nature of the reporting format for these three measures. The following is a summary of the trends in effectiveness measures for BCCB.

- Vehicle miles per capita for BCCB decreased from 1.74 miles in 2008 to 1.34 miles in 2012, a decrease of 23.3 percent. For the same time period, passenger trips per capita remained relatively constant.

- Passenger trips per revenue mile increased from 0.82 trips in 2008 to 1.08 trips in 2012, an increase of 32.0 percent. Passenger trips per revenue hour also increased from 10.77 trips in 2008 to 14.85 trips in 2012, an increase of 37.9 percent. Although there was a reduction of service supply during this time period, BCCB experienced a service consumption increase on a per-unit basis of total services provided.

- Average age of fleet for DO motorbus decreased from 2.88 years in 2008 to 2.44 years in 2012, a decrease of 15.3 percent over a five-year period. Average age of fleet for PT motorbus increased from 2.49 years in 2008 to 3.52 years in 2012, an increase of 41.4 percent over the same period.

- Average headway for DO motorbus increased from 43.54 minutes in 2008 to 50.69 minutes in 2012, while average headway for PT motorbus decreased from 32.09 minutes in 2008 to 41.23 minutes in 2011.

- The number of system failures experienced an increase from 150 in 2008 to 303 in 2012, which resulted in a decrease in revenue miles between failures of 61.9 percent during this time period.

- Weekday span of service for DO motorbus decreased from 13.45 hours to 12.50 hours from 2008 to 2012, a decrease of 7.1 percent, while weekday span of service for PT motorbus decreased by 21.2 percent from 2008 to 2012, from 18.92 hours to 14.92 hours.

Table 3-10

2008–2012 Effectiveness Measures, BCCB Trend Analysis

Effectiveness Measures	2008	2009	2010	2011	2012	% Change (2008-2012)
Service Supply						
Vehicle Miles per Capita	1.74	1.5	1.41	1.44	1.34	-23.30%
Service Consumption						
Passenger Trips per Capita	1.3	1.23	1.18	1.34	1.33	2.50%
Passenger Trips per Revenue Mile	0.82	0.88	0.9	1	1.08	32.00%
Passenger Trips per Revenue Hour	10.77	12.34	12.74	13.85	14.85	37.90%
Quality of Service						
Average Age of Fleet (DO)	2.88	2.97	3.09	3.06	2.44	-15.30%
Average Age of Fleet (PT)	2.49	2.9	2.24	3.23	3.52	41.40%
Average Headway (in minutes) (DO)	43.54	40.32	40.56	49.9	50.69	16.40%
Average Headway (in minutes) (PT)	32.09	37.45	40.09	41.23	N/A	28.5%*
Number of Vehicle System Failures	150	230	185	245	303	102.00%
Revenue Miles Between Failures	19,055	10,674	12,556	9,542	7,254	-61.90%
Service Availability						
Weekday Span of Service (in hours) (DO)	13.45	13.45	12.83	12.5	12.5	-7.10%
Weekday Span of Service (in hours) (PT)	18.92	18.92	19	14.92	14.92	-21.20%

N/A indicates data are not available for particular year.

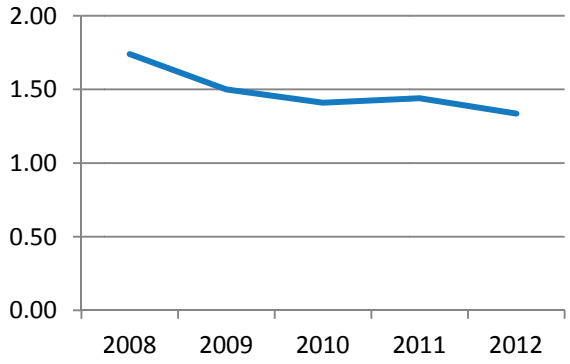
*Percent change reflects data from 2008-2011.

Note: Percent change calculations may vary due to rounding.

Source: INTDAS component from FTIS, DO and PT Motorbus combined statistics, unless otherwise noted

Figure 3-31

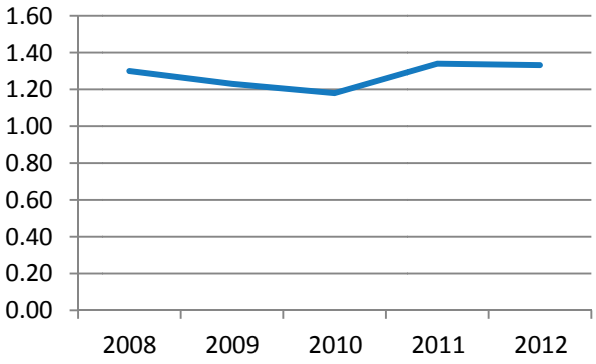
BCCB Vehicle Miles per Capita



Source: National Transit Database

Figure 3-32

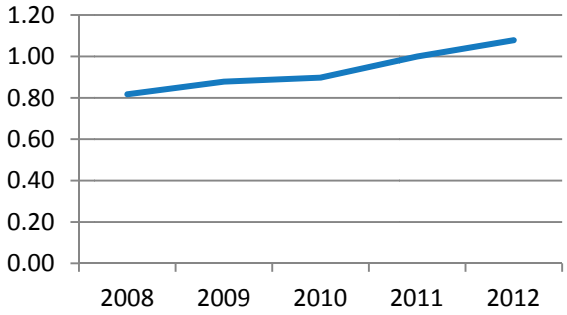
BCCB Passenger Trips per Capita



Source: National Transit Database

Figure 3-33

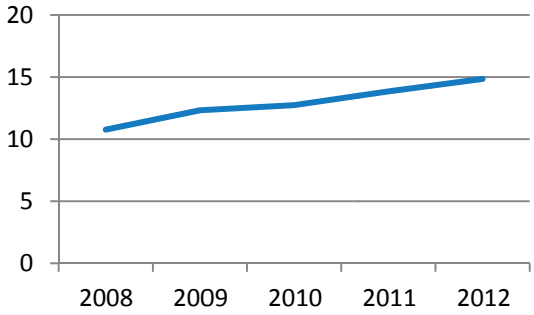
BCCB Passenger Trips per Revenue Mile



Source: National Transit Database

Figure 3-34

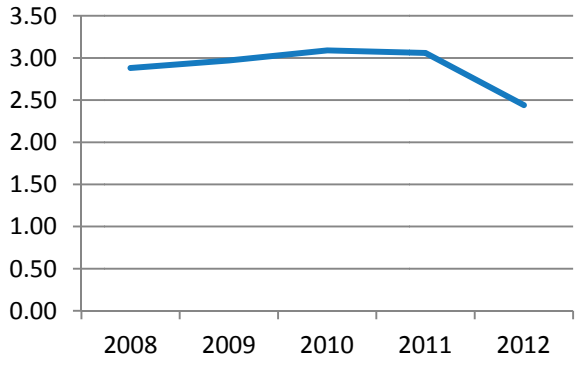
BCCB Passenger Trips per Revenue Hour



Source: National Transit Database

Figure 3-35

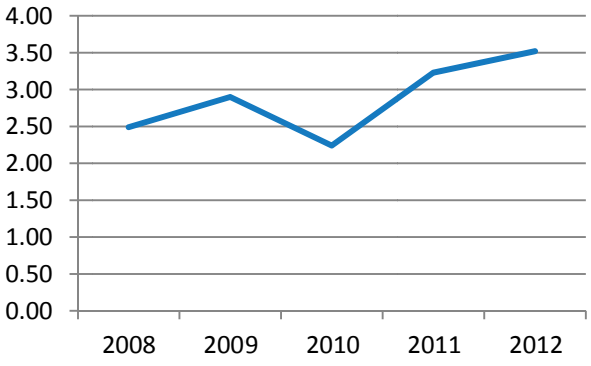
BCCB Average Age of Fleet (DO)



Source: National Transit Database

Figure 3-36

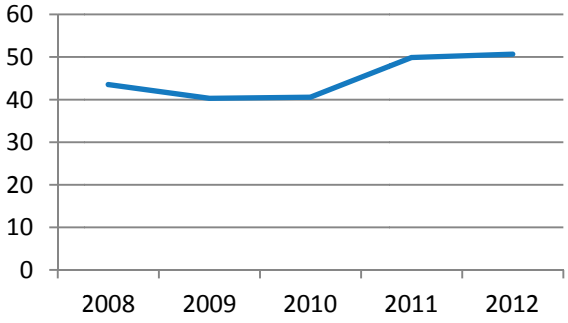
BCCB Average Age of Fleet (PT)



Source: National Transit Database

Figure 3-37

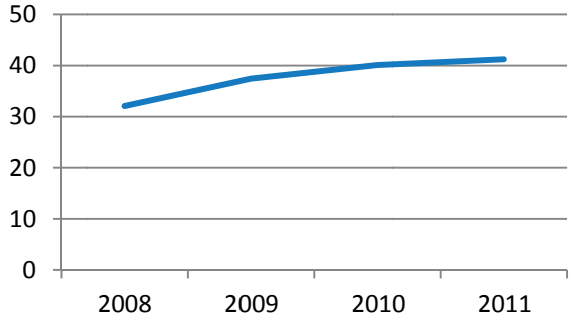
BCCB Average Headway (in minutes) (DO)



Source: National Transit Database

Figure 3-38

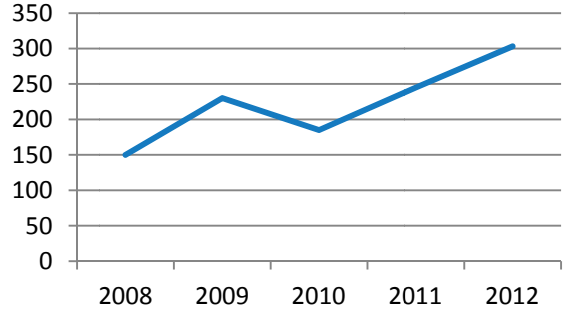
BCCB Average Headway (in minutes) (PT)



Source: National Transit Database

Figure 3-39

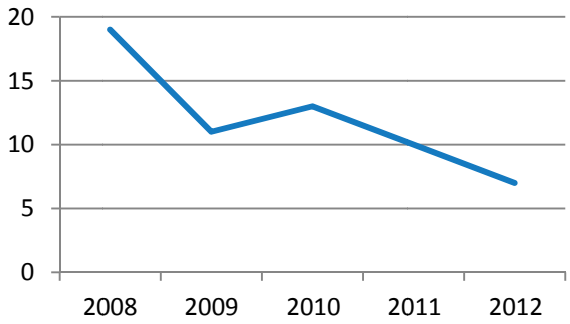
BCCB Number of Vehicle System Failures



Source: National Transit Database

Figure 3-40

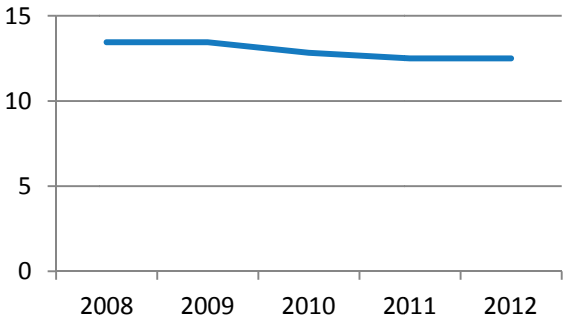
BCCB Revenue Miles Between Failures (000)



Source: National Transit Database

Figure 3-41

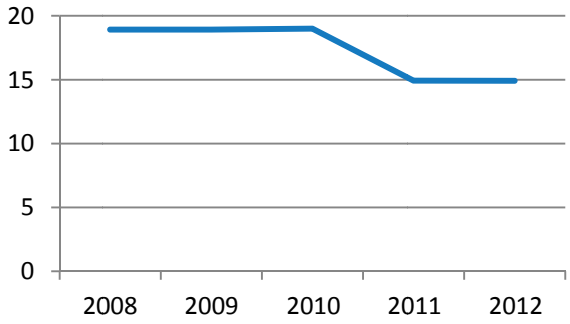
BCCB Weekday Span of Service (DO)



Source: National Transit Database

Figure 3-42

BCCB Weekday Span of Service (PT)



Source: National Transit Database

Efficiency Measures

Table 3-11 presents six categories of efficiency measures for BCT: cost efficiency, operating ratios, vehicle utilization, labor productivity, energy utilization, and average fare. Figures 3-43 through 3-52 present trends in efficiency. The following is a summary of the trends in efficiency measures for BCT.

- Operating expense per capita decreased from $55.51 in 2008 to $54.73 in 2012, a decrease of 1.4 percent. Operating expense per passenger mile decreased from $0.56 in 2008 to $0.54 in 2012, a decrease of 2.9 percent. Operating expense per revenue hour increased from $94.40 in 2008 to $98.06 in 2012, an increase of 3.9 percent. However, when the effects of inflation are removed, operating expense per capita, operating expense per passenger mile, and operating expense per revenue hour experienced decreases of 14.1, 16.1, and 9.5 percent, respectively,

between 2008 and 2012. These trends suggest that BCT has experienced some success over the last five years in controlling numerous factors impacting the cost of the agency's operations that are within its control.

- Revenue hours per employee full-time equivalent (FTE) decreased by 3.4 percent for DO motorbus.

- The average fare paid per passenger trip increased from $0.61 in 2008 to $0.87 in 2012, an increase of 42.1 percent. Similarly, farebox recovery increased by 41.7 percent from 2008 to 2012.

Table 3-11

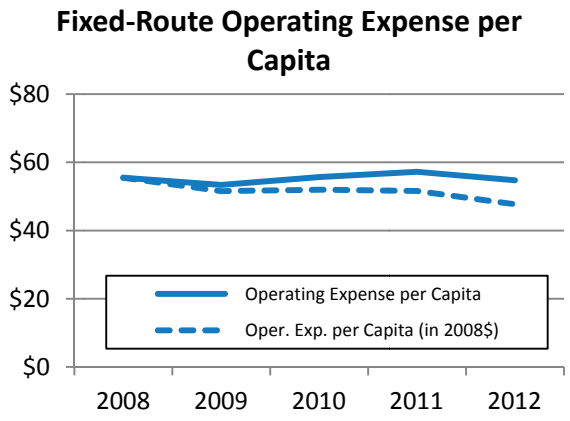
2008–2012 Efficiency Measures, BCT Fixed-Route Trend Analysis

Efficiency Measures	2008	2009	2010	2011	2012	% Change (2008-2012)
Cost Efficiency						
Operating Expense per Capita	$55.51	$53.35	$55.66	$57.22	$54.73	-1.40%
Operating Expense per Capita (in 2008$)	$55.51	$51.54	$51.95	$51.60	$47.68	-14.10%
Operating Expense per Passenger Trip	$2.56	$2.54	$2.69	$2.78	$2.57	0.30%
Operating Expense per Passenger Trip (in 2008$)	$2.56	$2.45	$2.51	$2.51	$2.24	-12.50%
Operating Expense per Passenger Mile	$0.56	$0.56	$0.57	$0.59	$0.54	-2.90%
Operating Expense per Passenger Mile (in 2008$)	$0.56	$0.54	$0.53	$0.53	$0.47	-16.10%
Operating Expense per Revenue Mile	$6.97	$6.73	$7.00	$7.43	$7.12	2.30%
Operating Expense per Revenue Mile (in 2008$)	$6.97	$6.50	$6.53	$6.70	$6.21	-10.90%
Operating Expense per Revenue Hour	$94.40	$92.10	$95.97	$101.58	$98.06	3.90%
Operating Expense per Revenue Hour (in 2008$)	$94.40	$88.98	$89.57	$91.60	$85.42	-9.50%
Operating Ratios						
Farebox Recovery	23.90%	25.30%	26.90%	30.40%	33.90%	41.70%
Vehicle Utilization						
Revenue Miles per Vehicle Mile	0.89	0.89	0.89	0.88	0.88	-1.90%
Labor Productivity						
Revenue Hours per Employee FTE (DO)	1,071	1,135	1,079	1,065	1,035	-3.40%
Energy Utilization						
Vehicle Miles per Gallon	3.22	3.53	3.59	3.51	3.48	8.00%
Fare						
Average Fare	$0.61	$0.64	$0.72	$0.85	$0.87	42.10%

Note: Percent change calculations may vary due to rounding.

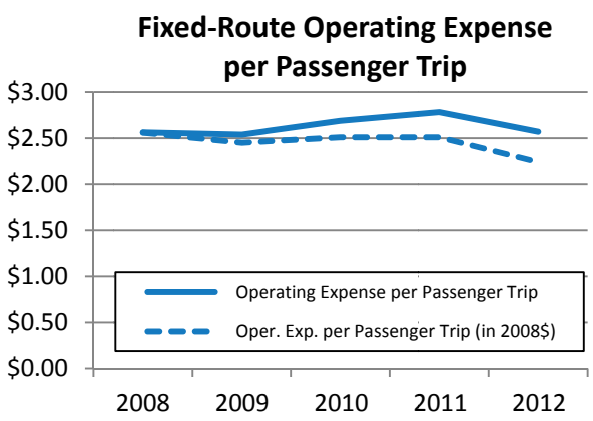
Source: INTDAS component from FTIS, DO PT Motorbus combined statistics, unless otherwise noted; Broward County Transit Division

Figure 3-43



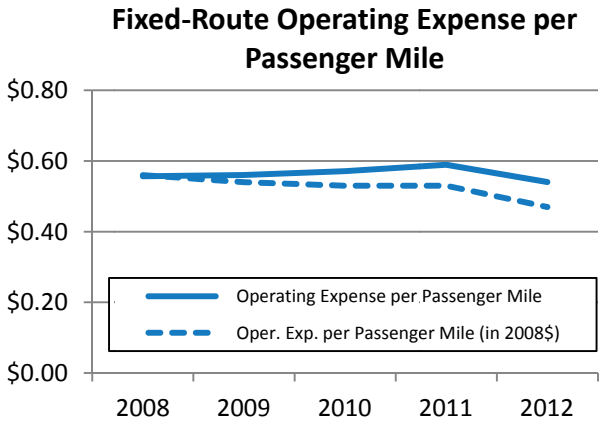
Source: National Transit Database

Figure 3-44



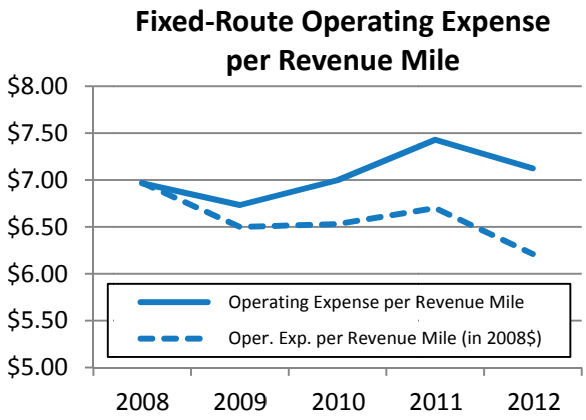
Source: National Transit Database

Figure 3-45



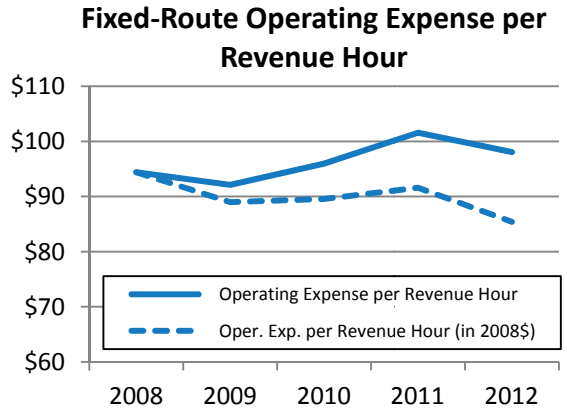
Source: National Transit Database

Figure 3-46



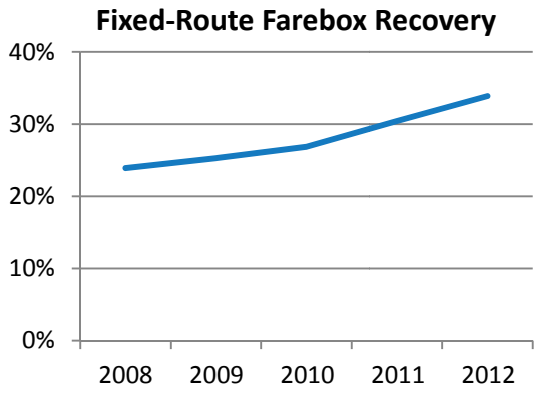
Source: National Transit Database

Figure 3-47



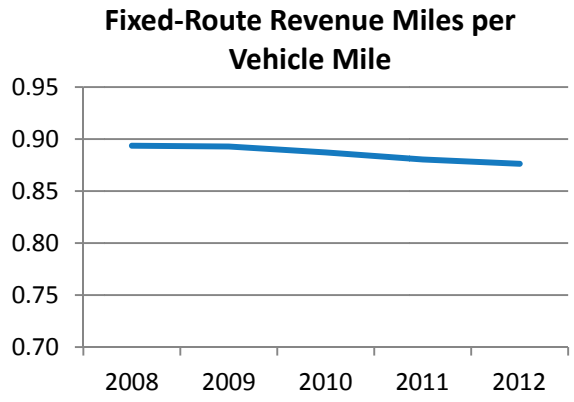
Source: National Transit Database

Figure 3-48



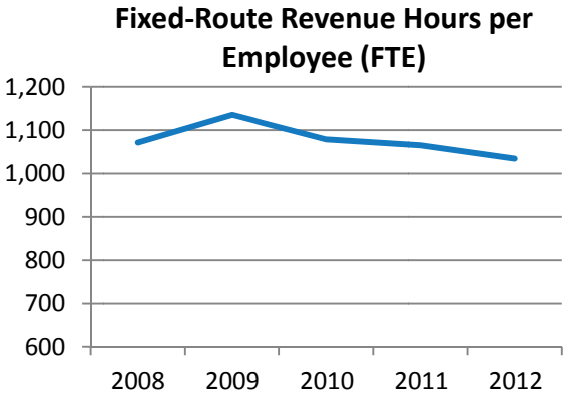
Source: National Transit Database

Figure 3-49



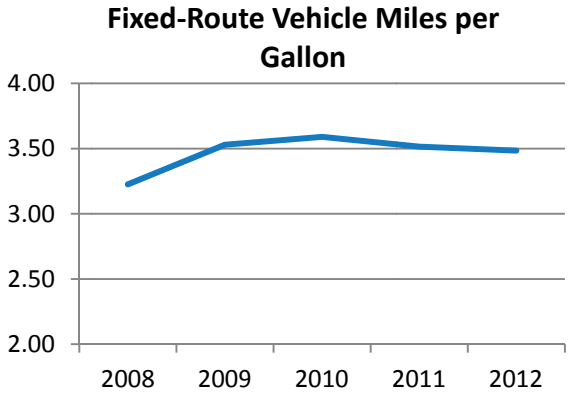
Source: National Transit Database

Figure 3-50



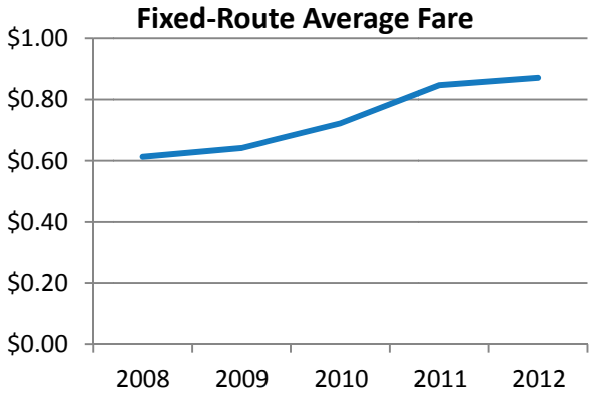
Source: National Transit Database

Figure 3-51



Source: National Transit Database

Figure 3-52



Source: National Transit Database

Table 3-12 presents the six categories of efficiency measures for BCCB. Figures 3-53 through 3-62 present trends in efficiency. The following is a summary of the trends for BCCB that are evident from the analysis of efficiency measures.

- All cost efficiency measures experienced decreases in varying degrees during the five-year time period. When removing the effects of inflation, the decreases varied from 16.6 percent to 42.5 percent. These trends indicate that BCCB has improved its efficiency in expenditures from 2008 to 2012.

- Vehicle miles per gallon increased from 7.30 miles to 8.10 miles, an increase of 10.9 percent between 2008 and 2012, indicating an improved energy utilization rate.

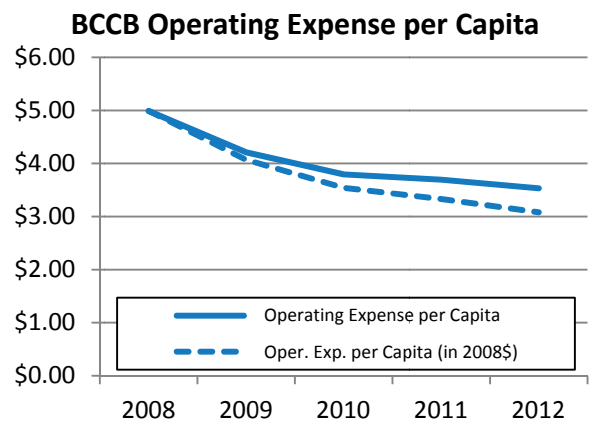
- Average fare remained stable from 2008 to 2012. During the same time period, farebox recovery increased from 2.48 to 3.41 percent, an increase of 37.6 percent.

Table 3-12

2008–2012 Efficiency Measures, BCCB Trend Analysis

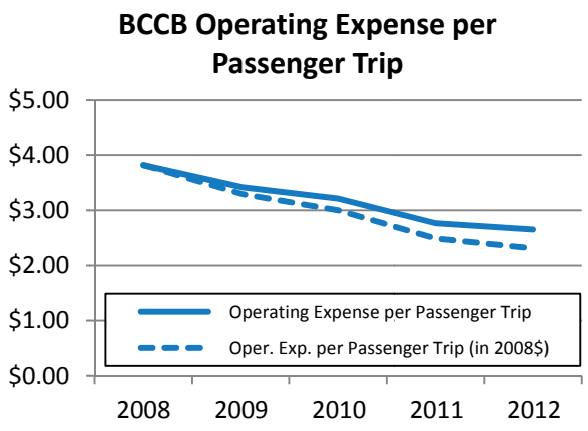
Efficiency Measures	2008	2009	2010	2011	2012	% Change (2008-2012)
Cost Efficiency						
Operating Expense per Capita	$4.99	$4.21	$3.79	$3.70	$3.53	-29.20%
Operating Expense per Capita (in 2008$)	$4.99	$4.07	$3.54	$3.33	$3.08	-38.30%
Operating Expense per Passenger Trip	$3.82	$3.42	$3.21	$2.77	$2.65	-30.50%
Operating Expense per Passenger Trip (in 2008$)	$3.82	$3.30	$3.00	$2.49	$2.31	-39.50%
Operating Expense per Passenger Mile	$1.06	$1.00	$0.89	$0.75	$0.70	-34.00%
Operating Expense per Passenger Mile (in 2008$)	$1.06	$0.96	$0.83	$0.67	$0.61	-42.50%
Operating Expense per Revenue Mile	$3.12	$3.00	$2.89	$2.76	$2.86	-8.30%
Operating Expense per Revenue Mile (in 2008$)	$3.12	$2.90	$2.69	$2.49	$2.49	-20.20%
Operating Expense per Revenue Hour	$41.12	$42.20	$40.94	$38.30	$39.39	-4.20%
Operating Expense per Revenue Hour (in 2008$)	$41.12	$40.77	$38.21	$34.54	$34.31	-16.60%
Operating Ratios						
Farebox Recovery	2.48%	2.63%	3.60%	3.39%	3.41%	37.60%
Vehicle Utilization						
Revenue Miles per Vehicle Mile	0.92	0.93	0.93	0.92	0.92	0.10%
Labor Productivity						
Revenue Hours per Employee FTE (DO)	1,326	1,218	1,076	1,068	1,024	-22.70%
Energy Utilization						
Vehicle Miles per Gallon	7.3	8.26	8.01	8.02	8.1	10.90%
Fare						
Average Fare	$0.09	$0.09	$0.12	$0.09	$0.09	0.00%

Figure 3-53



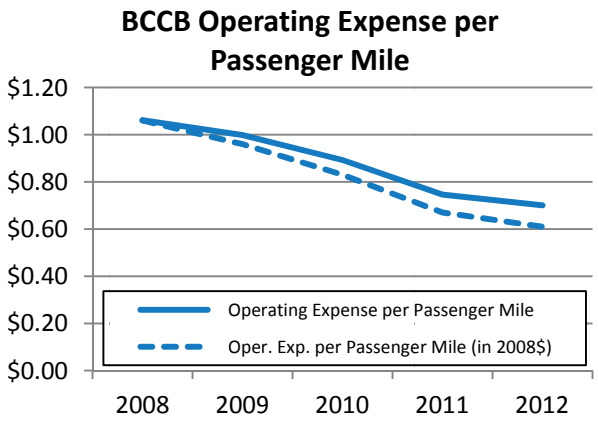
Source: National Transit Database

Figure 3-54



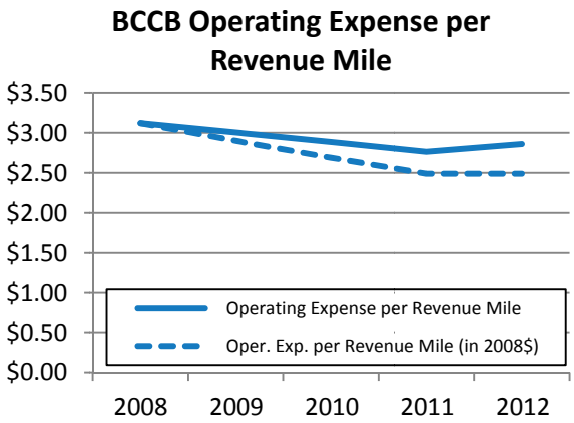
Source: National Transit Database

Figure 3-55



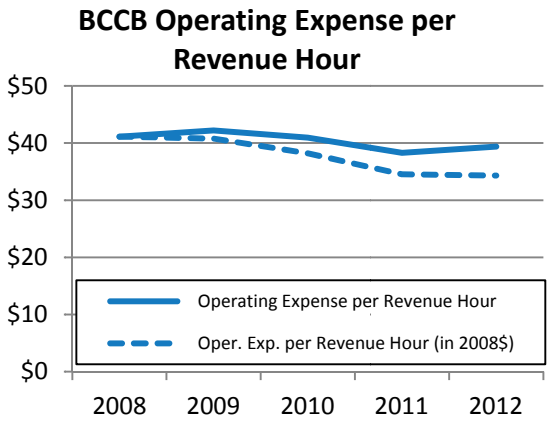
Source: National Transit Database

Figure 3-56



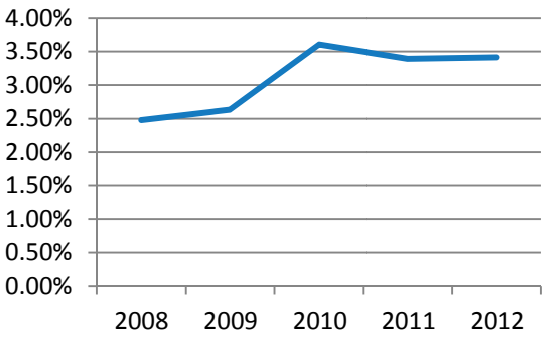
Source: National Transit Database

Figure 3-57



Source: National Transit Database

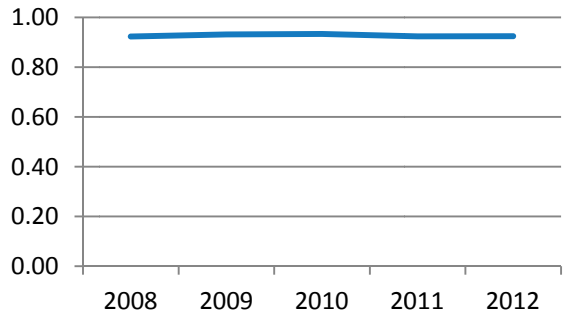
Figure 3-58



Source: National Transit Database

Figure 3-59

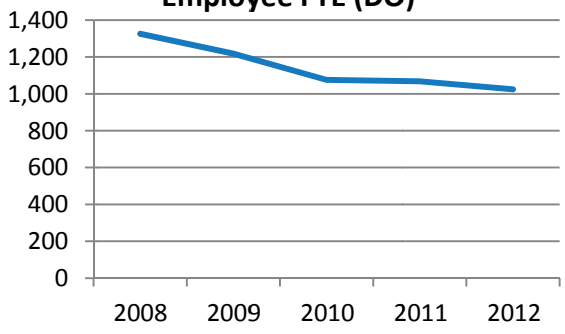
BCCB Revenue Miles per Vehicle Mile



Source: National Transit Database

Figure 3-60

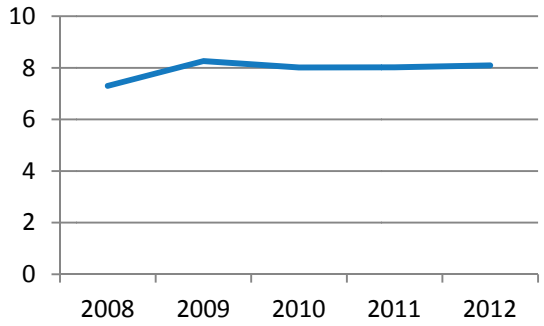
BCCB Revenue Hours per Employee FTE (DO)



Source: National Transit Database

Figure 3-61

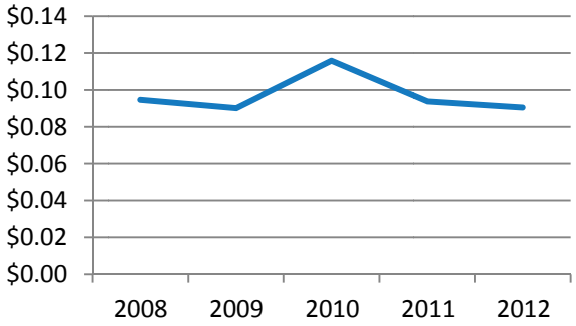
BCCB Vehicle Miles per Gallon



Source: National Transit Database

Figure 3-62

BCCB Average Fare



Source: National Transit Database

Summary Results of Fixed-Route Trend Analysis

The trend analysis provides an evaluation of the system's performance over time. This section includes a summary of BCT and BCCB performance based on the trend analysis in terms of service consumption, service supply and availability, quality of service, cost efficiency, and operating ratio and fare.

- **Service Consumption**
  - **BCT** – Passenger trips per capita, passenger trips per revenue mile, and passenger trips per revenue hour have shown neutral trends, demonstrating that the the service being supplied has remained relatively stable over the five-year timeframe.

  - **BCCB** – Passenger trips per revenue mile and passenger trips per revenue hour have shown positive trends. This trend indicates that use of BCCB services has become more productive over time in conjunction with the reduction in service being supplied.

- **Service Supply and Availability**
  - **BCT** – Vehicle miles per capita have shown a neutral trend from 2008 to 2012. Service availability in terms of service span similarly remained nearly unchanged.
  - **BCCB** – Vehicle miles per capita has shown a negative trend from 2008 to 2012. Service availability in terms of service span decreased during the same time period.

- **Quality of Service**
  - **BCT** – Average age of fleet (DO) has shown a neutral trend. The number of vehicle system failures decreased, resulting in a positive trend for revenue miles between failures. Average headway (DO) has also shown a positive trend.
  - **BCCB** – The measures in this category have indicated primarily negative trends, suggesting an aging vehicle fleet with increasing reliability issues.

- **Cost Efficiency**
  - **BCT** – When removing the effects of inflation, operating expense per capita, operating expense per passenger trip, operating expense per revenue mile, and operating expense per revenue hour have shown positive trends from 2008 to 2012. These trends generally suggest that BCT costs have been controlled over the last five-year period, in part by reductions in relatively unproductive service.
  - **BCCB** – BCCB shows a strong positive trend in this category, indicating that BCCB grew more cost-effective over the trend analysis period.

- **Operating Ratio and Fare**
  - **BCT** – From 2008 to 2012, both average fare and farebox recovery experienced an increase of approximately 42 percent. These two indicators have shown strong positive trends from 2008 to 2012, primarily due to fare increases that occurred in 2009 and 2010.
  - **BCCB** – Although the farebox recovery ratio showed a strong positive trend over the five-year timeframe, it is very low by industry standards due to many of the Community Bus services operating with free fares. At the same time, the average fare remained steady.

Tables 3-13 and 3-14 summarize the trend analysis, with positive and negative trends identified for BCT and BCCB, respectively.

Table 3-13

Summary of BCT Fixed-Route Trend Analysis (2008–2012)

Measure	% Change (2008–2012)	Indicator*
General Performance		
Passenger Trips	-2.10%	o
Passenger Miles	1.20%	o
Vehicle Miles	-2.10%	o
Revenue Miles	-4.00%	o
Total Operating Expense	-1.80%	o
Vehicles Operated in Maximum Service	0.80%	o
Service Supply		
Vehicle Miles per Capita	-1.70%	o
Service Consumption		
Passenger Trips per Capita	-1.70%	o
Passenger Trips per Revenue Mile	2.00%	o
Passenger Trips per Revenue Hour	3.60%	o
Quality of Service		
Average Age of Fleet (DO)	3.50%	o
Average Age of Fleet (PT)	-50.00%	+
Average Headway (in minutes) (DO)	-6.90%	+
Average Headway (in minutes) (PT)	428.10%	+
Number of Vehicle System Failures	-15.80%	+
Revenue Miles Between Failures	14.00%	+
Service Availability		
Weekday Span of Service (in hours) (DO)	-0.30%	o
Weekday Span of Service (in hours) (PT)	2.60%	o
Cost Efficiency		
Operating Expense per Capita (in 2008$)	-14.10%	+
Operating Expense per Passenger Trip (in 2008$)	-12.50%	+
Operating Expense per Passenger Mile (in 2008$)	-16.10%	+
Operating Expense per Revenue Mile (in 2008$)	-10.90%	+
Operating Expense per Revenue Hour (in 2008$)	-9.50%	+
Operating Ratios		
Farebox Recovery	41.70%	+
Vehicle Utilization		
Revenue Miles per Vehicle Mile	-1.90%	o
Labor Productivity		
Revenue Hours per Employee FTE (DO)	-3.40%	o
Energy Utilization		
Vehicle Miles per Gallon	8.00%	+
Fare		
Average Fare	42.10%	+

*Indicates a positive (+), negative (-), or neutral (o) trend. A change of less than 5%is considered a neutral trend.

Table 3-14

Summary of BCCB Trend Analysis (2008–2012)

Measure	% Change (2008–2012)	Indicator*
General Performance		
Passenger Trips	1.50%	o
Passenger Miles	6.80%	+
Vehicle Miles	-23.20%	-
Revenue Miles	-23.10%	-
Total Operating Expense	-29.50%	+
Vehicles Operated in Maximum Service	-17.10%	-
Service Supply		
Vehicle Miles per Capita	-23.30%	-
Service Consumption		
Passenger Trips per Capita	2.50%	o
Passenger Trips per Revenue Mile	32.00%	+
Passenger Trips per Revenue Hour	37.90%	+
Quality of Service		
Average Age of Fleet (DO)	-15.30%	+
Average Age of Fleet (PT)	41.40%	-
Average Headway (in minutes) (DO)	16.40%	-
Average Headway (in minutes) (PT)	28.5%**	-
Number of Vehicle System Failures	102.00%	-
Revenue Miles Between Failures	-61.90%	-
Availability		
Weekday Span of Service (in hours) (DO)	-7.10%	-
Weekday Span of Service (in hours) (PT)	-21.20%	-
Cost Efficiency		
Operating Expense per Capita (in 2008$)	-29.20%	+
Operating Expense per Passenger Trip (in 2008$)	-30.50%	+
Operating Expense per Passenger Mile (in 2008$)	-34.00%	+
Operating Expense per Revenue Mile (in 2008$)	-8.30%	+
Operating Expense per Revenue Hour (in 2008$)	-4.20%	o
Operating Ratios		
Farebox Recovery	37.60%	+
Vehicle Utilization		
Revenue Miles per Vehicle Mile	0.10%	o
Labor Productivity		
Revenue Hours per Employee FTE	-22.70%	-
Energy Utilization		
Vehicle Miles per Gallon	10.90%	+
Fare		
Average Fare	0.00%	o

*Indicates a positive (+), negative (-), or neutral (o) trend. A change of less than 5%is considered a neutral trend.

**Percent change reflects data from 2008-2011.

TOPS SERVICE TREND ANALYSIS

Table 3-15 lists the measures used in the performance trend analysis conducted for TOPS, BCT's complementary paratransit service. Highlights of the trend analysis are presented in the remainder of this section.

Table 3-15
TOPS Performance Review Measures for Trend Analysis (2007–2011)

General Performance	Effectiveness	Efficiency
Passenger Trips	Passenger Trips per Revenue Mile	Operating Expense per Passenger Trip
Passenger Miles	Passenger Trips per Revenue Hour	Operating Expense per Passenger Mile
Vehicle Miles		Operating Expense per Revenue Mile
Revenue Miles		Operating Expense per Revenue Hour
Total Operating Expense		

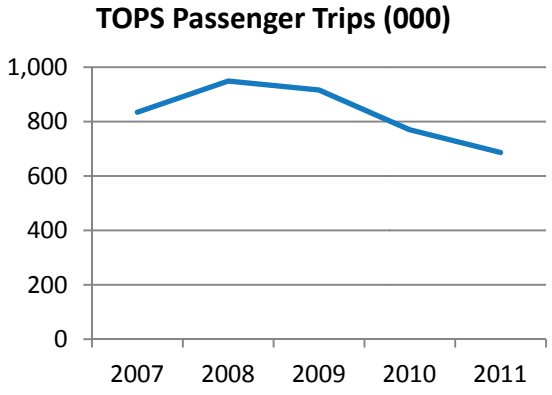
Table 3-16 includes the trend statistics for paratransit performance indicators. Performance, effectiveness, and efficiency measures are included for the noted time period and percent changes are calculated based on the change between 2007 and 2011. Figures 3-63 through Figure 3-73 present trends in service performance.

Table 3-16
TOPS Service Performance Indicators (2007–2011)

Selected Performance Indicator	2007	2008	2009	2010	2011	% Change (2007-2011)
Performance Measures						
Passenger Trips	834,205	948,632	916,009	769,163	685,998	-17.80%
Revenue Miles	7,882,892	9,074,306	8,310,956	7,328,065	6,857,322	-13.00%
Vehicle Miles	9,114,807	10,386,904	9,649,073	8,442,217	7,882,936	-13.50%
Revenue Hours	545,232	612,021	551,813	466,159	423,456	-22.30%
Total Operating Expense	$23,563,309	$32,310,979	$29,787,765	$21,171,147	$16,756,333	-28.90%
Effectiveness Measures						
Passenger Trips per Revenue Mile	0.11	0.1	0.11	0.1	0.1	-5.50%
Passenger Trips per Revenue Hour	1.53	1.55	1.66	1.65	1.62	5.90%
Efficiency Measures						
Operating Expense per Passenger Trip	$28.25	$34.06	$32.52	$27.52	$24.43	-13.50%
Operating Expense per Revenue Mile	$2.99	$3.56	$3.58	$2.89	$2.44	-18.30%
Operating Expense per Passenger Mile	$2.62	$3.12	$3.04	$2.87	$2.44	-6.90%
Operating Expense per Revenue Hour	$43.22	$52.79	$53.98	$45.42	$39.57	-8.40%

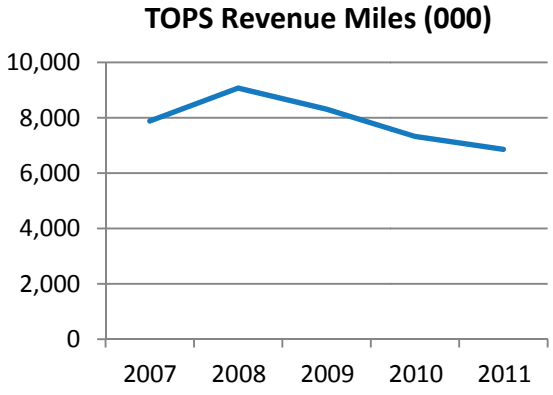
Source: INTDAS component from FTIS, Directly Operated Demand Response.

