STATE OF THE SYSTEM REPORT

Broward MPO
Metropolitan Planning Organization
Move People & Goods | Create Jobs | Strengthen Communities

JANUARY 2019

Richard Blattner
Chair

> ❝ **This report will inform the decision-making process in our effort to develop, fund, and track projects more effectively in the future.** ❞

Last year, the Broward MPO celebrated 40 years of success in improving Broward County's transportation system. This year, we have continued to build upon that success by developing tools that help fulfill our new *Strategic Business Plan's* mission, goals, and success markers. On behalf of the Broward MPO, I would like to share with you our first *State of the System Report* which is one of those tools that will help us get a better sense of where the region's transportation system is heading.

Our efforts to achieve the mission – **to collaboratively plan, prioritize, and fund the delivery of diverse transportation options** – will be enhanced by this document because it captures the current conditions of our community and the transportation system within Broward County. As the population grows and technology advances, our region will face new challenges.

The *State of the System Report* will strengthen our ability to meet those challenges by providing Board Members and Staff with an annual snapshot of the transportation system's health. This report will inform the decision-making process in our effort to develop, fund, and track projects more effectively in the future.

I want to thank all those involved in this report for their effort and support. I look forward to learning more as we continue to build a better future for our communities.

Richard Blattner

Gregory Stuart
Executive Director

I am pleased to inform you that we are making significant progress to achieve the goals laid out by our Board. The Broward MPO always aims to deliver transportation improvements that serve the needs of all users, however, doing so is no easy task and often proves to be a real "yeoman's lift." That is why I am excited to introduce the *State of the System Report*, which is the Broward MPO's newest data reporting tool that captures useful information about the transportation system in Broward County to help make planning initiatives easier.

Supplemented by land use, population, employment, housing, and commuting data, the *State of the System Report* neatly depicts information about our roadways, transit systems, bicycle, and pedestrian facilities, airports, and water ports. We have learned a great deal from the data captured thus far, and we invite our planning partners to take a look and use it in their planning efforts, so we are all on the same page as we shape the future of Broward County.

The *State of the System Report* will help us at the Broward MPO **identify project needs with the greatest expected positive impacts, improve Board activities and materials,** and **expand our presence and community outreach.** It will also help our partners effectively understand the current strengths and weakness of the system and empower them to be a part of the collaborative decision-making that needs to occur to resolve the transportation issues we face. Join us in shaping the future of Broward County's transportation system.

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SYSTEM CONDITIONS AND FACTS

APPENDIX

Purpose and Approach

The purpose of the *State of the System Report* is to provide a data-driven "snapshot" that assists us in our planning efforts and those of our regional planning partners. This report contains the most recent and available baseline transportation and land use data about Broward County and its multimodal transportation system. Having this data available and ready each year will improve our ability "to plan, prioritize, and fund the delivery of diverse transportation options," as our *Strategic Business Plan's* Mission Statement has specified.

Equipped with the most current conditions and key characteristics of Broward County, we can do more to identify mobility issues and align them with the current *Strategic Business Plan* Goals and Objectives, such as:

- Identify projects with the highest expected positive impacts;
- Fund projects that deliver diverse transportation options;
- Improve Board meetings and informational materials; and
- Expand staff technical skills and support services.

Within this report, there are two major sections:
1. **Overview of the Region**, which provides demographic and socioeconomic summaries of the County, and
2. **System Conditions and Facts**, in which each major transportation component and mode is discussed regarding facility conditions, traffic characteristics, performance, and financial conditions.

In general, this report highlights data attributes that will be important to all of our Core Product planning efforts, especially the *Metropolitan Transportation Plan (MTP)*, the *Transportation Improvement Plan (TIP)*, and the *Multimodal Priorities List (MMPL)*.

The U.S. Census Bureau's 2016 American Community Survey (ACS) 5-Year Estimates Profile[1] serves as the primary data source for the Overview of the Community section. All other statistical summaries in this report used the most the recent and available data from other sources including the Broward MPO, Florida Department of Transportation (FDOT), Federal Railroad Administration (FRA), National Transit Database (NTD), Bureau of Transportation Statistics (BTS), and individual transportation providers.

[1]*For more information about the U.S. Census Bureau's 2016 ACS 5-Year Estimates Profile, please visit https://factfinder.census.gov*

Key Components of the Transportation System

Roadway System
- National Highway System (NHS)
- Local Roadways
- Bridges

Transit System
- Broward County Transit
- Tri-Rail (South Florida Regional Transportation Authority)
- Park & Ride Termini

Biking and Pedestrian Systems
- Bicycle Lanes
- Sidewalks
- Bike-Share Systems
- Dockless Bike Share and Scooter Share
- Parks for Recreational Biking

Airports
- Fort Lauderdale–Hollywood International Airport (FLL)
- Other Air Fields

Seaports and Waterways
- Port Everglades
- Waterways (e.g., canals)

Land Freight
- Freight Railways
- National Freight Highway Network
- Intermodal and Transload Facilities
- Truck Parking Facilities

Land Use and Population

Broward County is growing rapidly. **Since 2010, the population has increased by 1.2% annually and was estimated to be 1.89 million in 2017** (1.73 million in 2010). The chart below shows the 2017 population by age cohort. Among the 32 municipalities in the County, Fort Lauderdale, Pembroke Pines, Hollywood, Miramar, and Coral Springs are the top 5 populated cities.

POPULATION BY AGE COHORT, BROWARD COUNTY, 2017

Age cohorts (top to bottom): 85 years and over, 80 to 84 years, 75 to 79 years, 70 to 74 years, 65 to 69 years, 60 to 64 years, 55 to 59 years, 50 to 54 years, 45 to 49 years, 40 to 44 years, 35 to 39 years, 30 to 34 years, 25 to 29 years, 20 to 24 years, 15 to 19 years, 10 to 14 years, 5 to 9 years, Under 5 years

X-axis: 80 60 40 20 0 20 40 60 80 100 — *Thousands*

MALE   FEMALE
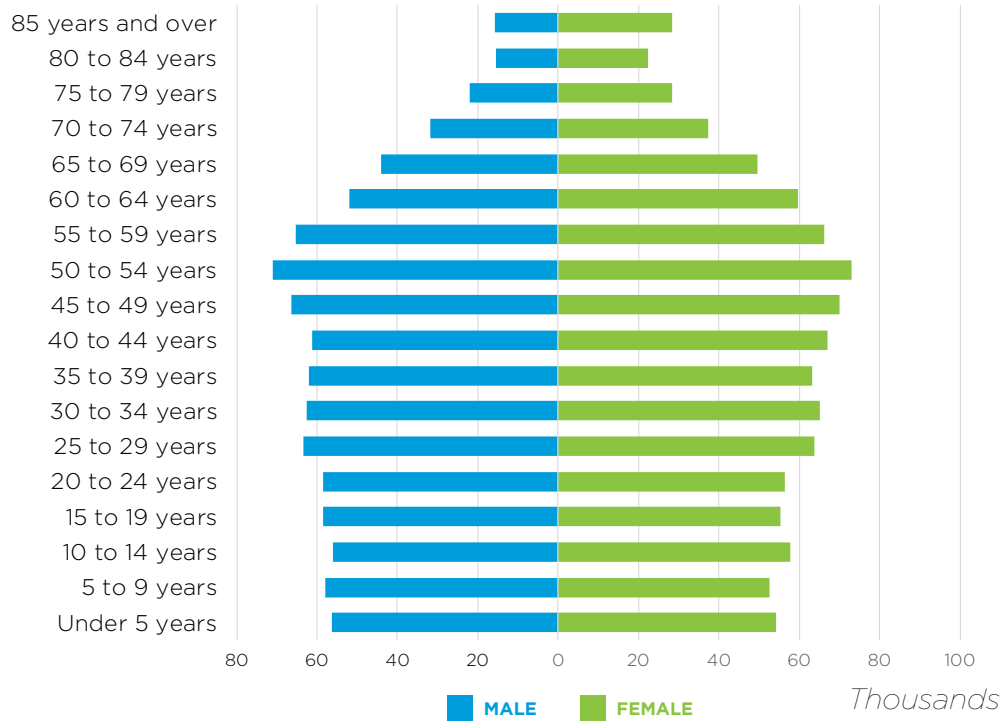
Source: U.S. Census 2017 ACS 5-Year Estimates

¹Only accounts for major roadways and facilities (e.g., NHS, airports, and seaport). Excludes parking and smaller arterials.

TOTAL AREA OF BROWARD COUNTY (SQUARE MILES)

790 **60%**

420 **31%**

113 **9%**

CONSERVATION AREA   **WATER**
DEVELOPABLE LAND

Source: U.S. Census 2010

DEVELOPABLE AREA 2040 LAND USE

59% **RESIDENTIAL**

20% **COMMERCE + ACTIVITY CENTER**

5% **TRANSPORTATION¹**

6% **RECREATION + OPEN SPACE**

11% **OTHER USES**

Source: Broward County Land Use Plan (Amendement 2017)

Employment

Approximately 930,000 employed people are working within many different industries in Broward County. Fort Lauderdale, Sunrise, Hollywood, Pompano Beach, Plantation, and Pembroke Pines provide over 50% of all job opportunities in the County. Workers living in these areas are located closer to employment centers, suggesting that a portion of them may have shorter commuting distances.

NUMBER OF EMPLOYEES BY INDUSTRY SECTOR, BROWARD COUNTY, 2017

Industry Sector	Number
Agriculture, Fishing & Mining	2,119
Construction	61,217
Manufacturing	44,361
Wholesale Trade	34,037
Retail Trade	123,599
Transportation, Warehousing & Utilities	52,355
Information	21,982
Finance & Real Estate	74,681
Professional Services & Waste Management	129,541
Educational & Health Services	191,876
Arts, Leisure & Hospitality	104,584
Public Administration	37,949
Other Services	52,260

Source: U.S. Census 2017 ACS 5-Year Estimates

Broward County Boundary (Developable Land)

Employment Access Index*

- < 21,001 (Low Accessibility)
- 21,001 - 27,000
- 27,001 - 32,000
- 32,001 - 39,000
- > 39,000 (High Accessibility)

*Higher Employment Access Index value indicates greater amount of job opportunities nearby and shorter commuting distance.

