STATE OF THE
SYSTEM
REPORT

Broward **MPO**
Metropolitan Planning Organization

JUNE 2020

As the Chair of the Broward MPO Board, it is my pleasure to bring to you the "State of the System" report. The MPO Board continues to help create and cultivate a vision for the work of the Broward MPO and this report is one way to help bring that forward. This is one of the newer reports that has been created by the MPO staff, however I believe that it gives a valuable and unique perspective on the transportation landscape of our region.

The original intent of this report was to provide a data rich, but visually engaging method to present information about the transportation network that is being created in Broward. However, I feel as it continues to be updated and grow, it becomes **an important tool that not just captures the current planning and programming of the Broward MPO, but also helps to shape the vision of what is yet to come.**
This is a document that I believe will have great community impact and provide our partners with a picture of the great work done by the Broward MPO, but also help to inform the decision making process as we work to make Broward a great place to be both now and in the future.

Bryan Caletka
Chair

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's transportation system.

"
The MPO Board continues to help create and cultivate a vision for the work of the Broward MPO and this report is one way to help bring that forward.
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"
This report will inform the decision-making process in our effort to develop, fund, and track projects more effectively in the future.
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For complaints, questions or concerns about civil rights or nondiscrimination: or for special requests under the Americans with Disabilities Act, please contact: Erica Lychak, Communications Manager/Title VI Coordinator at (954) 876-0058 or LychakE@browardmpo.org.

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 Community**, 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
- Local Roadways
- Bridges

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

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

Airports
- Fort Lauderdale–Hollywood International Airport (FLL)
- Pompano Beach Airpark
- Fort Lauderdale Executive Airport (FXE)
- North Perry Airport

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

Land Freight
- Freight Railways
- National Freight Highway Network

Land Use and Population

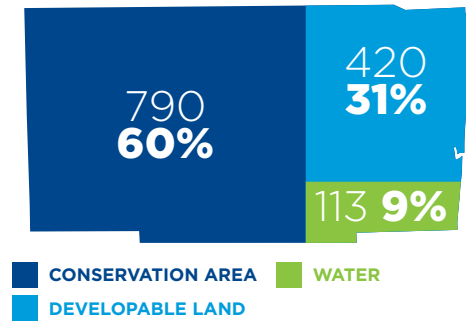Broward County is growing rapidly. **Since 2010, the population has increased by 1.0% annually and was estimated to be 1.90 million in 2018** (1.73 million in 2010). The chart below shows the 2018 population by age cohort. Among the 31 municipalities in the County, Fort Lauderdale, Pembroke Pines, Hollywood, Miramar, and Coral Springs are the top 5 populated cities.

POPULATION BY AGE COHORT, BROWARD COUNTY, 2018

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

Axis: 80 60 40 20 0 20 40 60

Thousands

■ MALE ■ FEMALE
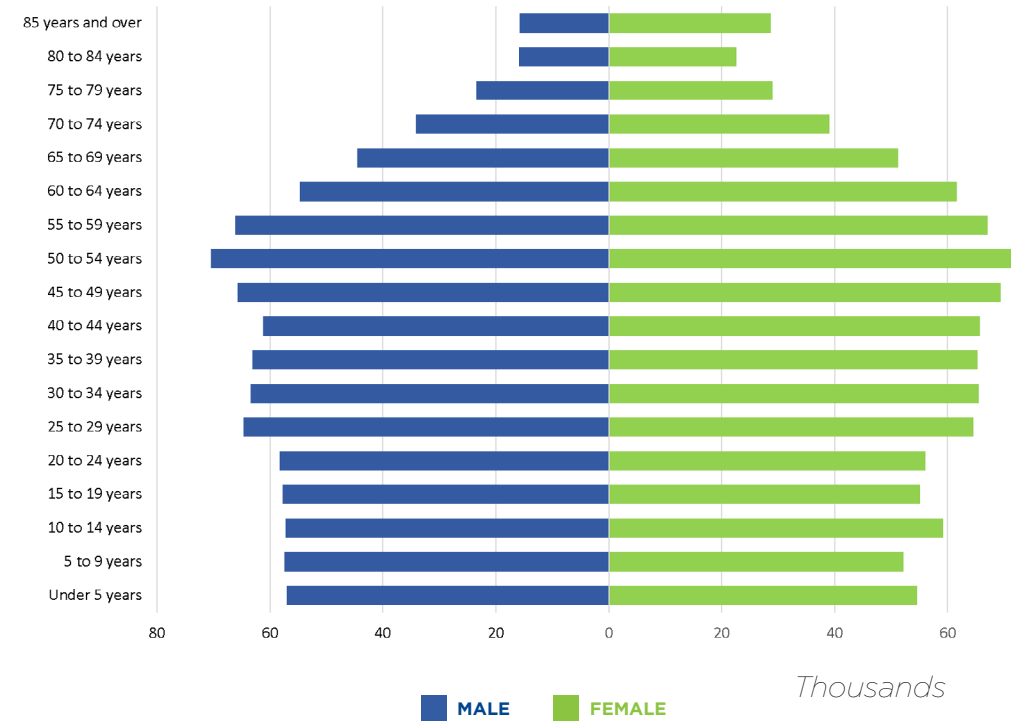
Source: U.S. Census 2018 ACS 5-Year Estimates