Figure 3-63



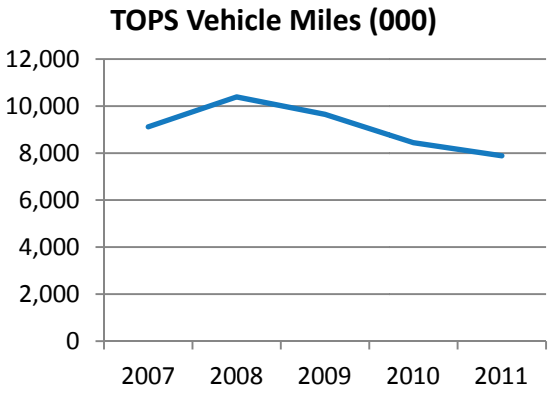
Source: National Transit Database

Figure 3-64



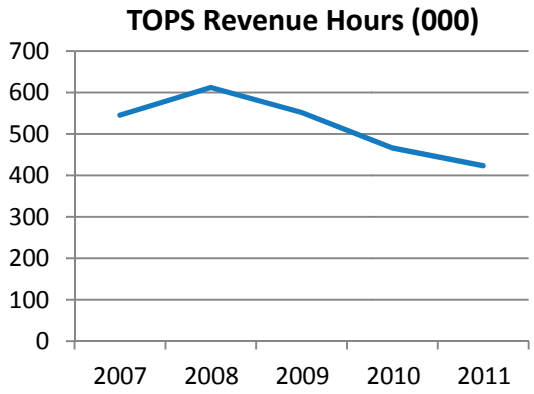
Source: National Transit Database

Figure 3-65



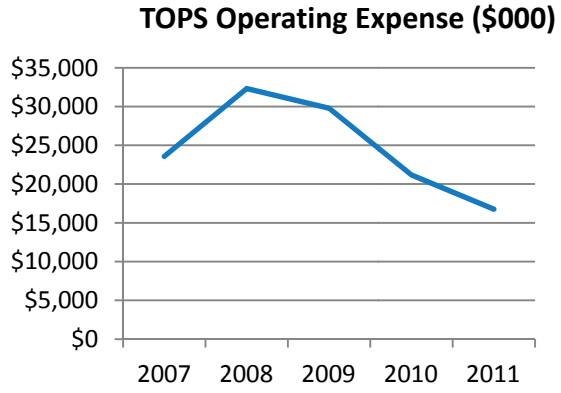
Source: National Transit Database

Figure 3-66



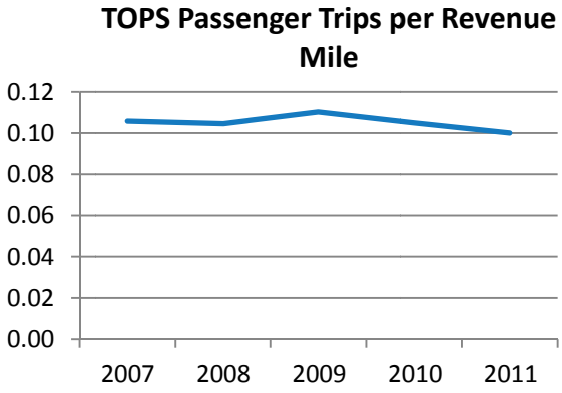
Source: National Transit Database

Figure 3-67



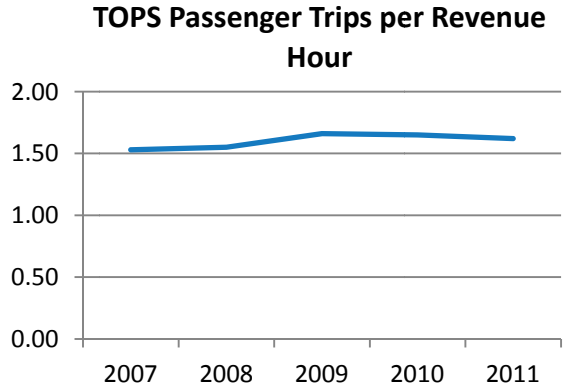
Source: National Transit Database

Figure 3-68



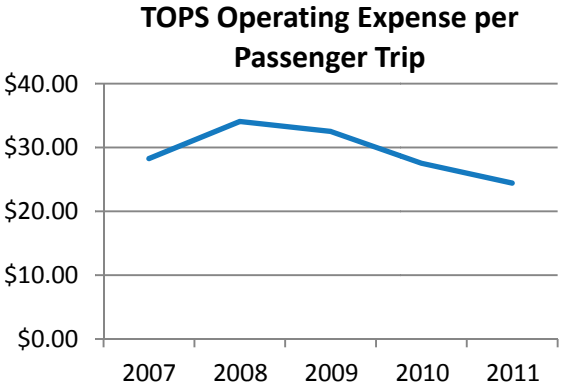
Source: National Transit Database

Figure 3-69



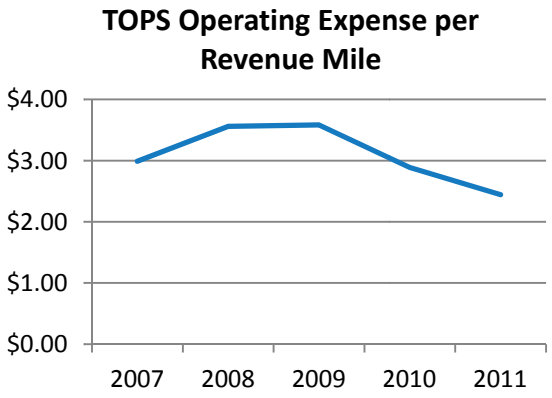
Source: National Transit Database

Figure 3-70



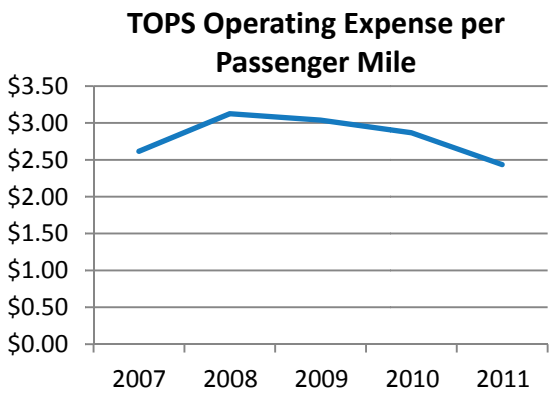
Source: National Transit Database

Figure 3-71



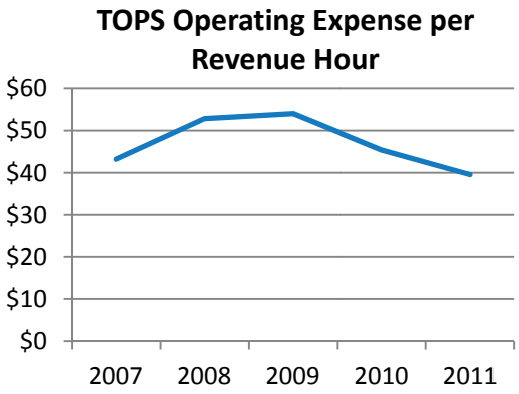
Source: National Transit Database

Figure 3-72



Source: National Transit Database

Figure 3-73



Source: National Transit Database

Summary Results of TOPS Trend Analysis

This section summarizes paratransit performance trends for BCT based on the trend analysis. Some of the key trends are described below.

- The number of total paratransit trips has decreased from 834,205 trips in 2007 to 685,998 trips in 2011, a decrease of 17.8 percent.

- Overall service supply experienced decreases in terms of revenue miles, vehicle miles, and revenue hours in varying degrees, ranging from 13.0 percent to 22.3 percent. When taking into consideration the decrease in passenger trips, passenger trips per revenue hour slightly

increased from 1.53 to 1.62, an increase of 5.9 percent, suggesting that the combined changes have resulted in improved productivity for service consumption.

- Paratransit operating costs decreased by approximately 29 percent over the trend analysis period. When taking into consideration the decrease in service supply, the four key efficiency measures—operating expense per passenger trip, operating expense per revenue mile, operating expense per passenger mile, and operating expense per revenue hour—experienced decreases of 13.5, 18.3, 6.9, and 8.4 percent, respectively. This indicates that the evident improvements in service utilization effectiveness have helped produce corresponding cost efficiency improvements.

PEER REVIEW

The peer review provides an opportunity for BCT to compare its system-wide effectiveness and efficiency indicators with other peer transit systems to determine how well BCT is performing compared to similar transit agencies. The results of the peer review serve as a starting point for BCT to adjust its operations and/or policies to achieve better system cost efficiency and operating performance.

The 2013–2024 TDP took into account previous peers and also conducted two analyses—a TCRP framework and a methodology developed by Tindale-Oliver & Associates (TOA)—to determine peers. BCT examined the results of the two new analyses plus the prior peers in order to determine the set of eight peers to be used for this TDP. Table 3-17 displays the final peer selection. The process employed to develop the final list of peers is described in detail in Appendix C.

Table 3-17
BCT TDP Final Peers

Transit Agency	Agency Abbreviation	Location
Alameda-Contra Costa Transit District	AC Transit	Oakland, CA
Board of County Commissioners, Palm Beach County, Palm Tran, Inc.	Palm Tran	West Palm Beach, FL
Central Florida Regional Transportation Authority	LYNX	Orlando, FL
Charlotte Area Transit System	CATS	Charlotte, NC
Miami-Dade Transit	MDT	Miami, FL
Santa Clara Valley Transportation Authority	VTA	San Jose, CA
Transportation District Commission of Hampton Roads, dba Hampton Roads Transit	HRT	Norfolk, VA
VIA Metropolitan Transit	VIA	San Antonio, TX

The peer review analysis was conducted using 2011 NTD data, the most recently validated dataset available for all transit agencies. Selected performance indicators, effectiveness measures, and

efficiency measures are summarized in the remainder of this section. The final peers are shown in Table 3-20.

Performance Indicators

Selected performance indicators for the BCT fixed-route bus service are presented in this section. Categories of performance indicators include population, population density, ridership, revenue miles, and vehicles. Table 3-18 includes the performance statistics for the fixed-route peer group. Table 3-19 and Figures 3-74 through 3-80 present the performance indicators for BCT's peer review analysis. The following is a summary of the peer review analysis performance indicators.

- Service area population and population density for BCT are 9.2 and 20.9 percent above the peer group mean, respectively.
- Passenger trips for BCT are consistent with the peer group mean (1.0%). At the same time, revenue miles for BCT are below the peer group mean (-13.2%), and operating expenses are lower than the peer group average by more than 30 percent.
- Passenger fare revenues are generally in line with the peer group average (-2.0%).
- BCT's number of vehicles operated in maximum service is approximately 26 percent lower than the peer group average.

Table 3-18

Fixed-Route Peer Group Performance Statistics (2011)

Transit Agency	Service Area Population	Service Area Population Density	Passenger Trips	Revenue Miles	Total Operating Expense	Passenger Fare Revenue	Vehicles Operated in Maximum Service
BCT	**1,748,066**	**4,264**	**35,943,338**	**13,461,475**	**$100,025,185**	**$30,429,058**	**245**
AC Transit	1,415,129	3,888	57,333,196	19,203,332	$284,897,127	$50,669,567	493
CATS	758,927	1,705	21,767,980	10,822,410	$77,050,119	$18,587,946	269
HRT	1,439,666	2,795	15,724,596	10,790,246	$63,294,653	$14,212,376	221
LYNX	1,837,359	724	26,996,158	14,714,555	$84,196,278	$24,539,515	225
MDT	2,496,435	8,158	75,723,805	28,860,941	$305,311,580	$82,454,846	694
Palm Tran	1,268,782	3,476	11,143,922	6,974,987	$48,853,682	$7,798,750	123
VTA	1,880,876	5,436	31,652,434	14,561,653	$205,807,523	$28,890,490	343
VIA	1,555,963	1,283	44,157,535	20,216,646	$127,309,485	$21,876,377	345

Source: National Transit Database

Table 3-19

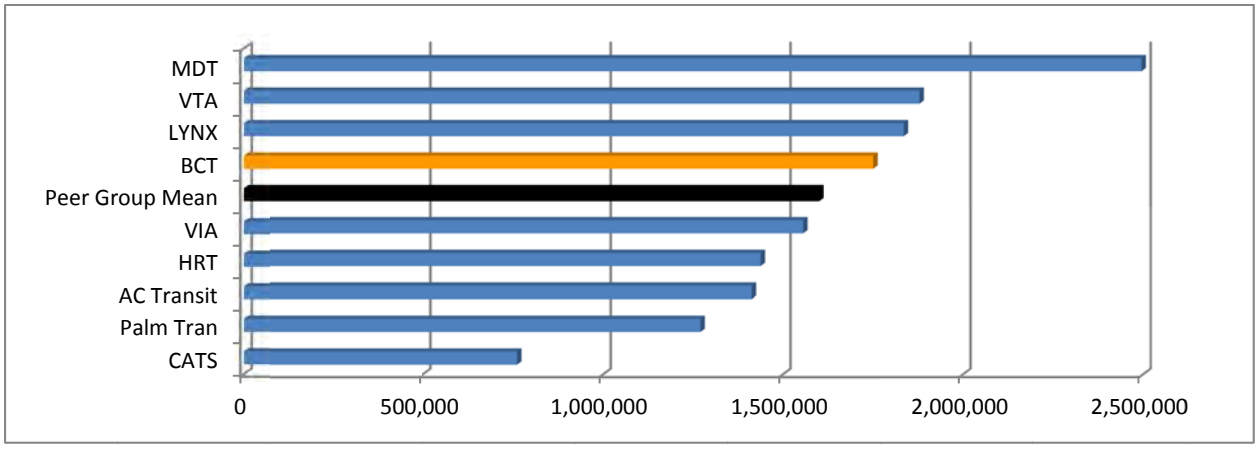
Performance Indicators, BCT Peer Review Analysis (2011)

Indicator	BCT	Peer Group Minimum	Peer Group Maximum	Peer Group Mean	BCT % from Mean
Service Area Population	1,748,066	758,927	2,496,435	1,600,134	9.20%
Service Area Population Density	4,264	724	8,158	3,525	20.90%
Passenger Trips	35,943,338	11,143,922	75,723,805	35,604,774	1.00%
Revenue Miles	13,461,475	6,974,987	28,860,941	15,511,805	-13.20%
Total Operating Expense	$100,025,185	$48,853,682	$305,311,580	$144,082,848	-30.60%
Passenger Fare Revenue	$30,429,058	$7,798,750	$82,454,846	$31,050,992	-2.00%
Vehicles Operated in Maximum Service	245	123	694	329	-25.50%

Source: National Transit Database

Figure 3-74

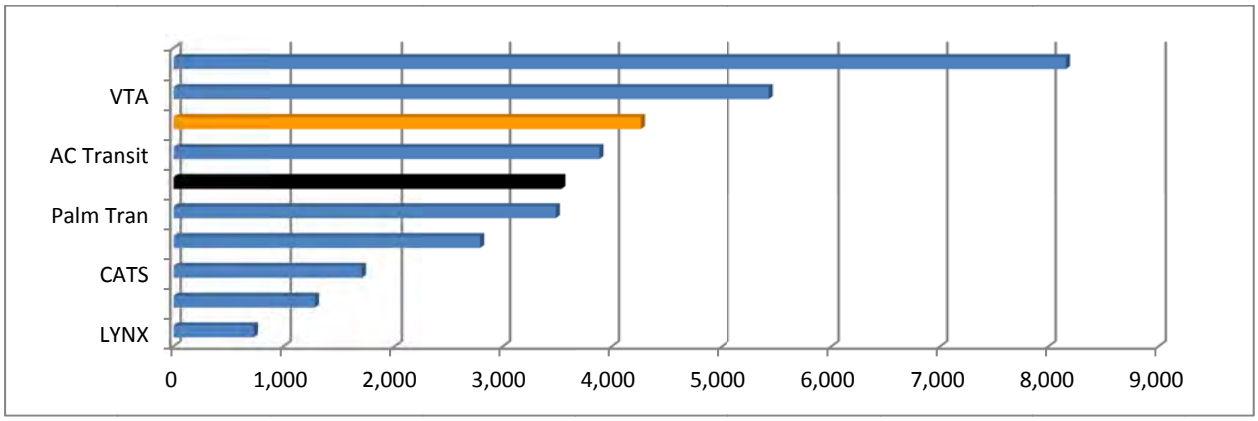
Fixed-Route Service Area Population (2011)



Source: National Transit Database

Figure 3-75

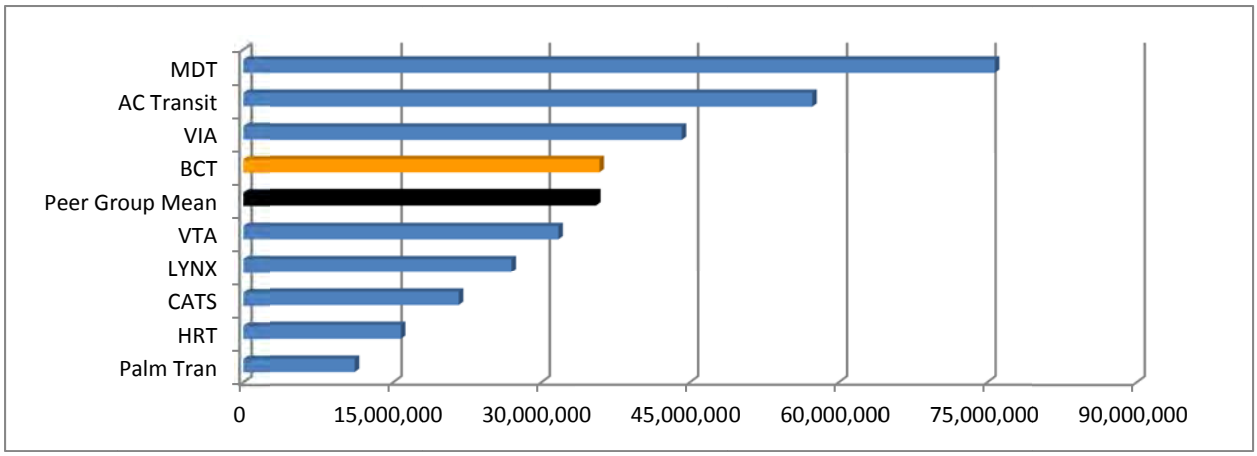
Fixed-Route Population per Square Mile of Service Area (2011)



Source: National Transit Database

Figure 3-76

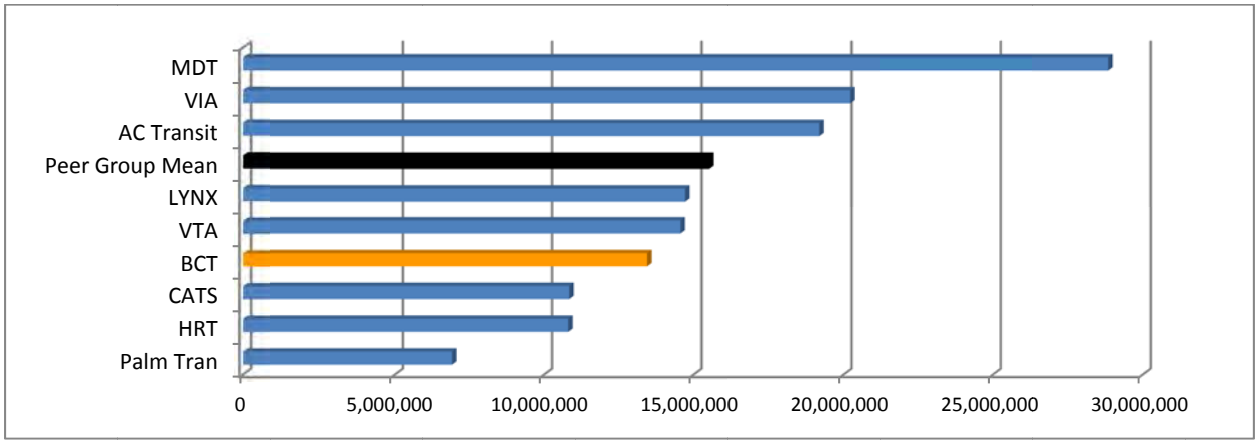
Fixed-Route Annual Passenger Trips (2011)



Source: National Transit Database

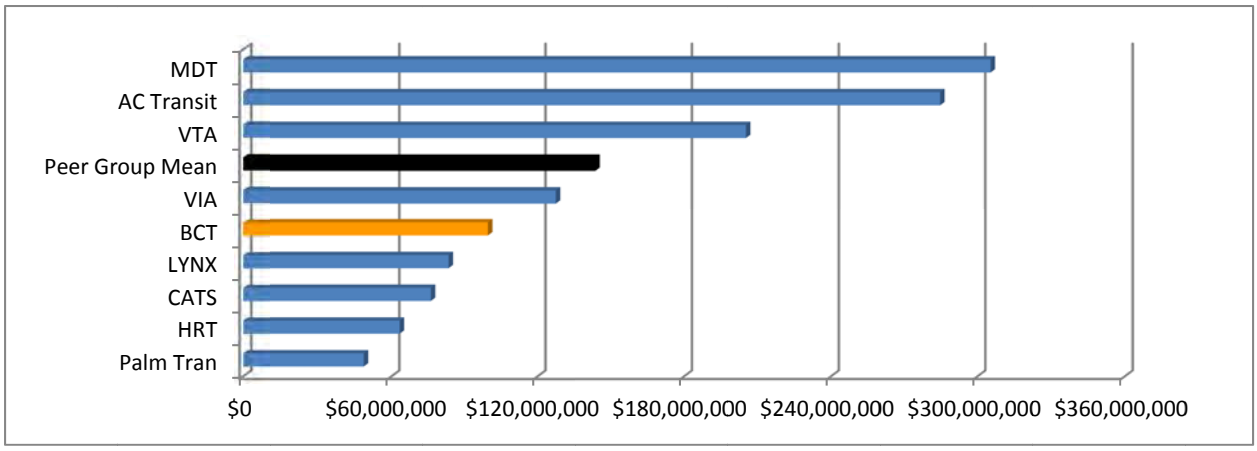
Figure 3-77

Fixed-Route Annual Revenue Miles (2011)



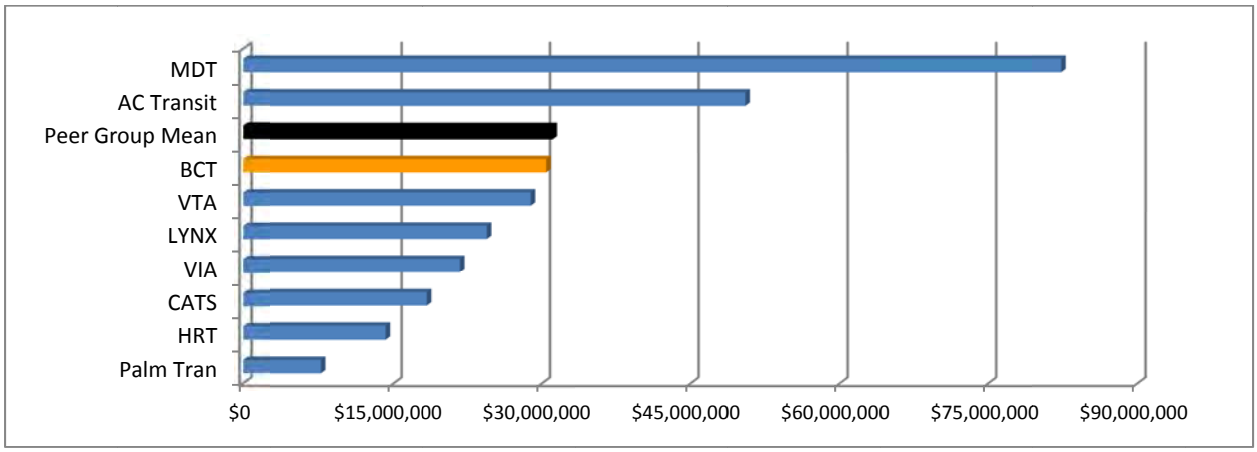
Source: National Transit Database

Figure 3-78
Fixed-Route Annual Operating Expense (2011)



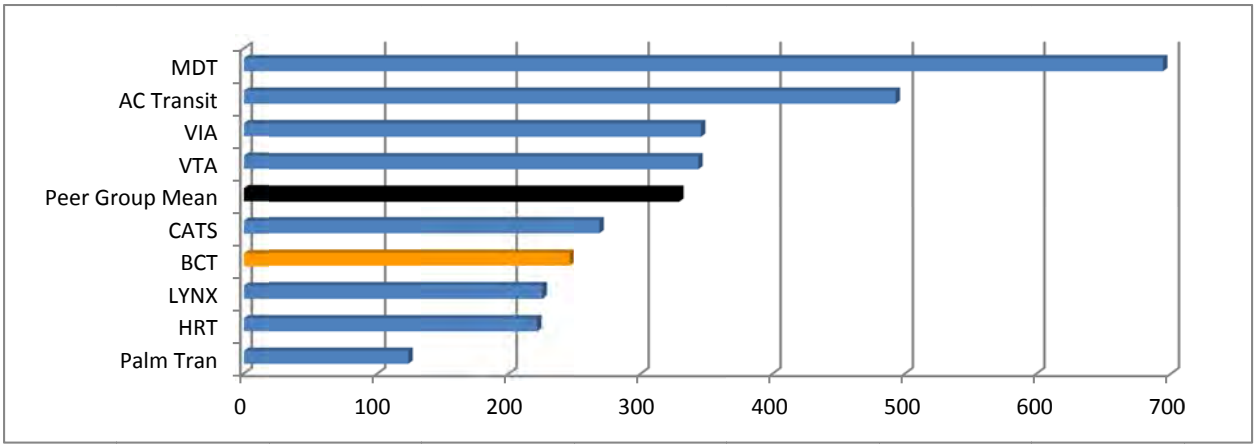
Source: National Transit Database

Figure 3-79
Fixed-Route Annual Passenger Fare Revenue (2011)



Source: National Transit Database

Figure 3-80
Fixed-Route Vehicles Operated in Maximum Service (2011)



Source: National Transit Database

Effectiveness Measures

Effectiveness measures include service supply, service consumption, and quality of service. Each category is represented by variables including vehicle miles per capita, passenger trips per revenue mile, passenger trips per revenue mile, and revenue miles between failures. Table 3-20 includes the effectiveness statistics for the fixed-route peer group. Table 3-21 and Figures 3-81 through 3-84 present the effectiveness measures for BCT's peer review analysis. The following is a summary of the effectiveness measures for the peer review analysis for BCT.

- Vehicle miles per capita for BCT are 22 percent below the peer group mean. This fact indicates that BCT is providing less bus service per resident, on average, within its service area than its peer systems.

- Passenger trips per revenue hour and passenger trips per revenue mile for BCT are approximately 27 percent and 23 percent above the peer group mean, respectively, showing much higher productivity in the consumption of the service it provides as compared to its peer systems.

- BCT's number of revenue miles between failures represents the peer group maximum, at 29,201 miles. This number is 258.9 percent above the peer group mean, indicating that BCT is doing a commendable job with vehicle maintenance and vehicle replacement, as compared to its peers.

Table 3-20

Fixed-Route Peer Group Effectiveness Statistics (2011)

Transit Agency	Vehicle Miles per Capita	Passenger Trips per Revenue Hour	Passenger Trips per Revenue Mile	Revenue Miles Between Failures
BCT	**8.75**	**36.5**	**2.67**	**29,201**
AC Transit	15.9	34.01	2.99	6,778
CATS	16.37	27.88	2.01	1,463
HRT	7.52	19.96	1.46	2,476
LYNX	8.98	26.22	1.83	14,041
MDT	13.74	31.24	2.62	1,909
Palm Tran	6.14	27.56	1.6	7,565
VTA	9.13	26.7	2.17	6,738
VIA	14.38	28.91	2.18	3,048

Source: National Transit Database

Table 3-21

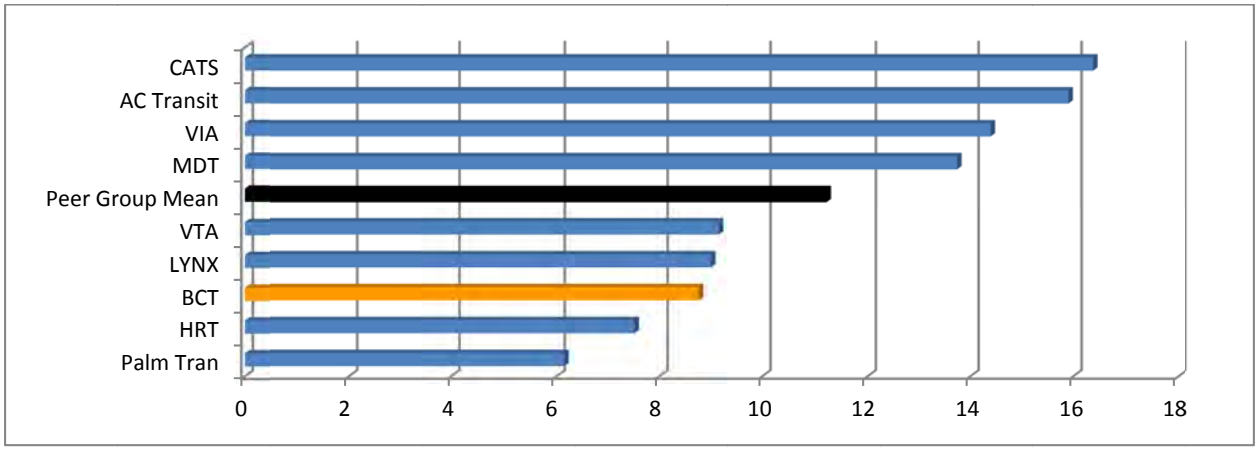
Effectiveness Measures, BCT Peer Review Analysis (2011)

Measure	BCT	Peer Group Minimum	Peer Group Maximum	Peer Group Mean	BCT % from Mean
Vehicle Miles per Capita	8.75	6.14	16.37	11.21	-22.0%
Passenger Trips per Revenue Hour	36.50	19.96	36.50	28.78	26.9%
Passenger Trips per Revenue Mile	2.67	1.46	2.99	2.17	23.0%
Revenue Miles between Failures	29,201	1,463	29,201	8,136	258.9%

Source: National Transit Database

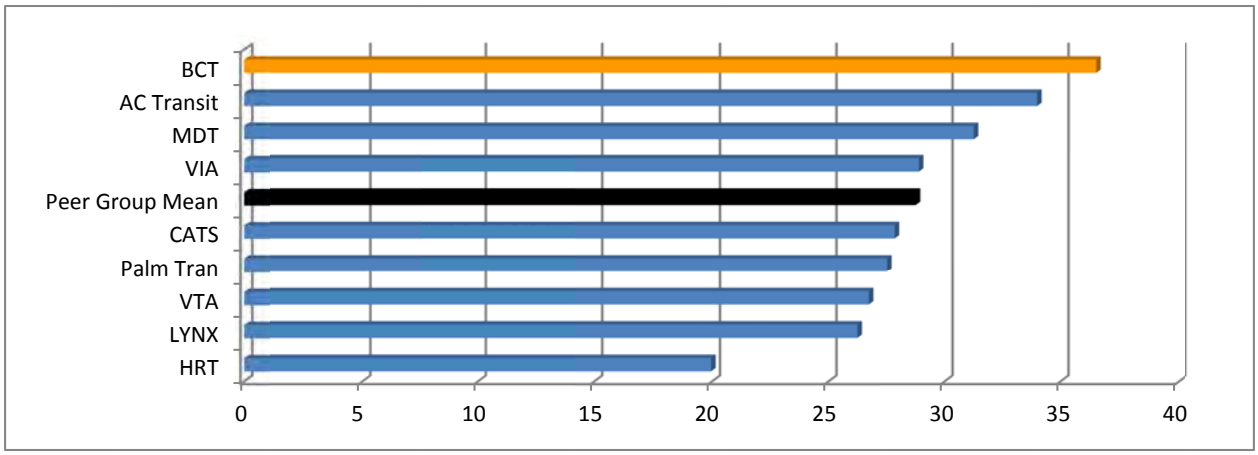
Figure 3-81

Fixed-Route Vehicle Miles per Capita (2011)



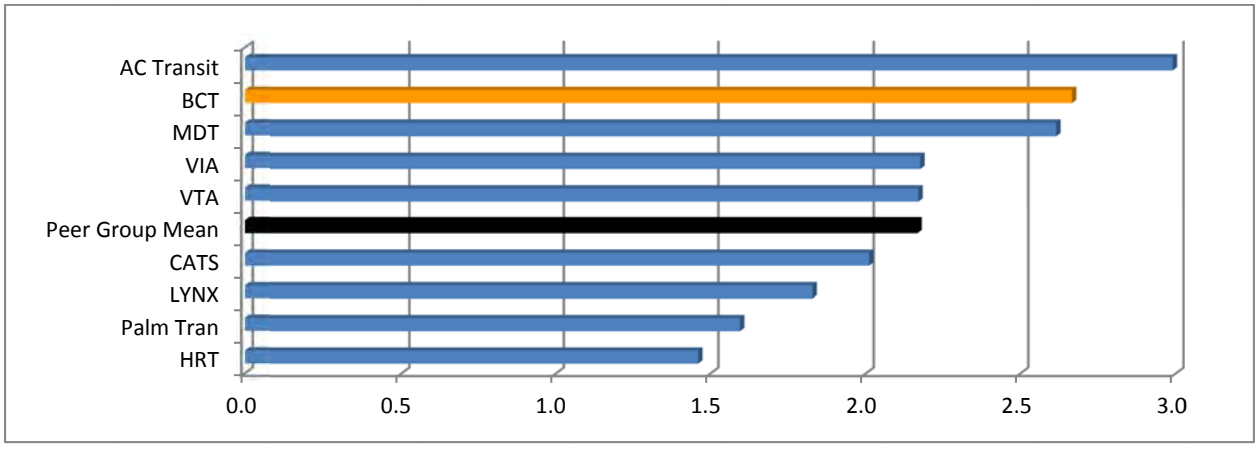
Source: National Transit Database

Figure 3-82
Fixed-Route Passenger Trips per Revenue Hour (2011)



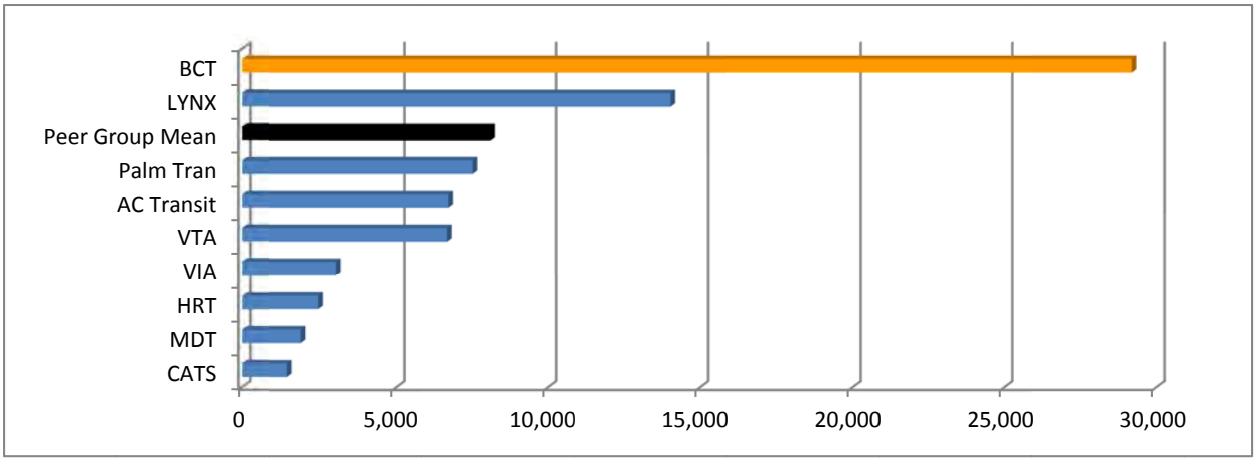
Source: National Transit Database

Figure 3-83
Fixed-Route Passenger Trips per Revenue Mile (2011)



Source: National Transit Database

Figure 3-84
Fixed-Route Revenue Miles between Failures (2011)



Source: National Transit Database

Efficiency Measures

Categories of efficiency measures include cost efficiency and operating ratios. Table 3-22 includes the efficiency statistics for the fixed-route peer group. Table 3-23 and Figures 3-85 through 3-92 present the efficiency measures for BCT's peer review analysis. The following is a summary of salient issues from the efficiency measures peer review.

- BCT's average fare is in line with the peer group average (0.3%). At the same time, BCT has the peer group maximum for farebox recovery, at 38.1 percent above the peer group average.

- Operating expense per capita, operating expense per revenue hour, operating expense per revenue mile, and operating expense per passenger trip for BCT are approximately 36, 12, 15, and 31 percent below the corresponding peer group means, respectively. This suggests that BCT has done a commendable job in controlling operating costs as compared to its peers.