Source: LAI (Version 2.0), HUD

Housing

Broward County contains an estimated 817,000 housing units, with an average density of 1,946 units per square mile. **17.6% of these housing units are vacant, which is 3.8% higher than the national housing vacancy rate.** In general, municipalities located by the ocean have higher development density but lower occupancy rate than those located inland.
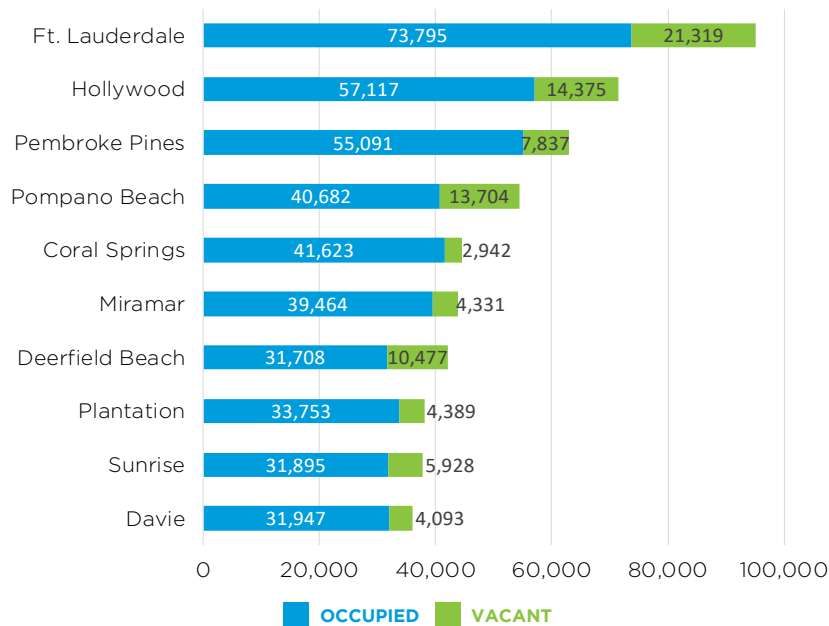
HOUSING STOCK (UNIT) BY TOP 10 MUNICIPALITIES, BROWARD, 2016

Municipality	Occupied	Vacant
Ft. Lauderdale	73,795	21,319
Hollywood	57,117	14,375
Pembroke Pines	55,091	7,837
Pompano Beach	40,682	13,704
Coral Springs	41,623	2,942
Miramar	39,464	4,331
Deerfield Beach	31,708	10,477
Plantation	33,753	4,389
Sunrise	31,895	5,928
Davie	31,947	4,093

■ OCCUPIED ■ VACANT

Source: U.S. Census ACS 2016 5-Year Estimates

Commuting

Broward County has 819,578 residents commuting within the region (South Florida) including 78% working in Broward, 16% working in Miami-Dade, and 6% working in Palm Beach. **Approximately, 89% of commuters rely on a personal automobile or carpool to get to work. On average, people spent 28.2 minutes commuting to work per trip in 2017.**

COMMUTING FLOW IN SOUTH FLORIDA

PLACE OF WORK

RESIDENCE	BROWARD	MIAMI-DADE	PALM BEACH	REGION TOTAL
BROWARD	640,362	126,681	52,535	819,578
MIAMI-DADE	68,970	1,036,685	3,898	1,109,553
PALM BEACH	46,183	7,859	505,952	559,994

Source: U.S. Census ACS 2009-2013 Commuting Flows

COMMUTING TIME (AVERAGE MINUTES) BY MODE

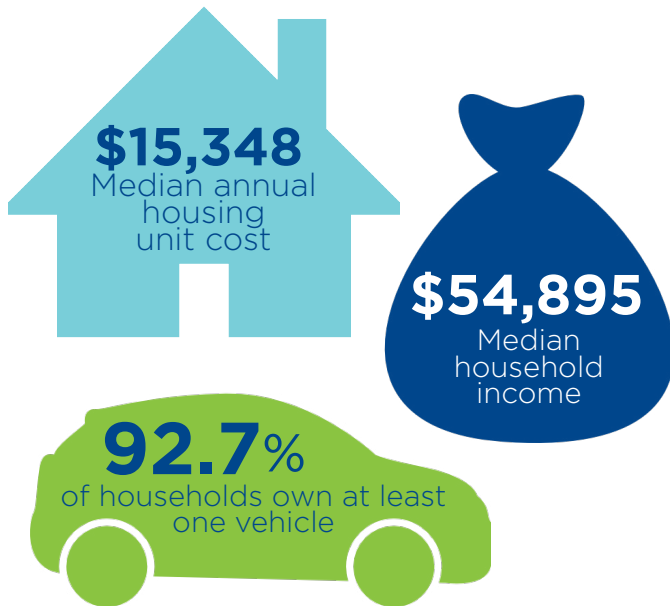| Mode	Minutes
AUTO VEHICLE	27.2
BUS	52.2
COMMUTER RAIL	64.4
WALKING	15.4
OTHER	34.2

TOTAL AVERAGE: 28

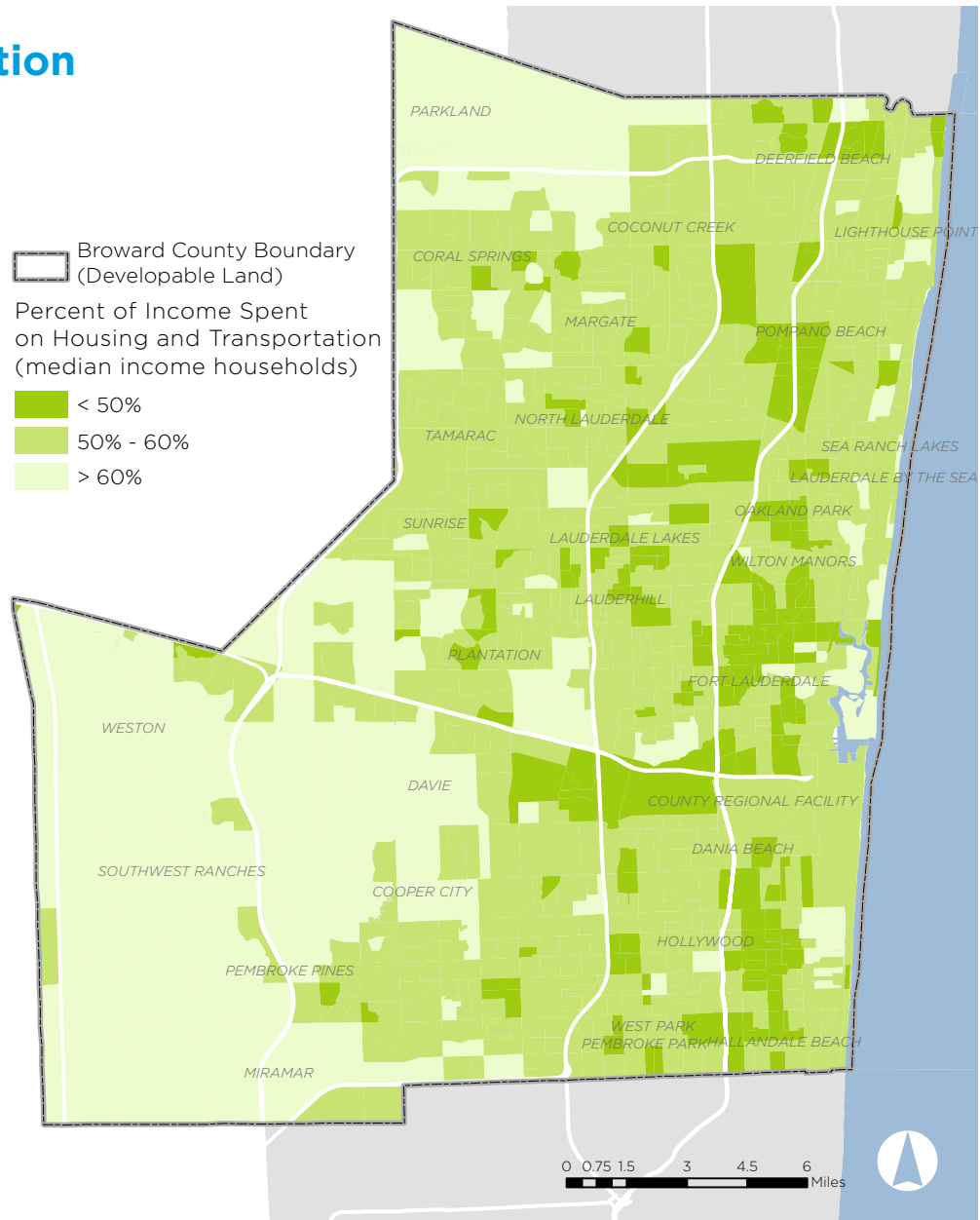*Source: U.S. Census ACS 2016 5-Year Estimates*

Housing and Transportation Affordability

Housing and Transportation (H+T) encompass a significant portion of the median household income. The map on the right shows the percent of income spent on H+T by median-income households. Below are some facts that directly affected Broward residents' perception of average housing and transportation costs.