TOTAL AREA OF BROWARD COUNTY (SQUARE MILES)

790 **60%**
420 **31%**
113 **9%**

■ CONSERVATION AREA ■ WATER
■ DEVELOPABLE LAND

DEVELOPABLE AREA 2045 LAND USE

59% **RESIDENTIAL**

20% **COMMERCE + ACTIVITY CENTER**

11% **OTHER USES**

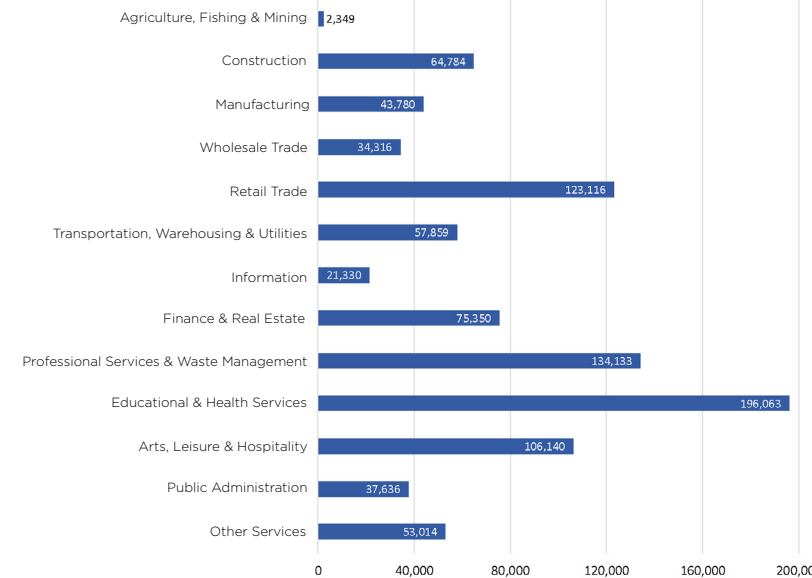**6**% **RECREATION + OPEN SPACE**

5% **TRANSPORTATION**

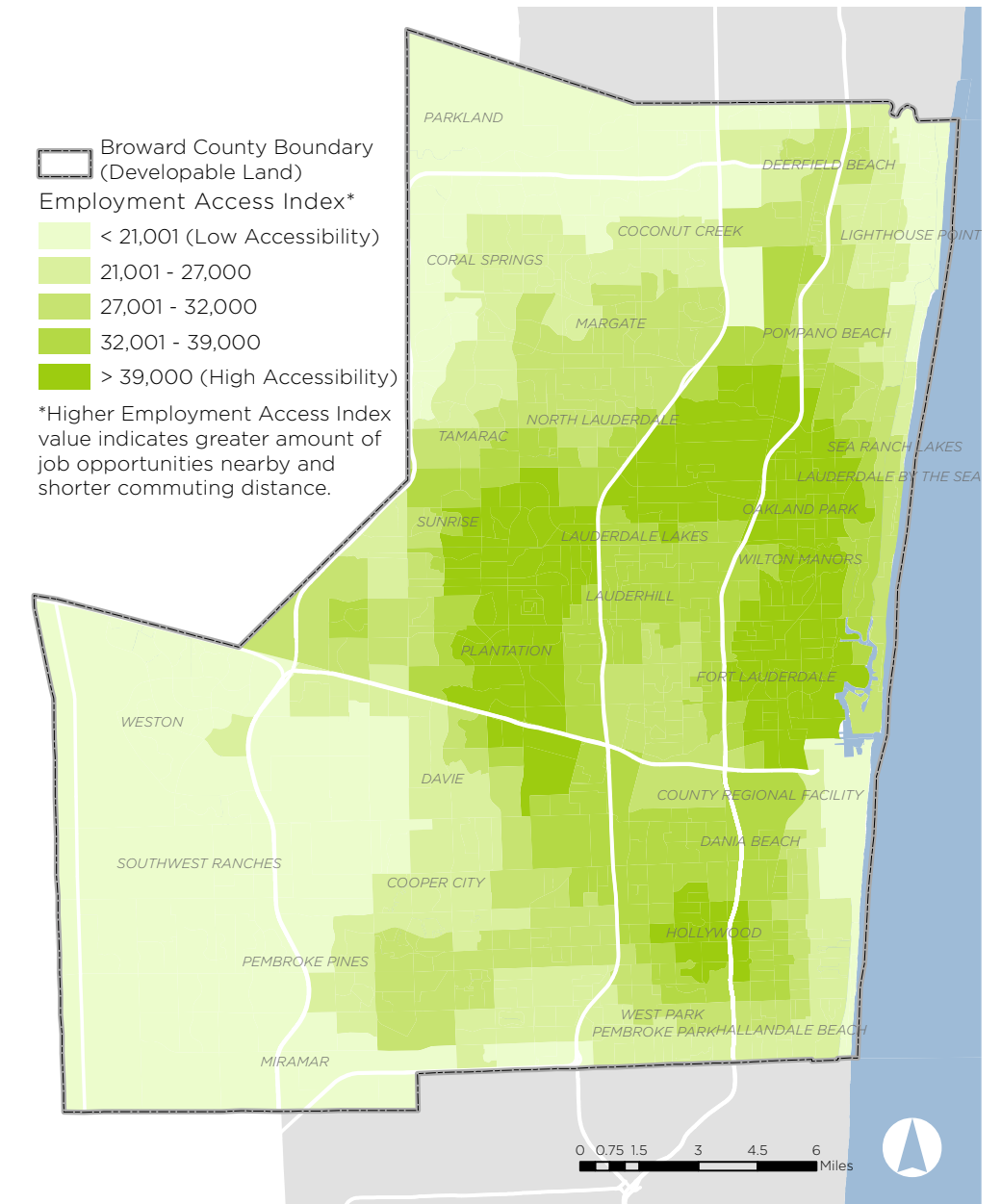*Source: Broward County Land Use Plan (Amendement 2018)*

Employment

Approximately 950,000 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, 2018

Industry Sector	Employees
Agriculture, Fishing & Mining	2,349
Construction	84,784
Manufacturing	43,780
Wholesale Trade	34,316
Retail Trade	123,116
Transportation, Warehousing & Utilities	57,859
Information	21,330
Finance & Real Estate	75,350
Professional Services & Waste Management	134,133
Educational & Health Services	196,063
Arts, Leisure & Hospitality	106,140
Public Administration	37,636
Other Services	53,014