Table 3-22

Fixed-Route Peer Group Efficiency Statistics (2011)

Transit Agency	Operating Expense per				Farebox Recovery Ratio	Revenue Miles Per Vehicle Mile	Revenue Hours Per Employee FTE	Average Fare
	Capita	Revenue Hour	Revenue Mile	Passenger Trip				
BCT	**$57.22**	**$101.59**	**$7.43**	**$2.78**	**30.42%**	**0.88**	**1,065**	**$0.85**
AC Transit	$201.32	$169.01	$14.84	$4.97	17.79%	0.85	1,032	$0.88
CATS	$101.53	$98.68	$7.12	$3.54	24.12%	0.87	1,024	$0.85
HRT	$43.96	$80.33	$5.87	$4.03	22.45%	1	1,115	$0.90
LYNX	$45.82	$81.77	$5.72	$3.12	29.15%	0.89	1,135	$0.91
MDT	$122.30	$125.95	$10.58	$4.03	27.01%	0.84	869	$1.09
Palm Tran	$38.50	$120.80	$7.00	$4.38	15.96%	0.9	973	$0.70
VTA	$109.42	$173.63	$14.13	$6.50	14.13%	0.85	1,027	$0.92
VIA	$81.82	$83.34	$6.30	$2.88	17.18%	0.9	1,028	$0.50

Source: National Transit Database

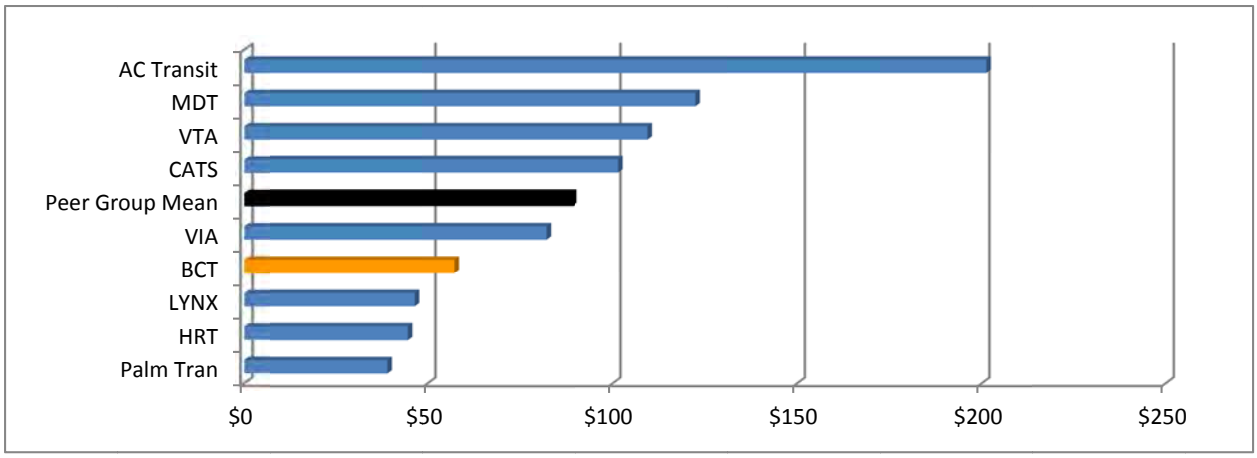
Table 3-23

Efficiency Measures, BCT Peer Review Analysis (2011)

Measure	BCT	Peer Group Minimum	Peer Group Maximum	Peer Group Mean	BCT % from Mean
Operating Expense per Capita	$57.22	$38.50	$201.32	$89.10	-35.8%
Operating Expense per Revenue Hour	$101.59	$80.33	$173.63	$115.01	-11.7%
Operating Expense per Revenue Mile	$7.43	$5.72	$14.84	$8.78	-15.3%
Operating Expense per Passenger Trip	$2.78	$2.78	$6.50	$4.03	-30.9%
Farebox Recovery	30.42%	14.13%	30.42%	22.02%	38.1%
Revenue Miles per Vehicle Mile	0.88	0.84	1.00	0.89	-0.7%
Revenue Hours per Employee FTE	1,065	869	1,135	1,030	3.4%
Average Fare	$0.85	$0.50	$1.09	$0.84	0.3%

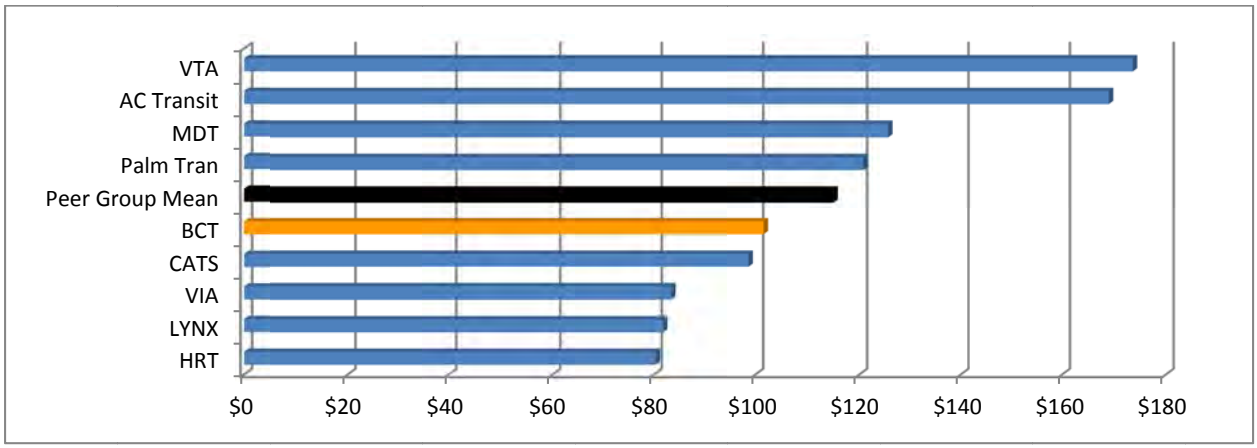
Source: National Transit Database

Figure 3-85
Fixed-Route Operating Expense per Capita (2011)



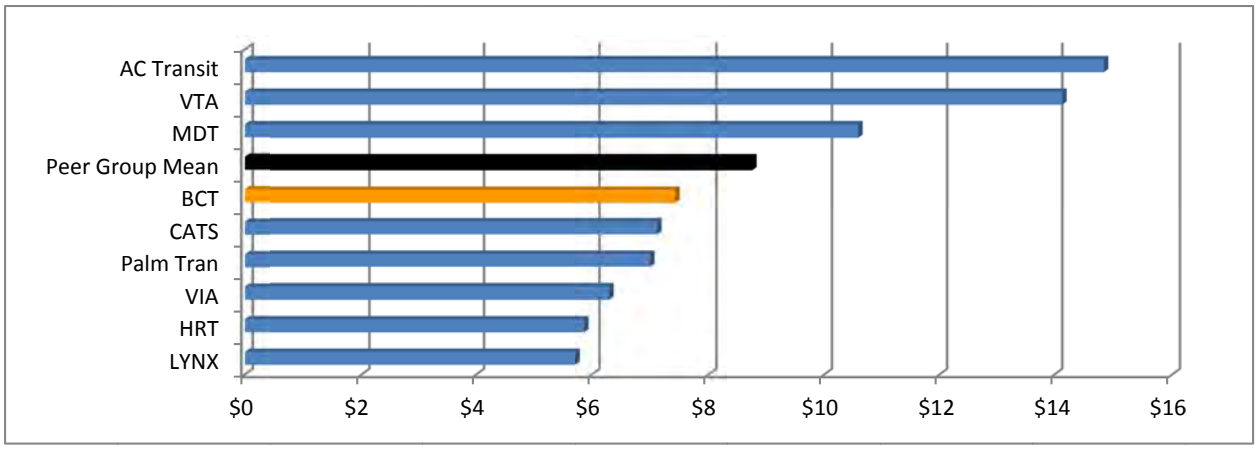
Source: National Transit Database

Figure 3-86
Fixed-Route Operating Expense per Revenue Hour (2011)



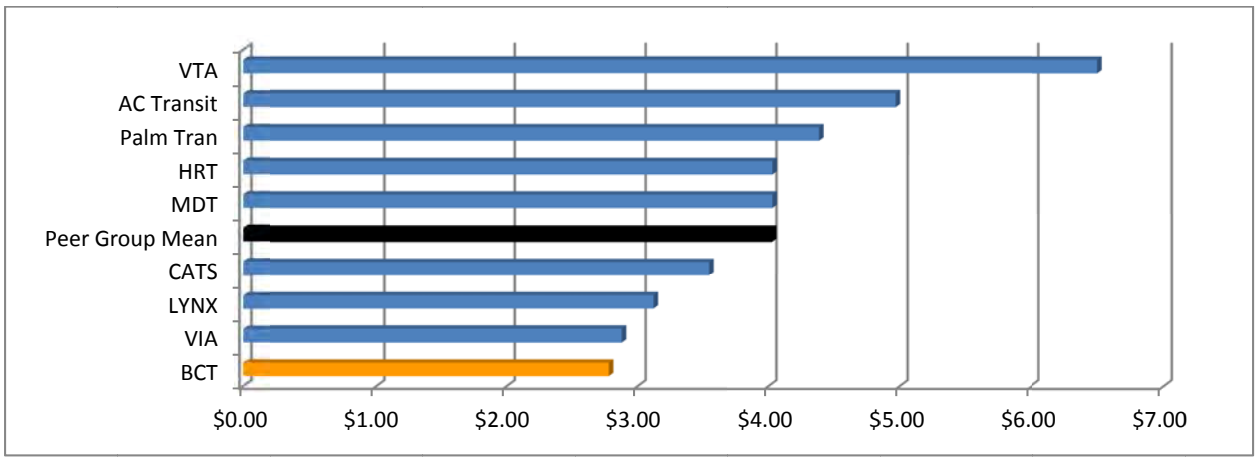
Source: National Transit Database

Figure 3-87
Fixed-Route Operating Expense per Revenue Mile (2011)



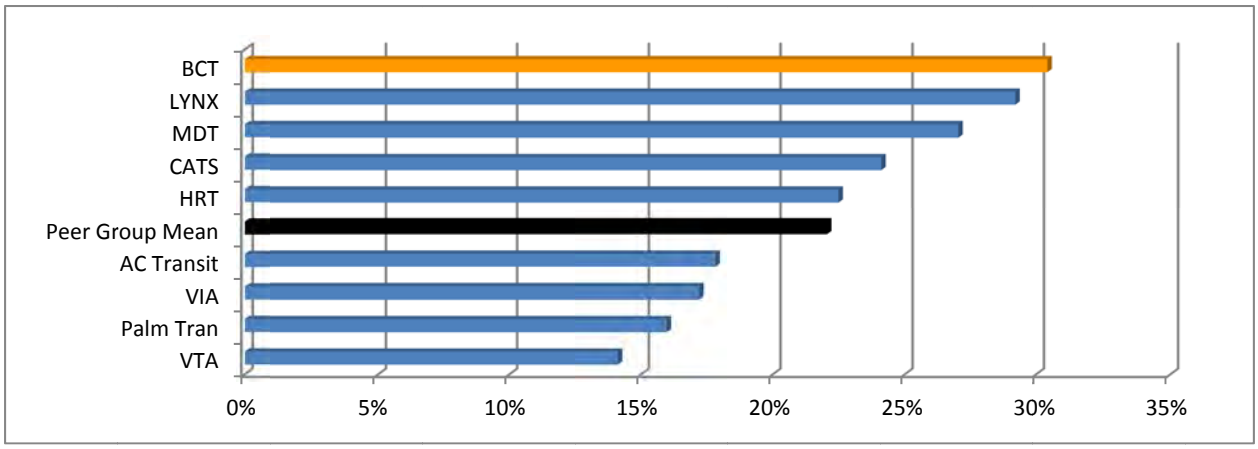
Source: National Transit Database

Figure 3-88
Fixed-Route Operating Expense per Passenger Trip (2011)



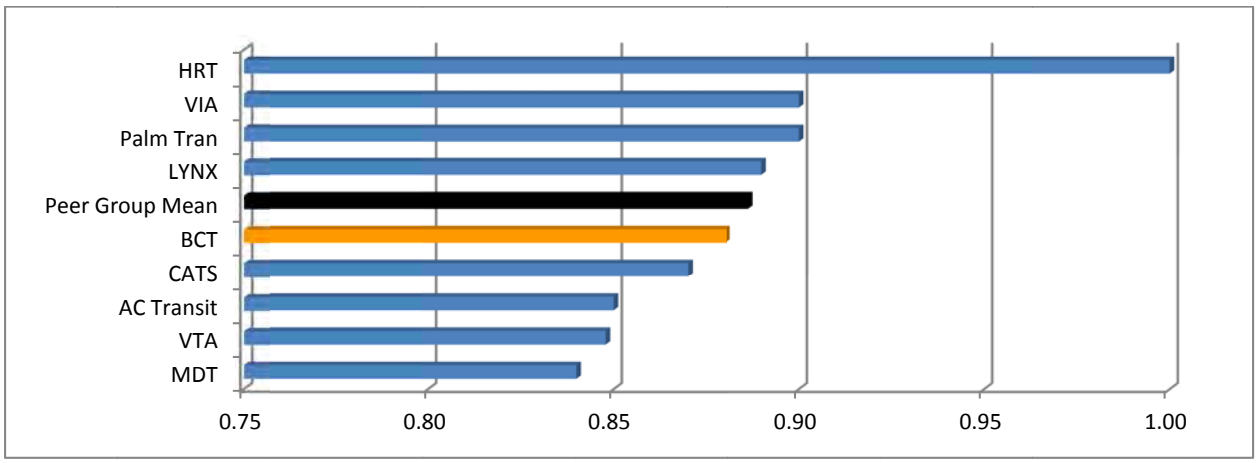
Source: National Transit Database

Figure 3-89
Fixed-Route Farebox Recovery Ratio (2011)



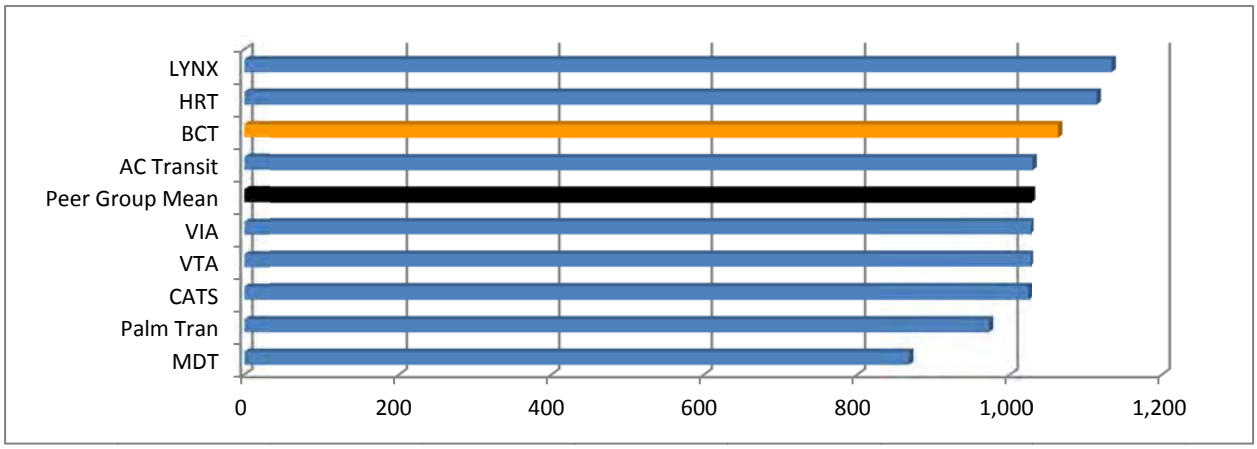
Source: National Transit Database

Figure 3-90
Fixed-Route Revenue Miles per Vehicle Mile (2011)



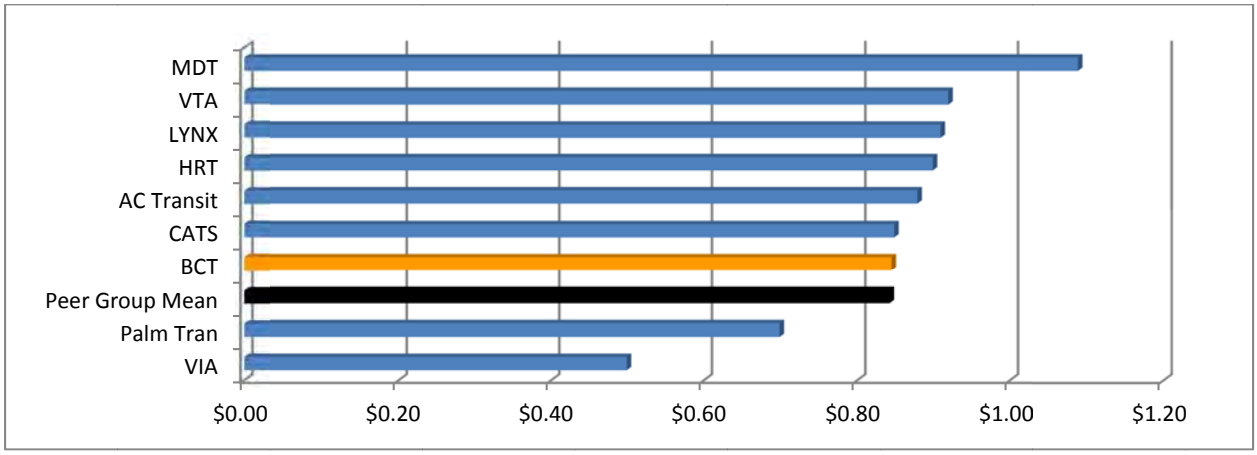
Source: National Transit Database

Figure 3-91
Fixed-Route Revenue Hours per Employee FTE (2011)



Source: National Transit Database

Figure 3-92
Fixed-Route Average Fare (2011)



Source: National Transit Database

Summary Results of Fixed-Route Peer Review Analysis

Table 3-24 provides a summary of the fixed-route peer review analysis for BCT's fixed-route system. The table includes each performance measure and BCT's standing within the peer group. The following strengths and opportunities were identified for BCT based on the peer review.

- ***Service Supply*** – Service supply is an area that provides BCT with an opportunity for improvement. BCT vehicle miles per capita are below the mean for the peer group.

- ***Service Consumption*** – BCT's passenger trips per revenue mile and passenger trips per revenue hour are well above the mean for service consumption.

- ***Quality of Service*** – This area is also indicated as a strength. BCT is above the mean in terms of the number revenue miles between roadcalls and failures.

- ***Cost Efficiency*** – This is noted as a strength, since operating expense per passenger trip, operating expense per revenue hour, and operating expense per revenue mile are below the mean for the peer group.

- ***Operating Ratio and Fare*** – BCT's farebox recovery ratio is also well above the mean (38%) for the peer group. BCT effectively maintains farebox revenues that support the level of services being provided while having an average fare in line with other peer systems.

Table 3-24
BCT Fixed-Route Peer Review Analysis Summary (2011)

Performance Indicators/Measures	Percent Away From Mean	Indicator*
Indicators		
Service Area Population	9.20%	N/A
Service Area Population Density	20.90%	N/A
Passenger Trips	1.00%	o
Revenue Miles	-13.20%	-
Total Operating Expense	-30.60%	+
Passenger Fare Revenue	-2.00%	o
Vehicles Operated in Maximum Service	-25.50%	-
Service Supply		
Vehicle Miles per Capita	-22.00%	-
Service Consumption		
Passenger Trips per Revenue Mile	26.90%	+
Passenger Trips per Revenue Hour	23.00%	+
Quality of Service		
Revenue Miles between Failures	258.90%	+
Cost Efficiency		
Operating Expense per Capita	-35.80%	+
Operating Expense per Revenue Hour	-11.70%	+
Operating Expense per Revenue Mile	-15.30%	+
Operating Expense per Passenger Trip	-30.90%	+
Operating Ratio		
Farebox Recovery	38.10%	+
Vehicle Utilization		
Revenue Miles per Vehicle Mile	-0.70%	o
Labor Productivity		
Revenue Hours per Employee FTE	3.40%	o
Fare		
Average Fare	0.30%	o

*Indicates a positive (+), negative (-), neutral (o), or not applicable (N/A) standing within the selected peer group. A result less than 5 percent from the peer group mean was considered neutral.

TOPS SERVICE PEER REVIEW

The TOPS peer review was conducted using the same peers selected for the fixed-route service peer review. NTD data from 2011 were used to analyze performance indicators for each peer system's demand-response service. Statistics for both PT and DO demand-response services, as applicable, were compiled to conduct the analysis. Table 3-25 includes the demand-response performance statistics for all of the peers in the fixed-route peer group.

Table 3-25

Paratransit Peer Group Performance Statistics (2011)

Transit Agency	Passenger Trips	Revenue Miles	Revenue Hours	Operating Expense
BCT	**685,998**	**6,857,322**	**424,532**	**$16,756,333**
AC Transit	752,693	6,365,949	411,335	$33,500,787
CATS	229,146	2,445,175	130,588	$7,353,614
HRT	346,200	2,992,991	194,220	$9,545,758
LYNX	821,169	8,597,624	516,283	$24,704,331
MDT	1,593,806	13,232,539	978,336	$46,939,524
Palm Tran	913,057	8,598,446	508,405	$25,588,096
VTA	824,813	6,010,766	319,914	$24,648,704
VIA	1,051,099	9,203,155	483,497	$31,232,458

Source: National Transit Database

Table 3-26 summarizes the paratransit peer group analysis performance statistics noted in Table 3-28. For each measure, the table provides BCT's performance, the maximum value among the peer group, the minimum value among the peer group, the mean of the peer group, and BCT's percent difference from the mean value. Peer rankings for each performance indicator are illustrated in Figures 3-93 through 3-96.

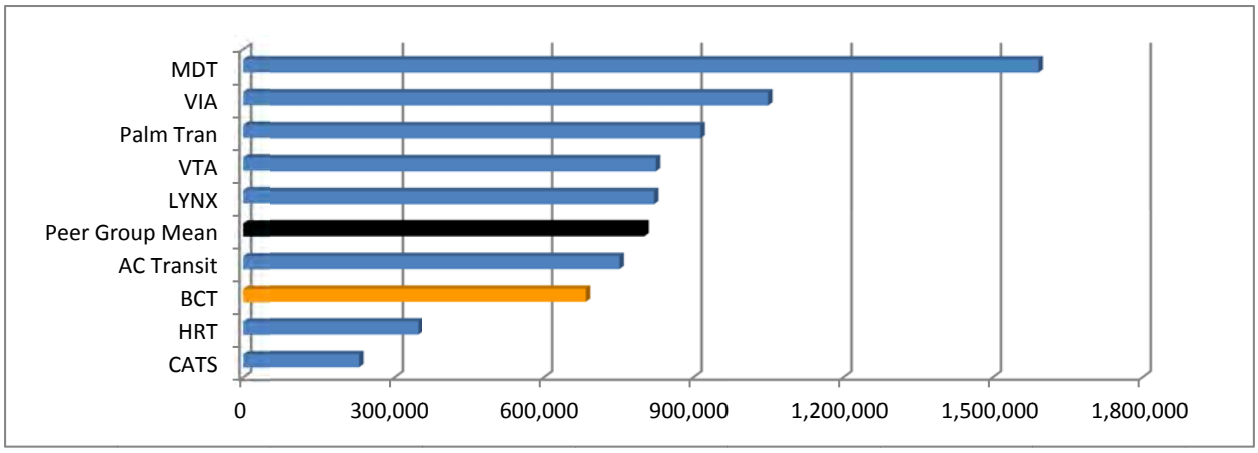
Table 3-26

Paratransit Peer Review – Performance Indicators (2011)

Measure	BCT	Peer Group Minimum	Peer Group Maximum	Peer Group Mean	BCT: Percent Deviation from Mean
Passenger Trips	685,998	229,146	1,593,806	801,998	-14.50%
Revenue Miles	6,857,322	2,445,175	13,232,539	7,144,885	-4.00%
Revenue Hours	424,532	130,588	978,336	440,790	-3.70%
Total Operating Expense	$16,756,333	$7,353,614	$46,939,524	$24,474,401	-31.50%

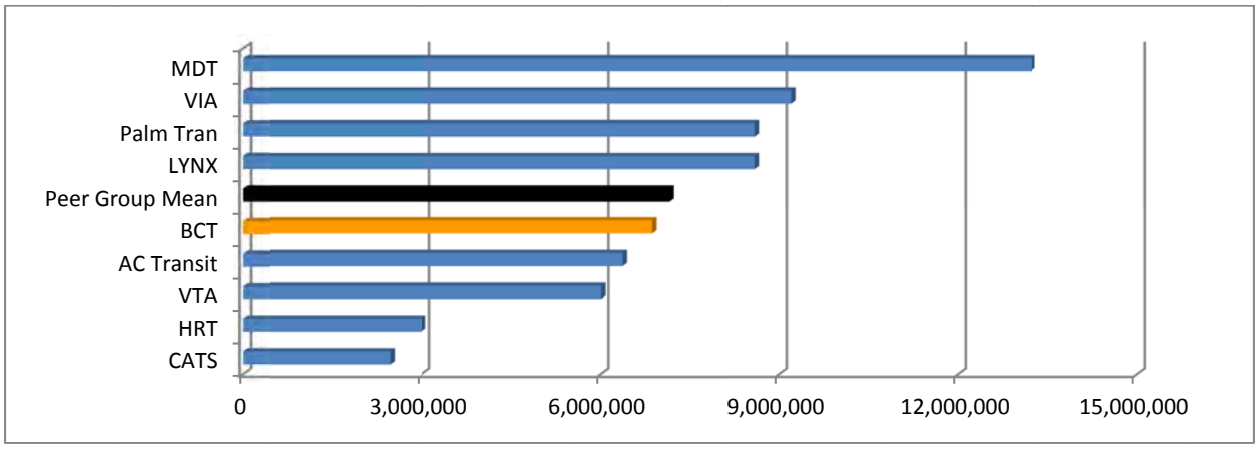
Source: National Transit Database

Figure 3-93
Paratransit Annual Passenger Trips (2011)



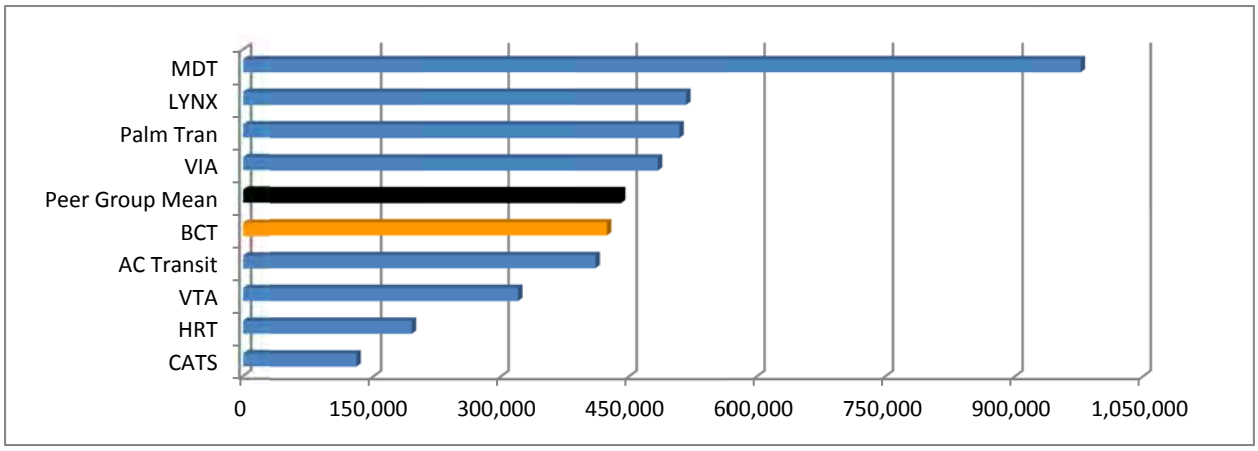
Source: National Transit Database

Figure 3-94
Paratransit Annual Revenue Miles (2011)



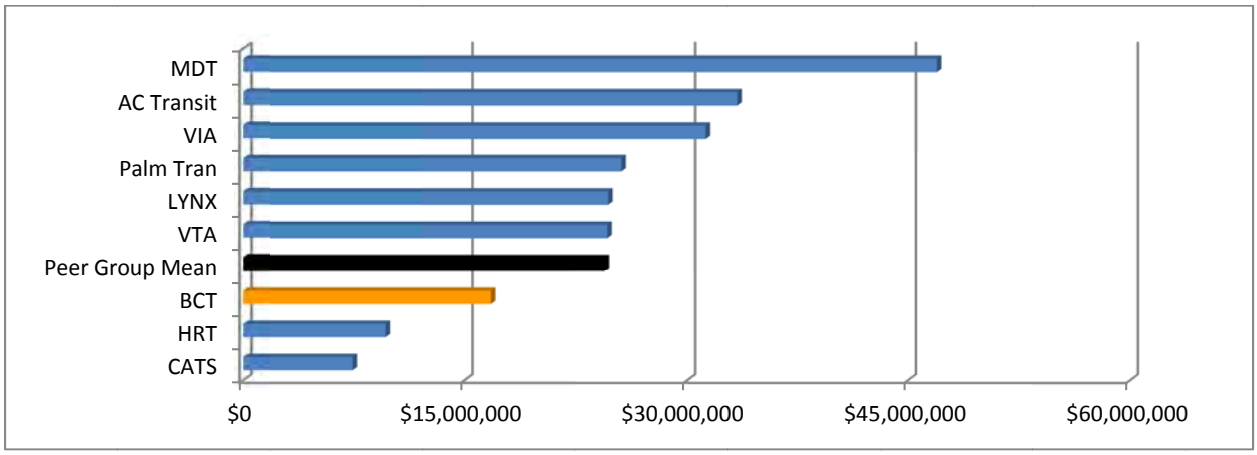
Source: National Transit Database

Figure 3-95
Paratransit Annual Revenue Hours (2011)



Source: National Transit Database

Figure 3-96
Paratransit Annual Operating Expense (2011)



Source: National Transit Database

Financial and operational performance measures were selected to provide a good indicator of overall system performance. Table 3-27 presents the peer group statistics for the selected financial and operational measures.

Table 3-27

Paratransit Peer Group Financial & Operational Measures (2011)

Transit System	Operating Expense per Revenue Hour	Operating Expense per Revenue Mile	Operating Expense per Passenger Trip	Passenger Trips per Revenue Mile	Passenger Trips per Revenue Hour
BCT	**$39.47**	**$2.44**	**$24.43**	**0.1**	**1.62**
AC Transit	$81.44	$5.26	$44.51	0.12	1.83
CATS	$56.31	$3.01	$32.09	0.09	1.75
HRT	$49.15	$3.19	$27.57	0.12	1.78
LYNX	$47.85	$2.87	$30.08	0.1	1.59
MDT	$47.98	$3.55	$29.45	0.12	1.63
Palm Tran	$50.33	$2.98	$28.02	0.11	1.8
VTA	$77.05	$4.10	$29.88	0.14	2.58
VIA	$64.26	$3.39	$29.63	0.12	2.18

Source: National Transit Database

Table 3-28 summarizes the peer group analysis for the financial and operational measures noted in Table 3-29. Peer rankings for each financial and operational measure are illustrated in Figures 3-97 through 3-101.

Table 3-28

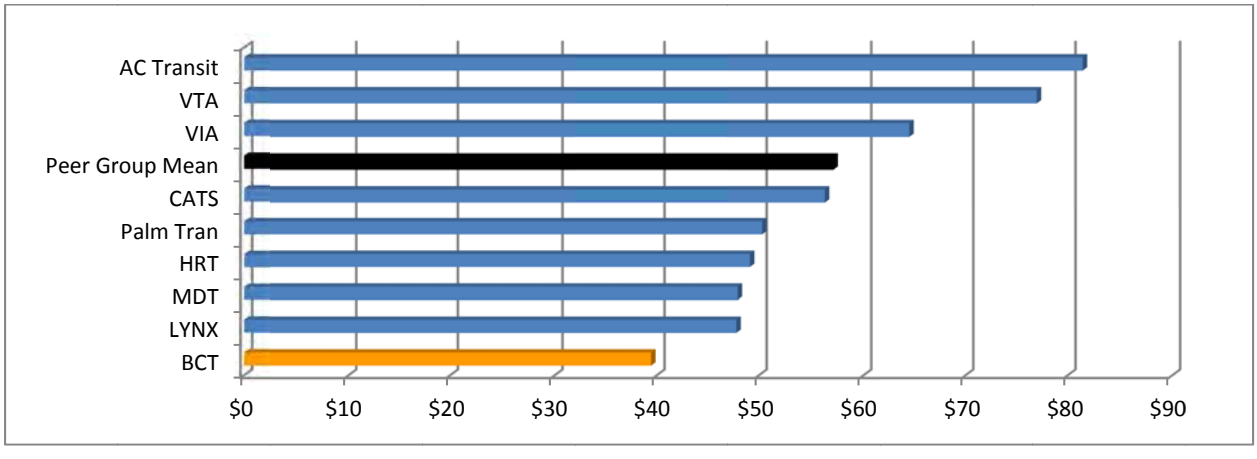
Paratransit Peer Review – Financial & Operational Indicators (2011)

Measure	BCT	Peer Group Minimum	Peer Group Maximum	Peer Group Mean	BCT: % Deviation from Mean
Operating Expense per Revenue Hour	$39.47	$39.47	$81.44	$57.13	-30.90%
Operating Expense per Revenue Mile	$2.44	$2.44	$5.26	$3.42	-28.60%
Operating Expense Per Passenger Trip	$24.43	$24.43	$44.51	$30.64	-20.30%
Passenger Trips per Revenue Mile	0.1	0.09	0.14	0.11	-10.10%
Passenger Trips per Revenue Hour	1.62	1.59	2.58	1.86	-13.20%

Source: National Transit Database

Figure 3-97

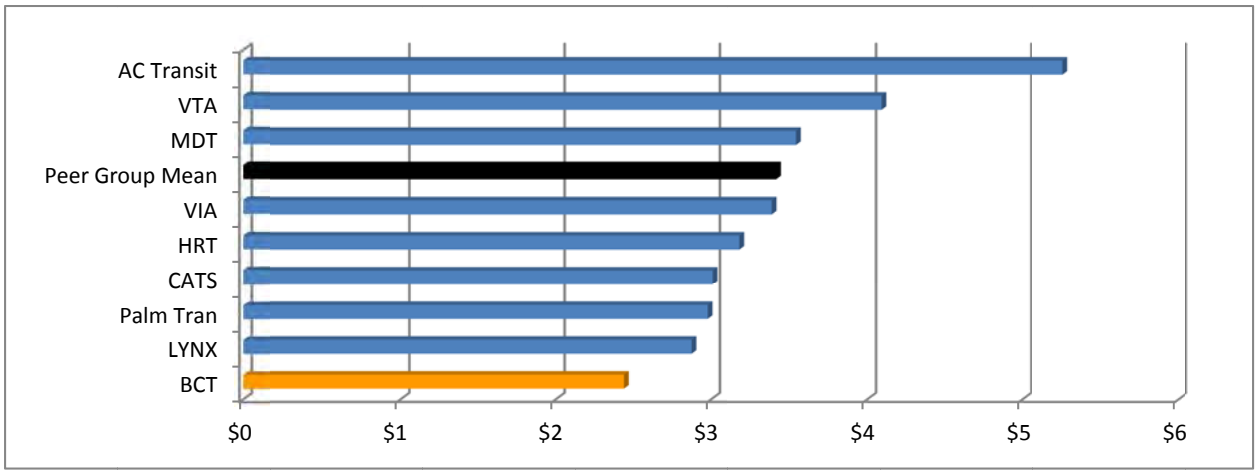
Paratransit Operating Expense per Revenue Hour (2011)



Source: National Transit Database

Figure 3-98

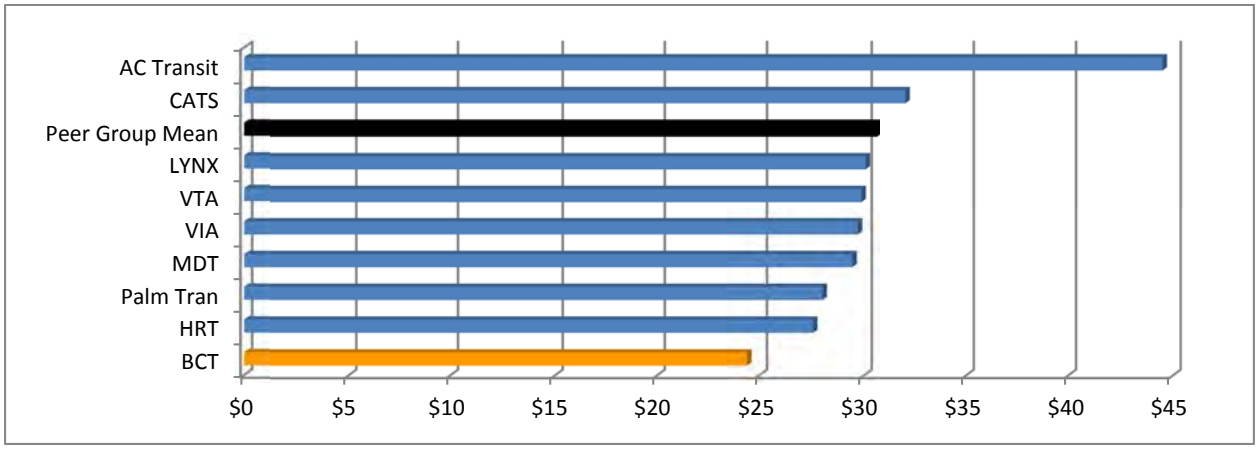
Paratransit Operating Expense per Revenue Mile (2011)



Source: National Transit Database

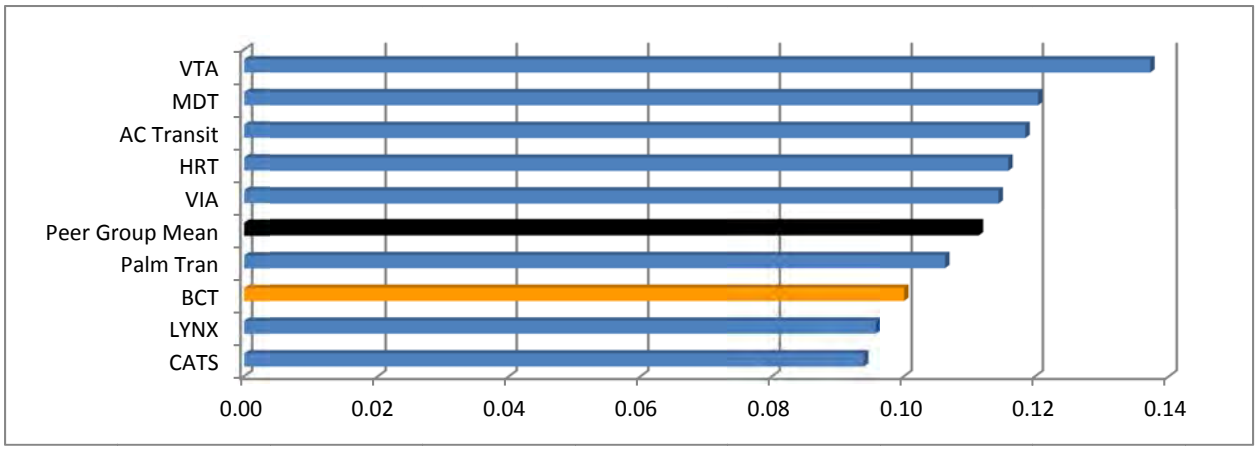
Figure 3-99

Paratransit Operating Expense per Passenger Trip (2011)



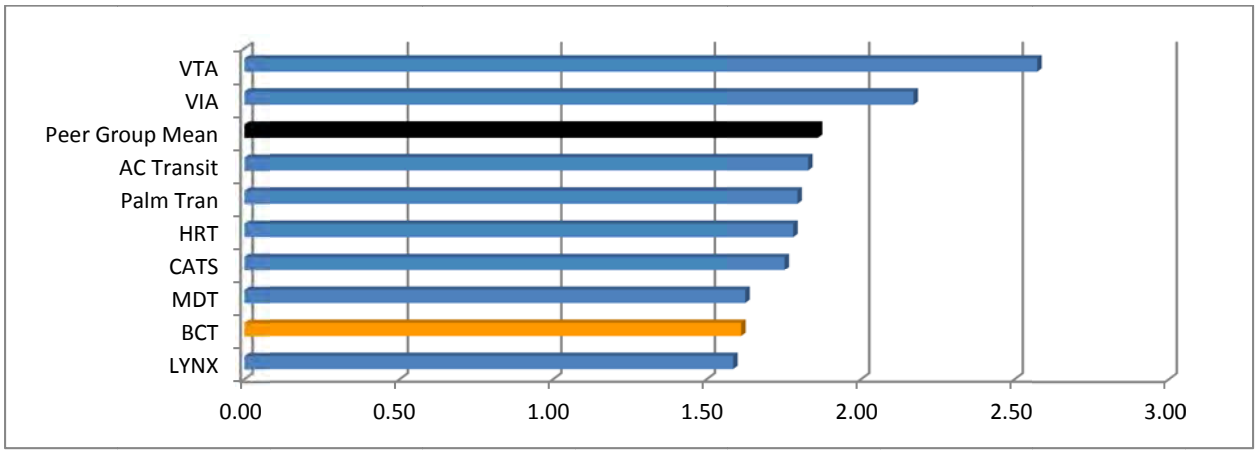
Source: National Transit Database

Figure 3-100
Paratransit Passenger Trips per Revenue Mile (2011)



Source: National Transit Database

Figure 3-101
Paratransit Passenger Trips per Revenue Hour (2011)



Source: National Transit Database

Summary Results of Paratransit Service Peer Review Analysis

Highlights from the paratransit service peer review analysis are summarized below. Table 3-29 provides a summary of the paratransit service peer review analysis.

Table 3-29

TOPS Paratransit Peer Review Analysis Summary (2011)

Performance Indicators/Measures	Percent Deviation From Mean	Indicator*
Indicators		
Passenger Trips	-14.50%	N/A**
Revenue Miles	-4.00%	o
Revenue Hours	-3.70%	o
Total Operating Expense	-31.50%	+
Cost Efficiency		
Operating Expense per Revenue Hour	-30.90%	+
Operating Expense per Revenue Mile	-28.60%	+
Operating Expense per Passenger Trip	-20.30%	+
Service Consumption		
Passenger Trips per Revenue Mile	-10.10%	-
Passenger Trips per Revenue Hour	-13.20%	-

*Indicates a positive (+), negative (-), neutral (o), or not applicable (N/A) standing within the selected peer group. A result less than 5% from the peer group mean was considered neutral.

**A positive, negative, or neutral indicator could not be determined for passenger trips based on the data analyzed.

- The number of paratransit passenger trips provided by BCT in 2011, 685,998, was 14.5 percent below the peer group mean of 801,998 trips. Additionally, BCT was below the mean for revenue miles and revenue hours of service (about 4% each, respectively). Given that all of the peers have similar service area sizes, these figures suggest that BCT may be experiencing a greater level of success in encouraging paratransit passengers who are able to do so to use fixed-route transit services.

- At the same time, BCT's total operating cost was 31.5 percent below the mean, as was the case for all of the related financial measures. Operating expense per revenue hour, per revenue mile, and per passenger trip were 31, 29, and 20 percent below the corresponding peer group means, respectively, indicating that BCT is providing comparatively more cost-effective paratransit service than many of its peers.

- BCT has some room for improvement when considering the two selected service consumption measures, passenger trips per revenue mile and per revenue hour. BCT is 10 and 13 percent below the corresponding peer group means for these measures.

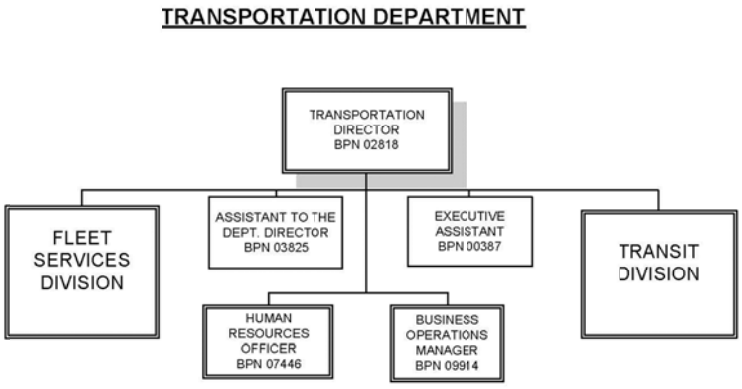
ORGANIZATION AND GOVERNANCE ASSESSMENT

As part of the BCT *Connected* process, a general assessment of BCT's organizational structure was completed in order to ensure that staffing levels are sufficient to support enhancements to the transit network as identified in the 10-year vision. BCT's staffing levels were compared with previously identified peer agencies. The organizational assessment includes a general review of current staffing levels by major employment category as identified per NTD reporting requirements.

ORGANIZATIONAL STRUCTURE

BCT operates as a department of Broward County government. According to 2011 NTD data, BCT has a total of 918 employees. As a County department, BCT is governed by the Broward County Board of County Commissioners (BCC), which serves as the transit agency's oversight board. The BCC consists of nine Commissioners elected by district in partisan elections. The BCC appoints the County's Chief Executive Officer, called the County Administrator in Broward County, who implements BCC-approved programs and directs the functions of County government. Figure 3-102 displays Broward County's organizational structure and where BCT fits into the overall structure. A detailed organizational chart can be found in Appendix D.

Figure 3-102
Broward County Organizational Structure



Source: Broward County

ORGANIZATIONAL PEER ANALYSIS

A peer review of staffing levels was performed to compare BCT's staffing levels with other transit agencies of similar size. The peer group used to perform the review was derived from the fixed-route

peer agencies identified as part of the transit development planning process. This group, which was verified for appropriateness based on the most recent validated NTD information from the Federal Transit Administration (FTA), consists of both Florida and non-Florida transit agencies. Using the same peers as shown in Table 3-20, the number of full-time equivalent administrative, vehicle maintenance, and operational staff were obtained for each agency from the 2011 NTD. The 2011 NTD is the most recent validated data currently available.

This analysis is completed with the same set of peers as in the peer review. Because of variability in system size, in order to more fairly compare the number of staff employed by the peer group members and BCT, it was necessary to normalize the number of staff in each employee category using a transit service performance statistic. Typical variables used to compare transit agency service performance characteristics include peak vehicles, revenue hours of service, and revenue miles of service. For the purposes of this peer review, the service performance statistics were tied to staff categories as follows:

- Peak vehicles and administrative staff
- Revenue hours and operations staff
- Revenue miles and vehicle maintenance staff

Table 3-30 shows the performance statistics and staffing levels for the eight peer transit agencies and the corresponding data for BCT. Also included in that table are the average and standard deviation for each variable. Table 3-31 compares BCT staffing levels in each staff category to the peer system averages. Table 3-32 shows that BCT is operating with fewer staff in each staff category than the peer system average. In the operating category, BCT is operating with 35 fewer FTEs than it would be if it were on par with the peer agency average. In the maintenance category, BCT is operating with 27 fewer FTEs than it would be if it were on par with the peer agency average. In the administrative category, BCT is operating with 3 fewer FTEs than it would be if it were on par with the peer agency average. In other words, BCT has a very lean and efficient staff composition as compared to the peer group average.

Table 3-30

BCT Staffing Level Peer Review

Transit Agency	Revenue Hours	Revenue Miles	Peak Vehicles	Operating Employees FTEs	Maintenance Employees FTEs	Administrative Employees FTEs
BCT	984,624	13,461,475	245	653	178	87
AC Transit	1,685,688	19,203,332	493	1,104	336	193
Palm Tran	404,415	6,974,987	123	295	91	30
LYNX	1,029,676	14,714,555	225	643	167	97
CATS	780,795	10,822,410	269	526	153	83
MDT	2,424,028	28,860,941	694	2,032	523	234
VTA	1,185,310	14,561,653	343	764	259	115
HRT	787,888	10,790,246	221	501	118	87
VIA	1,527,506	20,216,646	345	1,030	298	158
Average	**1,201,103**	**15,511,805**	**329**	**839**	**236**	**121**
Standard Deviation	**601,615**	**6,489,081**	**172**	**514**	**135**	**63**

Table 3-31

BCT Staffing versus Peer System Staffing

Employee Category	Employee FTEs	Operational Characteristics		FTE per Operational Characteristic	
BCT					
Operating	653	984,624	Revenue Hours	6.63	10,000 Revenue Hours
Maintenance	178	13,461,475	Revenue Miles	1.32	100,000 Revenue Miles
Administrative	87	245	Peak Vehicles	3.55	10 Peak Vehicles
Peer System Average					
Operating	839	1,201,103	Revenue Hours	6.98	10,000 Revenue Hours
Maintenance	236	15,511,805	Revenue Miles	1.52	100,000 Revenue Miles
Administrative	121	329	Peak Vehicles	3.67	10 Peak Vehicles

Table 3-32

BCT Staff Shortfall and Surplus

Employee Category	BCT Current Employee FTEs	Projected BCT FTEs Based on Peer System Average	BCT Shortfall/ Surplus versus Peer System Average
Operating	653	688	-35
Maintenance	178	205	-27
Administrative	87	90	-3

Organizational Assessment Summary

The organizational analysis shows that BCT has fewer employees than many of its peer agencies. While fewer employees can indicate a more efficient operation, it can also be indicative of an agency that is understaffed. BCT management will review staffing levels to ensure that they are appropriate.