$15,348
Median annual housing unit cost

$54,895
Median household income

92.7%
of households own at least one vehicle

Source: U.S. Census 2016 ACS 5-Year Estimates

Broward County Boundary (Developable Land)

Percent of Income Spent on Housing and Transportation (median income households)

- < 50%
- 50% - 60%
- > 60%

PARKLAND
DEERFIELD BEACH
COCONUT CREEK
CORAL SPRINGS
LIGHTHOUSE POINT
MARGATE
POMPANO BEACH
NORTH LAUDERDALE
TAMARAC
SEA RANCH LAKES
LAUDERDALE BY THE SEA
SUNRISE
OAKLAND PARK
LAUDERDALE LAKES
WILTON MANORS
LAUDERHILL
PLANTATION
FORT LAUDERDALE
WESTON
DAVIE
COUNTY REGIONAL FACILITY
DANIA BEACH
SOUTHWEST RANCHES
COOPER CITY
HOLLYWOOD
PEMBROKE PINES
WEST PARK
PEMBROKE PARK HALLANDALE BEACH
MIRAMAR

0 0.75 1.5   3   4.5   6
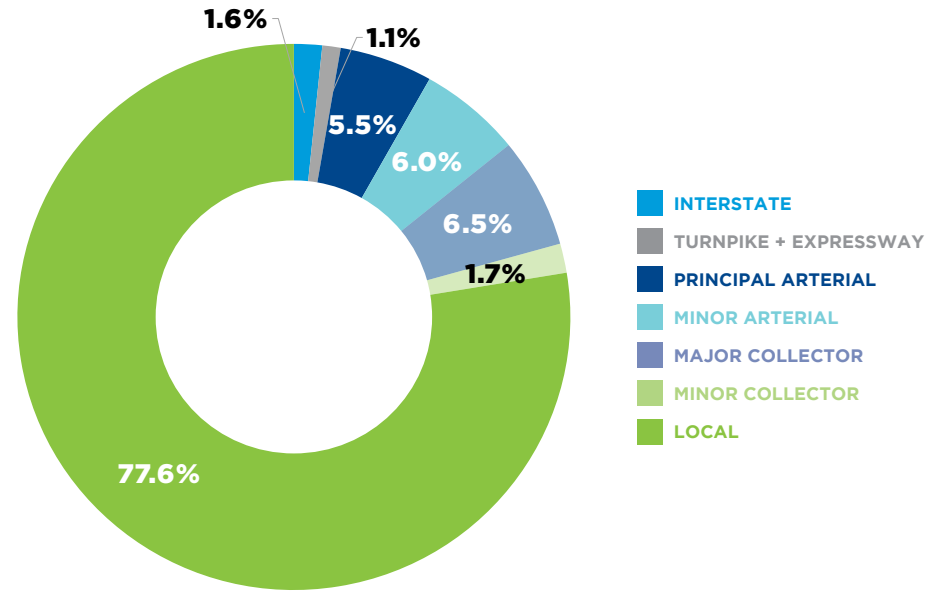Miles

Source: LAI (Version 2.0), HUD

Roadway

Broward County residents rely heavily on auto-oriented transportation, which creates demand for a well-designed, efficiently managed, and regularly maintained roadway system. In 2017, there were approximately 5,053 miles of roadways throughout the County which FDOT, Broward County, and the local municipalities maintained.

The County's major highway corridors, I-95, I-595, I-75, and the Florida Turnpike, carry long-distance intra- and inter-county traffic throughout the region. The arterials, collectors and local roadways connect communities to both major places of interest and larger transportation corridors.

5,053
TOTAL
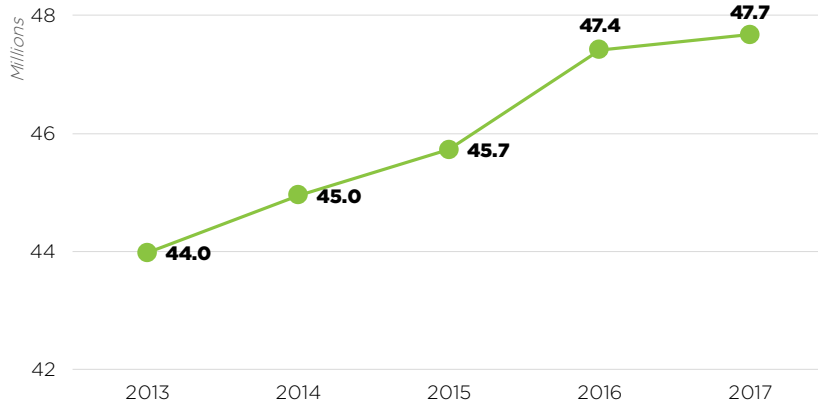ROADWAY
MILES

ROADWAY MILEAGE BY FUNCTIONAL CLASS, BROWARD COUNTY, 2017

1.6%
1.1%
5.5%
6.0%
6.5%
1.7%
77.6%

- INTERSTATE
- TURNPIKE + EXPRESSWAY
- PRINCIPAL ARTERIAL
- MINOR ARTERIAL
- MAJOR COLLECTOR
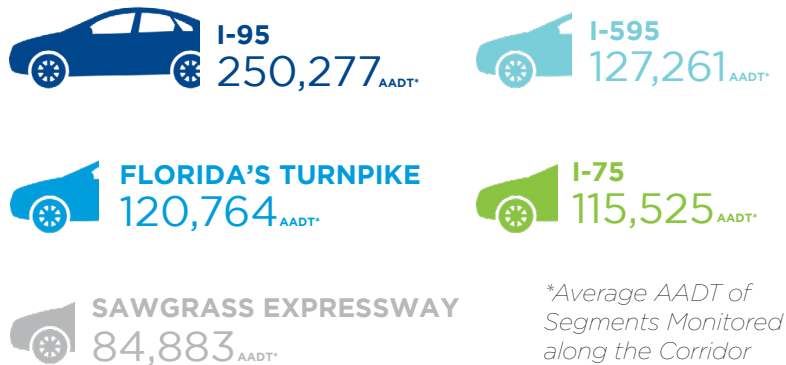- MINOR COLLECTOR
- LOCAL

Source: FDOT

In 2017, Broward County ranked second in Florida for vehicle-based trips, and it was reported that the daily vehicle miles traveled (DVMT) on public roads reached 47.7 million.

DAILY VEHICLE MILES TRAVELED BY YEAR, BROWARD COUNTY, 2013-2017

Source: FDOT

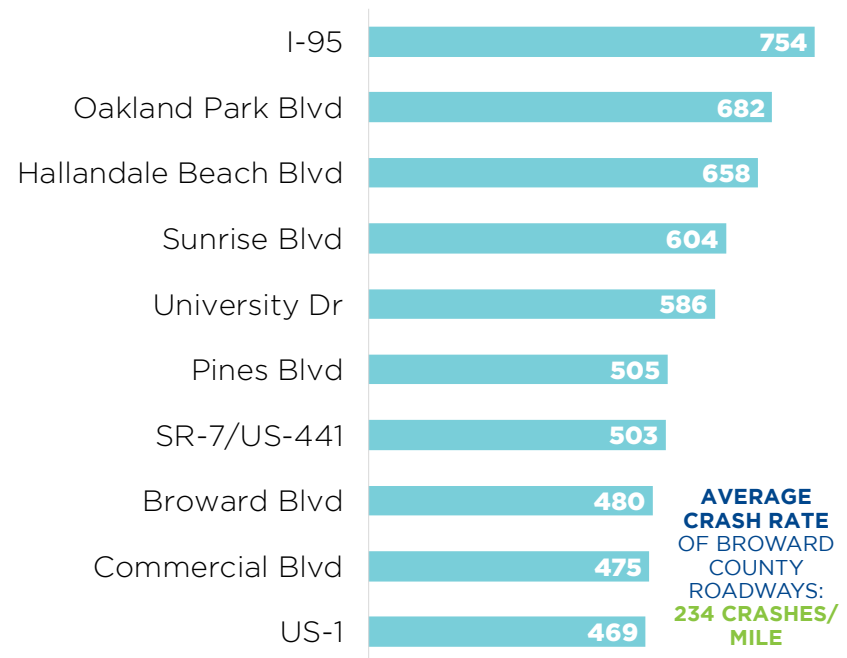### TOP FIVE TRANSPORTATION CORRIDORS WITH THE HEAVIEST TRAFFIC VOLUME, BROWARD COUNTY, 2017

I-95
250,277 AADT*

I-595
127,261 AADT*

FLORIDA'S TURNPIKE
120,764 AADT*

I-75
115,525 AADT*

SAWGRASS EXPRESSWAY
84,883 AADT*

Average AADT of Segments Monitored along the Corridor

Source: FDOT

Roadway Safety Profiles

Safety is always a priority in Broward County. From 2013-2017, there were a total of:

180,648
TRAFFIC CRASHES

852
TRAFFIC FATALITIES

6,509
SEVERE TRAFFIC INJURIES

The average crash death rate is 9.2 per 100,000 population per year (4.3 lower than state rate). Approximately 50% of all these crashes were concentrated on the roadway corridors shown below. Among these corridors, Broward Blvd had the highest fatality rate (0.6%), and University Dr had the highest severe injury rate (4.5%).

AVERAGE NUMBER OF CRASHES PER MILE BY ROADWAY CORRIDOR, BROWARD COUNTY, 2013-2017

Corridor	Crashes
I-95	754
Oakland Park Blvd	682
Hallandale Beach Blvd	658
Sunrise Blvd	604
University Dr	586
Pines Blvd	505
SR-7/US-441	503
Broward Blvd	480
Commercial Blvd	475
US-1	469

AVERAGE CRASH RATE OF BROWARD COUNTY ROADWAYS: **234 CRASHES/ MILE**

Source: FDOT

National Highway System

The National Highway System (NHS) is a strategic highway network of the United States. The pavement conditions (measured by the International Roughness Index), of the NHS in Broward County, roadways and bridge conditions (rated based on National Bridge Inspection Standards) can be seen below:

Interstate NHS Pavement Conditions

Broward MPO 4-Year Target: **60%** of Lane Miles Rated as "Good"