Axis: 0 40,000 80,000 120,000 160,000 200,000

Source: U.S. Census 2018 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.
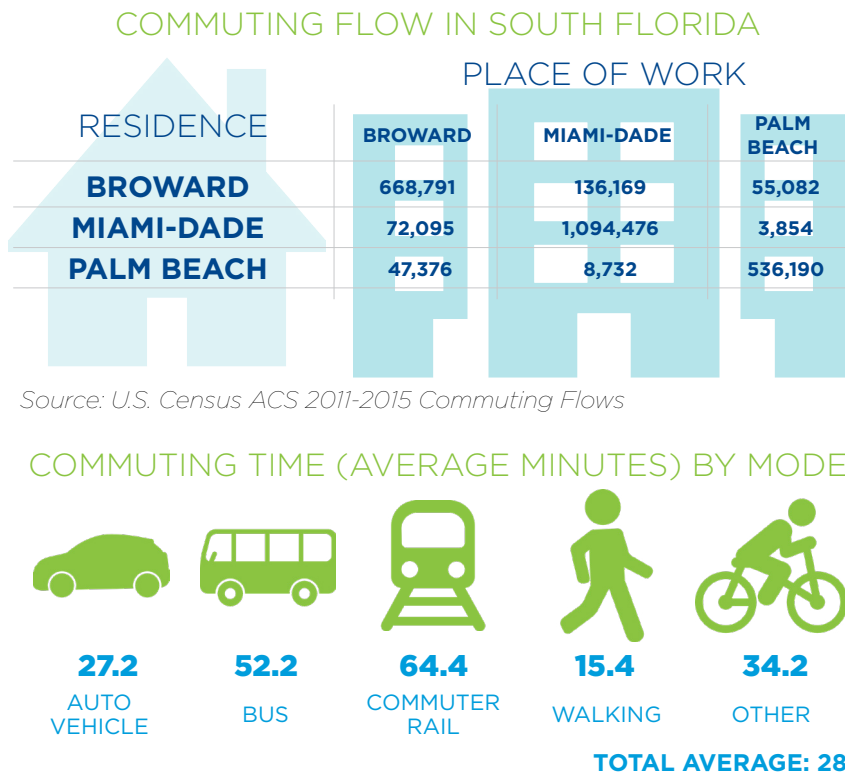
Source: LAI (Version 2.0), HUD

Housing

Broward County contains an estimated 821,000 housing units, with an average density of 1,955 units per square mile. **16.9% 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 Municipality, Broward County, 2016