BROWARD COUNTY Transit

CONNECTED

SECTION 4

Public Involvement

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Section 4

Public Involvement

Extensive public outreach activities were undertaken during the TDP process. In this section, the types of activities undertaken are described and the input received during those outreach activities is detailed. The first step in the public involvement process was to develop a Public Involvement Plan to guide activities. This plan can be found in Appendix E. It was approved by FDOT.

PUBLIC INVOLVEMENT ACTIVITIES

Public involvement activities included the following items:

- Creating a brand,
- Establishing Advisory Review Committee,
- Conducting stakeholder interviews,
- Developing a web page,
- Hosting discussion group workshops,
- Conducting surveys,
- Hosting community drop-ins, and
- Giving presentations.

BRANDING

As part of the TDP process, a brand was developed. The name, BCT *Connected*, along with a logo were created and used throughout the process. The logo, as seen in Figure 4-1, allowed individuals to more readily identify the plan and know when activities related to it were being held.

Figure 4-1
BCT *Connected* Logo

Figure 4-2
ARC Meeting Participants

ADVISORY REVIEW COMMITTEE

To ensure that BCT *Connected* was developed in a logical and thoughtful manner, BCT established an Advisory Review Committee (ARC) to oversee its development. Figures 4-2 and 4-3 are photographs from the first ARC meeting and Table 4-1 lists the members of the ARC. BCT included members of MPO staff and Workforce One, the regional workforce development board, to meet the requirements of rule 14-73.001 which requires BCT to allow these organizations the opportunity to provide comment on the TDP.

The ARC met four times during the development of BCT *Connected*:

- March 4, 2013
- May 13, 2013
- July 29, 2013
- August 19, 2013

Figure 4-3
ARC Meeting Participants

Table 4-1
Advisory Review Committee

Member	Organization
Germaine Smith Baugh	Urban League of Broward County
Kareen Boutros	Broward Workshop
Al Calloway	Current BCT Rider
Sidney Calloway	Transit Advocate
Paul Carpenter	Transit Advocate
Diane Drews	Student, Broward College
Larry Hymowitz	Florida Department of Transportation, District 4
Mason Jackson	Workforce One
Francois Leconte	Minority Development and Empowerment Organization
Buffy Sanders	Broward Metropolitan Planning Organization
Shirley Snipes	Aging and Disability Resource Center of Broward
Jim Udvardy	South Florida Commuter Services
Natalie Yesbeck	South Florida Regional Transportation Authority

STAKEHOLDER INTERVIEWS

Throughout the project, stakeholder interviews were held with individuals who could provide information regarding transportation issues and/or were viewed as having a particular stake in the decisions made with regard to transportation. Table 4-2 contains a list of stakeholders that were interviewed and the organizations they represent. Detailed summaries of the input gathered during these interviews can be found in Appendix F. Themes from the stakeholder interviews included the following:

- Connection is needed for bicyclists and pedestrians,
- Real-time passenger information is needed,
- Increased service and improved service frequency should be a focus for BCT,

- BCT should increase the percentage of hybrid vehicles in its fleet,
- System awareness needs to be increased through marketing efforts, and
- Overall BCT is doing a good job.

Table 4-2
Stakeholders

Stakeholder	Title	Organization	Interview Date
Dan Lindblade	President/CEO	Greater Chamber of Commerce	3.12.13
Tim Ryan	Commissioner	Broward County Board of County Commissioners	4.5.13
Dale V. Holness	Commissioner	Broward County Board of County Commissioners	4.8.13
Martin David Kiar	Commissioner	Broward County Board of County Commissioners	4.8.13
Stacy Ritter	Commissioner	Broward County Board of County Commissioners	4.8.13
Suzanne Gunzburger	Commissioner	Broward County Board of County Commissioners	4.8.13
James Murley	Executive Director	South Florida Regional Planning Council	4.9.13
Lois Wexler	Commissioner	Broward County Board of County Commissioners	4.15.13
Chris Wren	Executive Director	Downtown Development Authority of Fort Lauderdale	4.15.13
Alan Hooper	Chairman	Downtown Fort Lauderdale Transportation Management Association	4.15.13
Phyllis Zeiler	Executive Director	Downtown Fort Lauderdale Transportation Management Association	4.15.13
Nicki Grossman	President/CEO	Greater Fort Lauderdale Convention & Visitors Bureau	4.18.13
Kristin Jacobs	Commissioner	Broward County Board of County Commissioners	5.6.13
Chip LaMarca	Commissioner	Broward County Board of County Commissioners	5.13.13
Barbara Sharief	Commissioner	Broward County Board of County Commissioners	5.13.13
Robert Runcie	Superintendent	Broward County Public Schools	5.29.13
Jeff Moquin	Chief of Staff		
Maurice Woods	Chief of Operations Officer		
Leslie Brown	Chief Portfolio Services Officer		

WEBPAGE

As part of the public outreach process, BCT developed a webpage embedded within BCT's website. The page introduced the TDP as well as provided updated information on public outreach activities. In particular, community drop-in events were listed. Snapshots, short summaries of pertinent information, were also uploaded as part of the TDP process. Figure 4-4 displays a screenshot of the website.

Figure 4-4
BCT TDP Website Screenshot

DISCUSSION GROUPS

BCT conducted several discussion groups throughout the development of BCT *Connected*. Typically, the activity would begin with a short presentation that introduced the TDP and then would lead into a discussion that catered to the particular group assembled. Surveys were often distributed during these exercises and the results of those surveys can be found later in this section. Table 4-3 provides a list of

the discussion groups conducted and Figure 4-5 is a photograph from the Community Bus Service discussion group. Many of the comments received in the discussion groups echoed those gathered in the stakeholder interviews. More detailed summaries of the information gathered during the discussion groups can be found in Appendix F.

Figure 4-5
Community Bus Service Discussion Group

Table 4-3
Discussion Groups

Discussion Group	Date
Community Bus Service	3.12.13
Broward Regional Health Planning Council	4.15.13
Broward League of Cities Leadership Council	5.14.13
Community Bus Service	6.11.13
Hollywood Council of Howeowner Associations	6.17.13
Broward League of Cities	6.20.13

SURVEYS

Three primary survey types were conducted during BCT *Connected* outreach activities:

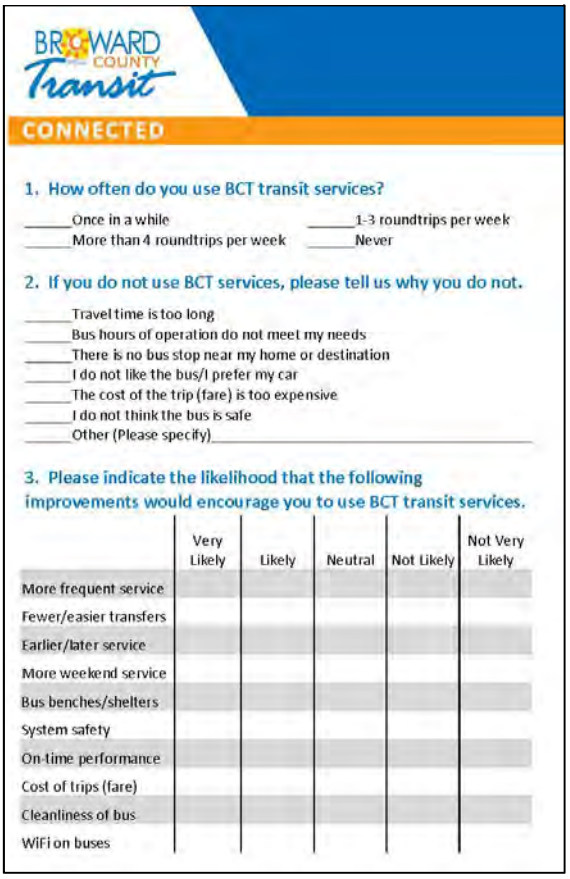
- Short surveys that were given in person or via the Internet (see Figure 4-6),
- On-board surveys, and
- Telephone surveys.

Each of the three is described in this section.

Short Surveys

Surveys were distributed at community drop-ins, discussion groups, presentations, and through the webpage. Survey instruments can be found in Appendix F. Survey types varied slightly based on the type of event being attended so not every survey contained the same question set. Overall, 352 in-person surveys were gathered and 185 online surveys were completed for a total of 537, but for each question the number of respondents may vary.

Figure 4-6
Short Survey Instrument



BROWARD COUNTY Transit
CONNECTED

1. How often do you use BCT transit services?

_____Once in a while
_____1-3 roundtrips per week
_____More than 4 roundtrips per week
_____Never

2. If you do not use BCT services, please tell us why you do not.

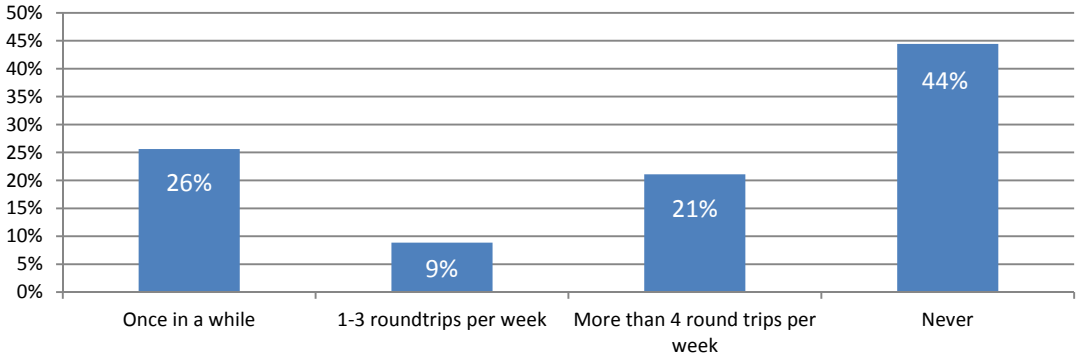
_____Travel time is too long
_____Bus hours of operation do not meet my needs
_____There is no bus stop near my home or destination
_____I do not like the bus/I prefer my car
_____The cost of the trip (fare) is too expensive
_____I do not think the bus is safe
_____Other (Please specify)_____

3. Please indicate the likelihood that the following improvements would encourage you to use BCT transit services.

	Very Likely	Likely	Neutral	Not Likely	Not Very Likely
More frequent service					
Fewer/easier transfers					
Earlier/later service					
More weekend service					
Bus benches/shelters					
System safety					
On-time performance					
Cost of trips (fare)					
Cleanliness of bus					
WiFi on buses					

The first question asked how often the respondent uses BCT's transit services. As seen in Figure 4-7, about 44 percent of respondents indicated that they have never used BCT's services, although approximately 30 percent indicated using BCT regularly.

Figure 4-7
How often do you use BCT transit services?



In the online survey, respondents were asked to indicate how important certain transit features are to them. As seen in Figure 4-8, over 90 percent of respondents indicated that on-time performance and more frequent service were very important or important to BCT's service offering. Only half of respondents thought Wi-Fi (i.e., wireless internet) on buses was a very important or important feature in BCT's features.

For those who indicated that they do not use the bus, the two most common reasons why people do not use BCT's services were "I do not like the bus/I prefer my car" (27%) and "Travel time is too long" (23%). Figure 4-9, also shows that over a quarter of the survey takers responded "Other" to this question. Convenience of the car compared to a bus, was the most frequently mentioned subject for those who responded "Other." Interestingly, no respondent indicated that cost of trip/fares was the reason they did not use BCT. Seventy-nine responses were analyzed for this question.

Respondents were asked to rank how likely service improvements would be to encourage them to start or continue using BCT's transit services. As seen in Figure 4-10, over 75 percent of respondents indicated that improvements to bus stop benches/shelters, improvements to on-time performance, and improvements to frequency of service were very likely or likely to encourage use of BCT's transit services.

Figure 4-8
Importance of the following features to BCT's services?

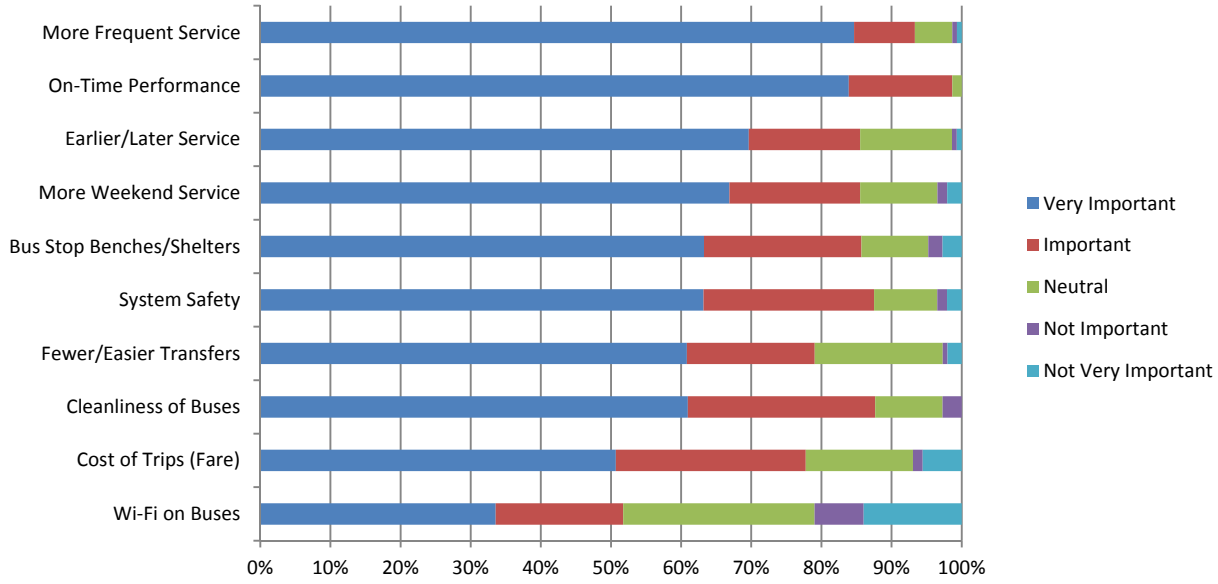


Figure 4-9
If you do not use BCT services, why not?

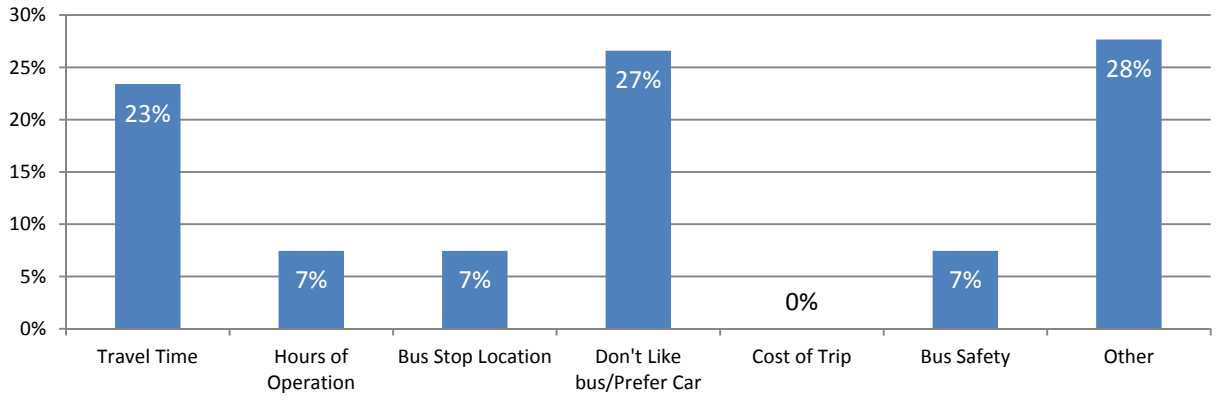
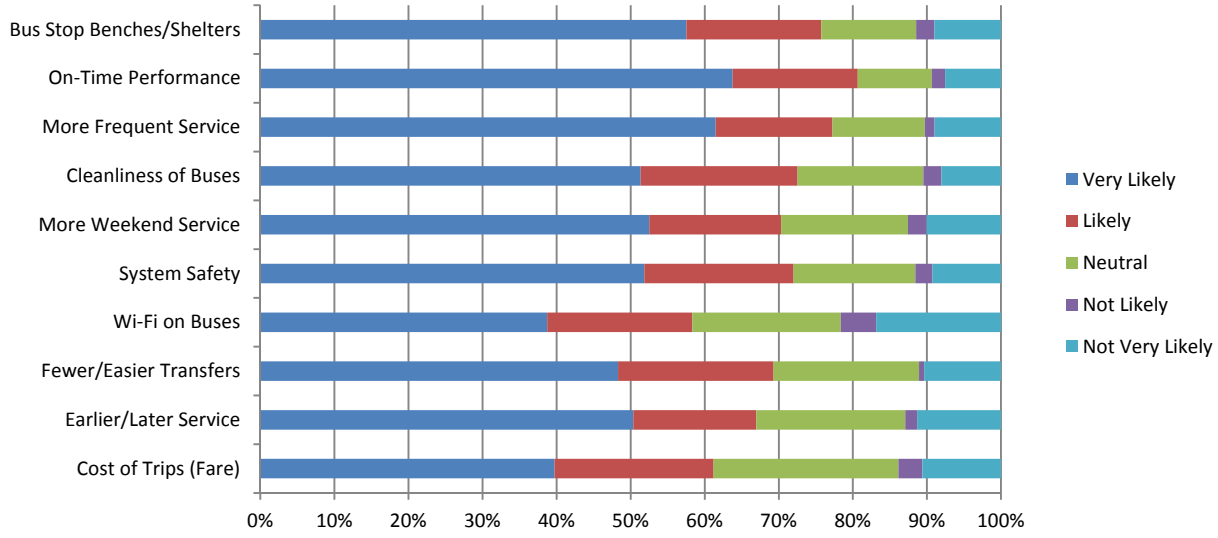
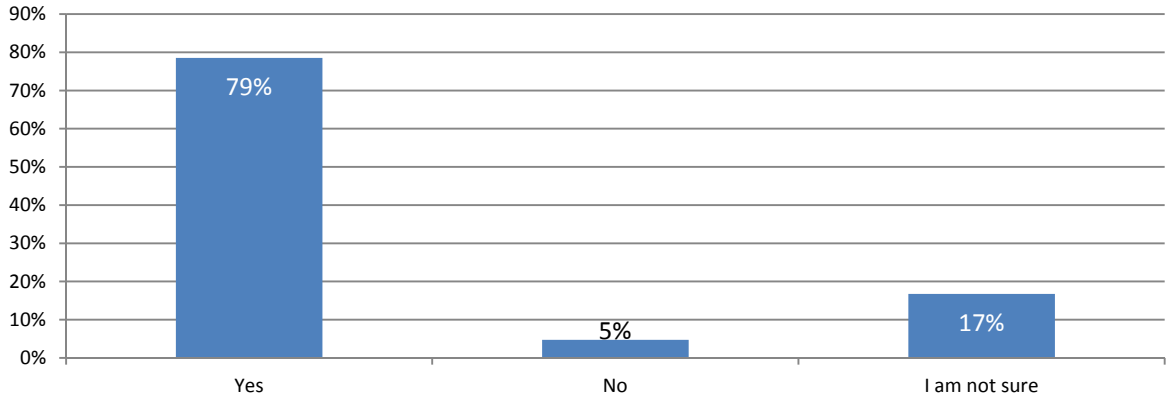


Figure 4-10
Improvements that would encourage the use of BCT services?



The surveys asked respondents if they would support long-term sustainable funding for public transportation. Figure 4-11 shows that the overwhelming majority, 79 percent, of respondents indicated they would support long-term sustainable funding for public transit, with only five percent indicating they would not support it.

Figure 4-11
Support long-term sustainable funding for public transportation?



The last question in the surveys asked the respondents to identify their home ZIP code. Overall there were close to 80 different ZIP codes listed. The three most common ZIP codes listed were 33311 (8%) in west-central Ft. Lauderdale, 33023 (5%) in southwest Hollywood, and 33027 (4%) in southwest

Miramar/Pembroke Pines. Map 4-1 provides a more detailed look at where survey respondents' residential ZIP codes.

On-board Survey

The BCT *Connected* on-board survey was conducted between February 26 and March 10, 2013. During this timeframe, a survey plan was designed to gather a 10 percent sample. Following the completion of this effort, it was determined that additional surveying would be conducted on the Community Bus system. This additional surveying work took place between May 2 and 18, 2013. Between the two surveying timeframes, a total of 8,913 completed surveys were completed.

Surveys were offered in English, Spanish, Haitian Creole, and Portuguese. A portion of the English version is shown in Figure 4-12. As displayed in Table 4-4, over 92 percent of the surveys were returned in English with 6.3 percent returned in Spanish, 0.1 percent returned in Portuguese, and 1.3 percent returned in Haitian Creole.

Table 4-4

On-board Survey Completion by Language

Language	Completed Surveys	Language Distribution of Completed Surveys
English	8,226	92.3%
Spanish	563	6.3%
Haitian Creole	117	1.3%
Portugese	7	0.1%
Total	8,913	100.0%

For the majority of users, travel to work was their trip purpose and they accessed the bus stop by walking. A plurality paid using the regular cash fare. Approximately one-third of users were able to complete their trip without a transfer.

More riders use the system four or more days per week and have been riders for two or more years. If the BCT route were not available, riders would ride with someone (26.3%), not make the trip (22.0%), or drive (14.1%). The most important part of transit service was on-time performance followed by more frequent service.

Approximately 30 percent of respondents live in households with annual incomes less than $10,000, although 61 percent of express service riders live in households with annual incomes of $60,000 or greater. Over 42 percent live in households with no vehicles present.

Map 4-1: Short Survey Respondent Zip Codes

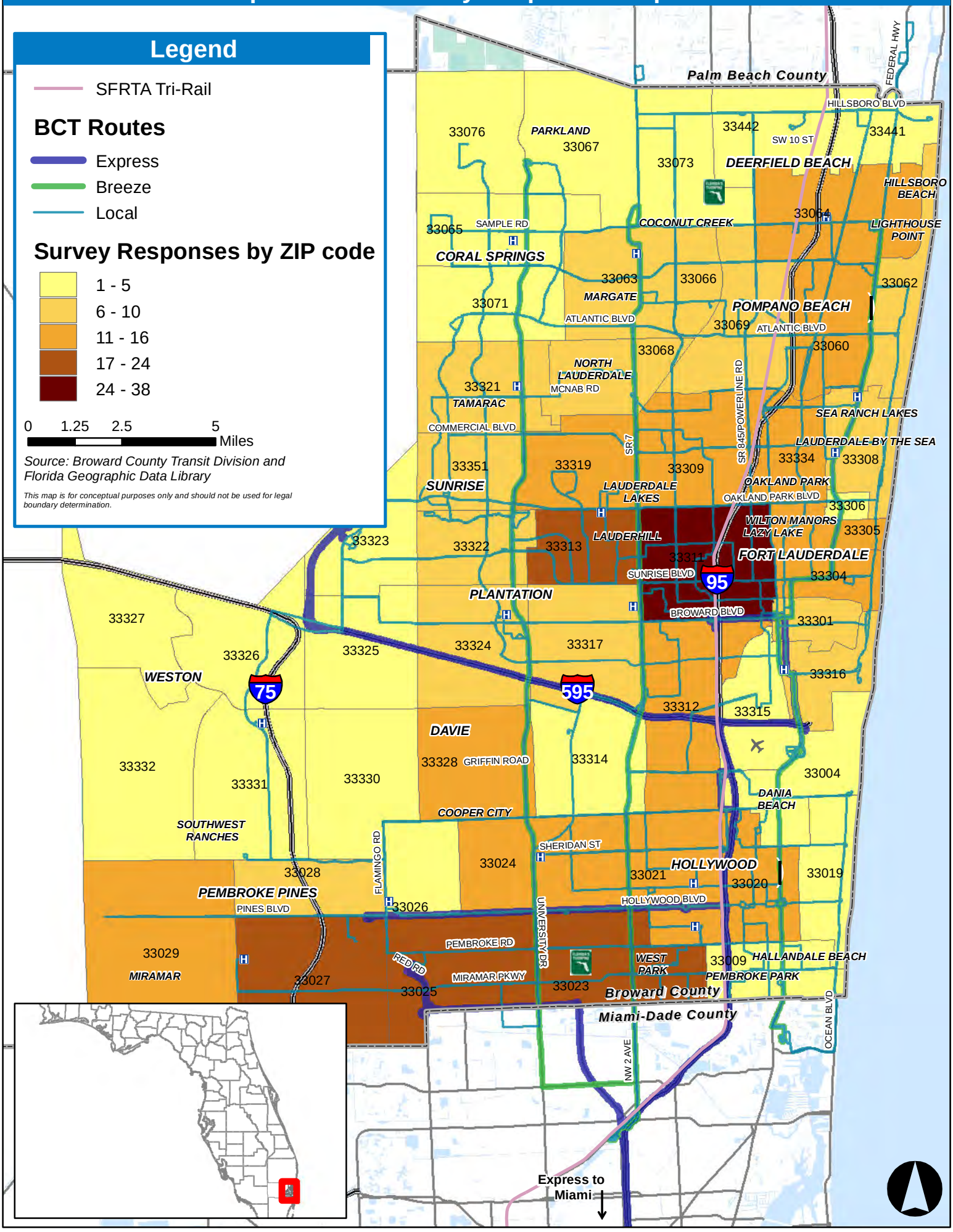
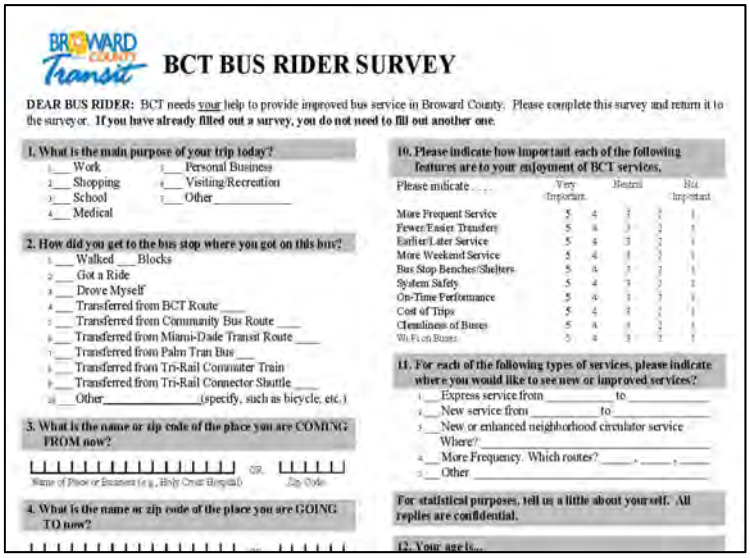


Figure 4-12
On-board Survey Instrument



BCT BUS RIDER SURVEY

DEAR BUS RIDER: BCT needs your help to provide improved bus service in Broward County. Please complete this survey and return it to the surveyor. If you have already filled out a survey, you do not need to fill out another one.

1. What is the main purpose of your trip today?
1 Work
2 Shopping
3 School
4 Medical
5 Personal Business
6 Visiting/Recreation
7 Other

2. How did you get to the bus stop where you got on this bus?
1 Walked ___ Blocks
2 Got a Ride
3 Drove Myself
4 Transferred from BCT Route ___
5 Transferred from Community Bus Route ___
6 Transferred from Miami-Dade Transit Route ___
7 Transferred from Palm Tran Bus ___
8 Transferred from Tri-Rail Commuter Train
9 Transferred from Tri-Rail Connector Shuttle ___
10 Other ___ (specify, such as bicycle, etc.)

3. What is the name or zip code of the place you are COMING FROM now?
Name of Place or Business (e.g., Holy Cross Hospital) OR Zip Code

4. What is the name or zip code of the place you are GOING TO now?

10. Please indicate how important each of the following features are to your enjoyment of BCT services.

Please indicate . . .	Very Important				Not Important
More Frequent Service	5	4	3	2	1
Fewer/Easier Transfers	5	4	3	2	1
Earlier/Later Service	5	4	3	2	1
More Weekend Service	5	4	3	2	1
Bus Stop Benches/Shelters	5	4	3	2	1
System Safety	5	4	3	2	1
On-Time Performance	5	4	3	2	1
Cost of Trips	5	4	3	2	1
Cleanliness of Buses	5	4	3	2	1
Wi-Fi on Buses	5	4	3	2	1

11. For each of the following types of services, please indicate where you would like to see new or improved services?
1 Express service from ___ to ___
2 New service from ___ to ___
3 New or enhanced neighborhood circulator service
Where? ___
4 More Frequency. Which routes? ___, ___, ___
5 Other ___

For statistical purposes, tell us a little about yourself. All replies are confidential.

12. Your age is...

The largest ethnic group is Black/African American (45.7%) followed by White/Caucasian (23.2%), and Hispanic (21.2%). Users are half female and half male. The largest age group to use the system is between 18 and 24. Over 37 percent of riders live in homes where a language other than English is spoken.

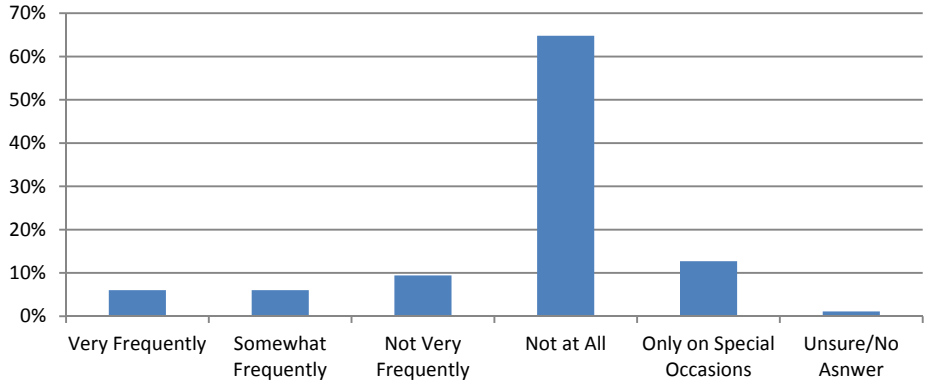
More detailed results from the on-board survey displayed by system type (e.g., all routes, Breeze, express, local, and community bus) are provided in Appendix G.

Telephone Survey

In addition to the on-board and other surveys, BCT conducted a telephone survey of 500 registered voters in Broward County. The survey took place between July 15 and 18, 2013. Adjustments were made to weight the results to fully represent the demographic and geographic characteristics of the county. The estimated margin of error of the survey is ±4.38 percent. The full survey results and responses can be found in Appendix H. The survey had 37 questions, including socio-economic questions. Below is brief analysis of the public opinion telephone survey questions.

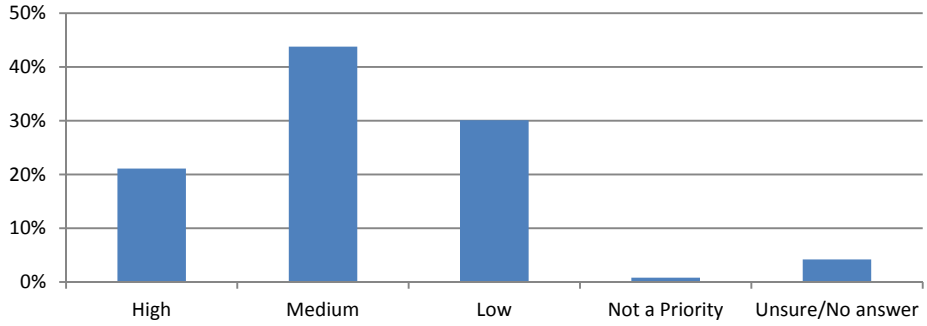
Question 8 of the survey asked respondents to indicate how frequently they use public transportation services, including Breeze Limited Stop, Community Bus, and/or I-95 Express. As seen in Figure 4-13, close to two-thirds of those surveyed indicated not using public transit at all while about 15 percent use bus and public transit services very or somewhat frequently.

Figure 4-13
Use of Bus and Public Transit Services



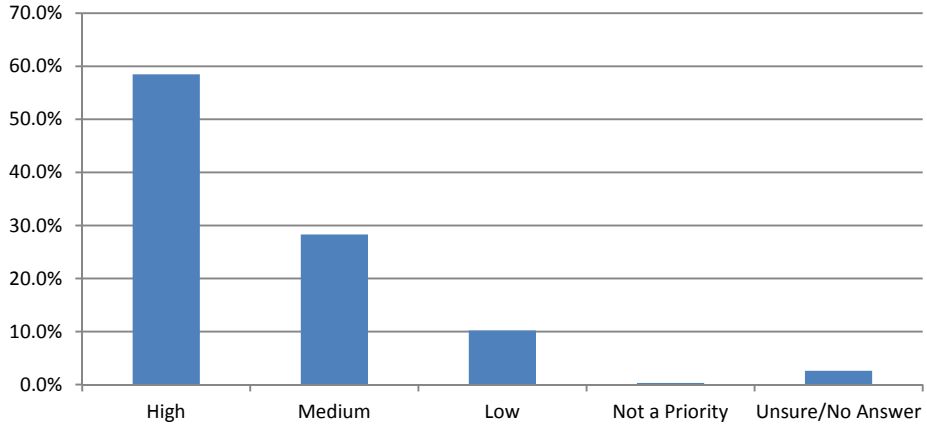
Question 14 asked survey takers, compared to other needs and priorities, how important is it to provide additional funding to improve public transit services in Broward County. Figure 4-14 shows that over 60 percent of respondents indicated that additional funding for public transportation in Broward County was of "High" or "Medium" importance. Only one percent responded that it was not a priority.

Figure 4-14
Priority for Additional Funding for Public Transit



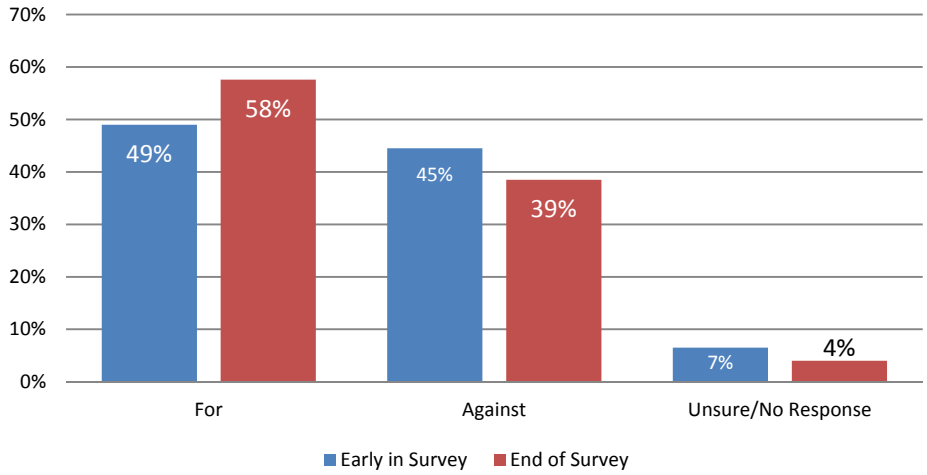
Question 26 asked respondents how much of a priority it is to expand the hours of service of public transportation in order to serve people working a second or third shift. As seen in Figure 4-15, close to 85 percent of respondents indicated that expanding hours of service of public transportation was of "High" or "Medium" priority.

Figure 4-15
Priority of Service Hour Expansion



In the early stages of the telephone survey, respondents were asked if they favored or opposed a half-cent sales tax increase to help pay for improvements to bus and public transit services. The question was asked again in the latter stages of the survey after respondents had been educated about transit services in Broward County. By the end of the survey, there was a nine percent point increase in respondents who supported the sales tax increase to fund bus service improvements in Broward County. The full results are shown in Figure 4-16.

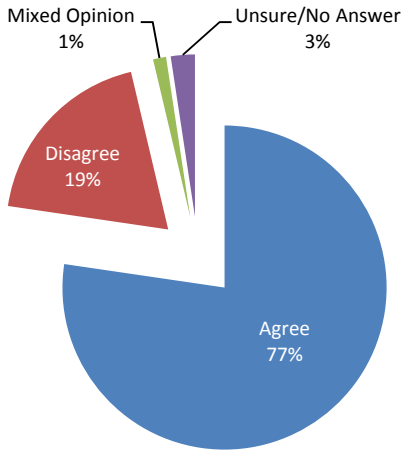
Figure 4-16
Support for Sales Tax Increase to Improve Bus Services



The last question of the telephone survey asked the survey taker if they agreed or disagreed that even if they may never use it, everyone benefits from improved bus and public transit services in Broward

County. Figure 4-17 shows that over three quarters (77%) of respondents indicated that they agreed with this statement.

Figure 4-17
Believe in the Benefits of Public Transit



COMMUNITY DROP-INS

BCT hosted numerous community drop-in events. Photographs from the Lauderhill Mall, Marando Farms Green Market, and Miramar Green Market are displayed in Figure 4-18. For these events, BCT participated in previously scheduled and advertised events, where BCT can setup presentation boards, distribute surveys, and have staff speak with event participants. Table 4-4 provides a list of events BCT attended.

Figure 4-18
Community Drop-in Events

Table 4-5
Community Drop-ins

Community Drop-in	Date
Oakland Park Blvd Transit Alternatives Analysis	4.11.13
Jamaican Women of Florida	4.19.13
Broward MPO 2040 LRTP Transportation Open House (Emma Lou Olson Civic Center)	4.23.13
Broward MPO 2040 LRTP Transportation Open House (Jaco Pastorius Community Center)	4.25.13
17th Annual Waterway Clean Up	4.27.13
Central Broward Kiwanis Club	4.30.13
Broward MPO 2040 LRTP Transportation Open House (Hallandale Beach Cultural Community Center)	5.2.13
Josh's Organic Market	5.5.13
Broward MPO 2040 LRTP Transportation Open House (Miramar Cultural Center)	5.7.13
Lauderhill Mall	5.10.13
Miramar Green Market	5.11.13
Broward MPO 2040 LRTP Transportation Open House (Tamarac Community Center)	5.15.13
Pompano Green Market	5.18.13
Miramar/Memorial Health Green Market	5.19.13
United Neighbors of Eastern Miramar	5.22.13
Cleveland Clinic Green Market	6.13.13
Marando Farms Green Market	6.15.13
Sunday Brunch Jazz (Riverwalk)	7.7.13

PRESENTATIONS

The final type of activity was presentations to boards and groups. These activities were primarily targeted at groups whose purview is transportation. Table 4-6 provides a list of presentations that occurred in the production of this document.

Table 4-6
Presentations

Presentation	Date
Broward MPO Board	4.11.13
Broward MPO Technical Coordinating Committee (TCC)	4.24.13
Broward MPO Community Involvement Roundtable (CIR)	4.24.13
Broward Bicycle/Pedestrian Advisory Committee (BPAC)	5.8.13
SFRTA Planning Technical Advisory Committee (PTAC)	5.15.13
WorkForce One	5.29.13
Broward County Local Coordinating Board	6.17.13
Broward County Board of County Commissioners	8.27.13
Broward MPO Technical Coordinating Committee (TCC)	8.28.13
Broward MPO Community Involvement Roundtable (CIR)	8.28.13
Broward MPO Board	9.12.13
SFRTA Planning Technical Advisory Committee (PTAC)	9.18.13

PUBLIC INVOLVEMENT SUMMARY

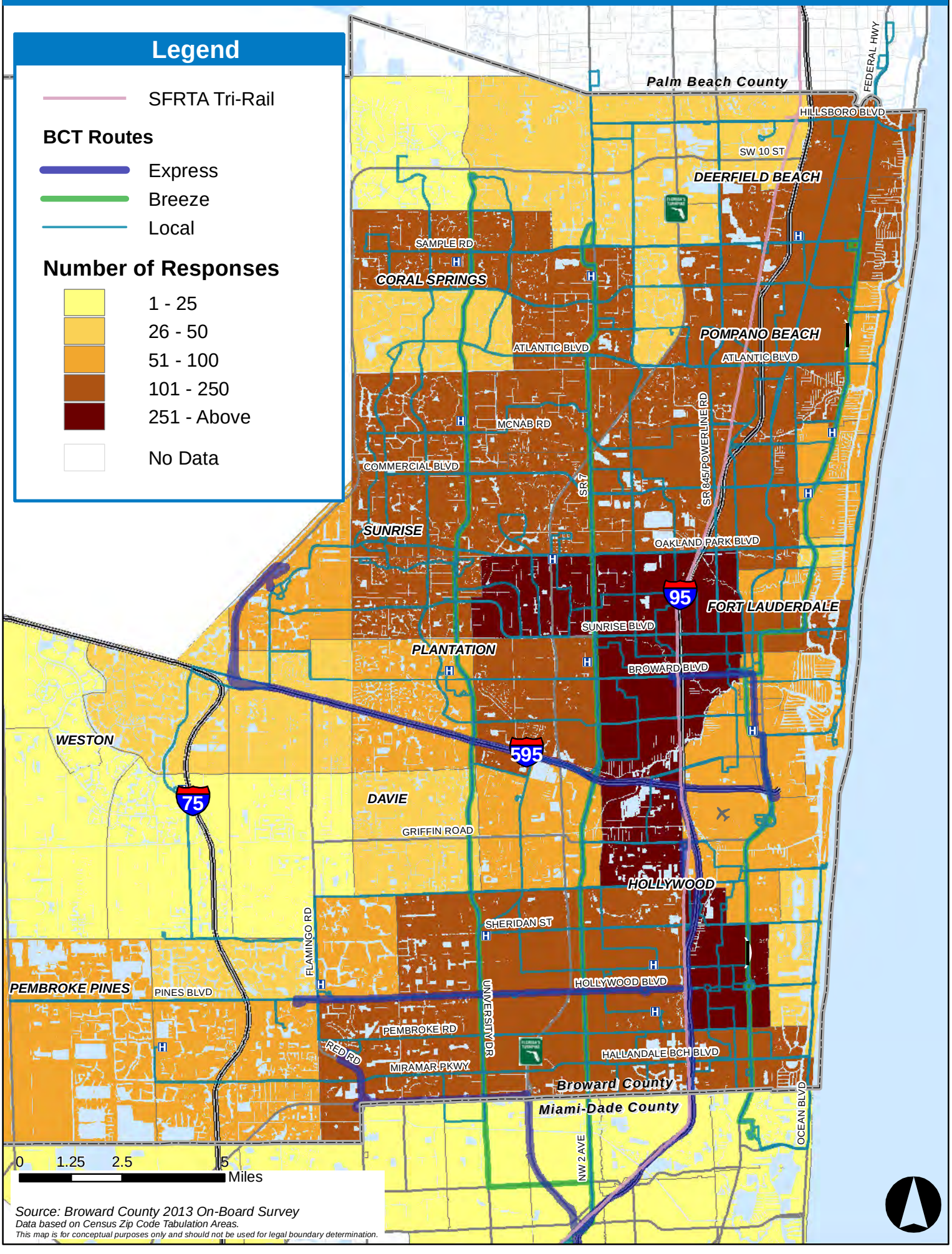
In total, BCT *Connected* hosted approximately 56 opportunities for individuals to provide input in to its development. Surveys were completed by 9,950 respondents. In total, BCT connected with over 10,000 individuals during the development of BCT *Connected*. Each survey asked respondents to provide their residential ZIP code. For those that provided one, Map 4-2 provides an indication of how many surveys were returned from each ZIP code.