☑ Current Conditions = **76.6% Good**

Non-Interstate NHS Pavement Conditions

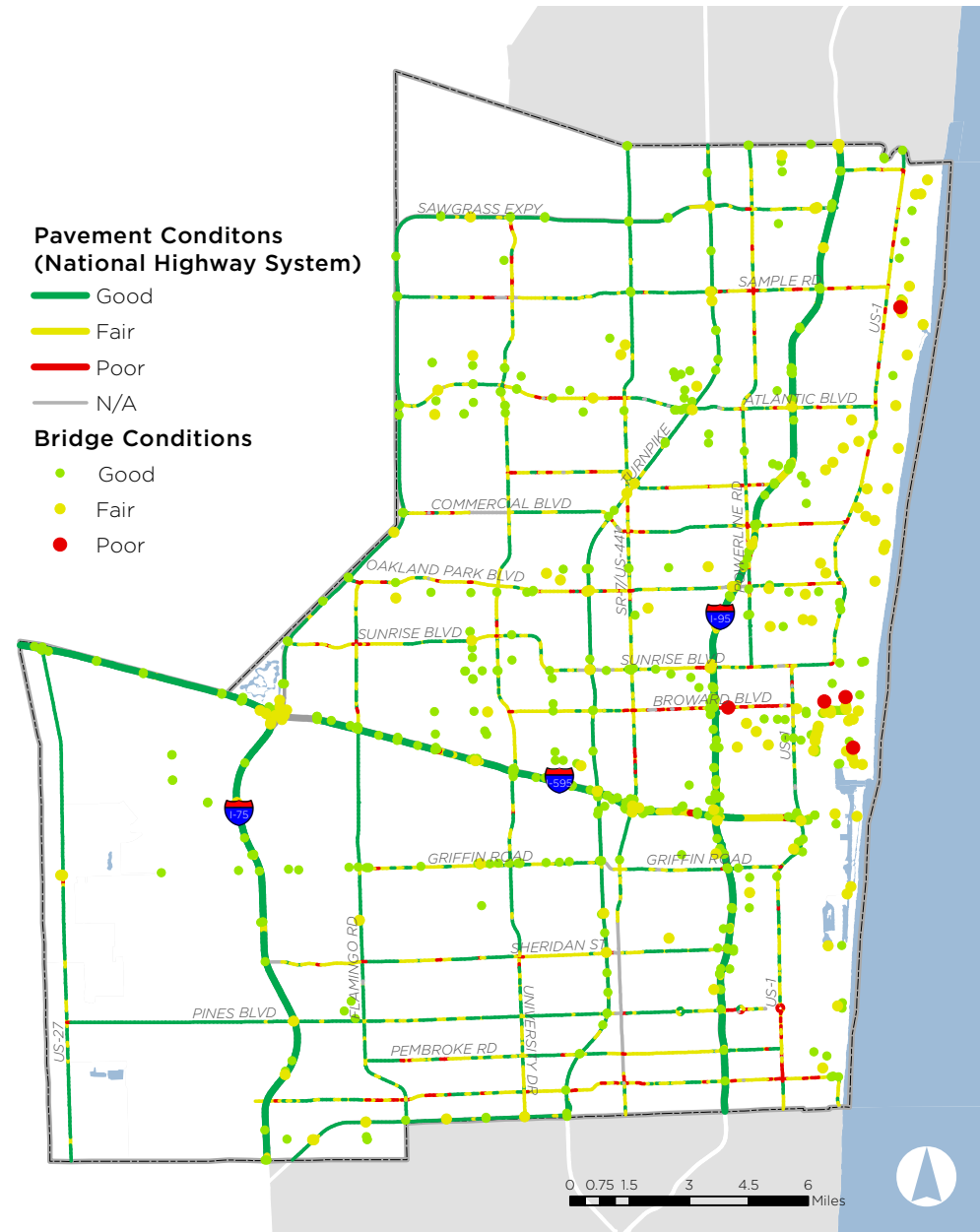Broward MPO 4-Year Target: **40%** of Lane Miles Rated as "Good"

☐ Current Conditions = **38.4% Good**

NHS Bridges

Broward MPO 4-Year Target: **50%** of Deck Area Rated as "Good"

☑ Current Conditions = **79.1% Good**

Source: FDOT (2017)

Pavement Conditons (National Highway System)

— Good
— Fair
— Poor
— N/A

Bridge Conditions

• Good
• Fair
● Poor

Source: FDOT and National Bridge Inventory

The Level of Travel Time Reliability (LOTTR), for a particular roadway segment on the Interstate or non-Interstate NHS, is defined as the consistency or dependability in travel times, as measured from day-to-day and/or across different times of day. The measures are the percent of person-miles traveled on the relevant portion of the NHS that are reliable. Person-miles are used because they take into account the users of the NHS, whether on bus, auto, or truck.

Interstate NHS LOTTR

Broward MPO 4-Year Target: **70%** Person-Miles Traveled are Reliable

Current Conditions = **67% Reliable**

Non-Interstate NHS LOTTR

Broward MPO 4-Year Target: **50%** of Person-Miles Traveled are Reliable

Current Conditions = **80% Reliable**

Source: FDOT (2017)

LEVEL OF TRAVEL TIME RELIABILITY, BROWARD COUNTY, 2017

- LOTTR(%) INTERSTATE NHS
- LOTTR(%) NON-INTERSTATE NHS
- - - LOTTR(%) TARGET (INTERSTATE) ABOVE 70%
- - - LOTTR(%) TARGET (NON-INTERSTATE) ABOVE 50%
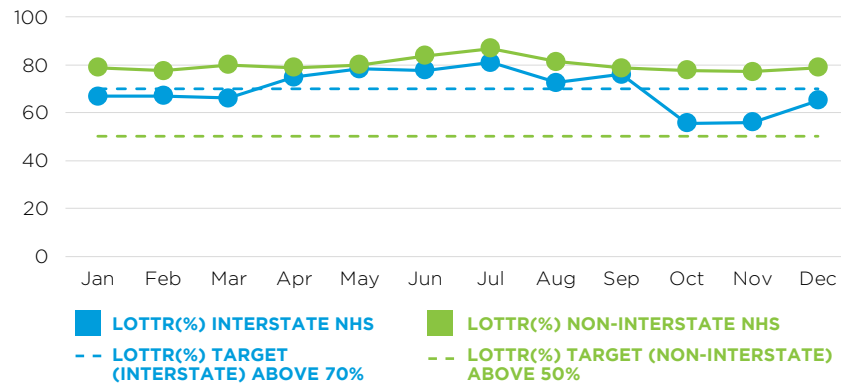
Source: FDOT

Current Roadway Construction Projects

Currently, there are 25 major roadway projects under construction in Broward County. According to FDOT, these projects are estimated to cost a total of $1.1 billion, 86% of which are associated with seven (7) interstate highway improvements. Only 7 out of 25 projects are "Capacity Expansion," which account for 91.1% of all costs.

Existing Roadway Planning Efforts

The Long-Range Transportation Plan (LRTP) is one of the Broward MPO's Core Products and is considered the "cost feasible" blueprint of the County's transportation system over the next 20 years. **In our last LRTP, Commitment 2040 (Amendment 4, 2018), 40 roadway projects were selected for future investments,** worth a total of $1 billion. Compared to the FDOT projects that are under construction, Commitment 2040's projects focus on capacity expansion and reconstruction of non-interstate arterials.

DISTRIBUTION OF COST BY TYPE FOR FDOT PROJECTS UNDER CONSTRUCTION, 2017
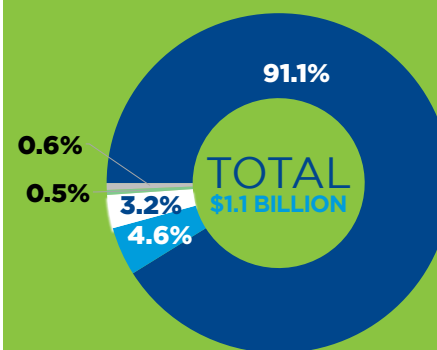
DISTRIBUTION OF COST BY TYPE FOR BROWARD MPO PROJECTS IN COMMITMENT 2040 (AMENDMENT 4, 2018)
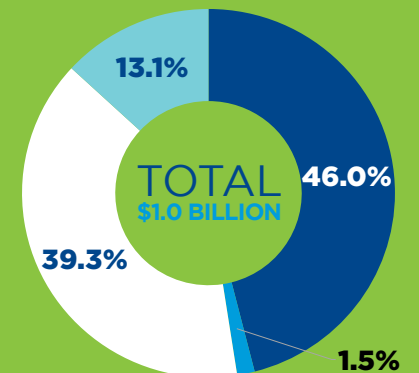
- CAPACITY EXPANSION
- TRAFFIC MANAGEMENT
- RECONSTRUCTION
- MAINTENANCE
- OTHER

Source: FDOT and Broward MPO

Transit

The transit system in Broward County mainly consists of Broward County Transit (a.k.a. BCT; an urban bus system with paratransit service), Tri-Rail (a commuter rail line which serves about 3.1% of commuters in the area), Brightline (intercity rail), and AMTRAK (interstate rail).

Tri-Rail, which is operated by the South Florida Regional Transportation Authority (SFRTA), connects Mangonia Park in Palm Beach County to Miami Airport with 71-miles track. It has seven rail stations located in Broward County.

BCT
44 BUS ROUTES

BCT
4,585 BUS STOPS
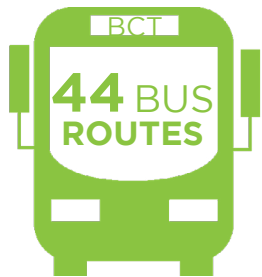
ONE COMMUTER RAIL LINE (TRI-RAIL)

ONE INTERCITY PASSENGER RAIL LINE (BRIGHTLINE)

ONE INTERSTATE PASSENGER RAIL LINE (AMTRAK)

TRI-RAIL **7**

AMTRAK **3**

BRIGHTLINE **1**

STATIONS

Map Legend

- Broward County (Developable Land)
- BCT Bus Service Corridors
- Tri-Rail
- Brightline
- Major Bus Stop (shared by at least three routes)
- Tri-Rail Station
- Tri-Rail Station (with access to Amtrak)
- Brightline Station

DEERFIELD BEACH STATION
POMPANO BEACH STATION
CYPRESS CREEK STATION
FT. LAUDERDALE STATION
AIRPORT STATION
SHERIDAN ST STATION
HOLLYWOOD STATION

HILLSBORO BLVD
SAMPLE RD
ATLANTIC BLVD
OAKLAND PARK BLVD
SUNRISE BLVD
BROWARD BLVD / NW 8 ST / NW 136 AVE
I-595 / I-95 / MIAMI CIVIC CTR
DAVIE RD / PETERS RD
STIRLING RD / FLAMINGO RD
HOLLYWOOD/PINES BLVD
PEMBROKE RD
PINE ISLAND RD / CORAL SPRINGS BLVD
SR 7 / US 441
UNIVERSITY DR
SAWGRASS EXPWY