Municipality	Occupied	Vacant
Ft. Lauderdale	74,160	22,284
Hollywood	58,542	13,168
Pembroke Pines	56,788	6,883
Pompano Beach	41,084	13,079
Coral Springs	41,560	3,160
Miramar	39,759	4,446
Deerfield Beach	31,863	9,746
Plantation	33,610	4,121
Sunrise	31,909	5,489
Davie	35,096	4,143
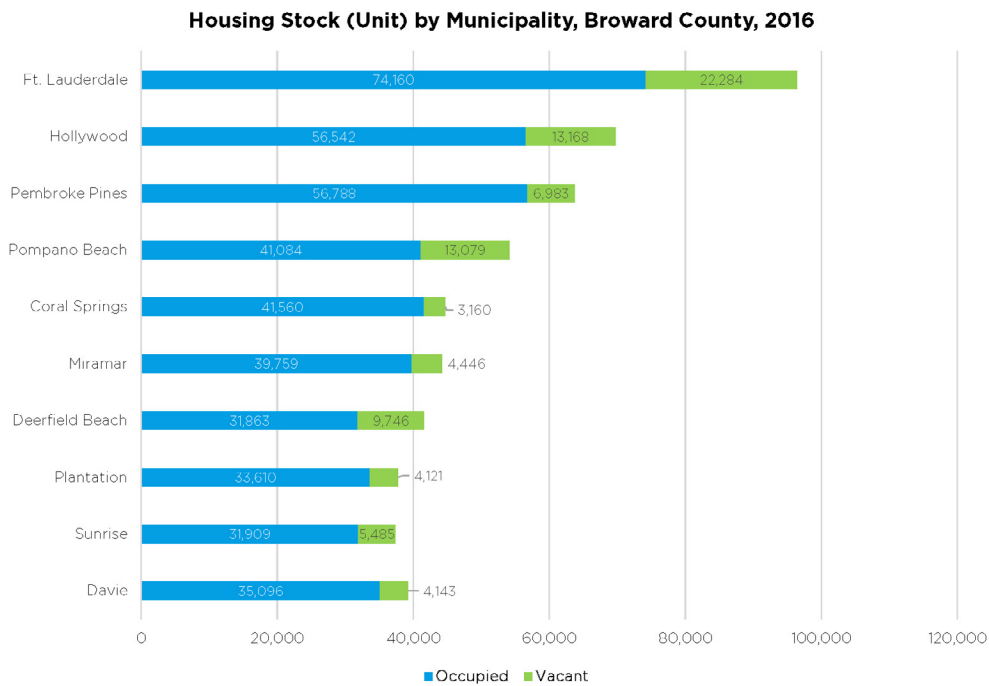
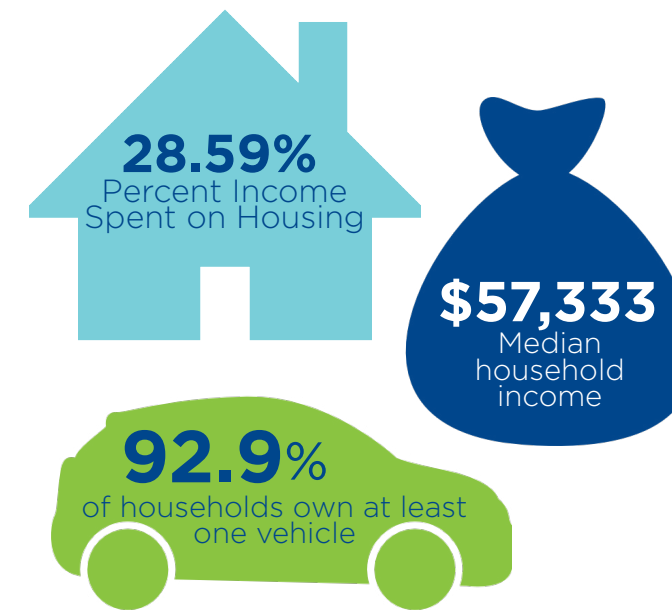*Source: U.S. Census ACS 2018 5-Year Estimates*