Table 4-7
Public Involvement Summary

Type of Outreach	Number of Events
Advisory Review Committee Meeting	4
Stakeholder Interview	16
Discussion Group	6
Community Drop-in	18
Presentation	12
Total Number of Events	56
Surveys	**Number of Surveys**
On-board	8,913
In-person	352
Online	185
Telephone	500
Total Number of Surveys	9,950

As noted in the PIP, the TDP had a number of goals and objectives that BCT would strive to meet during the TDP process. The results of BCT's efforts are displayed in Table 4-8.

4-2: Public Outreach Residential ZIP Codes



Source: Broward County 2013 On-Board Survey

Data based on Census Zip Code Tabulation Areas.

This map is for conceptual purposes only and should not be used for legal boundary determination.

Table 4-8
Public Involvement Goal Accomplishment

Strategy	Objectives	Measures	Targets	Accomplishments
Goal 1 Early and Consistent Involvement: Involve riders, the public, and stakeholders early and regularly in the project.				
• Stratify a variety of public involvement and outreach activities to provide opportunity throughout the project	• Prepare and maintain a public involvement schedule that includes a variety of activities throughout the duration of the project	• Schedule adherence	• Zero cancelled events	• Accomplished: Zero cancelled events
• Increase the number of individuals providing input and requesting information as the project progresses through development	• Catalog the number of interactions throughout the project. Interactions are defined as input received through face-to-face communication with a TDP team member, completion of a TDP survey, emailing a question, etc.	• Number of interactions	• Greater than 5,000 interactions	• Accomplished: A total of 9,950 surveys were completed through an on-board survey, in-person/public meeting survey distribution, or electronic distribution
• Increase the number of opportunities provided to participate as the project progresses through development	• Catalog the number of opportunities provided to participate throughout the project. Providing an opportunity to participate is defined as one-way communication between the TDP Team and the potential participant. Examples include sending out newsletters, posting TDP material on a website, posting a TDP notice in a newspaper, etc.	• Number of opportunities provided to participate	• Greater than 10,000 opportunities provided to participate	• Accomplished: Transit Flash newsletter with TDP information distributed to more than 6,000 people, more than 20,000 on-board surveys printed, 56 events hosted, and online survey available for more than three months
Goal 2 Opportunity: Provide all BCT riders, citizens, and stakeholders with the opportunity to participate throughout the project, including those in traditionally under-represented populations, such as youth, persons with disabilities, older adults, or those who have limited English proficiency (LEP).				
• Provide multiple opportunities for input so that if a person cannot attend a meeting or activity in person, he/she can still provide input via the website or a secondary forum	• Establish project-specific email address so participants can submit comments and questions any time.	• Establishment of a project-specific email address	• Maintenance of a project-specific email address throughout the duration of the project. Review comments and questions received.	• Accomplished: Maintained a project-specific email address throughout the duration of the project. Comments were reviewed and questions answered
• Ensure participation from people who live in all parts of the county	• Request ZIP code information from all public involvement participants	• Map ZIP code data from time-to-time throughout the project to ensure input is from individuals geographically distributed throughout the county	• Participation from at least 90% of all ZIP codes with at least 20 or more participants from 50% of the ZIP codes	• Accomplished: Participation from 100% of ZIP codes and more than 20 participatnts from 85% of the ZIP codes
• Provide opportunity for traditionally under-represented groups to participate	• Identify under-represented groups early in the process and include members in the stakeholder database	• Number of members of the stakeholder database that fall into an under-represented group	• Greater than 5% of stakeholder database members are members of an under-represented group	• Accomplished: Greater than 5% of stakeholder database members are members of an under-represented group

Table 4-8 (Continued)
Public Involvement Goal Accomplishment

Strategy	Objectives	Measures	Targets	Accomplishments
Goal 2 Opportunity: Continued				
• Provide opportunity for non-English speaking individuals to participate	• Provide printed survey materials in English, Spanish, Portuguese, and Haitian/Creole	• Percent of completed alternative language surveys	• Greater than 4.6% of returned surveys are alternative language surveys (based on percentage of households where no one over age 14 speaks English	• Accomplished: 7.7% of returned surveys are alternative language surveys
	• Provide translators at meetings where persons with LEP are expected	• Number of individuals not served due to lack of translation services	• Zero people turned away due to lack of translation services	• Accomplished: Zero people turned away due to lack of translation services
	• Provide a language translation function on TDP website	• Number of languages the website can be translated into	• Greater than four alternative languages	• Accomplished: Website can be translated into more than four languages.
• Provide opportunity for persons with disabilities to participate	• Ensure in-person events are held at locations accessible by at least one transit route and are ADA accessible	• Percent of events held at locations accessible by at least one transit route and are ADA accessible	• 100% of all events are held at locations accessible by at least one transit route and are ADA accessible	• Accomplished: 100% of all events are held at locations accessible by at least one transit route and are ADA accessible
Goal 3 Information and Communication: Provide all citizens and interested stakeholder agency groups with clear, timely, and accurate information relating to the project as it progresses.				
• Provide information in accessible format	• Provide printed copies of materials when requested by those who do not have access to the internet.	• Number of individuals not provided printed copies when requested	• Zero individuals not provided printed copies when requested	• Accomplished: Zero individuals not provided printed copies when requested
• Provide regular updates on the TDP's progress	• Provide summaries of technical information in a format that is easily understood by the public	• Percent of TDP technical documents summarized in easy-to-understand brochures	• At least four technical documents summarized in easy-to-understand brochures	• Accomplished: Four technical documents summarized in easy-to-understand brochures
	• Update the TDP website on a regular basis	• Frequency of updates to the TDP website	• Update the TDP website more than once per month	• Accomplished: TDP website updated more than once per month
• Provide opportunities for the public to ask questions	• Establish means for the public to submit questions via the website and in-person	• Percent of questions responded to within two business days	• Greater than 90% of questions responded to within two business days	• Accomplished: Greater than 95% of questions responded to within two business days
Goal 4 Range of Techniques: Use a broad-spectrum of techniques to gather input from a diverse population within the project area.				
• Provide opportunity for the public to critique public involvement opportunities	• Provide comment forms that participants can submit in writing or via website during the TDP process	• Percent of public outreach opportunities where comment cards are provided	• Greater than 25% of public outreach opportunities have comment cards available	• Accomplished: 100% of public outreach opportunities have comment cards available
• Employ the techniques identified in this PIP to provide a broad range of opportunities	• Assess whether or not the goals of this PIP have been met	• Percent of goals met by the conclusion of the TDP process	• Greater than 75% of goals met by the conclusion of the TDP process	• Accomplished: 100% of goals met by the conclusion of the TDP process

Situation Appraisal

WAVE ALIGNMENT

LEGEND

- Proposed Alignment
- Alternative Alignments
- Station
- Potential East/West Transit Alignment
- Potential FEC Transit Alignment
- Broward County Transit Transfer Station
- Optional Maintenance and Storage Site
- Drawbridge
- At-Grade Railroad Crossing
- Existing Parking Facility
- Proposed Rim Intercept Parking Facility

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Section 5

Situation Appraisal

In preparing this TDP Update, a review of applicable federal, state, regional, and local plans, programs, and studies that influence BCT operations, infrastructure, policy, or funding were reviewed. Findings of this review have been summarized and are incorporated into the development of the TDP through the situation appraisal. A situation appraisal, which is required during a major TDP update under the TDP Rule, is an evaluation of the environment in which the transit agency operates. One of the key components of the situation appraisal is this review of relevant plans, programs, and studies, in which factors and influences that will help BCT better understand its environment are identified.

PLAN REVIEW

Table 5-1 provides a summary of the key findings and considerations from the plans, programs, and studies reviewed as part of this effort. Essentially, this table provides the pertinent "take-aways" from each to be considered during the situation appraisal. A more detailed summary of the primary plans, programs, and studies listed above is provided in Appendix I.

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Table 5-1
Plan Review

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Moving Ahead for Progress in the 21st Century Act (MAP 21)	Federal	Implemented July 6, 2012	FTA, FDOT	• MAP-21 extends federal highway and transit funding through federal fiscal year 2014.	• MAP-21 consolidates or eliminates a number of existing funds and provides several new funds for transit capital and operating programs, in which BCT may be a recipient. • New Freedom funds are combined with Section 5310 program funds, while the Job Access and Reverse Commute (JARC) program is eliminated; however, many JARC projects are now eligible for funding under 5307 and 5311 funds.
Clean Air Act of 1990	Federal	Revisions to National Ambient Air Quality Standards (NAAQS) proposed in 2010; not yet implemented	U.S. Environmental Protection Agency (EPA)	• The Clean Air Act of 1990 and subsequent amendments determine the NAAQS for six pollutants, including carbon monoxide and ozone.	• Broward County is currently classified as an-attainment area. • Enhanced transit options reduce travel by single-occupant vehicle, helping Broward County to remain classified as an attainment area.
Title VI and Environmental Justice (EJ) Circulators	Federal	EJ Circulator, effective August 15, 2012 Title VI Circulator, effective October 1, 2012	U.S. DOT, FTA	• The new EJ Circular issued by FTA provides recipients of FTA financial assistance with guidance for incorporating EJ principles into FTA-funded plans, projects, and activities. • The revised Title VI Circular includes the removal of several references to EJ, which are now incorporated into the separate EJ Circular, to better understand the distinctions between Title VI and EJ.	• BCT is required to submit Title VI programs every three years as a transit provider operating 50 or more fixed route vehicles in peak service and located in an urbanized area of more than 200,000 persons. BCT also is required to evaluate service and fare equity changes or monitor transit service for Title VI impacts. • BCT's public involvement plan should incorporate outreach designed to encourage meaning full participation from members of the EJ population.
DOT Livability Initiative and Federal Sustainable Communities Program	Federal	Partnership for Sustainable Communities formed in 2009	U.S. DOT, FTA, U.S. Department of Housing and Urban Development (HUD), and EPA	• The goal of this joint-initiative is to improve access to affordable housing, better transportation choices, and lower transportation costs while protecting the environment – essentially making communities throughout the United States more livable.	• The US DOT and FTA support a number of policies and initiatives intended to help communities improve livability and overall quality of life, including programs to encourage Transit Oriented Development (TOD) enhanced mobility options, etc.
Florida Transportation Plan: Horizon 2060 (FTP)	State	2010	FDOT	• The Florida Transportation Plan looks at a 50-year transportation planning horizon and calls for a fundamental change in how and where Florida invests in transportation.	• The FTP supports the development of state, regional, and local transit services through a series of related goals and objectives, emphasizing new and innovative approaches by all modes to meet the needs today and in the future.

State of Florida Transportation Disadvantaged Five-Year/Twenty-Year Plan	State	2005	Florida Commission for the Transportation Disadvantaged	• The plan, required under the Florida Statutes, includes the following elements:
				  ◦ Explanation of the Florida Coordinated Transportation System
				  ◦ Five-Year Report Card
				  ◦ Florida Office of Program Policy Analysis and Government Accountability Review
				  ◦ Strategic Vision and Goals, Objectives, and Measures
					• Short-term strategic vision includes developing and field-testing a model community transportation system for persons who are Transportation Disadvantaged.
					• Long-range strategic vision includes developing a universal cost-effective transportation system with a uniform funding system and services that are designed and implemented regionally throughout the state.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
FDOT FY 2013-2017 Work Program	State (specific project list developed for FDOT District Four and Broward County)	February 12, 2013	FDOT	• The Five-Year Work Program is developed annually by FDOT and is a project-specific list of transportation activities and improvements developed in cooperation with the Broward MPO and local transportation agencies. • The Work Program must be consistent, to the maximum extent feasible, with the capital improvement elements of local government comprehensive plans.	• A summary of transit projects by type of work found in the adopted FY 2013-2017 Work Plan was compiled for consideration in the TDP update. • Types of transit projects included in the FY 2013-2017 Work Program include BCT route realignments, operational improvements, fixed-route capital, transit studies, park-and-ride lot improvements, etc.
State Growth Management Legislation (House Bill 7207)	State	June 2, 2011	Florida Legislature and local governments	• HB 7207 repeals most of the State-mandated growth management planning laws that have governed development activities within Florida since the original Growth Management Act of 1975, including transportation concurrency.	• The repeal of state-mandated transportation concurrency provides local governments with the opportunity to develop a more localized concurrency program that aligns with the development and mobility goals of the community. • HB 7207 strengthens legislative language that supports multi-modal approaches to transportation by stating that Comprehensive Plan Transportation Elements "shall provide for a safe, convenient multi-modal transportation system."
South Florida East Coast Corridor (SFEEC) Study	Regional	In Progress	FTA, Southeast Florida Transportation Council, FDOT, SFRTA, Broward MPO, BCT, Palm Tran, Palm Beach MPO, Miami-Dade MPO, MDT	• The SFECC Study proposes reintroducing passenger service along an 85-mile stretch of the Florida East Coast (FEC) Railway corridor between downtown Miami and Jupiter.	• This regional corridor connects to the existing bus systems, including BCT, Palm Tran and MDT, and rail transit systems including both Tri-Rail and Metrorail. It will also integrate with the various transit systems including the new Miami Trolley, the proposed Wave in downtown Fort Lauderdale, and the proposed Central Broward East-West Connection. • The System Master Plan is currently being refined to identify and evaluate initial phases for implementation, start-up infrastructure, stations, and preliminary costs. Next Steps include recommending a preferred alternative. • BCT is a Project Partner on this study and sits on the SFFEC Steering Committee.
All Aboard Florida	Regional	In Progress	Private Initiative led by Florida East Coast Industries	• All Aboard Florida is looking at the feasibility of implementing a privately owned, operated, and maintained intercity passenger rail service along a 240-mile section of the existing FEC between Miami and the Space Coast and the creation of new tracks into Orlando.	• Study requires coordination between with FEC and local transit/transportation agencies (including BCT) regarding connecting service at proposed stations (including a proposed station in Fort Lauderdale).
95 Express Managed Lanes (Phase 2)	Regional	In Progress	FDOT	• 95 Express Phase 2 will extend the existing express lanes north from Golden Glades interchange in Miami-Dade County to Broward Boulevard in Broward County.	• The 95 Express operated by BCT provides Express Bus service from Broward County to downtown Miami within current express lanes. The extension of the 95 Express lanes from the Miami-Dade County line to Broward Boulevard will allow BCT's 95 Express route to continue traveling at higher average travel speeds via uninterrupted express lanes.
Regional Transit System Master Plan (RTSMP)	Regional	In Progress	South Florida Transportation Council (SFTC)	• A key component of the SEFTC-led 2040 Southeast Florida Regional Transportation Plan (2040 RTP). • Project will identify the most significant regional investment needed to meet travel demands throughout the Southeast Florida region.	• The RTSMP, when completed in early 2014, will provide a thorough analysis of unmet transit travel demands and other regional transit opportunities in the three-county region. It is expected that this analysis will be particularly helpful for the development of future regional express bus service.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Regional Transit Interoperability/Universal Fare Technology Study	Regional	In Progress	FDOT, BCT, MPO, SFRTA, MDT, and Palm Tran	• Purpose of this study is to evaluate and implement a regional fare card using smart card technologies for BCT, SFRTA, MDT, and Palm Tran, along with evaluating the business case and total cost drivers associated with realizing the technical integration solution. • SFRTA and MDT utilizing EasyCard system; BCT and Palm Tran now accept SFRTA transfer ticket. • Regional travel is complex where separate fare media, different fares and transfer policies make travel difficult for existing riders and daunting for new customers	The next steps for implementing a regional fare system include: • Decision-makers from transit stakeholders to draft a fare policy for multi-modal regional trips • Define limitations to accessing Easy Card encryption key • Launch pilot program to evaluate use and administrative functions • Focus to develop robust system that is extensible to emerging technologies
Broward County Comprehensive Plan	Broward County	2006	Broward County, Broward County Planning Council	• The Broward County Comprehensive Plan is the primary policy document concerning land use, transportation, and other planning matters for unincorporated Broward County.	• The Comprehensive Plan Land Use Element identifies parameters for land use designations that promote or enhance transit, such as Regional Activity Centers, Local Activity Centers, Transit Oriented Corridors (TOC), and TODs. • The Comprehensive Plan Transportation Element defines the County's Transportation Concurrency Program, providing a concurrency designation for multi-modal transportation districts, which assign secondary priority to vehicle mobility and primary priority to travel and interconnectivity of alternative modes.
Broward County Land Use Plan	Broward County	2013	Broward County, Broward County Planning Council	• Under the Broward County Charter, the Broward County Planning Council is charged with preparing a land use plan. The County Charter requires all local land use plans to conform to the Broward County Land Use Plan.	• The Land Use Plan establishes the framework for the future development and redevelopment of Broward County and for the provision of facilities and services within the county. • All development must be consistent with the uses, the densities and the intensities of this policy plan. Land use designations that promote or enhance transit will need to be adopted into the Broward County Land Use Plan to be implemented at the local level.
Broward County Trafficways Plan	Broward County	2013	Broward County, Broward County Planning Council	• The Broward County Trafficways Plan serves as the roadway right-of-way preservation plan for Broward County. • Dedication of right-of-way may be required through the development review process to provide for an adequate regional roadway network.	• The Broward County Trafficways Plan identifies adequate right-of-way for the regional road network that is required to ensure that necessary facilities are or can be put into place to support vehicular, transit, bicycle, and pedestrian modes of travel.
City of Fort Lauderdale Comprehensive Plan	City of Fort Lauderdale	2008	City of Fort Lauderdale	• The City of Fort Lauderdale Comprehensive Plan is the primary policy document concerning land use, transportation, and other planning matters for the City of Fort Lauderdale.	• The City has designated four Regional Activity Centers, with the Downtown Regional Activity Center providing the highest level of transit and regional connectivity to existing and planned systems/routes. There are currently no specific sites designated for Local Activity Centers, TOCs, or TODs in the city.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
City of Hollywood Comprehensive Plan	City of Hollywood	2008	City of Hollywood	• The City of Hollywood Lauderdale Comprehensive Plan is the primary policy document concerning land use, transportation, and other planning matters for the City of Hollywood.	• The City has established a Regional Activity Center in and around downtown Hollywood to encourage redevelopment in a way that facilitates multi-use and mixed-use development, encourages mass transit, and reduces the need for automobile travel. • A TOC is designated alongside SR 7/US 441 between the northern and southern City of Hollywood limits. The goal of this designation is to facilitate mixed-use development with access to transit stations or stops along this corridor. There are specific design guidelines with the TOC specified to encourage connectivity between uses and to transit facilities.
City of Miramar Comprehensive Plan	City of Miramar	2010	City of Miramar	• The City of Miramar Comprehensive Plan is the primary policy document concerning land use, transportation, and other planning matters for the City of Miramar.	• The City has established the Miramar Regional Activity Center, located north of Bass Creek Road between Palm Avenue and Flamingo Road, under the Broward County Regional Activity Center designation. • The City has established a TOC, consistent with the Broward County Comprehensive Plan, which is located east of SW 66th Avenue and bound by the north by Pembroke Road, on the east by SR 7/US 441, and on the south by County Line Road. • The City has established a Town Center to serve as the focal point of activity in the city. The City seeks to continue to develop and enhance, in cooperation with BCT, the community shuttle services to effectively serve the Town Center and also the western, central, and eastern community centers.
City of Coral Springs Comprehensive Plan	City of Coral Springs	2008	City of Coral Springs	• The City of Coral Springs Comprehensive Plan is the primary policy document concerning land use, transportation, and other planning matters for the City of Coral Springs.	• The City seeks to create a multimodal transit center within downtown Coral Springs that will combine a commuter drop-off zone, BCT routes, bicycle facilities, pedestrian walkways, and transit station with seating and other amenities. • The City looks to maximize BCT and SFRTA services for its employees and residents by identifying opportunities for park-and-ride lot locations that are in proximity to or within the city, which may offer transit services, such as the Tri-Rail and BCT Express Bus Services.
Broward MPO 2035 & 2040 LRTP	Broward County	2009, next update in 2014	Broward MPO	• In 2009, the Broward MPO Board adopted the 2035 LRTP branded "Transformation." • Transformation is a transit-focused LRTP, proposing investments in BRT, premium rapid bus, mobility hubs, and other mobility options (bicycle, pedestrian, and greenways) that complement transit. • The Broward MPO is in the process of developing the 2040 LRTP, branded "Commitment 2040."	• The 2035 LRTP Cost Feasible Plan includes 81 miles of BRT, 75 miles of Premium Rapid Bus, 20 Gateway Hubs, 20 Anchor Hubs, 63 Community Hubs and 8 new local bus routes. • A portion of Broward County Transit's Operations and Maintenance and all capital costs are funded in the Cost Feasible Plan. One third of BCT's FY 2009-2018 TDP service is funded. • BCT will work with Broward MPO staff to ensure that transit projects identified in this TDP update for FY 2014-2023 will be incorporated into the 2040 LRTP Needs Plan, as appropriate.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Broward MPO Congestion Management Process/Livability Planning Studies (Hollywood Pines Corridor Project)	Hollywood/ Pines Boulevard Corridor from SR A1A to US 27	In Progress	Broward MPO, in coordination with the Cities of Hollywood and Pembroke Pines, and other state, regional and local agencies	• The Broward MPO's integration of Congestion Management Processes and Livability Planning focus on enhancing the quality of life by reducing congestion, improving safety and increasing mobility and livability along the corridor. • The Hollywood Pines Corridor Study Area includes a major east-west travel corridor (Hollywood/Pines Boulevard) served by several BCT/Breeze routes, as well as connections to I-95 Express, Tri-Rail, and potential the FEC corridor.	• The Hollywood Pines Corridor Project will identify ways to improve transit operations and transit supportive land uses through short and long-term strategies and improvements. • Short-term improvements for the corridor may include bus stop placement, connections and amenities; park-and-ride locations; and transit signal priority and queue jump bypass lanes. • Long-term improvements for the corridor may include premium transit, connection to multi-modal/rail hubs; location/design of mobility hubs; and linkage with future redevelopment projects.

Broward County Climate Change Action Plan	Broward County	2010	Broward County	• In June 2008, the BCC formed the Broward County Climate Change Task Force. The mission of the Task Force was to develop recommendations for a coordinated countywide strategy in mitigating the causes and addressing local implications of global climate change.
				• The Broward County Climate Change Action Plan, contains 126 recommended actions to be brought before the Board for approval and implementation. Recommendations were ranked into three categories—high (critical), medium, and low.
					• A total of 65 recommendations were ranked as critical and given a "high" ranking; some type of action has already been taken on 52 of the 65 high ranked action items. Major topic areas that these 65 high ranked recommendations fall under and that have an implication for transit include:
					  • Amend zoning and building recommendations to support TOD and transit supportive/walkable land uses.
					  • Create a functional mass transportation system as a major component to achieve the Commission's goal of reducing greenhouse gas emissions to 80% below current levels by 2050.
					  • Support local, regional, and state planning entities that integrate and adopt regional climate change mitigation and adaptation goals into their planning processes, including BCT.

Regional Climate Change Action Plan	Regional	2012	Southeast Florida Regional Climate Change Compact (Compact),	• Compact is a collaborative effort among Palm Beach, Broward, Miami-Dade, Monroe Counties, their municipalities and partners to develop a regional action plan for Southeast Florida to reduce greenhouse gas emissions and adapt to regional and local impacts of a changing climate.	• The Regional Climate Change Action Plan establishes seven goals to categorize the 110 action items identified by the Plan. One of the goals is to "reduce greenhouse gas emissions by planning, designing, and prioritizing walkable, affordable communities supported by sustainable multimodal transportation options." There are 16 action items associated with this goal that address both land use policy and multimodal infrastructure investment strategies. • The Regional Climate Change Action Plan recognizes that there are more than 100 entities in the four-county region that exercise governance over transportation planning, operation, and investment decisions. Continued enhancement of mobility options and land use policy to support alternative modes will require inter-regional coordination among these agencies, including BCT.
Fort Lauderdale – Hollywood International Airport Master Plan	Broward County	2010	Broward County	• The objective of the report is to plan the terminal airport area facilities through 2020.	• Development at the airport is to accommodate connections to local transit service.
Port Everglades Master Plan	Broward County	2011	Broward County	• The goal of the plan is to create a plan to maximize market share and revenue through a realistic 5-year facility development program within a framework of 10- and 20- year vision plans.	• The master plan assesses the market for the Port's four business lines: containerized cargo, non-containerized cargo, liquid bulk, and cruise ships. • Connection with the airport for cruise passengers is important to the Port.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Seven50 Regional Plan	Broward County	In Progress	South Florida Regional Planning Council – Treasure Coast Regional Planning Council	• Led by the South Florida and Treasure Coast Regional Planning Councils and the Southeast Florida Regional Partnership (SFRP). The SFRP is a voluntary, broad-based and growing collaboration of more than 200 public, private, and civic stakeholders from the Southeast Florida region. • The plan is being devised through a series of public summits, workshops, online outreach, and high-impact studies and will identify a blueprint for growing the Southeast Florida region into a prosperous and desirable place for the next 50 years and beyond.	• Concept is based on the "six pillars" designed to serve as an organizing force for strategic planning at local, regional, and state levels. The six pillars include: Talent Supply and Education, Innovation and Economic Development, Infrastructure and Growth Leadership, Business Climate and Competitiveness, Civic and Governance Systems, and Quality of Life and Quality Places. • Identifies a need to develop and maintain multimodal, interconnected trade and transportation systems to support a globally competitive economy and focus on improvement. • The Comprehensive Economic Development Strategies (CEDS) completed by the South Florida and Treasure Coast Regional Planning Councils, addressing the six pillars, will be integrated into the Seven50 Plan to form a comprehensive 2060 vision plan for the entire seven- county Southeast Florida Region.
Broward Complete Streets Initiative	Broward County	2013	Broward County Planning Council	• Broward County has developed model guidelines for developing complete streets	• The Complete Streets Initiative is an ongoing educational process that is supported by several Broward County organizations. • Broward County Commission approved the Complete Streets Initiative in March 2013 and includes the development of an inter-departmental Complete Streets Team.
Oakland Park Boulevard Transit Alternatives Analysis Study	Oakland Park Boulevard Corridor from the Sawgrass Expressway to SR A1A	In Progress	BCT, SFRTA, Broward MPO, FDOT, and affected municipalities	• This is a multi-agency project to evaluate premium transit projects along the high-ridership Oakland Park Boulevard corridor from the Sawgrass Expressway to SR A1A. • Study outcomes will be to identify the most feasible and effective transit projects that will improve mobility, congestion, and better link points of connection.	• The study is currently evaluating short- and long-term transit mode alternatives and operational improvements. Selection of a Locally Preferred Alternative (LPA) is anticipated to be completed by Spring 2014. • BCT sits on the Technical Advisory Committee (TAC) for this study.
University Drive Mobility Improvements Planning Study	University Drive Corridor, from Sample Road to NW 215th Street	In Progress	BCT, SFRTA, Broward MPO, FDOT, MDT, and affected municipalities	• This study will evaluate mobility improvements and transit projects along University Drive, from Sample Road in Broward County to south of the Miramar Parkway at NW 215th Street in Miami-Dade County.	• This study is in its initial stages, but when completed will define the range of potential enhanced transit alternatives for the corridor, including reviews of station locations, accessibility to stations, connectivity by different modes, costs, technologies, benefits, and feasibility. Selection of the Locally Preferred Alternative is anticipated to be completed by January 2014. • BCT sits on the Project Advisory Committee (PAC) for this study.
Central Broward East-West Transit Study	Central Broward County	Locally Preferred Alternative approved in October 2012	Broward MPO, FDOT, SFRTA and BCT	• Project goal is to develop a premium transit service in Central Broward County. • Study area boundaries include the central part of Broward County, located between Oakland Park Boulevard in the north, the Weston-Sawgrass area in the west, Griffin Road/Stirling Road in the south, and the Intracoastal Waterway in the east.	• The Broward MPO approved the Griffin Road Alternative in October 2012, which will evaluate a combination of premium bus and modern streetcar services. • Premium bus will be considered from Sunrise to the South Florida Education Center. Both premium bus and modern streetcar will be considered from the South Florida Education Center to the Griffin Road Tri-Rail Station. Modern Streetcar will provide service to the Fort Lauderdale-Hollywood International Airport, downtown Fort Lauderdale connecting with the Wave, and the Broward Boulevard Tri-Rail Station.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
The Wave Streetcar	Downtown Fort Lauderdale	In Progress	Broward County, BCT, SFRTA, Broward MPO, FDOT, City of Fort Lauderdale, and Fort Lauderdale Downtown Development Authority (DDA)	• The Wave is a 2.7-mile environmentally friendly streetcar system that will serve as a local circulator in downtown Fort Lauderdale. • The Wave route will include 10 stations, streetscape improvements, and a traffic signalization package to help maintain headways during peak periods.	• The Wave will connect points of interest along route to the regional transit network, including BCT routes. • The Wave willl maintain 7.5-minute headways during peak periods and 10 minute headways during off-peak periods by providing transit priority at traffic signals.
BCT I-95 Express Bus Service	Service from Hollywood/ Miramar to downtown Miami	In Operation	Service operated by BCT in cooperation with FDOT and other agencies	• The 95 Express operated by BCT provides BRT service from Broward County to downtown Miami via a combination of High-Occupancy Vehicle (HOV)/express lanes along I-95.	• The 95 Express currently travels in the I-95 express lanes from downtown Miami to Miami Gardens Drive/NE 183rd Street and travels in HOV lanes north. Extension of the I-95 express lanes to Broward Boulevard will allow BCT's 95 Express route to continue traveling at higher average travel speeds via uninterrupted express lanes. • 95 Express Bus Service provides free commuter park-and-ride locations, and travel along the major interstate highways to Miami-Dade County on weekdays during morning and afternoon peak travel hours.
MDT I-95 Express Bus Service	Service between downtown Miami and Sheridan St. and Ft. Lauderdale Tri-Rail Stations	In operation	Service operated by MDT in cooperation with FDOT and other agencies	• I-95 Express Service (Existing Route 195): This route provides express weekday rush-hour service and features two legs of service. The first leg provides express service between downtown Miami and Sheridan Street Tri-Rail Station in Broward County via I-95. The second leg provides express service between downtown Miami and Ft. Lauderdale Tri-Rail Station via I-95.	• This MDT Express Bus service provides connections to BCT Route 12 (Sheridan St. Tri-Rail Station) and BCT Route 22 (Ft. Lauderdale Tri-Rail Station).
BCT I-595 Express Bus Service	Service from downtown Fort Lauderdale to downtown Miami and Sunrise to the Miami Civic Center	In Operation	Service operated by BCT in cooperation with FDOT and other agencies	• 595 Express provides BRT service from downtown Fort Lauderdale to downtown Miami/Brickell and Westgate Square Park-and-Ride to the Miami Civic Center. • Currently buses travel in regular lanes on I-595 with mixed traffic; however, in 2014 the reconstruction of I-595 will be completed and the 595 Express will use reversible express lanes being built in the median. On I-95, the 595 Express uses the same travel lanes as the 95 Express.	• Construction of the I-595 reversible express lanes as well as the extension of the I-95 express lanes will allow BCT's 595 Express route to travel at higher average travel speeds via uninterrupted express lanes for the entire route. It is expected that these lanes will be fully constructed and operational by mid-2014. • 595 Express Bus Service provides free commuter park and ride locations, and travel along the major interstate highways between downtown Fort Lauderdale and Miami-Dade County on weekdays during morning and afternoon peak travel hours.
MDT Northeast Corridor (Biscayne Blvd.) Enhanced Bus Phase 1	Service from downtown Miami to Aventura Mall via Biscayne Blvd./US 1	Revenue service expected in 2014	Service to be operated by MDT	• This route will provide premium limited stop transit service along Biscayne Boulevard/US-1 from downtown Miami to Aventura Mall. This route provides service to the Adrienne Arsht Performing Arts Center, and a direct connection to the cities of Little Haiti, Miami Shores, North Miami and North Miami Beach. • Service headways will be 15 minutes during the AM/PM peak-hour and 20 minutes during the mid-day. Revenue service is anticipated to begin in 2014 using 11 new 60-foot diesel/electric hybrid, clean diesel, compressed natural gas (CNG), or other alternative fuel buses. The bus purchase component is considered Phase I for this corridor.	• This forthcoming MDT Enhanced service will directly benefit patrons using BCT Route's 1/US 1 Breeze/28 that currently serve the same transfer location as MDT at the Aventura Mall. • The forthcoming (2013-14) BCT-led US 1 BRT Improvements Study will review all options/plans for MDT's Northeast Corridor Enhanced Bus service for optimal transit service solutions into and out of this corridor.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
MDT I-95 Express Bus Service Broward Blvd. Expansion	New service from Broward Blvd. Tri-Rail Station to Miami Civic Center	Revenue service expected in 2014	Service to be operated by MDT	• This route would provide express commuter transit service between the Fort Lauderdale Tri-Rail Station located at Broward Boulevard in Broward County and the Civic Center Metrorail Station in Miami-Dade County via I-95. • Service headways will be 30 minutes during the AM/PM peak-hour. Revenue service is anticipated to begin in 2014.	• New Express Bus Service would provide direct connection between Fort Lauderdale/Broward County to the Civic Center employment area in downtown Miami.
MDT I-95 Express Bus Service Sheridan Street Expansion	New service from Sheridan St. Tri-Rail Station to Miami Civic Center	Revenue service expected in 2014	Service to be operated by MDT	• This route would provide express commuter transit service between the Sheridan Street Tri-Rail Station in Broward County and the Civic Center Metrorail Station in Miami-Dade County via I-95. • Service headways will be 30 minutes during the AM/PM peak-hour. Revenue service is anticipated to begin in 2014.	• New Express Bus Service would provide direct connection from southeast Broward County to the Civic Center employment area in downtown Miami.
MDT NW 7th Ave. Enhanced Bus Service	Service between downtown Miami and Golden Glades	Revenue service expected in 2015	Service to be operated by MDT	• This route will provide premium limited-stop transit service along NW 7th Avenue between downtown Miami and the park-and-ride lot located at the Golden Glades Interchange. Service headways will be 15 minutes during the AM/PM peak-hour and 30 minutes during the mid-day. • This route will provide a premium transit connection to the NW 7th Avenue Transit Village located at NW 7th Avenue and NW 62nd Street. Revenue service is anticipated to begin in 2015.	• This planned service will provide connections to BCT's University and US 441 Breeze routes at the Golden Glades transfer location, enhancing connectivity between MDT and BCT.
MDT I-295 Express Bus	Service from Miami-Dade/Broward Co. Line at 215th St./NW 27th Ave. and downtown Miami via the HEFT and I-95	Revenue service expected in 2016	Service to be operated by MDT	• This route would provide express commuter transit service between the Miami-Dade/Broward County Line (NW 215th Street and NW 27th Avenue) and downtown Miami via the HEFT and I-95. Service headways will be 15 minutes during the AM/PM peak-hour. Revenue service is anticipated to begin in 2016.	• This planned service will provide connections to BCT's Route 2 and University Breeze routes at the planned MDT park-and-ride facility at the Miami-Dade/Broward Co. Line at 215th St/NW 27th Ave, enhancing connectivity between MDT and BCT.
MDT North Corridor (NW 27th Ave.) Enhanced Bus	Service from Miami-Dade/Broward County Line (NW 215th St. & NW 27th Ave.) to Miami Intermodal Center (MIC)	Revenue service expected in 2017	Service to be operated by MDT	• This route would provide premium limited-stop transit service along the NW 27th Avenue corridor from the Miami-Dade/Broward County Line (NW 215th Street and NW 27th Avenue) to the MIC. A park-and-ride/bus terminal station is proposed at the northern terminus of the route at NW 215th Street. Service headways will be 10 minutes during the AM/PM peak hour and 20 minutes during the mid-day. • Revenue service is anticipated to begin in 2017 using 11 new 60-foot diesel/electric hybrid, clean diesel, CNG, or other alternative fuel buses.	• This forthcoming MDT Enhanced Bus service will directly benefit patrons utilizing the BCT Route 2 (University Dr.) and the University Breeze Limited Stop route. BCT will explore sending these two routes to serve MDT's proposed park-and-ride/bus terminal station at NW 215 St.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
I-75 Express Bus Service	Service from Sawgrass Mills/I-595 area into Miami-Dade County	Revenue service expected in 2018	Operating agency to be determined by FDOT Dist. IV	• The overall purpose of the projects (I-75 and SR 826 Express Lanes) is to improve mobility, relieve congestion, provide additional travel options, enhance transit services, accommodate future growth and development in the region, enhance emergency evacuation, and improve system connectivity between key limited access facilities in South Florida.	• Express Bus Service operating costs are projected to be funded by toll revenue from the completed Managed Lanes project. • Express Bus Service routing has not been finalized but is generally expected to originate in western Broward County and terminate in western Miami-Dade County. • The number, cost and type of buses to provide this service have not yet been identified.
MDT Northeast Corridor (Biscayne Blvd.) Enhanced Bus Phase 2	Service from downtown Miami to Aventura Mall via Biscayne Blvd./US 1	Revenue service expected in 2020	Partnership between Miami-Dade MPO and MDT	• The Miami-Dade MPO in cooperation with MDT is performing an Implementation Plan for the Biscayne Boulevard Enhanced Bus Service (EBS) project. This EBS route will feature robust stations, Wi-Fi, real-time "Where is the Bus?" arrival times via the internet or on web enabled mobile devices, real-time "Next Bus" arrival information via electronic signs, Transit Signal Priority (TSP), and Park-and-Rides. • Phase II for the Biscayne Enhanced Bus Service project will feature 10 minute service headways during the AM/PM peak-hour and 20 minutes during the mid-day using an additional five (5) new 60-foot diesel/electric hybrid buses, clean diesel, CNG or other alternative fuel buses. Phase II is expected to be completed by 2020.	• This forthcoming MDT Enhanced service will directly benefit patrons using BCT Route's 1/US 1 Breeze/28 that currently serve the same transfer location as MDT at the Aventura Mall. • The forthcoming (2013-14) BCT-led US 1 BRT Improvements Study will review all options/plans for MDT's Northeast Corridor Enhanced Bus service for optimal transit service solutions into and out of this corridor.
MDT Palmetto Express Bus	Service from FDOT Park-n-Ride Lot at I-75 to Palmetto Metrorail Station	Revenue service expected in 2022	Partnership between Miami-Dade MPO, FDOT Dist. VI and MDT	• This route would provide express commuter transit service between the proposed FDOT park-and-ride lot at I-75 (as proposed by the FDOT I-75 Express Bus Service Alternatives Study) and Miami Gardens Drive interchange to the Palmetto Metrorail Station via SR 826 Express Lanes. Service headways will be 15 minutes during the AM/PM peak-hour. Revenue service is anticipated to begin in 2022.	• This proposed service allows the opportunity for future I-75 Express Bus Service from Broward Co. to provide important connections to either the MDT Express Bus or Metrorail systems.
SR 7/US 441 Project Development and Environment (PD&E) Study	SR 7/US 441 from SR 834/Sample Road to SR 808/Glades Road	In Progress	FDOT	• SR 7 between the Broward County Line and Glades Road is designated as a TOC in the Broward County Comprehensive Plan. • Broward County policy requires the addition of two dedicated transit/special use lanes when projected level of service (LOS) falls below LOS D within a five-year period.	• The purpose of this study will be to analyze traffic/land use data; perform an environmental analysis, develop engineering concepts, conduct a noise study, and perform a financial analysis. • This PD&E Study will consider an evaluation of premium transit within the corridor, as well as recommend a build/no-build alternative based on the findings.
US 1 Bus Rapid Transit Improvements Study	US 1 (between downtown Fort Lauderdale and Aventura Mall)	In Progress (2013-14)	BCT, Broward MPO, FDOT, MDT, Miami-Dade MPO, SFRTA, and affected municipalities	• BCT received a $686,000 FTA Earmark to study BCT's third busiest bus route by daily trip activity. Current BCT local service (Route 1) in this corridor experiences overcrowding, faces unmitigated traffic congestion and consequently suffers from unreliable travel times. • This study is a critical step in pursuing beneficial short and medium-term premium transit service and technology improvements that can be applied to the corridor.	The goals of this study are to: • Improve transit travel time in a highly-utilized transit travel corridor; • Improve transit service reliability; • Meet existing and projected transit capacity needs; • Enhance the transit passenger experience utilizing transit on corridor; • Encourage sustainability, livability and transit-oriented development concepts and efforts along the corridor.

Plan/Program/Study Reviewed	Geographic Applicability	Most Recent Update/Timeframe	Responsible/Partner Agencies	Overview	Key Considerations for the Situation Appraisal
Broward Boulevard Livable Mobility Plan	Broward Boulevard	In Progress (until end of 2014)	BCT	• Broward County received $8 million in federal funding from FTA for transit capital and operating improvements on Broward Boulevard.	• Improvements programmed with federal funding include purchasing nine energy–efficient hybrid-electric buses to operate along Broward Boulevard (BCT Route 22), implementing Transit Signal Priority along Broward Boulevard, enhancing bicycle and pedestrian facilities/connections, developing a car sharing program, and making Advanced Traffic Management System (ATMS) improvements.
Broward Boulevard Corridor Transit Study	Broward Boulevard from US 1 to Pine Island Road	Final Report July 2012	FDOT, Broward MPO, BCT, SFRTA, and affected municipalities	• The purpose of this study is to explore transit options for the Broward Boulevard corridor to improve mobility, relieve congestion, and improve air quality.	• Selected Alternative includes adding an overlay service on BCT Route 22 that only stops at high demand stops. A longer-term Alternative includes dedicating curb lanes of Broward Boulevard from SR 7 to Andrews Avenue as Business Access and Transit (BAT) lanes. • Operating and Maintenance costs remain unidentified for the selected Alternative.
Broward Boulevard Gateway Implementation Plan	Broward Boulevard from NE 8th Avenue to NW 27th Avenue	In Progress	City of Fort Lauderdale, Fort Lauderdale DDA, Fort Lauderdale Transportation Management Authority, Fort Lauderdale Community Redevelopment Agency (CRA), South Florida Regional Planning Council (SFRPC), Broward County, Broward MPO, FDOT, and BCT	• The project goal is to improve mobility, accessibility, connectivity, and quality of life through specific implementable projects along Broward Boulevard, with the goal of creating a gateway to downtown Fort Lauderdale.	• Potential implementation projects will likely include transit-related recommendations that will impact BCT, Tri-Rail, and the future Wave route, such as park-and-ride, additional amenities, service improvements, etc.
Bus Queue Jump Lanes Pilot Demonstration Project	SR 7 and Prospect Road	Mid-2013	Broward County, BCT, FDOT and affected municipalities	• In late 2012, a pilot project was implemented to introduce a new traffic signal for buses in order to reduce bus delay and improve service delivery and traffic flow.	• Data collected during the two-week pilot project will be analyzed to assess the benefits of this technology and if similar applications are appropriate elsewhere in the county.
BCT Shelters and Amenities Program	Broward County	2010	Broward County, BCT	• Program objective is to increase the number of shelters, seating areas, and transit amenities at BCT bus stops at a minimum of 679 bus stop locations with identified funding.	• This countywide action plan will increase the number of shelters and transit amenities at bus stops; plan includes specific shelter designs adopted by Broward County and affected municipalities. • Bus stops are prioritized based on daily ridership figures, right-of-way availability, site safety, Americans with Disabilities Act (ADA) accessibility and connecting pedestrian accessibility (sidewalks). • BCT will have over 1,000 total shelters in the system-wide once the project is completed at the end of 2014. Once this project is completed, nearly 20% of BCT's total bus stops will have a shelter.