0 0.75 1.5 3 4.5 6 Miles

Source: FDOT and BTS

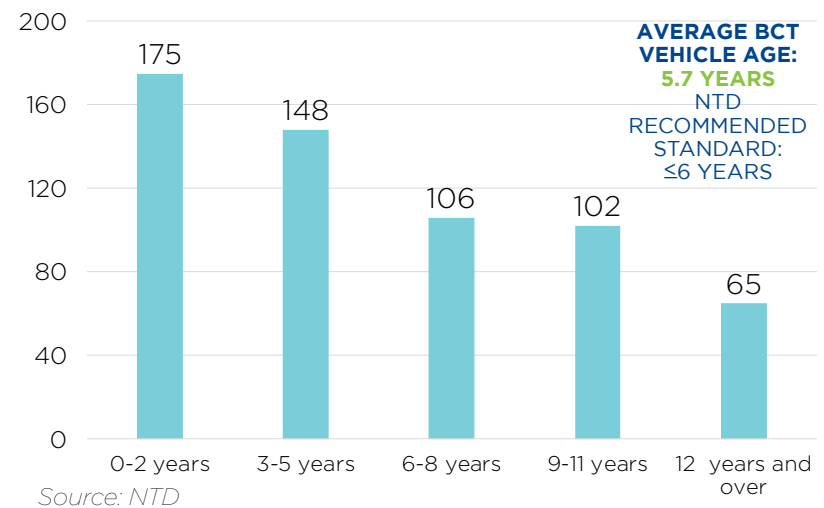Per 2017 data, BCT operated a mixed fleet of 596 public and privately owned vehicles. Their vehicles available for maximum service (a.k.a., VAMS; 359 buses, 237 demand response vehicles) had an average age of 5.7 years. BCT's bus fleet consisted of articulated buses, buses, cutaway buses, and over-the-road buses. Their demand response fleet consisted of cutaway buses, minivans, and vans. No data was available for BCT's on-time performance.

BCT had 6.7 mechanical breakdowns per vehicle in 2017, which was lower than its neighboring peers (i.e., Miami-Dade Transit (13.2) and Palm Tran (8.7)).
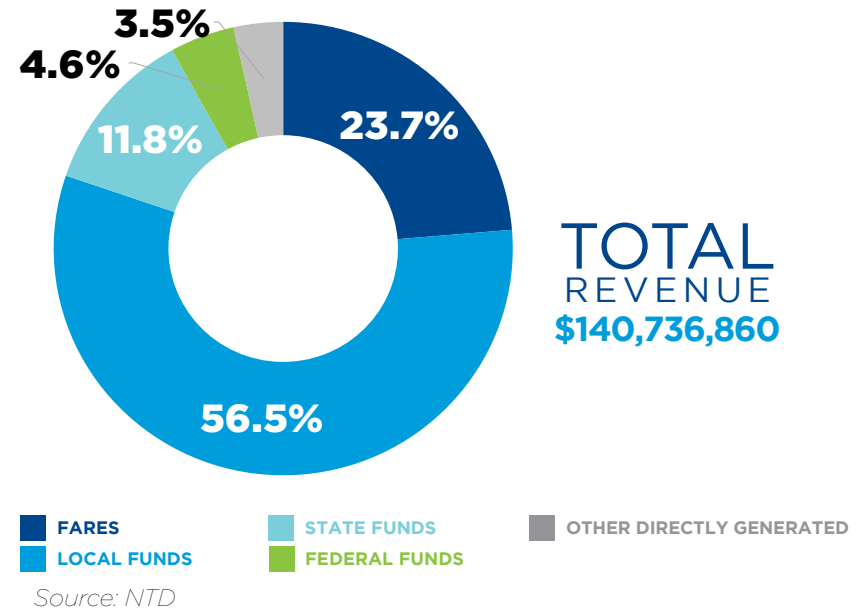
In the past five years, BCT's ridership has declined by 5.2%. In 2017, BCT recorded 29.8 million passenger trips. The average trip length was 5.16 miles/passenger trip. According to their financial reports, BCT had $139.2 million of total operating expenses. 65.1% of these expenses were from vehicle operations.

RIDERSHIP
29.8 MILLION
PASSENGER TRIPS

AVERAGE TRIP LENGTH PER PASSENGER
5.16 MILES

NUMBER OF FLEET VEHICLES BY AGE, BCT, 2017

Age	Vehicles
0-2 years	175
3-5 years	148
6-8 years	106
9-11 years	102
12 years and over	65

AVERAGE BCT VEHICLE AGE:
5.7 YEARS
NTD RECOMMENDED STANDARD: ≤6 YEARS

Source: NTD

BCT OPERATING REVENUE SOURCES, 2017

- 23.7%
- 56.5%
- 11.8%
- 4.6%
- 3.5%

TOTAL REVENUE
$140,736,860

FARES   **STATE FUNDS**   **OTHER DIRECTLY GENERATED**
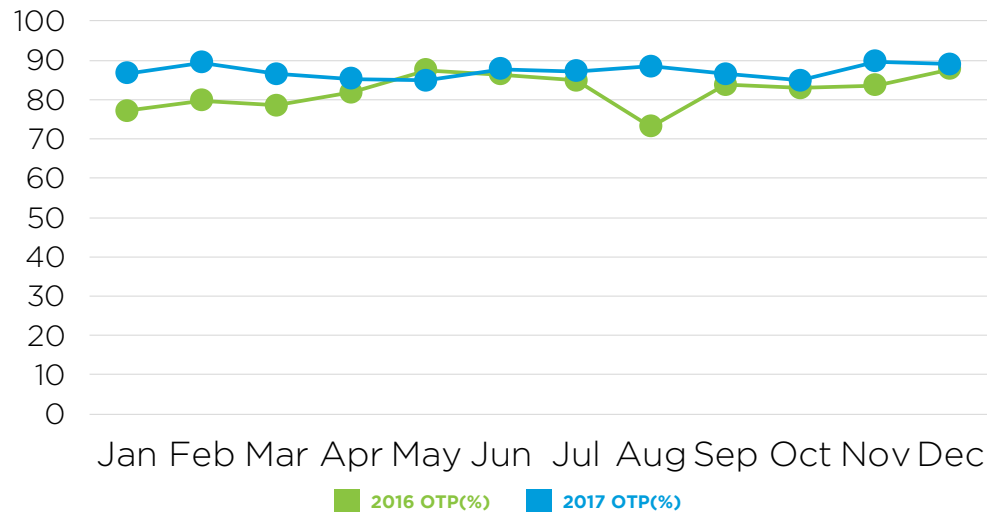**LOCAL FUNDS**   **FEDERAL FUNDS**

Source: NTD

In 2017, there were 4.3 million passenger trips made on Tri-Rail. Compared to the BCT, passengers tend to use commuter rail services for longer trips (average trip length: 27.8 miles/passenger trip).

Reliable commuting travel time ensures efficient transfers between modes. The average on-time performance (a.k.a. OTP; measured by the percentage of on-time services) of Tri-Rail was 87% in 2017, 5% higher compared to 2016. Common factors for service delays include regular facility maintenance, right-of-way conflicts with other track users, and mechanical breakdowns.

SFRTA had $94.4 million of total operating expenses (mostly spent on vehicle operations and facility maintenance). State funds and federal funds were the primary revenue sources for recovering these expenses.

RIDERSHIP
4.3 MILLION
PASSENGER TRIPS

AVERAGE TRIP LENGTH PER PASSENGER (ROUND TRIP)

27.8 MILES

TRI-RAIL ON-TIME PERFORMANCE (OTP) BY MONTH, 2016 AND 2017

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

■ 2016 OTP(%)   ■ 2017 OTP(%)

Source: SFRTA

SFRTA OPERATING REVENUE SOURCES, 2017

0.8%
12.5%
10.8%
21.8%
54.1%

TOTAL REVENUE
$102,163,558

■ **FARES**   ■ **STATE FUNDS**   ■ **OTHER DIRECTLY GENERATED**
■ **LOCAL FUNDS** ■ **FEDERAL FUNDS**
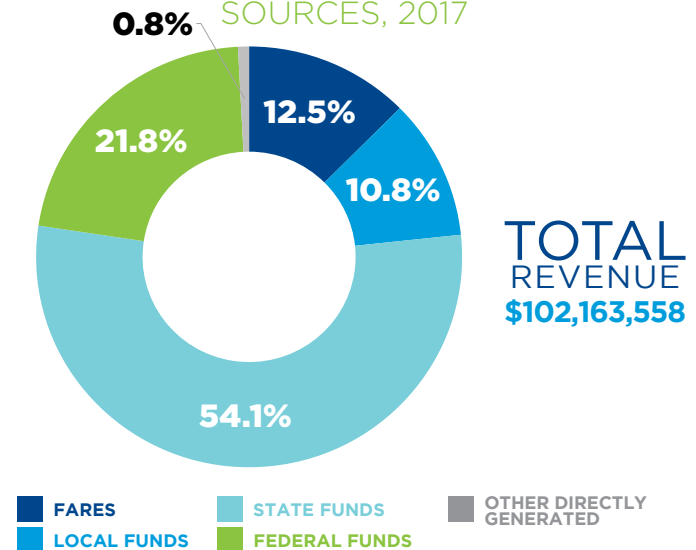
Source: NTD

Biking and Pedestrian

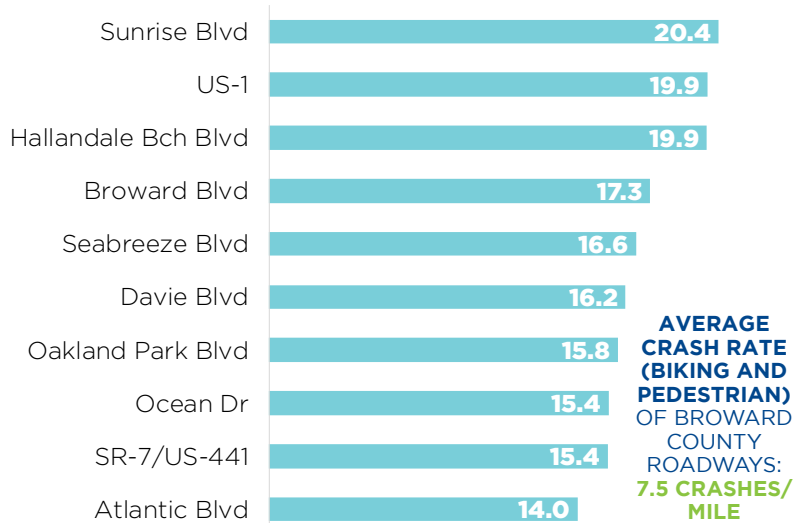Compared to auto and transit users, bicyclists and pedestrians are considered the most vulnerable group of people on the roadway. Between 2013 and 2017, there were 4,303 crashes in Broward County that involved bicyclists and pedestrians. 4.8% of them had at least one fatality, which means you are 14 times more likely to see a fatality in a bicycle or pedestrian crash than any other type of crash.