Commuting

Broward County has 860,762 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 28.4 minutes commuting to work per trip in 2018.**

COMMUTING FLOW IN SOUTH FLORIDA

RESIDENCE	PLACE OF WORK		
	BROWARD	**MIAMI-DADE**	**PALM BEACH**
BROWARD	668,791	136,169	55,082
MIAMI-DADE	72,095	1,094,476	3,854
PALM BEACH	47,376	8,732	536,190

Source: U.S. Census ACS 2011-2015 Commuting Flows

COMMUTING TIME (AVERAGE MINUTES) BY MODE

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

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.

28.59% Percent Income Spent on Housing

$57,333 Median household income

92.9% of households own at least one vehicle

Source: U.S. Census 2018 ACS 5-Year Estimates

Broward County Boundary (Developable Land)

Percent of Income Spent on Housing and Transportation (median income households)
- < 50%
- 50% - 60%
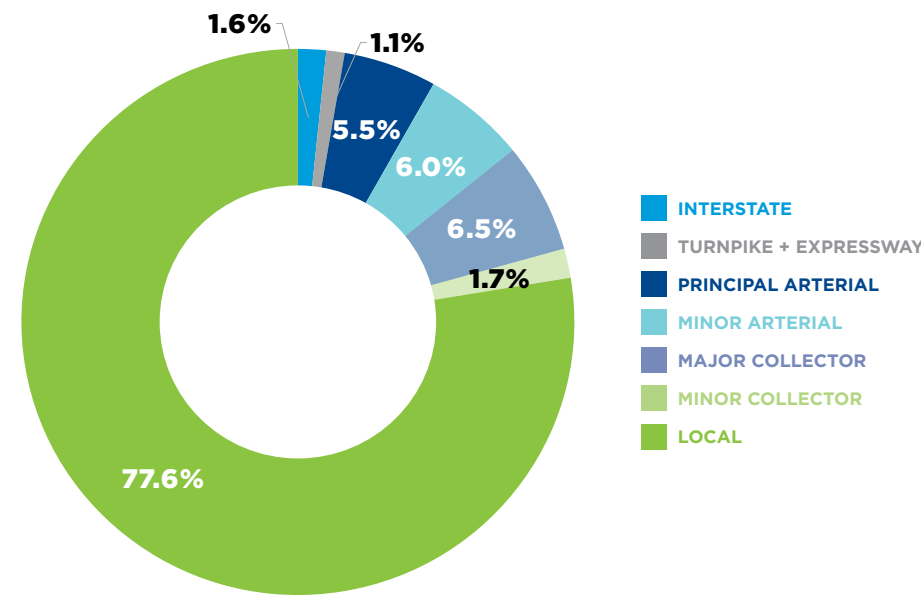- > 60%
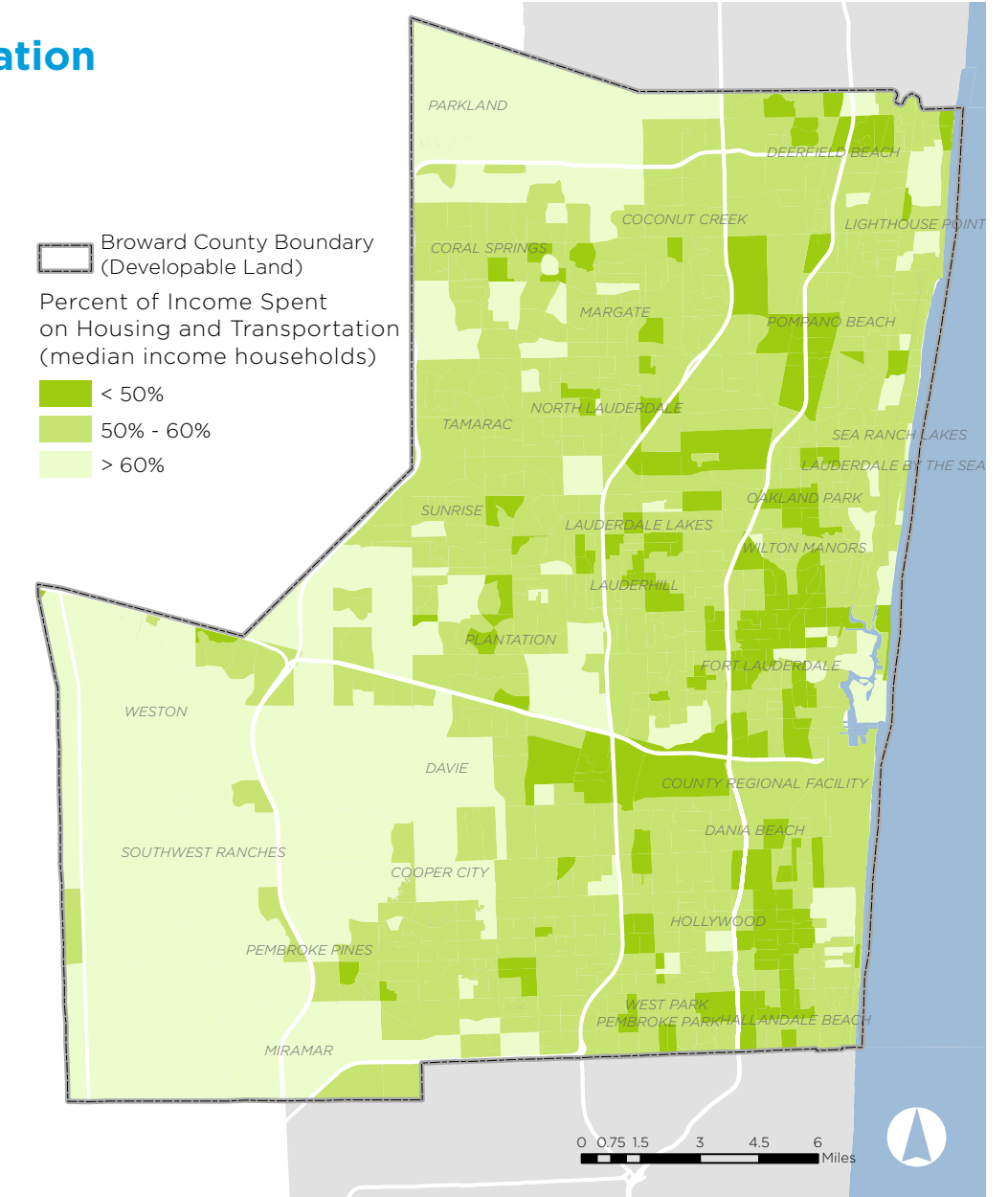
Source: LAI (Version 2.0), HUD

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 2018, 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.