SITUATION APPRAISAL

The requirements for a TDP major update include the need for a situation appraisal of the environment in which the transit agency operates. The purpose of this appraisal is to help develop an understanding of the BCT operating environment in the context of the following elements:

- Regional transportation issues;
- Socioeconomic trends;
- Travel behavior;
- Land use;
- Public Involvement; and
- Technology.

The following situation appraisal provides an overview of the environment in which BCT operates. While this list cannot possibly be exhaustive, it includes the primary circumstances shaping BCT's operating environment. The assessment of these elements resulted in the identification of possible implications for BCT. The assessment and resulting implications are drawn from the following sources:

- Review of relevant plans, studies, and programs prepared at all levels of government;
- Results of technical evaluation performed as part of the transit development planning process;
- Outcomes of discussions with BCT staff and administration; and
- Input gathered through public involvement activities.

Socioeconomic Trends

Broward County population grew at a rate of 7.7 percent between 2000 and 2010 (U.S. Census Bureau). The number of employed persons in Broward County increased by over 12 percent during this same time period. The growth in transportation disadvantaged persons between 2008 and 2013 in Broward County was over 10 percent.

Implications – BCT must strive to meet transit demand as the number of people living and working in Broward County continues to grow. As population grows and more employment opportunities become available, the role of transit will become an increasingly more important component of the overall transportation solution in the county. The increase in transportation disadvantaged individuals in the population may increase the demand for paratransit services, as well.

Travel Markets

Transit markets can be organized into three major categories: traditional markets, discretionary markets, and regional markets. The traditional market includes individuals who have no or limited transportation alternatives and rely on public transit for essential and recreational trips. This market includes the elderly, youth, low-income, and no/limited vehicle populations. The discretionary market refers to individuals who have a choice of transportation alternatives and may choose transit if the service is competitive with the automobile in terms of travel time, convenience, cost, and/or other factors. The regional market refers to the demand for commuter travel to other counties in the region.

While BCT currently serves all three markets, the largest group it serves is the traditional market. In recent years, BCT has been making a concerted effort to serve more and more of the discretionary and regional markets. To serve these groups, BCT has to offer services that are more competitive with the automobile and move people regionally.

Implications – BCT should continue to target traditional markets and continue efforts to increase its share of discretionary and regional riders. As economic development efforts in the county continue to mature, BCT should continue to modify its services in order to capture new riders and new transit markets.

Transportation Network

While BCT provides local and regional travel options, it also contributes to a larger transportation network that enables travel beyond the region. This network includes regional rail, airports, and seaports. SFRTA operates the Tri-Rail system, which provides transportation along a 70.9-mile corridor from Miami to West Palm Beach. Several studies are looking at adding passenger rail service between Miami and other destinations such as Jupiter and Space Coast. The Fort Lauderdale-Hollywood Airport's Master Plan includes plans for future growth that will include accommodations for regional transit connections. As with many other seaports, the deepening of the Panama Canal has impact for Port Everglades. As such, it is also planning to expand its operation. Public comment included the need to provide transportation to and from all of these facilities.

Implications: As these projects progress, there will be increasing demand for BCT services to support them. These demands will have operational and financial impacts for BCT as the system's route network grows and evolves to meet such increased demand.

Complete Streets

Developed through a grant from the Center for Disease Control and Prevention (CDC), the Broward County Complete Streets Initiative was approved by the Broward County Commission on March 12,

2013. The unanimously-approved measure calls for adopting the Broward Complete Streets Guidelines, which provide community design standards to make streets safe for all users.

The Complete Streets Initiative was created through a partnership of the Broward Regional Health Planning Council, Broward MPO, the Health Foundation of South Florida, and the Smart Growth Partnership. As part of this initiative, FDOT has developed a lane elimination process and the County has hired a Complete Streets Coordinator to review all resurfacing and capital improvement projects.

Implications – Throughout the public involvement activities conducted as part of the TDP process, many individuals mentioned the need to improve bicycle and pedestrian connectivity to the transit system and the safety of those modes. This initiative will assist BCT in making the transit system more accessible.

The Wave

On March 13, 2013, the Broward County Commission approved The Wave, which committed Broward County to fund annual cost to operate and maintain the system. The initial 1.4-mile streetcar segment will be constructed for approximately $83 million with an anticipated opening date in late 2016. The Wave is a modern streetcar system that is intended to circulate people around downtown and act as both a transportation mechanism and an economic development tool. Additional phases are being studied as to the appropriate locations for expansion.

Implications – BCT will be the owner and operator of The Wave system, which will add a new mode to the BCT system. As the operator, BCT will have to manage funding for The Wave, including the processing of grants. BCT also will need to determine how best to connect the existing fixed-route motorbus service to the streetcar line to ensure system connectivity.

Express Lane Development

In addition to express lanes already in operation, FDOT Districts Four and Six are implementing express lanes on 27 miles of I-75 and SR 826 from I-595 to SR 836. The express lanes will open in FY 2018. One of the stated purposes of the express lanes is to improve transit service in the area. Further expansion of the Managed Lane system from Broward Blvd. north through Palm Beach County to the Martin County line will also be studied by FDOT within the next few years.

Implications – BCT will be able to add and improve express bus service in this corridor by operating in the express lanes. Funding for such service remains unidentified.

Fixed Route Local Bus Service

BCT is currently having significant issues with on-time performance on a number of key corridors. In some instances the problem with schedule adherence is due to traffic congestion, in some instances it is due to increased ridership demand, and in some instances it is both. Ridership demand can become a problem when there is too much demand for the amount of service being provided on a given route; the bus has to stop more frequently, which slows its progression on the route. Additionally, on some trips it is so overcrowded that some potential passengers have to be passed up until the next bus.

Implications – BCT needs to add service annually on a number of its key routes in order to improve on-time performance and help ensure that these routes can actually provide the level of service that is published in BCT's schedule.

Community Bus System

BCT assists 18 municipalities with the funding of community bus routes. These services are managed by their respective communities while BCT provides $15 per hour of service to support the costs of operating the system. BCT assists each of these 18 partners with developing routing, schedules and other service-related logistics while the municipalities generally manage the operational contract for their respective routes.

Implications – Given the unique nature of every contract BCT has with the 18 different community bus partners, it has become very cumbersome for BCT to manage these contracts. It will be necessary for BCT to develop two or three boilerplate contracts I the near-term from which the communities can choose.

Jitney Service

Jitney service, independently operated and privately owned transit-like service, is making an entry into the local economy. Broward County Code of Ordinances Ch. 22½-7 permits jitney service under certain conditions with approval of the Transit Director. Jitneys must operate along a fixed route, are not permitted to have a schedule, and may not board/discharge passengers within 200 feet of a bus stop or taxicab zone. Service development standards by BCT provide that proposed jitney routes should complement BCT services by expanding transportation access primarily during hours when public transit is not available or in communities that are currently underserved by transit.

Implications – Jitney service could be a benefit to the community by providing transportation options in currently underserved areas or during hours when traditional transit service is not currently financially feasible.

Funding

Funding of BCT operations has been a concern for a few years. Services have been cut in recent years due to lack of funding for the system. The LRTP's 2035 cost feasible transit plan, as noted in the plan review section, identifies funding for only a portion of transit needs. A portion of BCT's operations and maintenance and all capital costs are funded in the Cost Feasible Plan. Only one-third of BCT's FY 2009-2018 TDP service is funded.

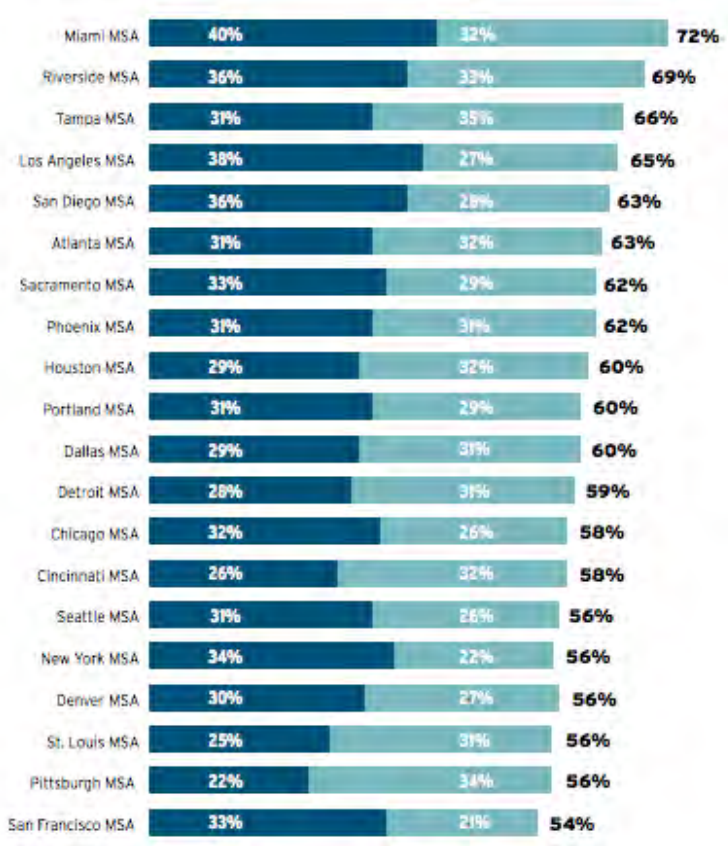
Implications – BCT will have to identify new funding sources to be able to continue operating current services without modification or service cuts. Such new resources will be necessary for BCT to be able to enhance or expand existing services, as well.

Housing And Transportation Costs

Using 2006 through 2010 American Community Survey data, the Center for Neighborhood Technology and Center for Housing Policy found that the Miami-Fort Lauderdale-Pompano Beach, FL, metropolitan statistical area (MSA) has the highest level of housing costs for any MSA in the country. For the average resident in this MSA, housing and transportation costs are equivalent to 72 percent of household income. For 90 percent of the households, housing and transportation costs are greater than 45 percent of their monthly income.

For commuters using public transportation, the average commute time is 47 minutes as compared to those who are driving alone, which is 26 minutes. A greater proportion of commuters using public transportation are minority residents. This means that a greater proportion of minority commuters have less time to spend doing other activities.

Figure 5-1
Housing and Transportation Costs



Source: Center for Neighborhood Technology and Center for Housing Policy.

Implications – Broward County residents are cost-burdened by housing and transportation costs. BCT has an opportunity to provide low-cost transportation services to alleviate some of this burden. If service frequency were improved, this could reduce the "penalty" paid by those individuals using public transportation as a commute alternative.

Long-term Sustainable Funding Source

Many of BCT's routes are "standing room only" during peak periods due to long headways. While crowded buses increase farebox recovery ratios, they may negatively impact total fare revenue. Long headways and standing-room-only conditions do not encourage transit usage and may reduce overall passenger loads. Standing-room-only conditions also negatively impact on-time performance. An overcrowded vehicle stops more frequently to allow passengers to board and alight; this constant stopping slows the progress of the bus, increases travel time, and makes it difficult to maintain on-time performance.

Implications – In order to provide more frequent service to address existing overcapacity and projected future demands, BCT must identify a long-term sustainable funding source. Without a sustainable funding source, BCT cannot begin to fully tackle existing capacity issues and projected increases in ridership over the near and long-term..

Six Pillars

Broward County has joined the State's Six Pillars initiative led by the Florida Chamber Foundation. One of the six pillars is Infrastructure & Growth Leadership, which has a goal of providing a variety of diverse, accessible, interconnected transportation options for residents, visitors, and the business community. This goal is to be measured by the miles of new rail line installed, number of new bus routes, and transit ridership levels.

Implications – As evidenced by this initiative, Broward County has begun the important process of garnering business support for greater transportation choices and investments.

Voter Opinions

From April 17-24, 2013, the Broward County MPO conducted a telephone survey of voters in Broward County. Of the 502 respondents, 10 percent of respondents indicated that the top issue of local concern is traffic, transportation and infrastructure/roads; 53 percent indicated that Broward's transportation system is inadequate; and 76 percent indicated that traffic congestion is a serious problem. For 45 percent of the respondents, adding more transportation options is the best way to address traffic congestion. In addition, 77 percent of respondents say that expanding public transportation should be a priority for Broward County.

Of those surveyed, 24 percent believe that they will be better off financially in the upcoming year than they are this year; 50 percent believe they will be about the same. Forty-seven percent indicated that they would support paying more in taxes or fees to improve the transportation system while 42 percent would oppose paying more.

Implications – Transportation and traffic congestion are important issues to the citizens of Broward County and they have concerns about them. These results are very similar to the public opinion poll findings from BCT's telephone survey (see Section 4).

Road Construction

Road construction projects will continue to change the operating landscape for BCT throughout the 10-year timeframe of the TDP. These projects may cause temporary impediments to on-time travel during construction periods. Once completed, they may offer better travel conditions. For example, the expansion of the southern part of State Road 7 to six lanes in Broward County will impact traffic flow on that portion of the roadway and potentially improve the on-time performance of Route 18 and Breeze US 441. The extension of the I-95 express lanes will ensure that BCT's 95 Express will be able to travel at higher average speeds for a longer distance.

Implications – BCT will continuously have to monitor the on-time performance of each route to ensure that on-time system performance goals are being met. Temporary and permanent adjustments may need to be made throughout the 10-year period based on known roadway construction schedules.

Transportation System Management and Operation (TSM&O) Program

BCT will be coordinating with FDOT and Broward County Traffic Engineering Division (BCTED) on the implementation of the TSM&O program. The program is scheduled to begin monitoring and implementing real-time strategies on Broward County arterials in the fall of 2013. The focus of the system is to improve travel time reliability for users of the arterial network by actively managing the corridor. Other expected benefits include reduced incident duration and fewer crashes.

Implications – BCT will work with FDOT and BCTED to determine the best methods for coordinating between them on this project.

School Children Transportation

The transportation of school children has been a discussion for sometime in Broward County. While BCT is prohibited by FTA rules from providing service designed to move school children between school and home if there is a private school bus operator conducting business in the county, BCT's services are

certainly used by school children. These children may be going to school, home, or other destinations. Discussions between the school system and BCT are ongoing.

Implications – BCT will need to continue to meet with and discuss this transportation issue with school system officials.

Alternative Fuel Vehicles

Public outreach activities revealed strong interest in BCT using vehicles fueled with alternative fuels. BCT has been exploring its options and owns over 80 hybrid buses at this time. BCT also has a goal to keep 25 percent of its vehicle fleet using a hybrid propulsion system.

Implications – BCT should continue to its explore options for alternative fuel use, while maintaining at least a quarter of its fleet as hybrid vehicles.

Technology

Many comments were received during the public involvement phase that BCT needed to invest in technology upgrades to improve the passenger experience. BCT is making an effort to implement state-of-the-art technology to enhance the customer experience. BCT is exploring the implementation of real-time passenger information systems, fare integration with other transit systems, mobile telephone ticketing options/technology, and wireless internet on express and Breeze buses, among other options. These upgrades will allow for passengers to more easily access the system and use their time more efficiently while on the system.

Implications – BCT continues to emphasize technology implementation in order to enhance customer service. As such, staff will need to keep the agency's technology plan up to date and ensure that appropriate resources are dedicated, as available to the advancement of this program in the future.

Economic Benefits of Transit

The 2011 study, *Economic and Community Benefits of Urban Fixed-Route Transit in Florida*, conducted by FDOT and the Center for Urban Transportation Research (CUTR), measured the impacts of public transportation on local economies. Using the nationally-recognized IMPLAN Input-Output (I-O) model data from the NTD, data from the American Automobile Association (AAA), and data from the Texas Technology Institute's Urban Mobility Report, the study measured the economic impacts of federal spending, of savings to transit users, and of savings to highway users based on the operational and capital spending by the 28 fixed-route transit agencies in the state.

On average, about $200 million federal dollars are spent every year by Florida transit agencies, which generates approximately 4,000 jobs and $464 million dollars in the production of goods and services in the state. In other words, for every dollar spent on transit, $2.30 of economic activity is generated.

Those who use public transportation enjoy the benefits of reduced travel costs, including savings in car ownership and operation. Reduced travel costs increase a transit user's disposable income, but decrease demand for goods of some industry sectors, like the automobile sector. Taking this into account, the I-O model estimates that the use of public transportation has a net positive impact on the state's Gross Domestic Product (GDP) of approximately $160 million annually.

Highway users experience the benefits of transit in increased transportation capacity and less congestion, travel time savings, and reduction in the amount of fuel wasted, among other things. Savings in wasted fuel and time savings produce on average between $115-$130 million dollars in GDP growth annually.

Implications: Increasing and improving BCT's services will have economic benefits to Broward County, as well as benefits to all of its residents, including users or non-users.

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BROWARD COUNTY Transit
CONNECTED

SECTION 6

Goals and Objectives

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Section 6

Goals and Objectives

The identification of goals and objectives for a transit agency is a fundamental but critical step in the preparation of a TDP. It is necessary for establishing the framework within which the agency will pursue its established TDP-inspired vision over time. BCT went through the goal-setting process during the agency's previous TDP major update; however, staff has indicated a desire to revisit the prior goals and modify them to better reflect the agency's current situation and vision for the future. As such, the TDP presents the updated goals and objectives that have been developed and are proposed for BCT.

It is important to note that a key input to the development of these goals and objectives is the range of comments and policy issues that have been identified during the TDP's public outreach process. As documented in the TDP's Public Involvement Plan, many discussions have been held with community leaders, key stakeholders, the Advisory Review Committee, BCT staff, and the general public, among other organizations and individuals. The issues highlighted during these discussions help form the basis for the proposed BCT goals. In addition, this list of goals has been supplemented by an examination of existing transit-related policies assembled from BCT's 2010 COA, as well as results from the 2013 on-board survey of BCT passengers systemwide and the household poll of randomly-selected Broward County residents (see Sections 5 and 4 for details on these results).

In developing original goals and objectives, or even modifying existing ones, it is beneficial to consider the definitions of these items to ensure that they are prepared in an appropriate manner. As such, following are general definitions of the terms to consider when developing when developing "goals" and "objectives":

- *Goal* – A long-term end toward which programs or activities are ultimately directed.
- *Objective* – A specific, measurable, intermediate end that is achievable and allows measurement of progress toward a goal.
- *Action* – A prescribed step for achieving a given goal.

BCT MISSION STATEMENT

BCT's current Mission Statement is as follows:

The mission of Broward County Transit is to provide clean, safe, reliable and efficient transit service to the community by being responsive to changing needs and focusing on customer service as our highest priority.

GOALS

BCT has established five major goals for the transit agency. Each goal is supported by objectives, actions, and performance measures. Each goal is presented with its related objectives and actions. A complete listing of each goal and its objectives, actions, performance measures, metrics, responsible parties, and targets can be found in Appendix J.

Goal 1: **Promote and Advocate Economic Development and Livability Through Transit Investments**

Public transportation is a critical component in the support of both regional economic vitality and growth and livability principles. Transit services can help support increased economic activity by providing mobility for an expanded workforce while also working in conjunction with local area land use regulations (in the form of planning, zoning, and design standards) to encourage high density, mixed use development around transit nodes. Broward County is especially interested in this last concept and has been examining the implementation of Complete Streets enhancements and transit-supportive land use changes and development on major corridors, which can help provide economic benefit by promoting infill/redevelopment and by enhancing the value of existing land uses. This goal seeks to ensure that BCT continues to coordinate with the County and other partners in supporting the ongoing economic development and livability activities in the region.

In the case of livability, which seeks to make communities more livable and sustainable by integrating and balancing economic, social, and environmental needs, transit services can employ “green” practices in capital infrastructure design and construction, ensure energy-efficient vehicles, and employ strategies to encourage land use and transit-oriented development designed to increase ridership. BCT is also committed to creating a culture of sustainability in its administrative and operational facilities.

Table 6-1

Goal 1 with Objectives and Actions

Goal 1 Promote and Advocate Economic Development and Livability Through Transit Investments	
Objective 1.1	Advocate regional connectivity by promoting BCT's role as a transit service provider
Objective 1.2	Coordinate link multimodal transportation with land use decisions
Objective 1.3	Integrate BCT's service planning efforts with other local and regional plans
Objective 1.4	Develop long-term transportation services beneficial to the region
Action 1.1	Promote transit as a benefit to the business community
Action 1.2	Become an active participant in organizations with local and regional partners with a focus on economic development and livability
Action 1.3	Actively work with local communities to ensure that transit is an integral part of the comprehensive planning process
Action 1.4	Monitor development for new transit markets in coordination with local and regional organizations

Goal 2: **Make BCT a Transportation Provider of Choice for Current and Potential Customers**

This goal focuses on the delivery of a transit service that presents a high level of quality to all of its customers. Meeting this goal includes such aspects as clean and well-maintained vehicles, frequent and on-time service, accessible bus stops and facilities with appropriate infrastructure, and even real-time passenger information at transfer centers and/or on mobile devices, among others. The key policy objectives under this goal address these aspects using selected metrics that relate to such considerations. It is important to recognize that the various aspects of service focused on for this goal come from much the public input received during the community outreach efforts of this TDP.

Table 6-2

Goal 2 with Objectives and Actions

Goal 2 Make BCT a Transportation Provider of Choice for Current and Potential Customers	
Objective 2.1	Increase frequency of service to meet customer demand
Objective 2.2	Expand coverage of services to meet customer demand
Objective 2.3	Improve productivity of services
Objective 2.4	Improve customer service
Objective 2.5	Maintain proactive communication with customers and stakeholders
Objective 2.6	Improve the perception of public transportation
Action 2.1	Monitor customer complaints on a regular basis and determine trends
Action 2.2	Monitor and improve on-time performance
Action 2.3	Enhance marketing and community involvement campaigns
Action 2.4	Monitor low-performing routes against performance standards
Action 2.5	Invest in capital projects that will improve customer satisfaction and convenience
Action 2.6	Coordinate with regional partners to create an interoperable fare collection system

Goal 3: **Achieve Financial Stability and Efficiency**

This goal focuses most importantly on BCT's long-term financial stability. The pursuit and securement of a dedicated funding source has come up during some of the outreach activity discussions, and this would be an important activity in the successful achievement of this particular goal. From key stakeholder interviews that were conducted, some of the ideas for possible sources of dedicated local revenue for transit include sales tax and revenues from a managed lanes toll surcharge. Regardless of the ultimate source, the goal for the dedicated funding would be to establish an annually-occurring stream of resources that would enable BCT to meet its many needs brought on by existing and growing demand, as identified for the 10-year time period of this plan, as well as address other needs that may arise in the future.

Table 6-3

Goal 3 with Objectives and Actions

Goal 3 Achieve Financial Stability and Efficiency	
Objective 3.1	Work with community stakeholders to establish the need to identify and implement a sustainable dedicated funding source for transit
Objective 3.2	Ensure business practices provide funding partners and stakeholders with the maximum benefit for their investment
Objective 3.3	Increase farebox recovery and ridership
Action 3.1	Present frequently updated reports on BCT's unfunded programs
Action 3.2	Work with community stakeholders to develop a coordinated approach to seeking a dedicated funding source for transit
Action 3.3	Actively seek additional and sustainable funding opportunities for new and expanded services

Goal 4: **Develop a BCT Workforce that is Highly Qualified, Efficient, and Motivated by Excellence**

BCT is dedicated to being an exemplary employer that continues to hold its staff to the highest standards. It is important for BCT to continue to develop a culture of accountability that is demanded at all levels of employment. BCT has committed to investing in its employees through training programs. These training programs will assist BCT in reducing potential accidents and increasing customer satisfaction.

Table 6-4

Goal 4 with Objectives and Actions

Goal 4 Develop a Workforce that is Highly Qualified, Efficient, Productive, and Motivated to Customer Service Excellence	
Objective 4.1	Attract, recruit, and retain professional, diverse, and skilled employees
Objective 4.2	Promote opportunities for continuous training to support workforce development
Objective 4.3	Promote accountability with a focus on customer service and safety as a culture
Action 4.1	Monitor workplace safety
Action 4.2	Reduce preventable operator accidents through annual operator safety training
Action 4.3	Implement all aspects of BCT safety and security plans
Action 4.4	Provide opportunities for supplemental training and employee recognition

Goal 5: **Increase and Improve Capital Assets**

BCT is dedicated to maintaining its capital assets in good operating condition in order to provide for a pleasant experience by the passenger. Capital assets include rolling stock, facilities, and information technology (IT) equipment. For rolling stock, this goal includes a commitment to maintain a younger

average fleet age. It also includes a commitment to strive for a 25-percent hybrid ratio in the vehicle fleet.

Table 6-5

Goal 5 with Objectives and Actions

Goal 5 Implement Capital Program Plan to Maintain State of Good Repair and Introduce New Technologies	
Objective 5.1	Replace vehicles according to established life cycles
Objective 5.2	Maintain all vehicles and facilities in a state of good repair
Objective 5.3	Practice and promote the enhancement of environmental sustainability as a culture
Objective 5.4	Implement new Information Technologies to enhance provision of customer service
Action 5.1	Manage the average age of vehicles to be within FTA guidelines
Action 5.2	Improve system reliability by improving mean distance between road failures
Action 5.3	Develop and implement a 10-year capital improvement plan
Action 5.4	Create a schedule for capital asset inspections and ensure that critical inspection recommendations are completed in a timely manner
Action 5.5	Construct all new facilities to "green building" standards for energy efficiency and sustainable design

SUMMARY

The goals and policy objectives presented herein reflect the strategic focus of BCT in its transit development planning process and are purposely designed to address the broad concepts of transit system operation that were identified using public and stakeholder outreach during the initial goal-setting process. Consequently, the policy objectives and related actions range in their level of specificity. It is envisioned that these goals and objectives, and accompanying actions, will provide the framework with which BCT can continue to grow, develop, and operate its various transit services so that they will continue to benefit BCT's stakeholders and patrons.

BROWARD COUNTY Transit

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SECTION 7

Alternatives

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Section 7 Alternatives

This section provides an overview of the alternatives developed for implementation during the 10-year TDP. For organizational purposes, the alternatives have been organized into two categories: Status Quo Plan and Vision Plan. Improvements in each category are detailed in this section. The projects in the Status Quo Plan are necessary to keeping the current system operational through the 10-year period. The Vision Plan projects are those that go beyond basic necessities and move the system toward more completely meeting the needs of Broward County residents.

The process to develop the alternatives included consultation with BCT staff, public outreach activities, a needs assessment based on the trend and peer analyses, and input from the ARC and local elected officials. The improvements are need-based improvements and therefore funding may not necessarily have been identified for them. Section 8, Financial Plan, will provide information on the costs associated with these improvements and funding available for them.

Following a description of the potential improvements, BCT provides analyses regarding ridership projections. Two tools are used; one is a Passengers per Hour (PPH) calculation while the other is the FDOT-required ridership model, Transit Boardings Estimation and Simulation Tool (TBEST), analysis.

STATUS QUO PLAN

The following projects are meant to ensure the current transit system is operational for the 10-year TDP timeframe.

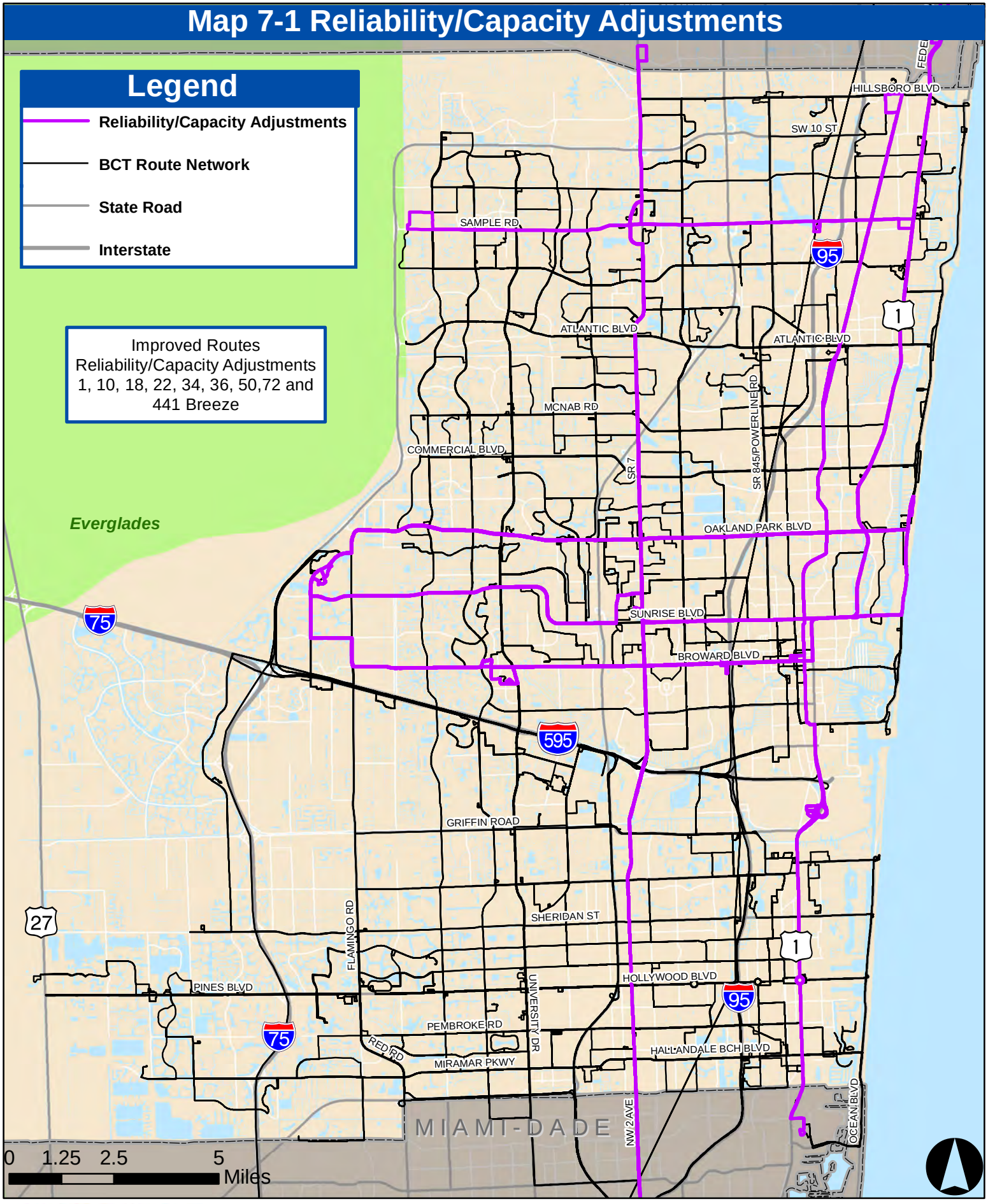
Reliability/Capacity Adjustments

To improve on-time performance on routes that are experiencing schedule adherence issues, BCT plans to put more buses on the road to allow for greater capacity on the routes. For some routes, it is hard for drivers to maintain the schedule due to traffic congestion, for others it is due to over-crowding which causes performance delays by requiring many stops so passengers can board or alight, or it is a combination of the two. This alternative puts more buses out on the street on these routes in order to allow for better schedule adherence. These improvements are targeted for Routes 1, 10, 18, 22, 34, 36, 50, 72 and 441 Breeze. Map 7-1 provides a map of the affected routes.

New Service - The Wave

In 2013, the Broward County BCC reiterated its support for providing $2.5 million annually to operate and maintain The Wave Streetcar system. The Wave Streetcar is a 2.7-mile local circulator planned for downtown Fort Lauderdale. As of August 2013, capital funding has been secured for the construction of the first phase of the project, a 1.4-mile portion that will extend from the Broward Central Terminal south to the Broward Courthouse area.

Map 7-1 Reliability/Capacity Adjustments



BROWARD COUNTY Transit

The initial line will provide circulator service in downtown Fort Lauderdale between 10 stations, with proposed 7.5-minute headways on weekdays and 15-minute headways during evenings and weekends. Following the construction of this initial 1.4-mile line by SFRTA in late 2016, BCT will become the owner and operator of the system.

The Wave Streetcar aims to create a livable community by integrating existing and planned transit-supportive land use, transportation, economic development, and environmental sustainability decisions in downtown Fort Lauderdale. By providing rail circulation between surrounding neighborhoods and downtown residents, and for regional transit users utilizing the Broward Terminal and connectivity to major employers, the WAVE Streetcar will accelerate the livability of the downtown and areas along the line.

Vehicle Replacement – Fixed Route

Each vehicle in the BCT fleet has a certain useful life and will need to be replaced when its useful life comes to a close. For the larger vehicles used on fixed route services, the useful life is about 14 years. Based on the age of BCT's current fleet and their replacement cycles, BCT developed a Fixed Route Fleet Replacement Plan.

Vehicle Replacement – Community Bus

As vehicles in the Community Bus system reach their useful lives and need to be replaced, BCT will begin to replace some of them with larger 30-foot buses. These larger buses will alleviate some of the overcrowding occurring in routes in these areas and allow for ridership growth with added capacity. Larger buses will be purchased for routes in Lauderdale Lakes, Lauderhill, Hallandale Beach, Pompano Beach, Deerfield Beach, Davie, and Fort Lauderdale.

Vehicle Purchase - Paratransit

BCT currently contracts out paratransit service, which includes the ownership of paratransit vehicles. BCT will slowly acquire paratransit vehicles in order to negotiate a new contract to allow for BCT to own the vehicles while a third party maintains and operates them. As such, BCT plans to purchase 234 new paratransit vehicles over the next one to two years. By moving to BCT ownership, equipment specific to BCT and its operations that is installed on the vehicle can be maintained on a vehicle even if the contract for paratransit operations changes between vendors. This avoids the situation where BCT is installing its equipment on vendor-owned vehicles. It also allows BCT to employ a better ratio of capital funds versus operating funds.

Cypress Creek Tri-Rail Station Access Improvements

Currently, the BCT station that serves the Cypress Creek Tri-Rail Station is across Andrews Avenue from the Tri-Rail station. In order to improve access for transferring passengers, BCT needs to realign the

routes in that area to enter the Tri-Rail area directly. The improvement will require a redesign and improvement of access roads into the Station as well as the purchase of three new vehicles to facilitate the realignment of routes serving the station.

Lauderhill Mall Transit Center

A new transit center is needed at Lauderhill Mall to accommodate community shuttle buses, 40-foot vehicles, 60-foot vehicles, restroom facilities, and ticketing areas. The facility is scheduled for FY 2014. The facility will continue to serve Routes 18, 36, 40, 441 Breeze, and 81 as well as Community Bus routes from Lauderhill, Lauderdale Lakes, and Plantation.

Park-and-Ride Lots

Two park-and-ride lots are planned for the near future: Miramar and Westgate. The Miramar facility will service I-95 Express Routes and the Westgate facility will serve I-595 and I-95 Express routes.

Copans Road Facility Administrative Building #4 Rehabilitation

BCT's Building #4 on its current Copans Road Maintenance and Operations Facility will be rehabilitated in 2014 in order to better house BCT's overall Operations Department.

Copans Road Maintenance and Operations Facility Rehabilitation/Upgrade

The Copans Road Operations and Maintenance Facility campus currently in use needs to be upgraded, modernized, and expanded. It is expected that these improvements will allow the capacity for 80 additional buses.

B-Cycle Expansion

Broward B-Cycle launched on December 14th, 2011, with 20 stations in three cities (Hollywood, Fort Lauderdale, and Pompano Beach). Within its first year, the program grew to a total of 26 stations with the addition of stations in the cities of Dania Beach, Hallandale Beach, and the Town of Lauderdale-by-the-Sea. The 275-bike system now has 27 stations in six cities within the County with additional stations to be added. Since Broward B-Cycle launched, over 29,809 riders have taken more than 45,000 bike rides, saving more than 7,700 gallons of gas, offsetting more than 143,000 pounds of carbon emissions, and burning more than 5.9 million calories.

Bikesharing offers residents and visitors an alternative and active form of public transportation, which is good for their health, environmentally friendly, and affordable. BCT estimates that a minimum of two additional stations per year will facilitate more uses of the system if stations are placed in favorable locations. Locations of future stations will be based on connectivity with other B-Cycle Stations, area uses with higher ridership potential, local codes or other permitting requirements/regulations, and funding availability.

Bus Shelter/Stop Replacement

BCT will complete its first major bus shelter expansion plan by the end of FY 2014. Once completed, over 1,000 BCT bus stops throughout the county will have some type of bus shelter. Beyond FY 2014, BCT anticipates a minimum of fifty new bus shelters and/or upgraded bus stops per year where feasible.

Computer-Aided Dispatch/Automatic Vehicle Locator/Single Sign-On/Real Time Passenger Information System

BCT has an existing Computer-Aided Dispatch/Automatic Vehicle Locator (CAD/AVL) system that helps manage fleet operations, track vehicle movements, and facilitate communication. Working in conjunction with this system is the agency's Automatic Passenger Counter (APC) technology, which counts passengers as they board and leave buses, and Voice Annunciation System (VAS), which gives English/Spanish/Haitian Creole on-board automatic voice announcements for major stops, transfer points, landmarks, and safety advisories. BCT is currently working toward replacing the existing system with enhanced capabilities including Real-Time Bus/Passenger Information System, Yard Management System, and other beneficial functions. The real-time information system will provide patrons with accurate bus arrival information and allow them to plan their travel more efficiently. It also will help BCT staff support the agency's operational activities. The new system is expected to be deployed in FY 2015, with planned system upgrades subsequently occurring in FY 2017 and FY 2020.

AssetWorks Fleet Anywhere (FA) Suites

Fleet Anywhere from AssetWorks is a computer-based fleet management system that tracks all functions related to the inventory and the maintenance of vehicles and equipment. For a transit agency, it can help staff process repair and preventive maintenance work orders, capture operating expenses by maintenance category, manage the parts inventory, and track warranty schedules and repairs, among other capabilities. After implementation in FY 2013, BCT will need to upgrade the system in FY 2018.

Fare System Interoperability (Open Fare Payment System)

BCT's current fareboxes allow the agency to accommodate electronic fare payment, whereby electronic communication, data processing, and data storage techniques are used to automate manual fare collection processes. To further enhance the fare payment process and make it even more convenient for patrons, BCT will be pursuing the integration of Smart Card technology to these devices, which would also support the ongoing fare interoperability efforts in the region and allow for the transferability of fare payments across transit systems in Southeast Florida (e.g., Miami-Dade Transit's Easy Pass program). It is estimated that this project would be completed in FY 2016. In addition, BCT is also researching the potential feasibility of an open fare payment system (e.g., "Mobile Ticket" technology) to further expand the array of payment methods that it can offer to riders. BCT will participate in a pilot project in partnership with Palm Tran and then proceed with full deployment based on the outcome of the pilot.

Personal Computer Replacement and Growth

Like all other capital equipment used by a transit agency, computer and technology-related equipment has a distinct life cycle and must be maintained and replaced accordingly. BCT intends to develop and maintain a scheduled replacement plan and to support any future personnel increases. Such a plan will allow the agency to ensure that it has an up-to-date and functional computer and technology infrastructure to support its services and operations in an ongoing fashion. This will be an annual priority project for BCT for FY 2015-23.

eLearning Solution for Computer-based Training (CBT)

BCT will implement an internal e-learning solution for Transit Operations & Maintenance employees focusing on service and operation improvements in FY 2015. This initiative will enable BCT to conduct ongoing CBT as needed.

Closed Circuit Television (CCTV) - Campus Surveillance System

BCT plans to upgrade to Internet Protocol (IP) Camera Technology from coaxial Point to Point in FY 2015, where possible. This upgrade will also include expanded channel counts for Digital Video Recorders as a part of the life cycle replacement program.

On-Board Vehicle Surveillance System

BCT has been using an on-board, closed circuit camera surveillance system on its buses since 2010. The system is used to record passenger and operator behavior, help deter crimes and disruptive behavior, and boost the overall safety and security of the vehicles while in service. The surveillance system recordings provide BCT staff with the ability to review occurrences for investigative and risk management purposes. A desired add-in, Live Look-in, is planned for acquisition in FY 2013, which will provide the additional capability to view and listen, in real-time, to the activities occurring on any one of the equipped BCT buses. This additional capability will enable transit, law enforcement, and security personnel with the ability to better assess situations as they unfold, thereby helping the agencies devise and implement appropriate responses. Thereafter, the entire camera system will be slated for an upgrade or replacement in FY 2016.

Real-Time Information Monitors at Employee Facilities (Digital Signage)

BCT intends to implement real-time information monitors at its major transit employee facilities. The monitors will be used to provide training, internal news, and job related information to the transit staff in FY 2015.

Trapeze Midas-BD Bidding & Dispatching Software

BCT currently uses Midas-Bidding and Dispatch Software, a vendor provided software package, to manage its operator bidding processes, operator dispatching, and timekeeping function. This work-force management software tool is slated to be upgraded or replaced in FY 2016.

Genfare Odyssey Electronic Validating Fareboxes

BCT's bus fleet is equipped with electronic validating fareboxes used to accept fares and bus passes. These fareboxes, have a built-in electronic identification system that can accept and validate coins, tokens, and bills. They also have the capability to accept and process magnetic fare cards; accept, issue, and validate electronic transfers. BCT has planned a replacement for the fareboxes in FY 2016-17 which will follow the Fare Systems Interoperability project.

Business Continuity

BCT intends to establish a backup Disaster Recovery Site to the existing Category 5 Rated Data Center site in FY 2015.

Security Assessment

After deployment of key Strategic Initiatives in FY 2015 (e.g. CAD AVL), BCT will initiate a Security Assessment and Evaluation for Cyber/Network Security Risk and recommended actions for mitigation in FY 2016-17.

Radio Lifecycle

As a part of Lifecycle replacement, BCT will replace the existing radios with newer technology based on technology advancements in FY 2017 and FY 2021.

Paratransit Virtual Desktop

BCT intends to virtualize paratransit personal computers to clientless technology and upgrade backend infrastructure in FY 2014. Upgrades of the hardware and software will be considered in FY 2019.

Real-Time Information for Downtown Kiosks

The Fort Lauderdale DDA, in a pass through arrangement with BCT, is enhancing the provision of transit services in the downtown area by strategically placing kiosks that would provide real-time bus schedule information for the local BCT routes serving this area. Real-time bus schedule information technology is designed to improve customer service by disseminating timely and accurate service information about projected bus arrival and departure times, disruptions and delays, transfers, and other transportation services at key locations. BCT will be coordinating with the DDA on its implementation of the kiosks so that they can be coordinated with the transit agency's planned real-time information system deployment in FY 2015.

Wi-Fi Hardware Upgrade on Express/Breeze Buses

BCT's current Express and Breeze bus services provide patrons with Wi-Fi on-board the vehicles to help accentuate the premium nature of these services. The existing Wi-Fi hardware on the vehicles is in need of upgrade to make the Wi-Fi service more reliable. BCT is still working on the schedule for this particular improvement; however, it is clear from staff that the agency's 10-year vision includes Wi-Fi only for Breeze, Express, and all other future premium bus services and not the entire fleet.