A good transportation system should be planned and designed for all users. In recent years, state, county, and local governments have been working to improve bicycle and pedestrian facilities in Broward County. In 2017, 49.7% of roadways featured sidewalks, and 5% had installed designated bike lanes.

2,511 TOTAL MILES OF **SIDEWALK**

254 TOTAL MILES OF **BIKE LANES**

88.6 TOTAL MILES OF **GREENWAYS**

AVERAGE NUMBER OF BIKING & PEDESTRIAN-RELATED CRASHES PER MILE BY ROADWAY CORRIDOR, BROWARD COUNTY, 2013-2017

Corridor	Crashes per mile
Sunrise Blvd	20.4
US-1	19.9
Hallandale Bch Blvd	19.9
Broward Blvd	17.3
Seabreeze Blvd	16.6
Davie Blvd	16.2
Oakland Park Blvd	15.8
Ocean Dr	15.4
SR-7/US-441	15.4
Atlantic Blvd	14.0

AVERAGE CRASH RATE (BIKING AND PEDESTRIAN) OF BROWARD COUNTY ROADWAYS: **7.5 CRASHES/ MILE**

Source: FDOT

22 BIKE-SHARING STATIONS

14 COUNTY PARKS WITH PATHS FOR RECREATIONAL BICYCLING

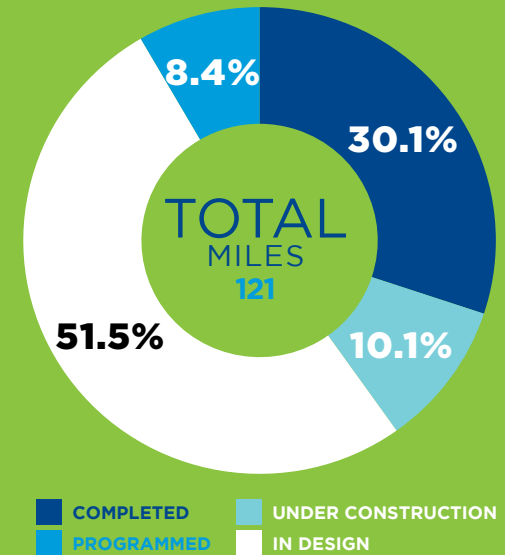## Existing Planning Efforts (Biking & Pedestrian)

Between 2013 and 2018, the Broward MPO's Transportation Alternative Program (TAP) and Complete Streets and Other Localized Initiatives Program (a.k.a. CSLIP; the replacement for TAP) helped fund 44 smaller, non-regionally significant transportation projects. These projects cost approximately $93 million of total capital expenses.

The Complete Streets Initiative was developed to assist local governments in creating a transportation system that serves all users. As the implementation arm of the Complete Streets Initiative, the Broward MPO's Mobility Program identifies and implements new projects improving active transportation.
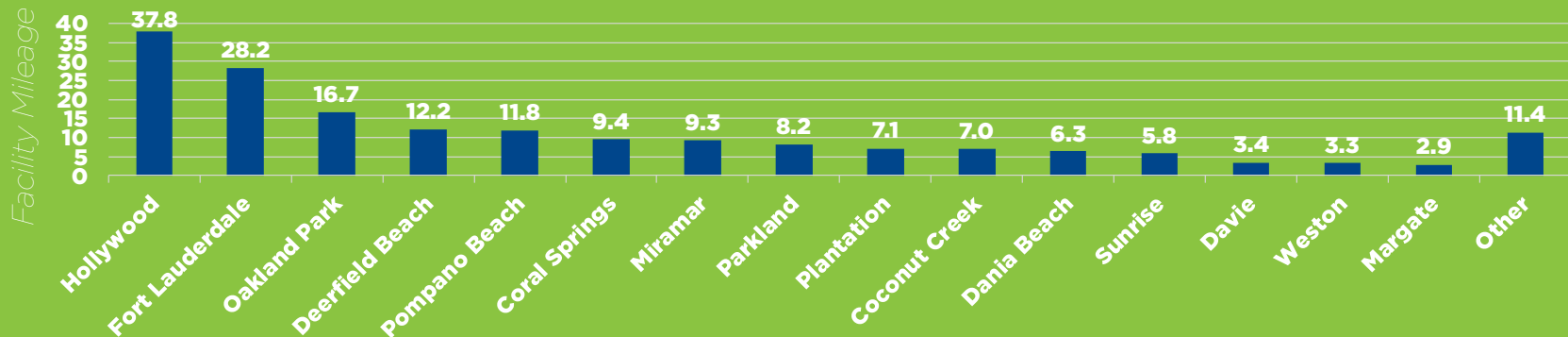
TOTAL COST OF TAP AND CSLIP AWARDED PROJECTS, BROWARD MPO

Millions

Year	Cost
2013 (TAP)	$6.6
2014 (TAP)	$8.7
2015 (TAP)	$7.1
2016-2017 (CSLIP Cycle 1)	$36.8
2018 (CSLIP Cycle 2)	$33.2

STATUS OF MOBILITY PROJECT MILEAGE, BROWARD MPO, 2018

TOTAL MILES 121

- COMPLETED — 30.1%
- UNDER CONSTRUCTION — 10.1%
- IN DESIGN — 51.5%
- PROGRAMMED — 8.4%

BIKE LANE AND SIDEWALK PROJECT MILEAGE BY MUNICIPALITY, BROWARD MPO (2013-2015 TAP, CSLIP CYCLE 1, CSLIP CYCLE 2 AND 2017-2018 MOBILITY PROGRAM)

Facility Mileage

Municipality	Mileage
Hollywood	37.8
Fort Lauderdale	28.2
Oakland Park	16.7
Deerfield Beach	12.2
Pompano Beach	11.8
Coral Springs	9.4
Miramar	9.3
Parkland	8.2
Plantation	7.1
Coconut Creek	7.0
Dania Beach	6.3
Sunrise	5.8
Davie	3.4
Weston	3.3
Margate	2.9
Other	11.4

Airports

Broward County currently has 19 airfields serving the aviation industry, including four major airports (i.e., Fort Lauderdale-Hollywood International Airport, Fort Lauderdale Executive Airport, Pompano Beach Airpark, and North Perry Airport). In total, they generated more than 680,000 flights (departures and arrivals) in 2017.

In 2017, FLL ranked 19th among all major U.S. airports with 31.7 million passengers served (includes arrivals and departures). When compared to the Miami International Airport (MIA) and Palm Beach International Airport (PBI), shown below, FLL has steadily increased their passenger traffic between 2013 and 2017 (38% increase).

FLL AIR TRAFFIC, 2017

PASSENGERS

Domestic	24,619,606
International	7,073,828
Arrival	15,905,676
Departure	15,797,758

AIR CARGO (FREIGHT)
228,800 tons of incoming goods
Source: BTS

NUMBER OF FLIGHTS BY MAJOR AIRFIELD IN BROWARD COUNTY, 2017

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT
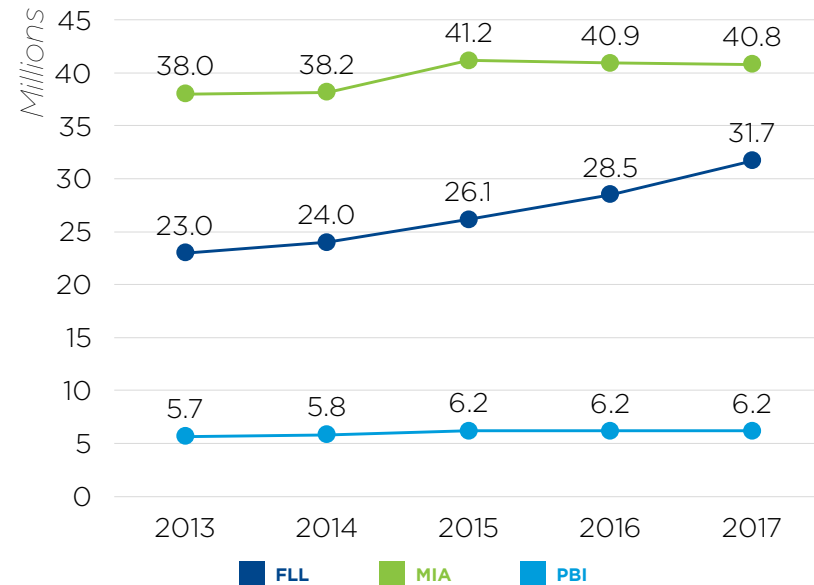251,451

POMPANO BEACH AIRPARK
169,642

FORT LAUDERDALE EXECUTIVE AIRPORT
149,553

NORTH PERRY AIRPORT
117,457

Source: FDOT

TOTAL NUMBER OF PASSENGERS BY YEAR, FLL, MIA AND PBI

MIA: 38.0 (2013), 38.2 (2014), 41.2 (2015), 40.9 (2016), 40.8 (2017)
FLL: 23.0 (2013), 24.0 (2014), 26.1 (2015), 28.5 (2016), 31.7 (2017)
PBI: 5.7 (2013), 5.8 (2014), 6.2 (2015), 6.2 (2016), 6.2 (2017)
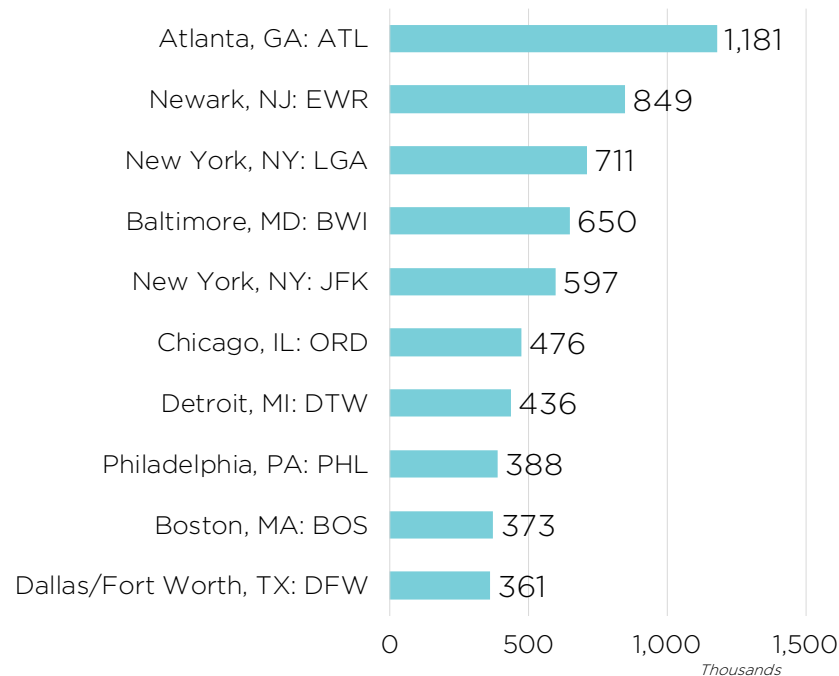
FLL   MIA   PBI

Source: BTS

In 2017, Hartsfield–Jackson Atlanta International Airport (ATL) received the most number of flights from FLL, compared to other major destinations. Southwest, JetBlue, Spirit, Delta, and American airlines provide more than 80% of flights coming to and from FLL. The on-time rate of FLL departed flights was 74% (ranked 27th in the nation) with an average delay of 67.8 minutes (ranked 17th in the nation).
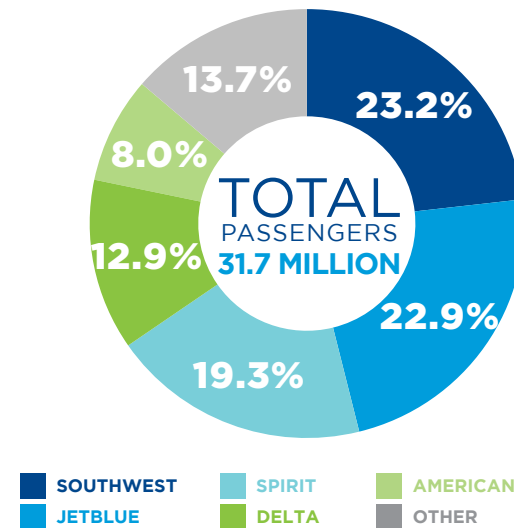
In 2017, FLL's operating revenue reached $245.8 million, 54% of which were from passenger airline revenues, and parking and ground transportation. FLL's annual operating expense was $162.0 million.

TOP 10 DESTINATIONS FOR FLIGHTS DEPARTING FROM FLL BY NUMBER OF PASSENGERS, 2017
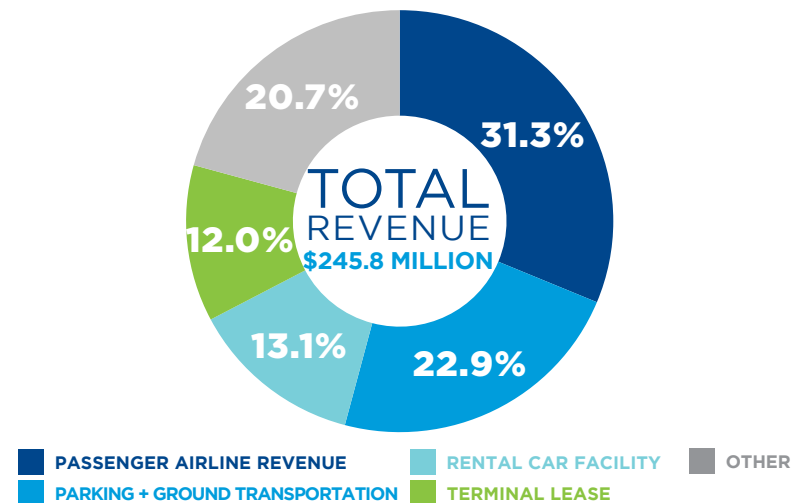
Destination	Passengers (Thousands)
Atlanta, GA: ATL	1,181
Newark, NJ: EWR	849
New York, NY: LGA	711
Baltimore, MD: BWI	650
New York, NY: JFK	597
Chicago, IL: ORD	476
Detroit, MI: DTW	436
Philadelphia, PA: PHL	388
Boston, MA: BOS	373
Dallas/Fort Worth, TX: DFW	361

Thousands

Source: BTS

NUMBER OF PASSENGERS BY AIRLINE, FLL, 2017

TOTAL PASSENGERS 31.7 MILLION

- 23.2% SOUTHWEST
- 22.9% JETBLUE
- 19.3% SPIRIT
- 12.9% DELTA
- 8.0% AMERICAN
- 13.7% OTHER

SOUTHWEST | **SPIRIT** | **AMERICAN**
JETBLUE | **DELTA** | **OTHER**

FLL OPERATING REVENUE SOURCES, 2017

TOTAL REVENUE $245.8 MILLION

- 31.3% PASSENGER AIRLINE REVENUE
- 22.9% PARKING + GROUND TRANSPORTATION
- 13.1% RENTAL CAR FACILITY
- 12.0% TERMINAL LEASE
- 20.7% OTHER

PASSENGER AIRLINE REVENUE | **RENTAL CAR FACILITY** | **OTHER**
PARKING + GROUND TRANSPORTATION | **TERMINAL LEASE**

Source: BTS

Seaports and Waterways

Broward County is well-known for its water-related assets. In total, there are 286 marina facilities and 94 port facilities (71 of them serve Port Everglades). These facilities are distributed between Port Everglades Harbor, the Intercoastal Waterway, and Broward County's major rivers and canals (e.g., New River and Dania Cut Off Canal).

In 2017, Port Everglades was considered the 17th largest container port in the nation, serving 7.2 million tons of containerized cargo and 18.2 million tons of petroleum and other cargo. Port Everglades' operating revenue was $161.7 million, and operating expense was $87.5 million.

TOTAL SHIP CALLS
4,029
(2013-2017 growth: 4.6%)

TOTAL CRUISE PASSENGERS
3.9 million
(2013-2017 growth: 7.3%)

TOTAL CARGO MOVEMENTS
25.3 million tons
(2013-2017 growth: 12.7%)

TOP 5 MARKETS OF CONTAINERIZED CARGO

- CENTRAL AMERICA (308,454 TEUS)
- MEDITERRANEAN (52,349 TEUS)
- EAST COAST SOUTH AMERICA (62,720 TEUS)
- WEST COAST SOUTH AMERICA (87,758 TEUS)
- CARIBBEAN (249,193 TEUS)

TEU refers to "Twenty-Foot Equivalent Unit," a standardized unit of containerized cargo.