Workers Compensation Upgrade

BCT will upgrade the existing system in FY 2015 to provide employees with first level reporting of on-the-job injuries and track standard NCCI codes for reporting.

Document Management System

By implementing a document management system in FY 2015, BCT will be able to reduce the storage requirements for physical documents, enhance productivity; reduce paper printing and convert e-File for easy access. BCT will be able to store a version history of all documents and record change logs. An upgrade of the system is programmed for FY 2019.

Video Conferencing

Video conferencing capabilities will improve communications between BCT staff and will reduce the need for travel to and from BCT or County office locations, further enhancing productivity levels across dispersed workforces and teams in all BCT departments. Video conferencing equipment would only be installed at select locations and is scheduled for implementation in FY 2015.

Net Backup and Network Upgrades

BCT will maintain and upgrade backup and recovery systems along with Network Upgrades which will increase bandwidth for ease of access. These upgrades are scheduled for FY 2015.

End of Life Server Replacement

BCT plans the development of a Life Cycle Replacement Plan for server infrastructure, which would include cost estimates and procedures for end-of-life replacement, as well as upgrades and maintenance of software and hardware components where necessary. This will be an annual priority project for BCT for FY 2015-23.

The Wave Streetcar Technology Needs

The Wave Streetcar system is expected to be operational in late 2016 and includes a number of Advanced Public Transportation System (APTS) technologies to attract and assist riders and make their travel experience more convenient. Among the technology needs for which BCT will need to plan in conjunction with system start-up are real-time information monitors, information kiosks, video cameras, APCs, AVLs, automated annunciators, and potential signal priority applications, among other elements.

Community Bus Technology Needs

The aforementioned CAD/AVL/APC/Annunciation system upgrade that BCT is planning for FY 2015 will benefit the agency's existing local and premium bus services. The upgrade will also be expanded to the Community Bus service as necessary to ensure compatibility of technology and operations across all modes/services. This technology expansion to the Community Bus vehicles will occur sometime after the overall system upgrade has been completed and will be accommodated by new vehicle purchases for the program, as well. Exact costs for this need are to be determined in future years.

Transit Signal Priority Implementation

TSP is a technology strategy that gives buses preference at selected traffic signals when they arrive at the intersections, potentially dependent on some set of pre-established conditions. Since signal delay presents a major impact to bus operations, this technology has the potential to help BCT better maintain its bus schedules on key corridors with minimum impact on cross street traffic. To this end, FDOT and BCTED have been working in conjunction with BCT in a pilot project to test the technology and assess its potential uses, benefits, and impacts. To date, TSP is not widely used; however, BCT is interested in expanding the application of the technology to major corridors across the county in coming years as part of its 10-year vision. A future expansion plan will need to be developed.

The expansion of TSP will likely occur on a corridor-by-corridor basis following detailed transit corridor studies such as those being scheduled, underway, or completed on Broward Boulevard, Oakland Park Boulevard, University Drive, and US 1. Corridors such as Hollywood/Pines Boulevard, State Road 7/US 441, and Hallandale Beach Boulevard will also have more detailed corridor planning in the next one to three years. An estimated cost for TSP deployment is factored into the overall capital costs of Enhanced Bus service (see Table 7-1).

Additional IT Personnel and IT Temporary Staff

Any organization with a robust technology infrastructure will require an equivalent IT staff with which to maintain it. This equivalence matters in both the quantity and the quality of the staff. Given BCT's commitment to customer-service-based technology as well as its planned enhancements, it also will be prudent for the agency to develop an IT staffing plan to ensure appropriate and sufficient support for both current and new/upgraded equipment with the proper mix of permanent and temporary staffing. This staffing plan will be developed in FY 2014 and adjusted annually as different technologies become imbedded in BCT's day-to-day business.

Maintenance and Support Services

BCT continues to provide IT Support Services for routine maintenance, security services and upgrades of software and hardware systems through various vendor agreements. Needs under this category will remain an annual priority for BCT for FY 2015-23.

Software Tools and Database Licenses

BCT will continue to maintain compliance with software license agreements for databases and programs such as Business Objects, Crystal, and Toad that are used for various support and project related functions. Needs under this category will remain an annual priority for BCT for FY 2015-23.

Real Time Communications (Service)

With the implementation of the new CAD/AVL System, Real Time Communications requirements will increase. The additional carrier services are accounted for within this line item. Needs under this category will remain an annual priority for BCT for FY 2015-23.

Comprehensive Operational Analysis

A COA will examine the operational aspects of the current system and determine changes that would improve efficiencies and better address changing rider needs. COAs make recommendations that range from schedule alterations, route realignments, new service needs, and other operationally-based improvements that enhance the customer experience and increase ridership. BCT will fund and development an updated COA every five years, with FY 2014 and FY 2019 as the target years.

Park-and-Ride Lot Study

BCT will conduct a market analysis study to determine the need for park-and-ride lots for current or planned Express Bus services. At a minimum, the study will need to identify available parcels, including parcels currently owned by governmental entities, locations or development opportunities that provide optimal access and amenities that are attractive to BCT's customers, and sites that encourage or are part of local or regional transit-supportive land use developments. This study will include a solid review of all past, current, or future park-and-ride and/or hub development studies completed by a municipality, the Broward MPO, FDOT, or other parties as needed.

Intermodal Facility Study

BCT intends to build a new downtown Fort Lauderdale intermodal facility by FY 2016 as well as up to six new intermodal transfer facilities around Broward County. A study is needed to determine the best available locations for these new facilities collectively.

ADA Accessibility Study

In order to ensure BCT is in continued compliance with the ADA, BCT will complete an ADA accessibility study. An accessibility study with a prioritization plan will assist BCT in understanding what needs to be done throughout the system to remain compliant with ADA.

VISION PLAN

The following improvements are intended to improve the transit system beyond its current capabilities, level of service, and current funding levels.

Frequency Improvements

Frequency improvements, also called headway improvements, are needed on many routes to

accommodate demand for more service. Frequency improvements generally include the reduction in headways. Most headway adjustments in this plan are to provide 10-, 20-, or 30-minute headways. Frequency adjustments are based on existing demand for the service coupled with estimated demands for service through FY 2023. Demand was estimated using the PPH methodology and TBEST as described later in this section. Frequency improvements are needed for Routes 1, 2, 7, 10, 14, 18, 28, 30, 31, 34, 36, 40, 42, 50, 55, 60, 72, 81, 108X, and 109X. Map 7-2 provides a map of the affected routes.

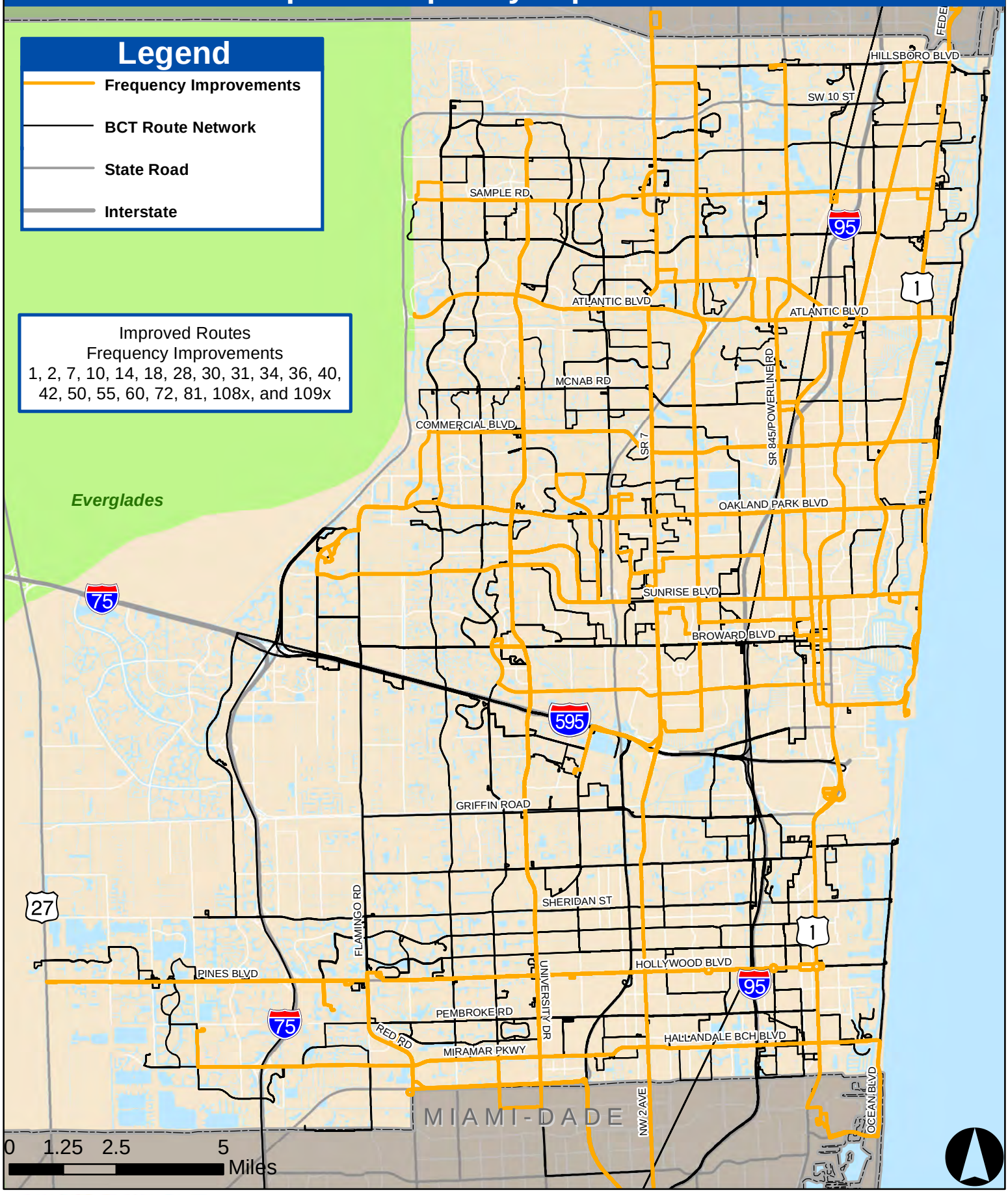
Service Span Improvements

Service span improvements extend service later in the evening, extend service earlier in the morning, add service during mid-day, or add service on the weekends on routes that are currently in operation. Service span improvements are targeted for 35 routes: 1, 2, 6, 7, 9, 10, 11, 12, 14, 15, 16, 18, 20, 22, 23, 28, 30, 31, 34, 36, 40, 42, 48, 50, 55, 56, 60, 62, 72, 81, 83, 88, 108x, 109x, and 441 Breeze. Map 7-3 provides a map of the affected routes.

Route Realignments

Several routes will be re-aligned, extended, or truncated in order to improve efficiency of operations or better serve passengers. For example, Routes 14, 60, and 62 are scheduled to be realigned to directly serve the new bus terminal at the Cypress Creek Tri-Rail Station. This improvement will allow passengers to board and alight from BCT routes without having to cross a major roadway to access the Tri-Rail station. Other realignments for Routes 9, 11, 12, 20, 42, 48, 55, 81, 108X, and 109X are detailed in the service plan found in Appendix L. Map 7-4 provides a map of the affected routes.

Map 7-2 Frequency Improvements



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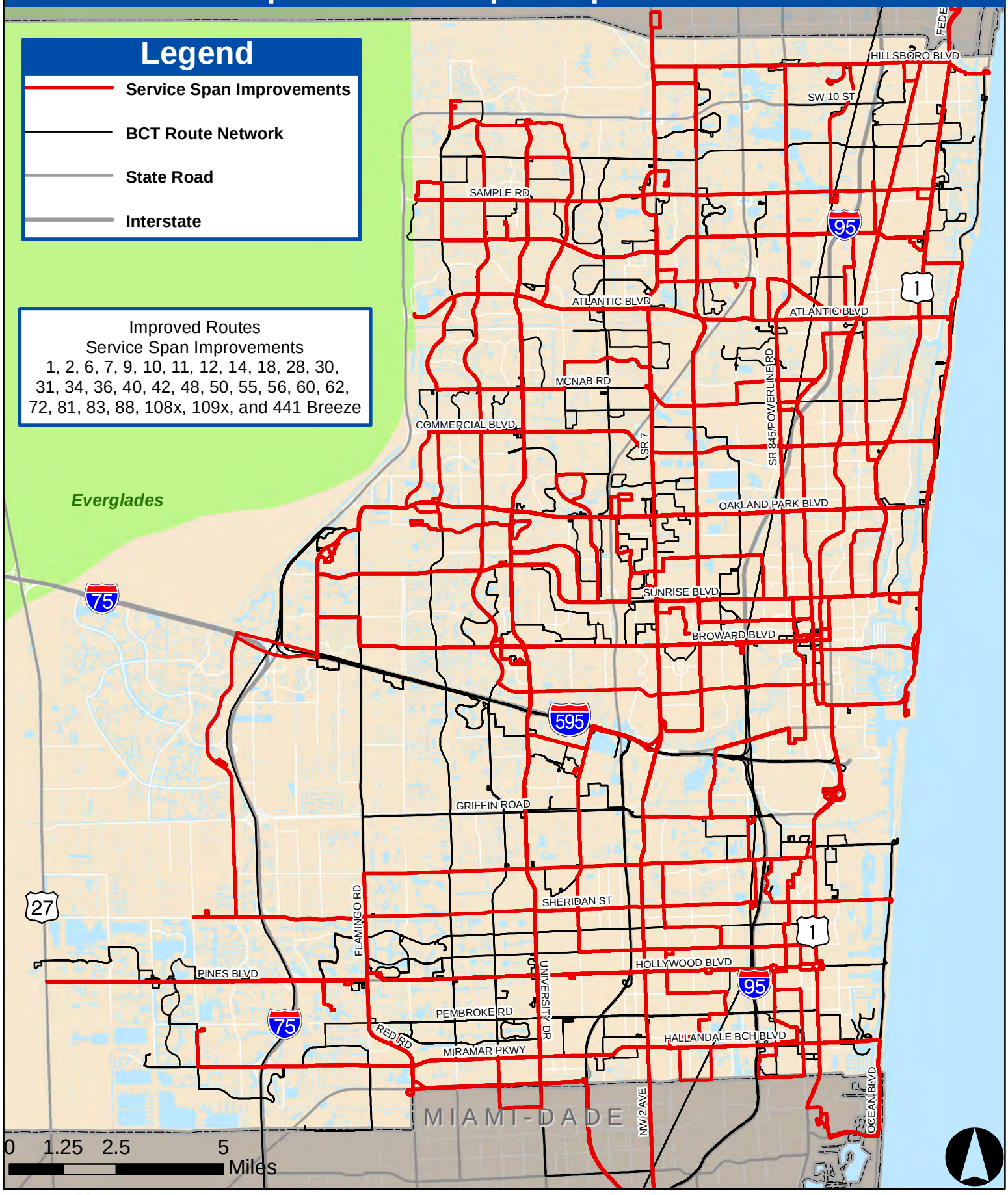
Map 7-3 Service Span Improvements



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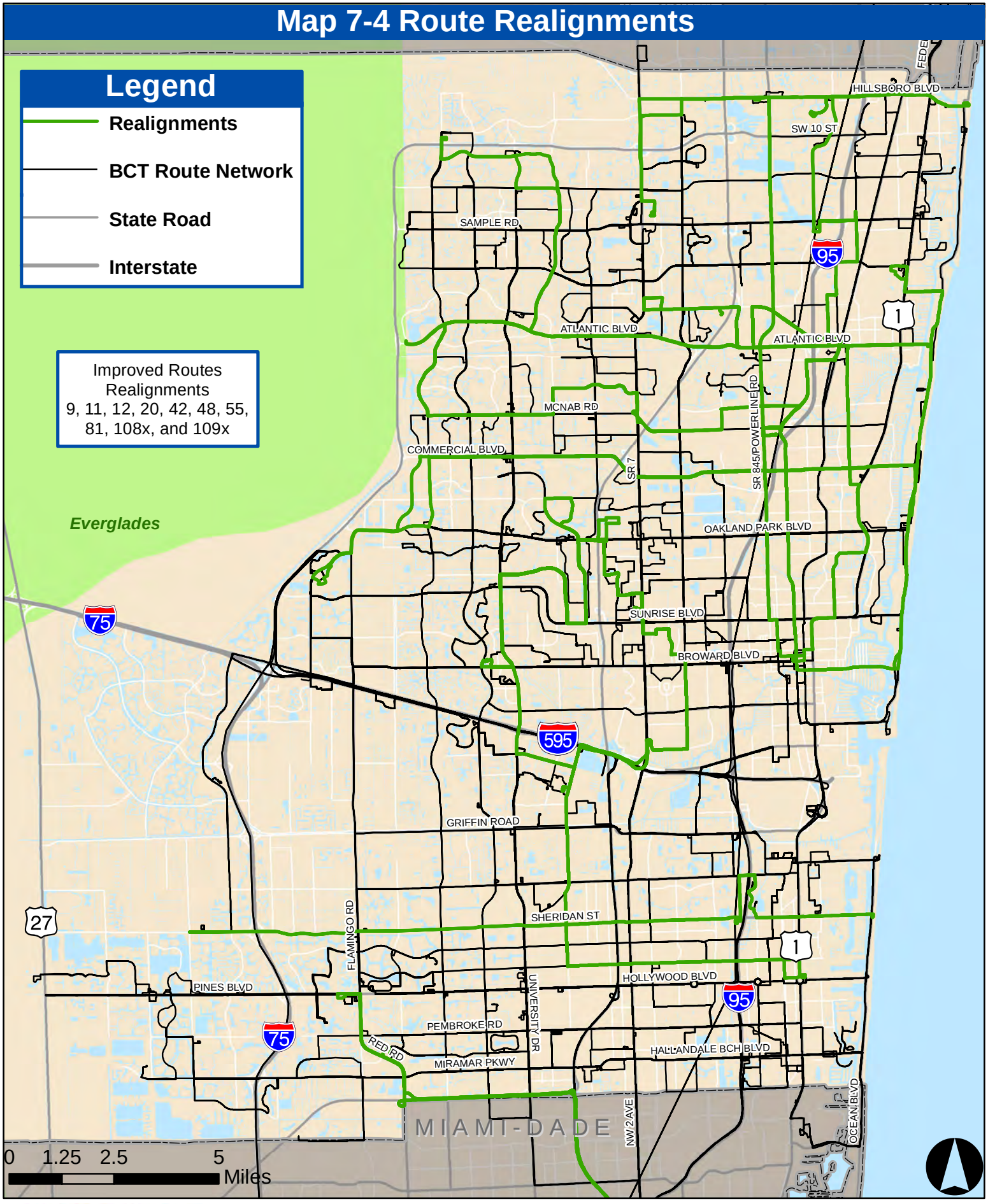
Map 7-4 Route Realignments



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New Service – Enhanced Bus

BCT will implement a number of Enhanced Bus routes during the TDP timeframe. The planned Enhanced Bus layer of service is different than the current limited stop BCT Breeze service. Enhanced Bus is characterized by providing a higher level of service than the current Breeze service, including the additions of transit service enhancements such as real-time information signage, more frequent service (10- to 15-minute headways during the peak periods), TSP, branding, and station amenities such as payment kiosks. The Table 7-1 provides an overview of these routes while Map 7-5 displays their alignments. The Enhanced Bus routes will replace Breeze routes operating in the corridor, but the local fixed route service layer will continue in each corridor.

The priority of each Enhanced Bus route was determined via an analysis of current levels of demand on each corridor (current and projected PPH) coupled with estimated demand (TBEST) by FY 2023. Demand was estimated using the PPH methodology and TBEST as described later in this section. It should be noted that any exact service plan and terminus of Enhanced Bus routes on each respective corridor will depend on the completion of a robust transit corridor study, an extensive on-board/origin-destination survey, and a clear analysis of the market demand and need for such planned activities.

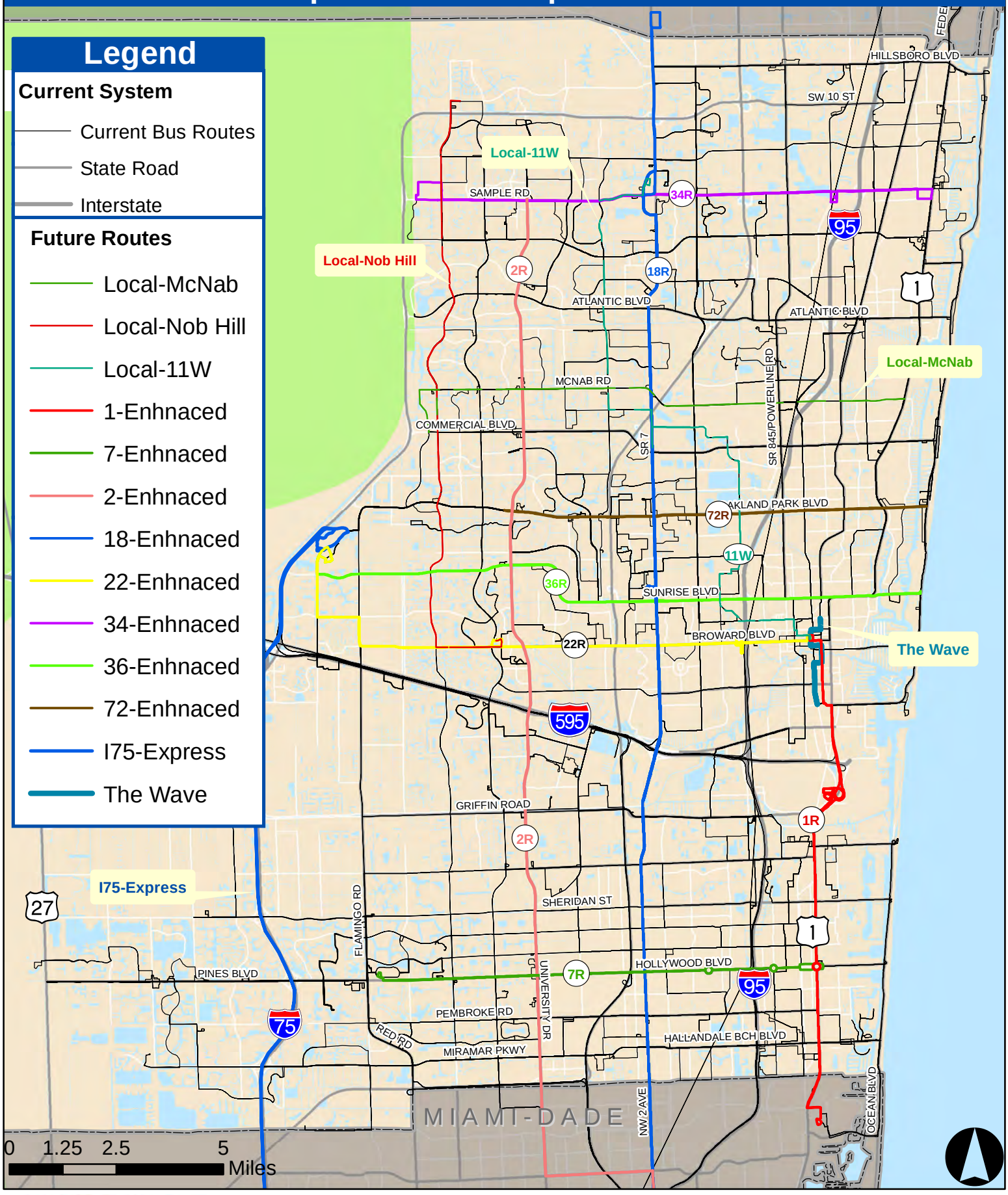
Table 7-1
Enhanced Bus Routes

Primary Corridor	Terminus #1	Terminus #2	Implementation Year (Fiscal Year)
US 441	Sandalfoot Boulevard	Golden Glades	2017
Oakland Park Boulevard	Sawgrass Mills Mall	State Road A1A	2018
Federal Highway (US 1)	Broward Terminal	Aventura Mall (Miami-Dade County)	2019
University Drive	Sample Road	Golden Glades	2020
Broward Boulevard	Sawgrass Mills Mall	Broward Terminal	2021
Sunrise Boulevard	Sawgrass Mills Mall	SR A1A	2022
Pines/Hollywood Boulevard	Pembroke Lakes Mall	Young Circle	2023
Sample Road	Coral Ridge Drive	Federal Highway (US 1)	2023

New Service - Express

BCT would like to expand express bus service in the I-75 corridor in southwest Broward County and into Miami-Dade County. Currently, FDOT has listed the operating funding needed to operate an I-75 Express route in its latest Work Program for FY 2018. Although an operating agency has not been identified for utilization of these funds, BCT will be prepared to seek this funding to provide an express bus connection between Broward County (I-595/I-75 area) to the job center(s) in and around the Miami-Dade International Airport (MIA). Service would operate during the weekdays on 30-minute headways beginning in FY 2018 and use the Managed Lanes soon to be under construction on I-75.

Map 7-5 Service Improvements



BROWARD COUNTY Transit

New Service - Fixed Route

Scheduled for implementation in FY 2020, new local fixed route service on Nob Hill Road is planned between Broward Boulevard and Holmberg Road. Also in FY 2020, service is planned for McNab Road and Cypress Creek Boulevard between Federal Highway and Hiatus Road. Both of these routes are planned to operate with 30-minute frequencies during the weekday peak period and 60-minute frequencies during the off-peak weekday and weekend periods.

New Service - Community Bus Improvements

There are a number of Community Bus improvements planned for the next 10 years. One priority is to improve the frequency of all routes to at least 60-minute headways by FY 2023. This would positively benefit routes in Davie (Green), Miramar (Green, Red, Yellow, Orange), and Pembroke Pines (Blue West). In addition, BCT received a number of requests from participating and community bus partners for new or expanded service by FY 2023. These municipalities include Fort Lauderdale, Hallandale Beach, Hillsboro Beach, Lauderdale-by-the-Sea, and Lauderdale Lakes. Lastly, BCT has recently received unfunded service requests from new partners, including Hollywood, Sunrise, and West Park. In total, BCT anticipates that all of these improvements will provide better service for local residents trying to circulate within their respective area as well as provide better connectivity to the rest of the BCT system.

Downtown Intermodal Center

The introduction of passenger rail on the FEC Railway corridor has been proposed by both the FEC, Inc.'s All Aboard Florida (AAF) and SFRTA's Tri-Rail Coastal Link/SFFEC projects. Both of these efforts identify BCT's Broward Central Terminal (BT) site and surrounding parcels as a potential major passenger rail station for FEC passenger rail corridor service. In addition, it is expected that the development of The Wave Streetcar alignment and potential maintenance facilities near the BT offer further multimodal connections in and around the BT. In total, all of these forthcoming passenger rail efforts offer tremendous opportunity for redevelopment of the BT site, such as public-private joint development in and around the BT site, and an exciting opportunity for all transit users to have a world-class array of transit services and related amenities in one site or area. Further redevelopment plans for the BT and surrounding parcels will continue through FY 2016. At this time, exact plans, designs, costs, and funding sources for all potential changes to this site and surrounding area are not yet identified.

Maintenance/Operations Facility

Once BCT is able to access a dedicated funding source to increase the number of vehicles in its fleet per the TDP Vision Plan, a third maintenance/operations facility will need to be constructed to accommodate the expanded fleet. An exact location for this facility is to be determined.

Park-and-Ride Lots

Beyond the facilities planned in Miramar and Westgate, other park-and-ride lots are also needed. A study to determine locations and sizes will be undertaken.

Transit Intermodal Centers

BCT estimates that the expanded system as detailed in the TDP Vision Plan may require the development of additional intermodal transit centers to accommodate transfers between BCT services and other modes. Future locations of such intermodal centers remain unidentified at this time. Such locations will depend heavily on a number of factors that BCT will monitor, such as the likely progress of transit-supportive land use developments, future regional express bus or passenger rail investments, or specific operating needs within BCT's system.

Pedestrian/Complete Streets Improvements

BCT is committed to improving the passenger experience by improving pedestrian connectivity with BCT services. Pedestrian improvements such as the addition of connecting sidewalks or other access improvements will remain a perennial investment for BCT, particularly around existing BCT bus stops. In addition, BCT will continue to partner with other Broward County departments, municipalities, and FDOT on initiating and completing Complete Streets projects that also will enhance the BCT passenger experience.

BCCB Contractual Reorganization

Over the next several years, BCT will work with its local community bus partners to create two or three standard contractual agreements for providing community bus service. At present, there are 18 different contracts that BCT must administer. In adherence with FTA policy, BCT will move toward the use of a much smaller number of standardized contracts.

Driver Training

Recent complaints filed by passengers have suggested that drivers need ongoing training to ensure they are following proper procedures with regard to ADA assistance, safety, and etiquette. Drivers are the primary source of interaction with BCT riders so they need to be trained to assist passengers.

Business Analysts

BCT would like to add between up to six business analysts to its staff over the next 10 years. Business analysts will assist the agency with detailed budgetary, service planning, and operational analysis.

RIDERSHIP PROJECTIONS

Two ridership projection tools were used to prioritize improvements. The first, a PPH analysis, uses historical ridership rates and growth rate to project future ridership levels. The second, TBEST, is the FDOT-required method for projecting ridership impacts from changes to a transit network.

PASSENGERS PER HOUR ANALYSIS

BCT staff conducted an analysis of projected PPH by route in order to determine which routes might be ready for more premium level service in the future. By looking at passenger loads, BCT can better determine if a bus is standing room only such that more service on the route may be required. BCT staff started with current PPH levels on the network and then assumed a 1.5 percent annual growth rate. Table 7-2 displays the passengers per hour by route and time of day. It is color-coded to indicate differing levels of ridership.

On Table 7-2, green font indicates ridership levels above 50 PPH, red font indicates ridership levels above 60 PPH, and purple font indicates ridership levels above 70 PPH. These levels are such that greater service on the route may be necessary to avoid overcrowded and standing room only conditions.

Table 7-2
Passengers per Hour Analysis

Route	Period	Headway		Vehicles		2012 Actual	Passengers per Hour Projections										
		Original	Proposed	Original	Proposed	PPH	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
18	Sat Eve	30	20	9	14	68.4	69.4	70.5	71.5	72.6	73.7	74.8	75.9	77.1	78.2	79.4	80.6
72	PM Peak	15	12	11	15	63.5	64.5	65.4	66.4	67.4	68.4	69.4	70.5	71.5	72.6	73.7	74.8
18	PM Peak	15	12	17	23	59.3	60.2	61.1	62.0	62.9	63.9	64.8	65.8	66.8	67.8	68.8	69.9
18	AM Peak	15	12	17	21	58.6	59.5	60.4	61.3	62.2	63.1	64.1	65.0	66.0	67.0	68.0	69.0
18	Sat Base	20	15	13	19	56.2	57.0	57.9	58.8	59.6	60.5	61.5	62.4	63.3	64.3	65.2	66.2
18	Wkd Base	15	12	17	22	56.1	56.9	57.8	58.7	59.5	60.4	61.3	62.3	63.2	64.1	65.1	66.1
1	Sat Eve	30	20	5	8	55.3	56.1	57.0	57.8	58.7	59.6	60.5	61.4	62.3	63.2	64.2	65.1
34	PM Peak	20	15	6	9	55.2	56.0	56.9	57.7	58.6	59.5	60.4	61.3	62.2	63.1	64.1	65.0
1	PM Peak	15	12	10	13	54.5	55.3	56.1	57.0	57.8	58.7	59.6	60.5	61.4	62.3	63.2	64.2
10	PM Peak	30	20	6	10	54.3	55.1	55.9	56.8	57.6	58.5	59.4	60.3	61.2	62.1	63.0	64.0
72	Sat Base	20	15	8	11	54.3	55.1	55.9	56.8	57.6	58.5	59.4	60.3	61.2	62.1	63.0	64.0
50	Sat Base	45	30	3	5	54.2	55.0	55.8	56.7	57.5	58.4	59.3	60.2	61.1	62.0	62.9	63.8
72	Sat Eve	30	20	5	8	54.2	55.0	55.8	56.7	57.5	58.4	59.3	60.2	61.1	62.0	62.9	63.8
1	Sat Base	20	15	8	11	53.2	54.0	54.8	55.6	56.5	57.3	58.2	59.0	59.9	60.8	61.7	62.7
1	Wkd Eve	30	20	5	8	53.1	53.9	54.7	55.5	56.4	57.2	58.1	58.9	59.8	60.7	61.6	62.5
18	Sun Base	30	20	8	13	53.1	53.9	54.7	55.5	56.4	57.2	58.1	58.9	59.8	60.7	61.6	62.5
1	Sun Base	20	15	8	11	53.1	53.9	54.7	55.5	56.4	57.2	58.1	58.9	59.8	60.7	61.6	62.5
18	Wkd Eve	30	20	9	14	51.8	52.6	53.4	54.2	55.0	55.8	56.6	57.5	58.4	59.2	60.1	61.0
14	PM Peak	20	15	7	10	51.5	52.3	53.1	53.9	54.7	55.5	56.3	57.2	58.0	58.9	59.8	60.7
34	AM Peak	20	15	6	9	51.5	52.3	53.1	53.9	54.7	55.5	56.3	57.2	58.0	58.9	59.8	60.7
72	AM Peak	15	12	11	14	50.8	51.6	52.3	53.1	53.9	54.7	55.5	56.4	57.2	58.1	59.0	59.8
72	Sun Eve	45	30	3	5	50.6	51.4	52.1	52.9	53.7	54.5	55.3	56.2	57.0	57.9	58.7	59.6
72	Wkd Eve	30	20	5	8	50.3	51.1	51.8	52.6	53.4	54.2	55.0	55.8	56.7	57.5	58.4	59.3
50	Wkd Base	30	20	5	8	50.1	50.9	51.6	52.4	53.2	54.0	54.8	55.6	56.4	57.3	58.1	59.0
36	PM Peak	20	15	9	12	50.0	50.8	51.5	52.3	53.1	53.9	54.7	55.5	56.3	57.2	58.0	58.9
36	Sat Base	30	20	7	11	49.9	50.6	51.4	52.2	53.0	53.8	54.6	55.4	56.2	57.1	57.9	58.8
14	Wkd Base	30	20	4	7	49.4	50.1	50.9	51.7	52.4	53.2	54.0	54.8	55.6	56.5	57.3	58.2
1	Wkd Base	15	12	10	13	49.4	50.1	50.9	51.7	52.4	53.2	54.0	54.8	55.6	56.5	57.3	58.2
18	Sat Nite	45	30	5	8	49.3	50.0	50.8	51.6	52.3	53.1	53.9	54.7	55.5	56.4	57.2	58.1
50	PM Peak	20	15	8	11	49.0	49.7	50.5	51.2	52.0	52.8	53.6	54.4	55.2	56.0	56.9	57.7
72	Wkd Base	15	12	8	12	49.0	49.7	50.5	51.2	52.0	52.8	53.6	54.4	55.2	56.0	56.9	57.7
42	PM Peak	30	20	4	7	49.0	49.7	50.5	51.2	52.0	52.8	53.6	54.4	55.2	56.0	56.9	57.7
72	Sun Base	30	20	5	8	48.5	49.2	50.0	50.7	51.5	52.2	53.0	53.8	54.6	55.5	56.3	57.1
18	Sun Eve	30	20	8	12	48.2	48.9	49.7	50.4	51.2	51.9	52.7	53.5	54.3	55.1	55.9	56.8
34	Wkd Base	30	20	4	7	48.0	48.7	49.5	50.2	50.9	51.7	52.5	53.3	54.1	54.9	55.7	56.5
7	PM Peak	20	15	8	11	47.9	48.6	49.3	50.1	50.8	51.6	52.4	53.2	54.0	54.8	55.6	56.4
60	Wkd Base	30	20	5	8	47.8	48.5	49.2	50.0	50.7	51.5	52.3	53.1	53.8	54.7	55.5	56.3
50	AM Peak	20	15	8	11	47.6	48.3	49.0	49.8	50.5	51.3	52.0	52.8	53.6	54.4	55.2	56.1
60	PM Peak	20	15	8	11	47.5	48.2	48.9	49.7	50.4	51.2	51.9	52.7	53.5	54.3	55.1	56.0
2	Wkd Base	30	20	8	13	47.2	47.9	48.6	49.4	50.1	50.8	51.6	52.4	53.2	54.0	54.8	55.6
28	PM Peak	20	15	9	13	46.9	47.6	48.3	49.0	49.8	50.5	51.3	52.1	52.8	53.6	54.4	55.2
72	Sat Nite	45	30	3	5	46.9	47.6	48.3	49.0	49.8	50.5	51.3	52.1	52.8	53.6	54.4	55.2
30	PM Peak	20	15	5	7	46.8	47.5	48.2	48.9	49.7	50.4	51.2	51.9	52.7	53.5	54.3	55.1
441	PM Peak	30	20	7	11	46.7	47.4	48.1	48.8	49.6	50.3	51.1	51.8	52.6	53.4	54.2	55.0
55	PM Peak	30	20	5	8	46.2	46.9	47.6	48.3	49.0	49.8	50.5	51.3	52.0	52.8	53.6	54.4
40	Wkd Base	30	20	5	8	46.1	46.8	47.5	48.2	48.9	49.7	50.4	51.2	51.9	52.7	53.5	54.3
2	PM Peak	20	15	12	17	45.9	46.6	47.3	48.0	48.7	49.4	50.2	50.9	51.7	52.5	53.3	54.1
441	AM Peak	30	20	6	10	45.4	46.1	46.8	47.5	48.2	48.9	49.6	50.4	51.1	51.9	52.7	53.5
40	PM Peak	20	15	8	11	44.9	45.6	46.3	47.0	47.7	48.4	49.1	49.8	50.6	51.3	52.1	52.9
60	AM Peak	20	15	8	11	44.9	45.6	46.3	47.0	47.7	48.4	49.1	49.8	50.6	51.3	52.1	52.9
42	Sat Base	60	40	2	3	44.8	45.5	46.2	46.8	47.5	48.3	49.0	49.7	50.5	51.2	52.0	52.8
18	Wkd Nite	30	20	8	13	44.7	45.4	46.1	46.7	47.4	48.2	48.9	49.6	50.4	51.1	51.9	52.7
81	PM Peak	20	15	9	13	44.2	44.9	45.5	46.2	46.9	47.6	48.3	49.1	49.8	50.5	51.3	52.1
1	AM Peak	15	12	10	13	44.1	44.8	45.4	46.1	46.8	47.5	48.2	48.9	49.7	50.4	51.2	51.9
55	AM Peak	30	20	5	8	44.1	44.8	45.4	46.1	46.8	47.5	48.2	48.9	49.7	50.4	51.2	51.9
14	Sat Base	45	30	3	5	44.0	44.7	45.3	46.0	46.7	47.4	48.1	48.8	49.6	50.3	51.1	51.8
1	Sun Eve	30	20	5	8	43.9	44.6	45.2	45.9	46.6	47.3	48.0	48.7	49.5	50.2	50.9	51.7
10	Wkd Base	30	20	6	10	43.4	44.1	44.7	45.4	46.1	46.8	47.5	48.2	48.9	49.6	50.4	51.1
28	AM Peak	20	15	9	13	43.0	43.6	44.3	45.0	45.6	46.3	47.0	47.7	48.4	49.2	49.9	50.7
31	Wkd Base	30	20	5	8	43.0	43.6	44.3	45.0	45.6	46.3	47.0	47.7	48.4	49.2	49.9	50.7
50	Sat Eve	45	30	3	5	42.6	43.2	43.9	44.5	45.2	45.9	46.6	47.3	48.0	48.7	49.4	50.2
BCT	**Average**					**38.3**	**38.9**	**39.5**	**40.0**	**40.7**	**41.3**	**41.9**	**42.5**	**43.1**	**43.8**	**44.4**	**45.1**

TBEST MODELING

Ridership forecasts were prepared using the FDOT-approved transit demand forecasting tool, TBEST. TBEST is a comprehensive transit analysis and ridership-forecasting model that is capable of simulating travel demand at the individual route level. The software was designed to provide near- and mid-term forecasts of transit ridership consistent with the needs of transit operational planning and TDP development. In producing model outputs, TBEST also considers the following:

- *Transit network connectivity* – Refers to the level of connectivity between routes within the bus network. The greater the connectivity between bus routes, the more efficient the bus service becomes.
- *Spatial and temporal accessibility* – Refers to service frequency and to distance between stops. The larger the physical distance between potential bus riders and bus stops, the lower the level of service utilization. Similarly, less frequent service is perceived as less reliable and, in turn, utilization decreases.
- *Time-of-day variations* – TBEST accommodates peak-period travel patterns by rewarding peak service periods with greater service utilization forecasts.
- *Route competition and route complementarities* – TBEST accounts for competition between routes. Routes connecting to the same destinations or anchor points, or that travel on common corridors, experience decreases in service utilization. Conversely, routes that are synchronized and support each other in terms of service to major destinations or transfer locations and schedule benefit from that complementary relationship.

The following section outlines the model input and assumptions used, includes a description of the TBEST scenario run performed using the model, and summarizes the ridership forecasts produced by TBEST.

TBEST uses various demographic and transit network data as model inputs. The inputs and the assumptions made in modeling the BCT system in TBEST are presented below. The BCT model utilized the recently released TBEST Land Use Model structure. The TBEST Land Use model is supported by parcel-level data developed from the Florida Department of Revenue (DOR) statewide tax database. The DOR parcel data contain land use designations and supporting attributes which allow the application of ITE-based trip generation rates at the parcel level as an indicator of travel activity.

It should be noted, however, that the model is not interactive with roadway network conditions. Therefore, ridership forecasts will not show direct sensitivity to changes in the roadway traffic conditions or speeds.

- *Transit Network* – The BCT transit route network was created to reflect 2013 base conditions. The BCT fixed and express bus routes were developed using the TBEST GTFS Network Import tool. The imported routes contain all necessary model input parameters including route alignments for each unique trip path per route and direction, stop locations, stop name and description, service span, headway, and in-vehicle travel time. The imported GTFS routes were in service from January 6, 2013 to May 11, 2013. Community Bus alignments were provided by BCT in shapefile format and routes were input using TBEST network coding tools. Community Bus service characteristics were derived from published schedules and input as part of the network coding process. The Tri-Rail network alignment was also included as part of the BCT network to allow for bus service network accessibility to be calculated for those routes which service Tri-Rail stations. Tri-Rail ridership forecasts are not included as part of this document. Terminal and transfer station locations were provided by BCT and coded into the TBEST network. BCT also provided observed average daily ridership numbers as input into the TBEST model validation.

- *Demographic Data* – The demographics used as the base input for the TBEST model are derived from Census 2010 geography and population characteristics, American Community Survey 5-year Estimates (2006-2010), 2011 InfoUSA employment data and 2011 parcel-level land use data from Florida Department of Revenue. Using the data inputs above, the model captures market demand (population, demographics, employment and land use characteristics) within ¼ mile of each stop.

- *Population and Employment Growth Rates* – TBEST uses a socio-economic data growth function to project population and employment data. A population growth rate and an employment growth rate were calculated using the 2040 TAZ forecasts developed for the Broward County LRTP. As indicated previously, population and employment data are hard-coded into the model and cannot be modified by end-users. As applied, the growth rates do not reflect fluctuating economic conditions as experienced in real time.