TOP 5 COMMODITIES OF CONTAINERIZED CARGO

APPAREL
57,680 TEUS

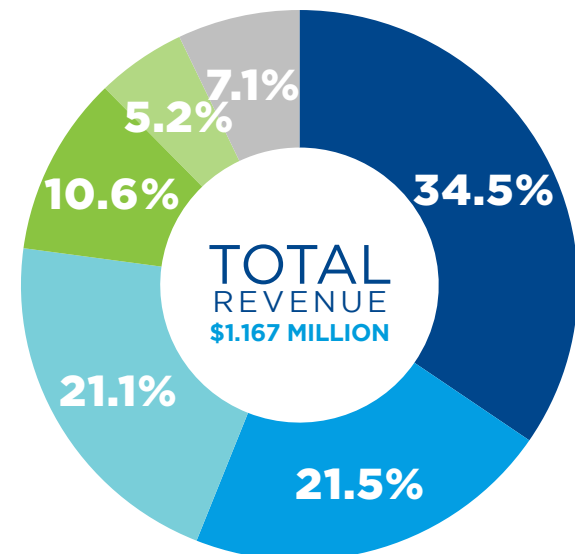**MACHINERY**
57,391 TEUS

FOOD PRODUCTS
54,585 TEUS

BEVERAGES
33,706 TEUS

MOTOR VEHICLES
43,532 TEUS

Source: Port Everglades

PORT EVERGLADES OPERATING REVENUE SOURCES, 2017

TOTAL REVENUE
$1.167 MILLION

- 34.5%
- 21.5%
- 21.1%
- 10.6%
- 5.2%
- 7.1%

- CRUISE
- PETROLEUM
- GARAGE
- CONTAINERIZED CARGO
- REAL ESTATE
- OTHER

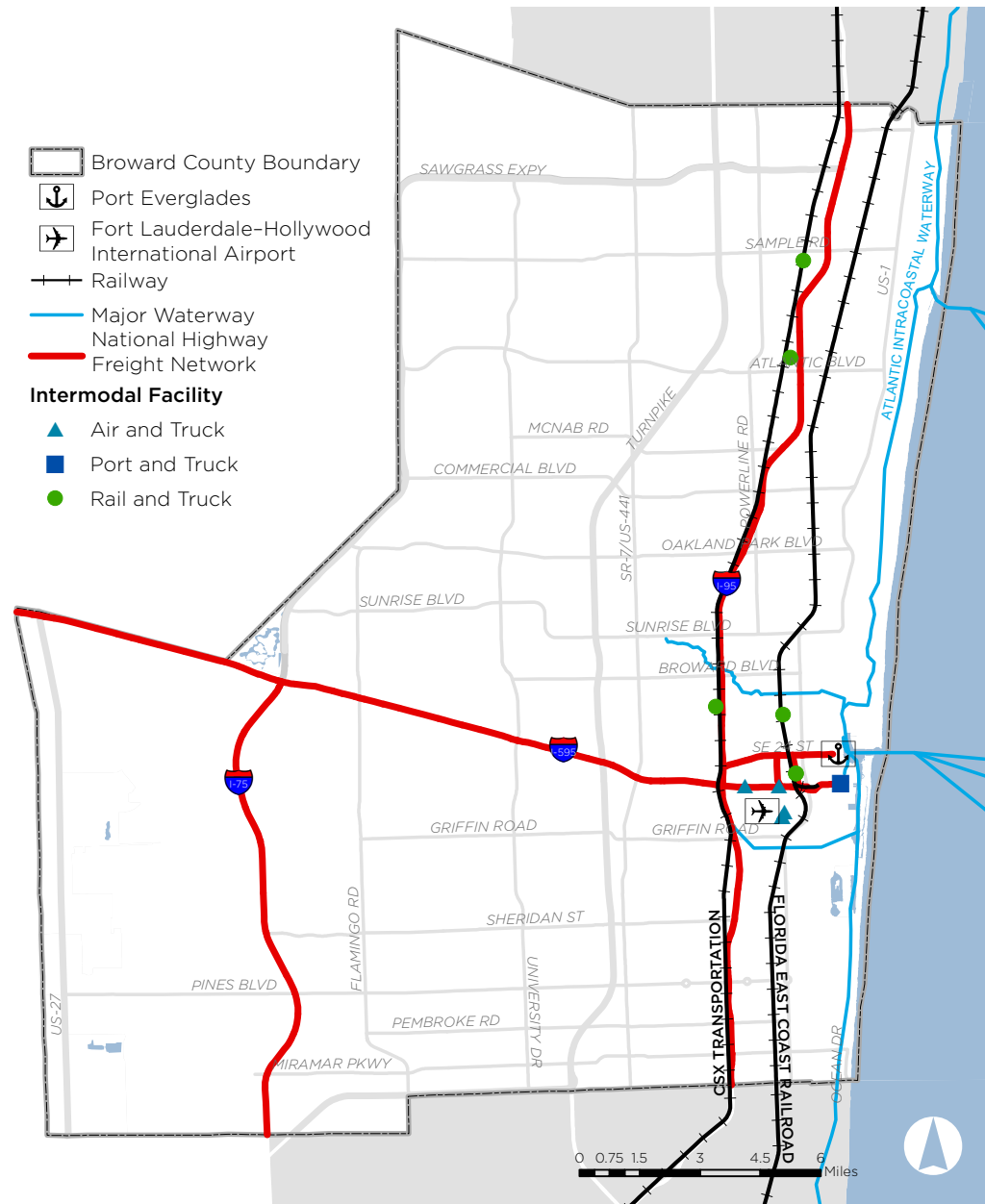*Source: Port Everglades*

Land Freight

Broward County freight network consists of the roadways for trucks and railways for freight trains. Various intermodal facilities connect these two components throughout the region.

I-95, I-595, and I-75 are designated as parts of National Highway Network (90.1 total miles in Broward County). This does not exclude other roadway corridors that have also been known to serve as alternative routes for large truck movements.

PERCENTAGE OF TRUCK TRAFFIC ON MAJOR FREIGHT CORRIDORS

	TRUCK % OF ALL TRAFFIC
FLORIDA'S TURNPIKE	**10.4%**
I-95	**4.6%**
I-75	**8.2%**
SAWGRASS EXPRESSWAY	**10.5%**
I-595	**6.1%**

Source: FDOT

Legend:
- Broward County Boundary
- Port Everglades
- Fort Lauderdale–Hollywood International Airport
- Railway
- Major Waterway
- National Highway Freight Network

Intermodal Facility
- ▲ Air and Truck
- ■ Port and Truck
- ● Rail and Truck
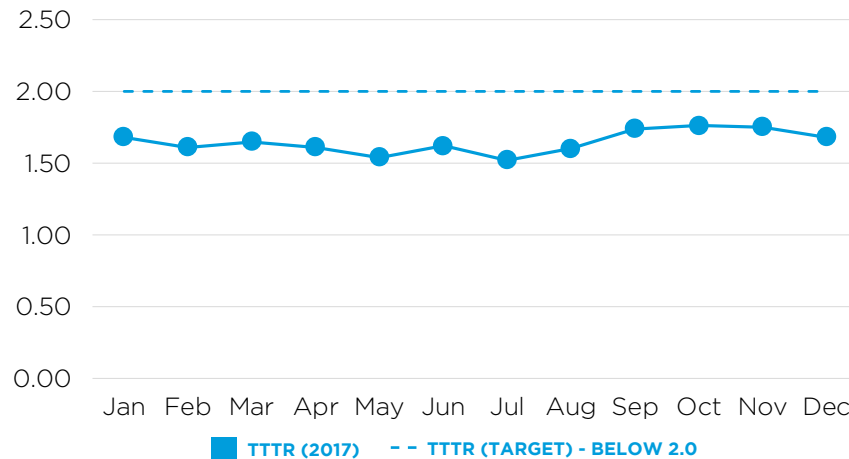
Source: FDOT and BTS

The Truck Travel Time Reliability (TTTR) Index is the FDOT's metric used to assess truck movement reliability on the Interstate system. In 2017, the average TTTR was 1.81, which met the Broward MPOs' 4-year target (i.e., below 2.0).

TRUCK TRAVEL TIME RELIABILITY (TTTR) INDEX, BROWARD COUNTY, 2017

TTTR (2017)   - - TTTR (TARGET) - BELOW 2.0

Source: FDOT

Broward County's rail freight system includes the Florida East Coast (FEC) Railway (whose rail tracks are shared with Brightline) and CSX Transportation line (whose rail tracks are shared with Tri-Rail and Amtrak). Between 2013 and 2017, the rail freight system had 29 grade crossing accidents that were reported by rail freight providers operating in Broward County

50.5
MILES OF
RAIL TRACK

80
RAILWAY GRADE CROSSINGS

RAIL GRADE CROSSING CRASHES BY REPORTING AGENCY/COMPANY, 2013-2017
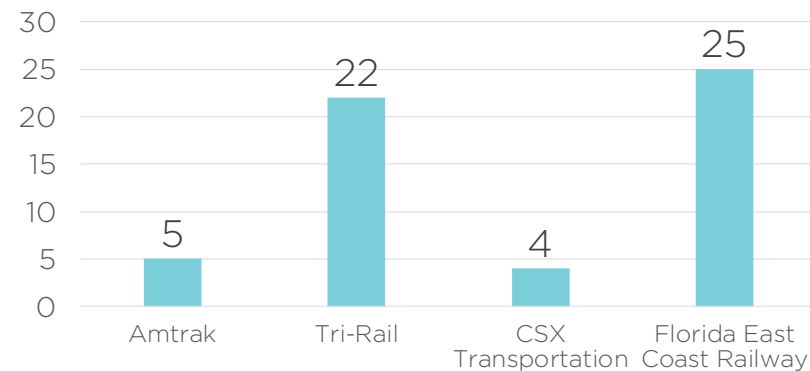
Source: FRA

Existing Planning Efforts (Freight)

The Broward MPO's Freight Transportation Advisory Committee (FTAC) was established to provide a forum for both the freight community and the MPO to improve decision-making regarding freight project selection and prioritization. The FTAC meets quarterly, attended by members, advisors, presenters and public audiences.

The Broward MPO has been working with FEC, CSX, Brightline, and Tri-Rail to create the Quiet Zones. This effort is meant to decrease noise levels from train horns throughout local communities. Currently, there are plans for a 26-mile Quiet Zone segment along the FEC railroad corridor going through eight municipalities: Deerfield Beach, Pompano Beach, Oakland Park, Wilton Manors, Fort Lauderdale, Dania Beach, Hollywood, and Hallandale Beach.

Glossary of Terms

Employment Access Index (EAI)
The number of jobs in area block groups divided by squared distance of block groups. EAI is used in the Location Affordability Index to measure the job accessibility of a particular area. Higher EAI indicates more jobs nearby and shorter commuting distances.

Location Affordability Index (LAI)
Developed by U.S. Department of Housing and Urban Development (HUD), LAI is a user-friendly source of standardized data on combined housing and transportation costs to help consumers, policymakers, and developers make more informed decisions about where to live, work, and invest. LAI Version 2.0 uses 2008-2012 American Community Survey Data.

Daily Vehicle Miles Traveled (DVMT)
A measure of daily total vehicle activity. It is calculated by multiplying the number of vehicles (traffic volume) on a given roadway segment during a day by its length.

Annual Average Daily Traffic (AADT)
The total volume of traffic on a highway segment for one year, divided by the number of days in a year.

International Roughness Index (IRI)
Required by the Federal Highway Administration, IRI is a standard index for consistently expressing pavement smoothness.

National Bridge Inspection Standards (NBIS)
Established by Federal Highway Administration, NBIS is used to inspect and rate the conditions of publicly owned bridges greater than 20 feet in length.

Level of Travel Time Reliability (LOTTR)
LOTTR is a ratio calculated by dividing the 80th percentile travel time of a reporting segment by the 50th percentile travel time of a reporting segment occurring throughout one full calendar year. Broward MPO reports the percentages of person-miles traveled on NHS structures that are considered reliable.

Twenty-Foot Equivalent Unit (TEU)
A standardized unit (20-foot long) of containerized cargo. It can be easily transferred between different freight transportation modes (e.g., ships, trains and trucks).

Truck Travel Time Reliability (TTTR) Index
TTTR is the metric used to assess the movement of trucks on the Interstate system. It is a ratio calculated by dividing the 95th percentile time by the 50th percentile for each segment. The TTTR Index is generated by multiplying each segment's largest ratio of the five periods by its length, then dividing the sum of all length-weighted segments by the total length of Interstate.

Summary of Data Sources

BROWARD MPO
http://www.browardmpo.org/

FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) – TRAFFIC AND FACILITY
http://www.fdot.gov/statistics/gis/

AMERICAN COMMUNITY SURVEY, U.S. CENSUS BUREAU
https://www.census.gov/programs-surveys/acs/

FEDERAL HIGHWAY ADMINISTRATION (FHWA) - BRIDGE
https://www.fhwa.dot.gov/bridge/nbi.cfm

FEDERAL RAILROAD ADMINISTRATION (FRA) - SAFETY
https://safetydata.fra.dot.gov/OfficeofSafety/default.aspx

NATIONAL TRANSIT DATABASE (NTD)
https://www.transit.dot.gov/ntd/ntd-data

BUREAU OF TRANSPORTATION STATISTICS (BTS) - AIRLINES AND AIRPORTS
https://www.bts.gov/topics/airlines-and-airports-0

PORT EVERGLADES
http://www.porteverglades.net/

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