- *TBEST Model Limitations* – According to Rule 14-73.001 Florida Administrative Code, TBEST is the FDOT-approved model for transit ridership forecasting as part of TDPs in Florida. It has long been a desire of FDOT to have a standard modeling tool for transit demand that could be standardized across the state similar to the Florida Standard Urban Transportation Model Structure (FSUTMS) model used by MPOs in developing LRTPs. However, while TBEST is an important tool for evaluating improvements to existing and future transit services, model outputs do not account for latent demand for transit that could yield significantly higher ridership, and, correspondingly, model outputs may over-estimate demand in isolated cases. In

addition, TBEST cannot display sensitivities to external factors such as an improved marketing and advertising program, changes in pricing service for customers, and other local conditions.

Although TBEST provides ridership projections at the route and bus stop levels, its strength lies more in its ability to facilitate relative comparisons of ridership productivity. As a result, model outputs are not absolute ridership projections, but rather are comparative for evaluation in actual service implementation decisions. TBEST has generated interest with DOTs in other states and continues to be a work in progress that will become more useful as its capabilities are enhanced in future updates to the model. Consequently, it is important for the transit agency to integrate sound planning judgment and experience when interpreting TBEST results.

Using these inputs, assumptions, and actual ridership data, the TBEST model was validated. Using the validation model as the base model, TBEST ridership forecasts for the TDP planning horizon year, FY 2023, were developed. The generated annual ridership forecasts reflect the estimated level of service utilization if no changes were to be made to any of the fixed-route services.

Table 7-3 shows the projected number of annual weekday riders by mode for three scenarios. The base year represents current ridership levels. Future Year – Status Quo provides the results of running the model for 2023 with the current transit system and no improvements. Ridership increases in this category are driven by population growth, employment growth, and land use changes for the future year. The Future Year – Improved column provides results for the new system plus all of the service improvements described at the beginning of this section.

The results of the analysis show that by replacing the Breeze network with the more premium Enhanced Bus network that ridership increases dramatically. Community Bus has the smallest increase at 18 percent over the 10-year period. Systemwide the improvements lead to a 67 percent increase in ridership

Ridership modeling results by mode and route by weekday, Saturday, or Sunday service can be found in Appendix M.

Table 7-3
TBEST Average Weekday Ridership Projections

Mode	Base Year	Future Year - Status Quo	Future Year - Improved	Percent Change (Base Year to Future Year - Improved)
Fixed Routes	119,276	128,126	162,141	36%
The Wave	0	0	3,597	N/A
Express	1,941	2,237	2,482	28%
Breeze/Enhanced	4,323	4,812	45,926	962%
Community Bus	8,472	9,098	9,980	18%
Systemwide	134,012	144,273	224,126	67%

Note: Enhanced Bus Routes replace Breeze Routes by FY 2023.
Source: TBEST

BROWARD COUNTY Transit
CONNECTED

SECTION 8

Financial Plan

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Section 8

Financial Plan

This final section of the TDP contains the financial information with regard to the improvements described in Section 7, Alternatives. The financial information is divided into two plans:

- Status Quo Plan: In this plan, the focus is maintaining current service levels.
- Vision Plan: The Vision Plan focuses on improving the system so that it truly meets the needs of the citizens of Broward County.

STATUS QUO PLAN

The Status Quo Plan examines the financial impacts of operating a transit system similar in nature to today's system over the next 10 years. In order to maintain the current system, investments in infrastructure and operations will need to be made. Increasing demand for services will require further investment in additional services just to maintain current, published schedules. Operating costs are projected to continue to increase with inflation over the 10-year timeframe. Infrastructure is expected to reach the end of its useful life and need to be replaced.

STATUS QUO PLAN ASSUMPTIONS

There are several assumptions being made in the Status Quo Plan:

- Current services are maintained.
- Increased demand may require additional service to be operated in order to maintain current, published schedules.
- Inflation will continue to increase the cost of operating the transit system.
- No new revenue streams will be added to the budget.
- Any shortfall between projected costs and revenues will be covered by an additional transfer from the General Fund (Ad Valorem).

STATUS QUO PLAN BUDGET ITEMS

The following items are included in the Status Quo Plan:

- Maintenance of Existing Service: Under the Status Quo Plan, all of the services currently in operation are assumed to continue to operate.
- Reliability/Capacity Adjustments: As described in Section 7, several BCT routes are struggling with on-time performance due to congested roadways and overcrowded buses. It is assumed

that this issue will begin to affect other routes as demand for service and congestion increase. By adding service, BCT can begin to conform to its schedule and alleviate over-crowding situations. Funding for additional service to maintain current schedules is included in this plan.

- The Wave: Streetcar service in downtown Fort Lauderdale is added in the Status Quo plan in FY 2016 because the County Commission has committed to funding it.
- IT Improvements: The cry for IT improvements was particularly obvious during public outreach sessions. Passengers need to know when the next bus is coming so they can make educated decisions concerning their time. Operators need more information about bus running times, historical schedule adherence, and driver performance to make better management decisions. These improvements, as detailed in the IT Plan in Appendix K, are included in the Status Quo Plan.
- Plans: A number of studies and plans are scheduled to be undertaken under the Status Quo Plan. These plans allow BCT to investigate the need for improvements as well as the appropriate characteristics of the improvements.
- Infrastructure: There are several infrastructure improvements that are required during the 10-year period to keep BCT operating at its current level of service. The infrastructure projects to be included in the Status Quo Plan are listed in Table 8-1.

Table 8-1
Status Quo Plan Infrastructure Improvements

Infrastructure Improvement	Implementation Year (FY)
Cypress Creek Tri-Rail Station Service - Access Improvements	2014
Lauderhill Mall Transit Center	2014-15
Miramar Park-and-Ride Lot	2014
Westgate Park-and-Ride Lot	2014
Copans Facility Rehabilitation/Upgrade	2015-16
Copans Facility Administrative Building #4 Rehabilitation	2014
B-Cycle Expansion	Ongoing
Bus Shelter/Stop Replacement	Ongoing

STATUS QUO PLAN OPERATING COSTS

The operating costs are divided into 12 categories. Each is described in the following bullets with the actual costs detailed by year in Table 8-2. Supporting documentation for the budget can be found in Appendix L.

- Personal Services: This figure was provided by Broward County's Office of Management and Budget. It includes salaries and fringe benefits for all BCT staff at the current staffing levels.

- Overtime: This figure was provided by Broward County's Office of Management and Budget. It includes payment for all overtime accrued by drivers. Some overtime is planned overtime due to the demands of certain routes or schedules while other overtime is unscheduled to cover employees who are unable to work their shift.
- Operating Expenses: This figure was provided by Broward County's Office of Management and Budget. These expenses relate to operating BCT's services, but do not include fuel or contractual payments. They include utilities, minor supplies, etc.
- Fuel: This figure was provided by Broward County's Office of Management and Budget. It includes the costs for fueling the vehicles.
- Paratransit Service: This figure was provided by Broward County's Office of Management and Budget. This line item covers the contractual cost of paying a third party to operate paratransit services.
- Other Contractual Services: This figure was provided by Broward County's Office of Management and Budget. This also pertains to paratransit services, but it provides payment for the third-party operator who manages the eligibility of paratransit passengers.
- Other Governmental Operators: This figure was provided by Broward County's Office of Management and Budget. BCT provides annual funding to Tri-Rail and the Community Bus system through this line item.
- Fuel and Other Reserves: This figure was provided by Broward County's Office of Management and Budget. This line item assumes that the reserves captured in the revenue projections are spent in a manner consistent with their respective reserve funds.
- Reliability/Capacity Adjustments: These costs are based on improvements detailed in the Service Plan found in Appendix L. This cost provides more service to certain routes to increase their reliability and alleviate overcrowding situations. Broward County has already committed to funding the FY 2014 amount.
- The Wave Streetcar: These costs are associated with operating The Wave. FY 2016 operating costs were taken from the analysis done to seek funding for the system. It is assumed that costs increase by three percent annually, a figure based on the Consumer Price Index (CPI) calculated by the Bureau of Labor Statistics (BLS).
- IT Improvements: These costs were taken from the IT Plan provided in Appendix K. The costs cover all operating expenses associated with implementing the plan. It should be noted that all items scheduled for implementation in FY 2014 in the IT Plan were budgeted in FY 2015 in the TDP.

STATUS QUO PLAN OPERATING REVENUES

There are 11 categories for operating revenues. Each is described in the following bullets with the actual revenues by year displayed in Table 8-2.

- Farebox Revenues: This figure was provided by Broward County's Office of Management and Budget. There are three categories related to farebox revenues. This category represents the fares collected from current services without the addition of The Wave or the Reliability/ Capacity Adjustments.
- Farebox Revenues (The Wave Streetcar): These farebox revenues are related to the implementation of the new streetcar service in downtown Fort Lauderdale. Using a conservative farebox recovery ratio of 30 percent, the streetcar is projected to recoup about 30 percent of its operating costs through the farebox.
- Farebox Revenues (Reliability/Capacity Adjustments): These farebox revenues are related to the implementation of the reliability/capacity adjustments planned for certain routes over the 10-year period. Using a conservative farebox recovery ratio of 30 percent, these new services are projected to recoup about 30 percent of their operating costs through the farebox.
- General Fund (Ad Valorem): The FY 2014 figure was provided by Broward County's Office of Management and Budget. A conservative assumption that there is no growth in this revenue source was assumed for the 10-year timeframe. General fund revenues come from property taxes collected by Broward County.
- Gas Tax: This figure was provided by Broward County's Office of Management and Budget. Revenues from gas taxes are projected to decrease over the 10-year timeframe. These revenues come from the taxes paid by purchasers of gasoline and other fuels.
- Concurrency Fund: This figure was provided by Broward County's Office of Management and Budget. The Concurrency Fund is only projected to provide revenue for two years of the 10 years. Concurrency funds are collected from development impact fees and used to fund transportation improvements in the impacted areas.
- Fuel and Other Reserves: This figure was provided by Broward County's Office of Management and Budget. Reserves were built up over the last several years and expected to be depleted by BCT in the next few years.
- Applied Fund Balance: This figure was provided by Broward County's Office of Management and Budget.
- State Grants: The FY 2014 figure was provided by Broward County's Office of Management and Budget. A conservative growth rate of one percent was then added annually. State grants are provided by FDOT on an annual basis to assist in funding transit services. These grants include block grants and TD funding.

- All Other Revenues: This figure was provided by Broward County's Office of Management and Budget. These revenues include those from advertising on buses as well as selling surplus vehicles.
- 5% Contingency Adjustment: This figure was provided by Broward County's Office of Management and Budget. This adjustment allows for a more conservative budgeting approach by assuming that revenues may have been overstated, but that costs have not.

STATUS QUO PLAN OPERATING CONCLUSIONS

The following conclusions can be made from Table 8-2 with regards to the projected Status Quo Plan operating budget:

- BCT's projected total operating costs for the 10-year period exceed $1.4 billion.
- BCT's projected total operating revenues for the 10-year period are projected to be over $1.2 billion.
- BCT's budget is balanced for FY 2014.
- BCT's conservatively projected revenues indicate that BCT will need additional revenue beginning in FY 2015 from Broward County's General Fund (Ad Valorem) in order to balance its budget for the remaining nine years of the plan. In total, BCT would need approximately $185 million in additional funds from the General Fund (Ad Valorem) to implement the Status Quo Plan.

STATUS QUO PLAN CAPITAL COSTS

The capital costs are divided into 10 categories. Each is described in the following bullets with the actual costs detailed by year in Table 8-2.

- Fixed Route Vehicle Replacement: Each vehicle in the BCT fleet has a certain useful life and will need to be replaced when its useful life comes to a close. For the larger vehicles used on fixed route services, the useful life is about 14 years. Based on the age of BCT's current fleet and their replacement cycles, BCT developed annual cost estimates for replacing its current vehicle fleet.
- Community Bus Vehicle Replacement: For smaller vehicles used in the Community Bus system the useful life may only be five or six years. Based on the age of BCT's current Community Bus fleet and their replacement cycles, BCT developed annual cost estimates for replacing its current vehicle fleet. In cases where a Community Bus route is projected to reach over 20 PPH during the FY 2014-23 timeframe, the additional cost of purchasing 30-foot replacement vehicles for extra capacity is included.

- Paratransit Vehicle Acquisition: As described in Section 7, BCT is in the process of purchasing the vehicles for use by its third-party contractors that are operating the paratransit system. BCT determined the costs of purchasing these vehicles.
- Parts and Preventative Maintenance: Based on current purchasing levels, the cost of vehicle parts and preventative maintenance were projected. It is assumed that the third-party paratransit contractors will be responsible for maintenance of the paratransit vehicles.
- Tire Leasing: Based on current fleet numbers, BCT staff projected the cost of leasing tires for the fleet over the 10-year period. The cost is based on current costs and a three percent CPI-based escalation rate.
- Reliability/Capacity Adjustments – Vehicles: In order to implement the additional services needed to ensure the reliability of certain routes and alleviate over-crowding conditions, BCT will need to purchase several new vehicles. The cost of these new vehicles is projected in this line item. Vehicle purchases for this purpose only occur in the first three years of the plan.
- IT Improvements: As detailed in Appendix K, the IT plan has numerous capital costs associated with it. These costs are provided on an annual basis here.
- Concurrency Infrastructure and Bus Replacement Projects: These costs are associated with the concurrency revenues received annually. They are projected to remain constant throughout the 10-year period.
- Infrastructure: These costs support the infrastructure needs of the system as detailed in Table 8-1 over the 10-year period.
- Planning Studies: The costs of producing several studies needed during the 10-year period are included in this line item. Studies are often required to seek state and federal funding.

STATUS QUO PLAN CAPITAL REVENUES

The capital revenues are divided into two categories. Each is described in the following bullets with the actual revenues detailed by year in Table 8-2.

- Concurrency Fund: These revenues are assumed to remain constant throughout the 10-year period. Concurrency funds are collected from development impact fees and used to fund capital transportation improvements throughout the County.
- Federal 5307 for Capital: Funding is based on historical Federal 5307 funding levels. Escalation is assumed to be one percent annually.

On the capital side, there are also several grants that BCT has been awarded, but they have not been expended to date. These funds are noted as “carryover” in the capital analysis.

STATUS QUO PLAN CAPITAL CONCLUSIONS

The following conclusions can be made from Table 8-2 with regards to the projected Status Quo Plan capital budget:

- BCT's capital budget is balanced in FY 2014.
- Federal and state grants that have carried over from prior years will cover the costs of funding needed in FY 2014.
- Beginning in FY 2015 and continuing through the entire timeframe, BCT's budgeted capital costs exceed its capital revenues.
- Over the 10-year timeframe, total capital costs exceed $519 million.
- Over the 10-year timeframe, total capital revenues are projected to be approximately $293 million plus carryover of approximately $85 million.

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Table 8-2

Status Quo Plan: Operating and Capital Budgets (FY 2014-2023)

OPERATING											
Costs	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**10-Year Period**
Personal Services	$63,152,940	$65,687,070	$65,454,250	$67,081,230	$68,748,603	$70,457,367	$72,208,561	$74,003,221	$75,842,432	$77,727,297	**$700,362,970**
Overtime	$5,520,110	$5,529,460	$5,658,110	$5,667,700	$5,799,560	$5,809,390	$5,944,550	$5,954,620	$6,093,160	$6,103,490	**$58,080,150**
Operating Expenses	$9,911,230	$9,836,800	$10,082,720	$10,008,940	$10,259,170	$10,184,100	$10,438,710	$10,362,320	$10,621,390	$10,543,660	**$102,249,040**
Fuel	$16,128,210	$16,704,800	$16,497,420	$17,283,400	$17,947,968	$18,089,716	$18,703,987	$19,282,464	$19,879,677	$20,466,859	**$180,984,500**
Paratransit Service	$17,320,060	$17,527,900	$17,738,230	$17,951,090	$18,166,500	$18,384,500	$18,605,110	$18,828,370	$19,054,310	$19,282,960	**$182,859,030**
Other Contractual Services	$4,030,390	$4,100,920	$4,172,690	$4,245,710	$4,320,010	$4,395,610	$4,472,530	$4,550,800	$4,630,440	$4,711,470	**$43,630,570**
Other Governmental Operators (i.e., Tri-Rail, Comm. Bus)	$6,959,250	$6,780,740	$6,780,740	$6,799,830	$6,819,070	$6,838,450	$6,870,990	$6,903,940	$6,937,300	$6,971,080	**$68,661,390**
Fuel and Other Reserves	$7,812,250	$5,979,250	$4,146,250	$2,313,250	$480,250	$0	$0	$0	$0	$0	**$20,731,250**
Reliability/Capacity Adjustments	$1,242,680	$1,919,763	$1,965,848	$522,330	$538,016	$554,143	$570,765	$587,882	$605,000	$622,612	**$9,129,039**
The Wave Streetcar	$0	$0	$2,500,000	$2,575,000	$2,652,250	$2,731,818	$2,813,772	$2,898,185	$2,985,131	$3,074,685	**$22,230,840**
IT Improvements	$0	$3,949,943	$4,073,905	$4,196,122	$4,322,006	$4,451,666	$4,585,216	$4,722,772	$4,864,455	$5,010,389	**$40,176,473**
Total Operating Costs	**$132,077,120**	**$138,016,646**	**$139,070,163**	**$138,644,602**	**$140,053,402**	**$141,896,758**	**$145,214,191**	**$148,094,574**	**$151,513,295**	**$154,514,502**	$1,429,095,252
Revenues	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**10-Year Period**
Farebox Revenues	$34,226,896	$35,118,700	$35,645,480	$36,180,160	$36,722,860	$37,702,140	$38,267,670	$38,841,680	$39,424,310	$40,015,670	**$372,145,566**
Farebox Revenues (The Wave Streetcar)	$0	$0	$750,000	$772,500	$795,675	$819,545	$844,132	$869,456	$895,539	$922,405	**$6,669,252**
Farebox Revenues (Reliability/Capacity Adjustments)	$372,804	$575,929	$589,754	$156,699	$161,405	$166,243	$171,229	$176,365	$181,500	$186,784	**$2,738,712**
General Fund (Ad Valorem)	$21,162,900	$21,162,900	$21,162,900	$21,162,900	$21,162,900	$21,162,900	$21,162,900	$21,162,900	$21,162,900	$21,162,900	**$211,629,000**
Gas Tax	$54,000,000	$52,920,000	$51,861,600	$50,824,370	$49,807,880	$48,811,720	$47,835,490	$46,878,780	$45,941,200	$45,022,380	**$493,903,420**
Concurrency Fund	$622,120	$114,180	$0	$0	$0	$0	$0	$0	$0	$0	**$736,300**
Fuel and Other Reserves	$7,812,250	$5,979,250	$4,146,250	$2,313,250	$480,250	$0	$0	$0	$0	$0	**$20,731,250**
Applied Fund Balance	$1,833,000	$1,833,000	$1,833,000	$1,833,000	$1,833,000	$480,250	$0	$0	$0	$0	**$9,645,250**
State Grants	$13,007,640	$13,137,716	$13,269,094	$13,401,784	$13,535,802	$13,671,160	$13,807,872	$13,945,951	$14,085,410	$14,226,264	**$136,088,694**
All Other Revenues	$810,000	$818,100	$826,280	$834,540	$842,890	$851,320	$859,830	$868,430	$877,110	$885,880	**$8,474,380**
5% Contingency Adjustment	($1,770,490)	($1,796,840)	($1,823,590)	($1,850,740)	($1,878,290)	($1,927,670)	($1,956,380)	($1,985,510)	($2,015,070)	($2,045,080)	**($19,049,660)**
Total Operating Revenues	**$132,077,120**	**$129,862,935**	**$128,260,768**	**$125,628,463**	**$123,464,372**	**$121,737,608**	**$120,992,743**	**$120,758,051**	**$120,552,899**	**$120,377,203**	$1,243,712,164
Revenues Minus Costs	**$0**	**($8,153,711)**	**($10,809,395)**	**($13,016,138)**	**($16,589,029)**	**($20,159,150)**	**($24,221,448)**	**($27,336,524)**	**($30,960,396)**	**($34,137,298)**	**($185,383,088)**
Additional General Fund (Ad Valorem) Transfer	**$0**	**$8,153,711**	**$10,809,395**	**$13,016,138**	**$16,589,029**	**$20,159,150**	**$24,221,448**	**$27,336,524**	**$30,960,396**	**$34,137,298**	$185,383,088
Surplus/Deficit	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0
CAPITAL											
Costs	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**10-Year Period**
Fixed Route Vehicle Replacement	$27,840,787	$29,543,010	$27,875,900	$23,969,742	$19,451,227	$23,876,380	$24,592,672	$25,330,452	$26,090,366	$26,873,077	**$255,443,612**
Community Bus Vehicle Replacement	$2,551,766	$3,369,843	$1,314,964	$1,130,729	$3,065,117	$1,205,449	$4,881,803	$1,394,892	$1,030,806	$2,037,050	**$21,982,419**
Paratransit Vehicle Acquisition	$14,235,915	$732,810	$784,839	$840,563	$900,243	$8,447,509	$9,581,218	$1,105,931	$1,027,696	$3,904,948	**$41,561,671**
Parts and Preventative Maintenance	$1,935,000	$3,000,000	$3,090,000	$3,182,700	$3,278,181	$3,376,526	$3,477,822	$3,582,157	$3,689,622	$3,800,310	**$32,412,318**
Tire Leasing	$1,670,000	$1,720,100	$1,771,703	$1,824,854	$1,879,600	$1,935,988	$1,994,067	$2,053,889	$2,115,506	$2,178,971	**$19,144,678**
Reliability/Capacity Adjustments - Vehicles	$6,126,826	$4,156,840	$6,957,509	$0	$0	$0	$0	$0	$0	$0	**$17,241,175**
IT Improvements	$11,373,000	$4,171,000	$11,370,000	$7,695,000	$1,365,000	$3,195,000	$2,345,000	$1,545,000	$945,000	$945,000	**$44,949,000**
Concurrency Infrastructure and Bus Replacement Projects	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	**$29,760,000**
Infrastructure (e.g., operations facilities)	$22,694,247	$6,480,000	$14,580,000	$1,580,000	$1,580,000	$1,580,000	$1,580,000	$1,580,000	$1,580,000	$1,580,000	**$54,814,247**
Planning Studies	$500,000	$250,000	$500,000	$0	$500,000	$500,000	$0	$0	$0	$0	**$2,250,000**
Total Capital Costs	**$91,903,541**	**$56,399,602**	**$71,220,915**	**$43,199,587**	**$34,995,366**	**$47,092,853**	**$51,428,583**	**$39,568,321**	**$39,454,996**	**$44,295,357**	$519,559,120
Revenues	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**10-Year Period**
Concurrency Fund	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	$2,976,000	**$29,760,000**
Federal 5307 for Capital	$25,134,649	$25,385,996	$25,639,856	$25,896,254	$26,155,217	$26,416,769	$26,680,937	$26,947,746	$27,217,224	$27,489,396	**$262,964,043**
Total Capital Revenues	**$28,110,649**	**$28,361,996**	**$28,615,856**	**$28,872,254**	**$29,131,217**	**$29,392,769**	**$29,656,937**	**$29,923,746**	**$30,193,224**	**$30,465,396**	$292,724,043
Federal 5307 Carryover from Previous Year	**$74,335,556**	**$21,446,498**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	N/A
FTA and FDOT Capital Grants Carryover	**$10,903,834**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$10,903,834
Total Capital Revenues Plus Carryover	**$113,350,039**	**$49,808,494**	**$28,615,856**	**$28,872,254**	**$29,131,217**	**$29,392,769**	**$29,656,937**	**$29,923,746**	**$30,193,224**	**$30,465,396**	$377,963,433
Surplus/Deficit	**$21,446,498**	**($6,591,108)**	**($42,605,060)**	**($14,327,333)**	**($5,864,149)**	**($17,700,084)**	**($21,771,646)**	**($9,644,575)**	**($9,261,772)**	**($13,829,961)**	($141,595,687)

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Figures 8-1 and 8-2 display the operating and cost budgets for the Status Quo Plan in a slightly different manner. The figures show the amount of the Status Quo Plan that is funded and the shortfall in funding.

Figure 8-1
Status Quo Plan Operating Budget

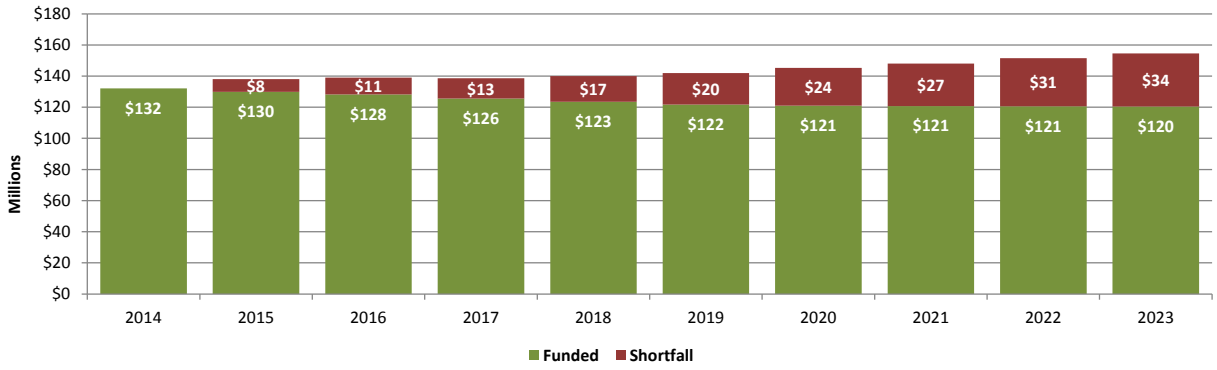
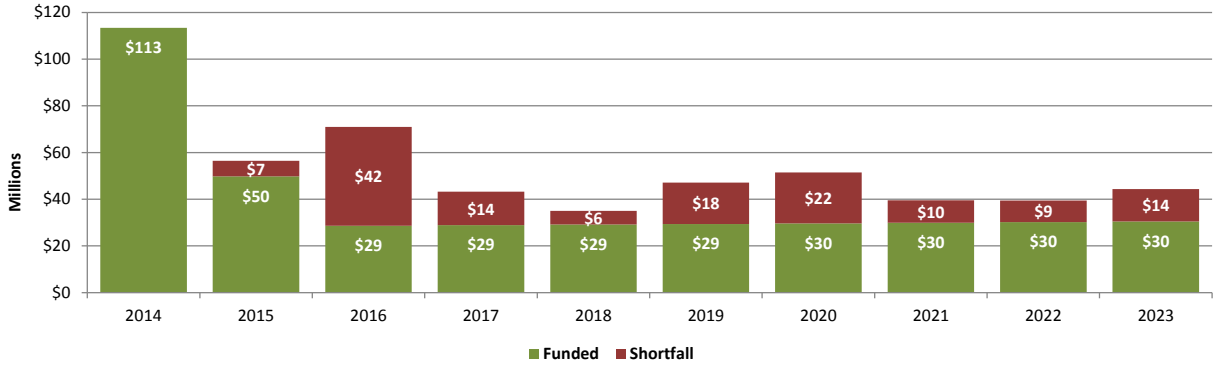


Figure 8-2
Status Quo Plan Capital Budget



VISION PLAN

While the Status Quo Plan focuses on continuing current levels of service, the Vision Plan focuses on implementing a number of additional services and infrastructure projects that are needed to improve the system. This plan offers a vision of what transit in Broward County could look like if additional funding sources were identified.

VISION PLAN ASSUMPTIONS

The following assumptions were made regarding the Vision Plan:

- All budget items included in the Status Quo Plan were carried over into the Vision Plan.
- All needed improvements, described in Section 7, were included in the Vision Plan.
- The only difference in assumed revenues between the Vision Plan and the Status Quo Plan were the addition of farebox revenues from new services implemented in the Vision Plan.

VISION PLAN BUDGET ITEMS

The following improvements are included in the Vision Plan.

- All current service needs identified in the Status Quo Plan are included in the Vision Plan.
- All of the new Fixed, Express, and Enhanced Bus routes included in the Service Plan (Appendix L) are included in the Vision Plan. The vehicles necessary to implement these improvements are also included in the Vision Plan.
- Service improvements that reduce all headways on the Community Bus system to a maximum of 60-minute headways are implemented beginning in FY 2018.
- Infrastructure: The infrastructure projects to be included in the Vision Plan are listed in Table 8-3.

Table 8-3
Vision Plan Infrastructure Improvements

Infrastructure Improvement	Implementation Year (FY)
Downtown Intermodal Center	2015-16
Third Maintenance/Operations Facility	2019-21
Park-and-Ride Lots	2016-23
Transit Intermodal Centers	2018-19; 2022-23
Bus Stops/Pedestrian Improvements	Ongoing

VISION PLAN OPERATING COSTS

The operating costs are divided into five categories. Each is described in the following bullets with the actual costs detailed by year in Table 8-4.

- Status Quo Plan: This line item is the total operating cost from the Status Quo Plan. It includes all of the operating items that were included in the Status Quo Plan.
- New Service Implementation – Fixed Route: This line item covers the costs of implementing all of the fixed route service improvements detailed in the service plan found in Appendix L. Costs were based on a fully allocated operating cost per revenue hour.
- New Service Implementation – Express: Express service is to be extended along I-75 into Miami's Brickell District and the MIC. This line item covers the operating costs of extending this service. Costs were based on a fully allocated operating cost per revenue hour.
- New Service Implementation – Enhanced Bus: There are eight new routes to be implemented under the Vision Plan. Details are provided in Section 7 and the Service Plan in Appendix L. Costs were based on a fully allocated operating cost per revenue hour.
- New Service Implementation – Community Bus: Operating costs for improvements to the Community Bus system are listed in this line item. Costs were based on a fully allocated operating cost per revenue hour.

VISION PLAN OPERATING REVENUES

The operating revenues are divided into two categories. Each is described in the following bullets with the actual revenues detailed by year in Table 8-4.

- Status Quo Plan: All of the revenues projected to be available under the Status Quo Plan are also projected to be available under the Vision Plan.
- Farebox Revenues (New Fixed Route, Express, and Enhanced Bus): A conservative 30 percent farebox recovery rate was assumed for the new Fixed Route, Express, and Enhanced Bus services. No farebox recovery was assumed for community bus services as that revenue is collected by the respective community operators.

VISION PLAN OPERATING CONCLUSIONS

The following conclusions can be made from Table 8-4 with regards to the projected Vision Plan operating budget:

- The same level of transfer from the General Fund (Ad Valorem) was assumed as in the Status Quo Plan.
- The FY 2014 operating budget is balanced under the Vision Plan.

- A total of approximately $50 million in operating costs are projected beyond the Status Quo Plan to operate the Vision Plan.

VISION PLAN CAPITAL COSTS

The capital costs are divided into seven categories. Each is described in the following bullets with the actual costs detailed by year in Table 8-4.

- Status Quo Plan: This line item is the total capital cost from the Status Quo Plan. It includes all of the capital items that were included in the Status Quo Plan.
- New Service Vehicles – Fixed Route: This line item includes the purchase of all vehicles necessary to implement the new fixed route services detailed in the Service Plan in Appendix L.
- New Service Vehicles – Express: This line item includes the purchase of all vehicles necessary to implement the new express services detailed in the Service Plan in Appendix L.
- New Service Vehicles – Enhanced Bus: This line item includes the purchase of all vehicles necessary to implement the new Enhanced Bus services detailed in the Service Plan in Appendix L.
- New Service Vehicles – Community Bus: This line item includes the purchase of all vehicles necessary to implement the new community bus services such as increased frequencies.
- Infrastructure: This line item totals the costs of the infrastructure improvements detailed in Table 8-3. More detail on the cost of individual facilities can be found in Appendix L.
- Enhanced Bus Infrastructure: In addition to the vehicles necessary to implement this new layer of Enhanced Bus service, other infrastructure such as TSP installation, station and stop infrastructure (design and construction), land acquisition for the stations (does not include guideway), and pedestrian connectivity improvements is required. Based on recent Rapid Bus construction efforts in Kansas City and Tampa, these costs are estimated to be $2 million per mile.

VISION PLAN CAPITAL REVENUES

The capital revenues are divided into two categories. Each is described in the following bullets with the actual revenues detailed by year in Table 8-4.

- Status Quo Plan: All of the revenues projected to be available under the Status Quo Plan are also projected to be available under the Vision Plan.

- New Revenues: At present, no new revenues have been identified for the capital projects under the Vision Plan. It is possible BCT will pursue local, state, and federal funding for certain projects, but no assumptions as to their award has been made in the capital Vision Plan.

VISION PLAN CAPITAL CONCLUSIONS

The following conclusions can be made from Table 8-4 with regards to the projected Vision Plan capital budget:

- The FY 2014 capital budget is balanced under the Vision Plan.
- The total 10-year capital costs in the Vision Plan are projected at $1,048 million.
- To fund the capital portion of the Vision Plan, it would take approximately $529 million beyond the Status Quo Plan.

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Table 8-4

Vision Plan: Operating and Capital Budgets (FY 2014-2023)

OPERATING											
Costs	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**10-Year Period**
Status Quo Plan	$132,077,120	$138,016,646	$139,070,163	$138,644,602	$140,053,402	$141,896,758	$145,214,191	$148,094,574	$151,513,295	$154,514,502	**$1,429,095,252**
New Service Implementation - Fixed Route	$0	$0	$0	$3,969,224	$3,503,947	$1,282,965	$4,382,777	$1,502,176	$1,567,239	$1,703,135	**$17,911,462**
New Service Implementation - Express	$0	$0	$0	$0	$1,196,460	$0	$0	$0	$0	$0	**$1,196,460**
New Service Implementation - Enhanced Bus	$0	$0	$0	$3,049,137	$3,439,823	$2,002,525	$1,507,280	$1,797,612	$840,888	$4,384,531	**$17,021,796**
New Service Implementation - Community Bus	$0	$0	$0	$0	$3,768,053	$3,881,094	$3,997,527	$4,117,453	$4,240,977	$4,368,206	**$24,373,309**
Total Operating Costs	**$132,077,120**	**$138,016,646**	**$139,070,163**	**$145,662,963**	**$151,961,683**	**$149,063,343**	**$155,101,774**	**$155,511,816**	**$158,162,399**	**$164,970,373**	**$1,489,598,279**
Revenues	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**10-Year Period**
Status Quo Plan	$132,077,120	$129,862,935	$128,260,768	$125,628,463	$123,464,372	$121,737,608	$120,992,743	$120,758,051	$120,552,899	$120,377,203	**$1,243,712,164**
Farebox Revenues (New Fixed Route, Express, and Enhanced Bus)	$0	$0	$0	$2,105,508	$2,442,069	$985,647	$1,767,017	$989,936	$722,438	$1,826,300	**$10,838,915**
Total Operating Revenues	**$132,077,120**	**$129,862,935**	**$128,260,768**	**$127,733,972**	**$125,906,441**	**$122,723,256**	**$122,759,760**	**$121,747,987**	**$121,275,338**	**$122,203,503**	**$1,254,551,079**
Revenues Minus Costs	**$0**	**($8,153,711)**	**($10,809,395)**	**($17,928,991)**	**($26,055,242)**	**($26,340,088)**	**($32,342,014)**	**($33,763,828)**	**($36,887,061)**	**($42,766,870)**	**($235,047,200)**
General Fund Transfer (Cost Feasible)	**$0**	**$8,153,711**	**$10,809,395**	**$13,016,138**	**$16,589,029**	**$20,159,150**	**$24,221,448**	**$27,336,524**	**$30,960,396**	**$34,137,298**	**$185,383,088**
Surplus/Deficit	**$0**	**$0**	**$0**	**($4,912,853)**	**($9,466,213)**	**($6,180,938)**	**($8,120,567)**	**($6,427,305)**	**($5,926,666)**	**($8,629,572)**	**($49,664,112)**
CAPITAL											
Costs	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**10-Year Period**
Status Quo Plan	$91,903,541	$56,399,602	$71,220,915	$43,199,587	$34,995,366	$47,092,853	$51,428,583	$39,568,321	$39,454,996	$44,295,357	**$519,559,120**
New Service Vehicles - Fixed Route	$0	$0	$0	$8,268,735	$10,220,148	$6,433,020	$6,626,004	$4,963,480	$7,023,566	$5,256,952	**$48,791,905**
New Service Vehicles - Express	$0	$0	$0	$0	$3,552,870	$0	$0	$0	$0	$0	**$3,552,870**
New Service Vehicles - Enhanced Bus	$0	$0	$0	$6,323,878	$7,105,740	$2,439,636	$1,256,412	$3,882,318	$1,997,697	$8,223,720	**$31,229,401**
New Service Vehicles - Community Bus	$2,551,766	$3,369,843	$1,314,964	$1,130,729	$3,065,117	$1,205,449	$4,881,803	$1,394,892	$1,030,806	$2,037,050	**$21,982,419**
Infrastructure (e.g., operations facilities)	$0	$3,300,000	$33,450,000	$4,500,000	$5,550,000	$24,300,000	$39,550,000	$17,400,000	$10,850,000	$11,900,000	**$150,800,000**
Enhanced Bus Infrastructure (not including vehicles)	$0	$0	$0	$59,000,000	$32,000,000	$26,000,000	$53,000,000	$16,000,000	$30,000,000	$57,000,000	**$273,000,000**
Total Capital Costs	**$94,455,307**	**$63,069,444**	**$105,985,880**	**$122,422,929**	**$96,489,241**	**$107,470,957**	**$156,742,802**	**$83,209,011**	**$90,357,065**	**$128,713,079**	**$1,048,915,715**
Revenues	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**10-Year Period**
Status Quo Plan	$28,110,649	$28,361,996	$28,615,856	$28,872,254	$29,131,217	$29,392,769	$29,656,937	$29,923,746	$30,193,224	$30,465,396	**$292,724,043**
New Revenues	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Total Capital Revenues	**$28,110,649**	**$28,361,996**	**$28,615,856**	**$28,872,254**	**$29,131,217**	**$29,392,769**	**$29,656,937**	**$29,923,746**	**$30,193,224**	**$30,465,396**	**$292,724,043**
Federal 5307 Carryover from Previous Year	**$74,335,556**	**$18,894,732**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**N/A**
FTA and FDOT Capital Grants Carryover	**$10,903,834**										**$10,903,834**
Total Capital Revenues Plus Carryover	**$113,350,039**	**$47,256,728**	**$28,615,856**	**$28,872,254**	**$29,131,217**	**$29,392,769**	**$29,656,937**	**$29,923,746**	**$30,193,224**	**$30,465,396**	**$377,963,433**
Revenues Minus Costs	**$18,894,732**	**($15,812,716)**	**($77,370,024)**	**($93,550,675)**	**($67,358,024)**	**($78,078,188)**	**($127,085,865)**	**($53,285,265)**	**($60,163,841)**	**($98,247,683)**	**($670,952,282)**
Surplus/Deficit	**$18,894,732**	**($15,812,716)**	**($77,370,024)**	**($93,550,675)**	**($67,358,024)**	**($78,078,188)**	**($127,085,865)**	**($53,285,265)**	**($60,163,841)**	**($98,247,683)**	**($670,952,282)**

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Figures 8-3 and 8-4 display the operating and cost budgets for the Vision Plan in a slightly different manner. The figures show the amount of the Vision Plan that is funded and the shortfall in funding.

Figure 8-3
Vision Plan Operating Budget

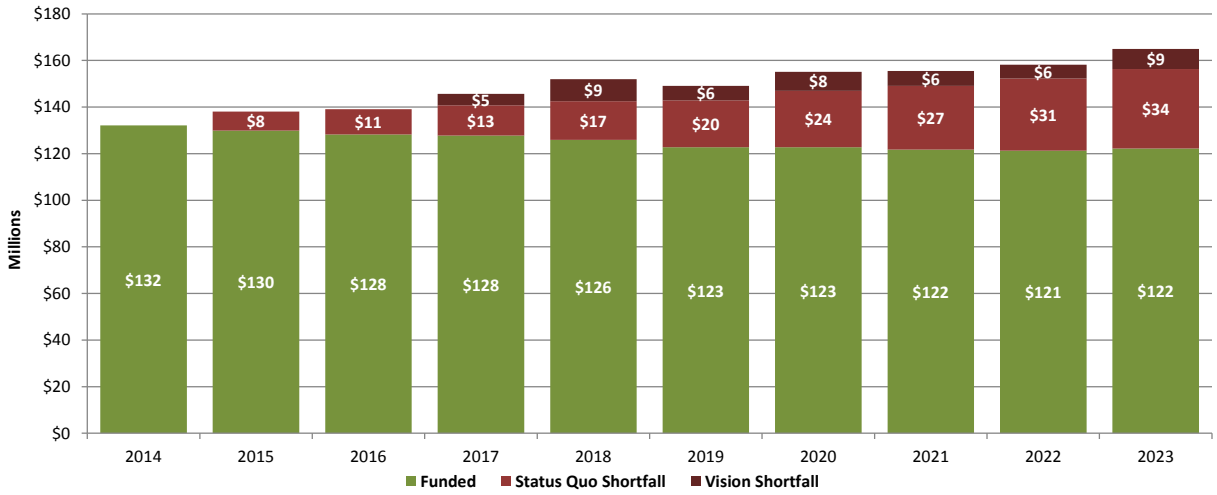
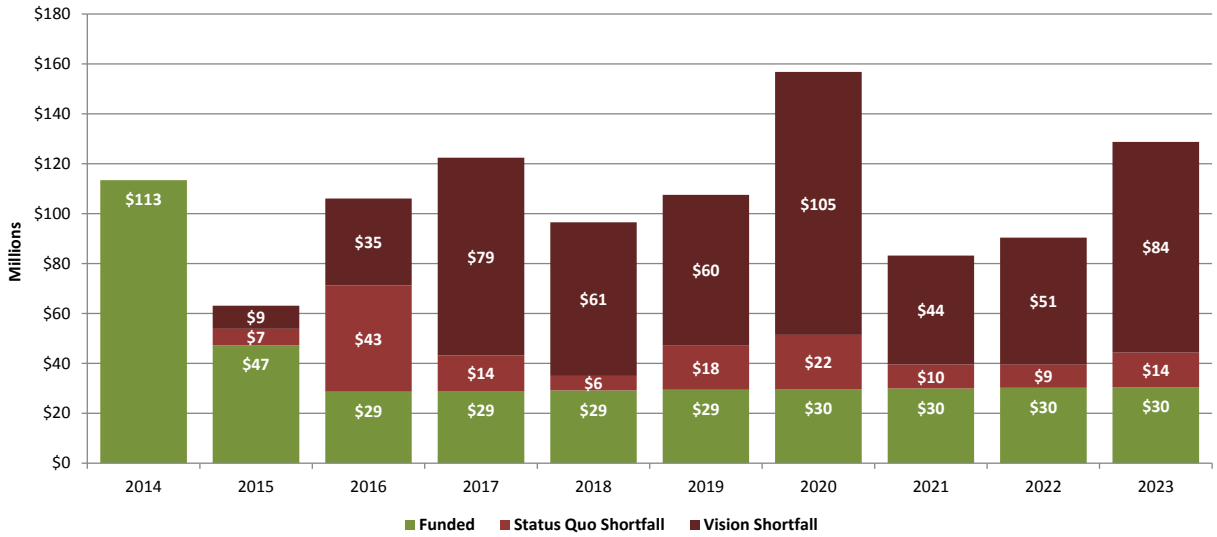


Figure 8-4
Vision Plan Capital Budget



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