ROADWAY MILEAGE BY FUNCTIONAL CLASS, BROWARD COUNTY, 2018

5,053 TOTAL ROADWAY MILES

- 1.6% INTERSTATE
- 1.1% TURNPIKE + EXPRESSWAY
- 5.5% PRINCIPAL ARTERIAL
- 6.0% MINOR ARTERIAL
- 6.5% MAJOR COLLECTOR
- 1.7% MINOR COLLECTOR
- 77.6% LOCAL

Source: FDOT

In 2018, 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 47.9 million.

DAILY VEHICLE MILES TRAVELED BY YEAR, BROWARD COUNTY, 2014-2018

million

Year	Value
2014	45.0
2015	45.7
2016	47.4
2017	47.7
2018	47.9
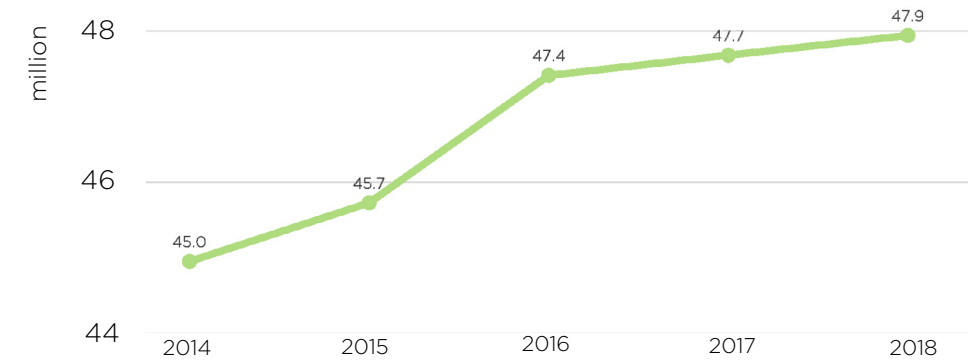
Source: FDOT

TOP FIVE TRANSPORTATION CORRIDORS WITH THE HEAVIEST TRAFFIC VOLUMES, BROWARD COUNTY, 2018

I-95 266,838 AADT*

I-595 168,512 AADT*

FLORIDA'S TURNPIKE 138,212 AADT*

I-75 176,500 AADT*
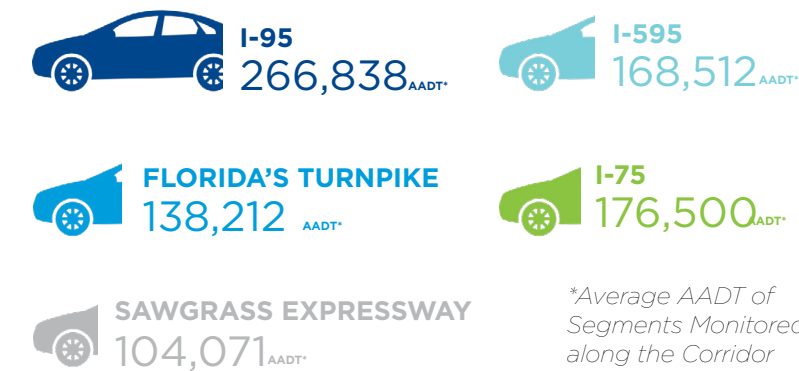
SAWGRASS EXPRESSWAY 104,071 AADT*

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, US-1 had the highest fatality rate (0.6%), and Sample Road had the highest severe injury rate (6.2%).

AVERAGE NUMBER OF CRASH PER MILE BY ROADWAY CORRIDORS, BROWARD COUNTY, 2013-2017

Corridor	Value
I-95	754
Oakland Park Blvd	682
Hallandale Beach Blvd	658
Sunrise Blvd	593
University Dr	586
NE 6th Ave	555
Pines Blvd	505
SR-7/US-441	503
Broward Blvd	480
Commercial Blvd	475
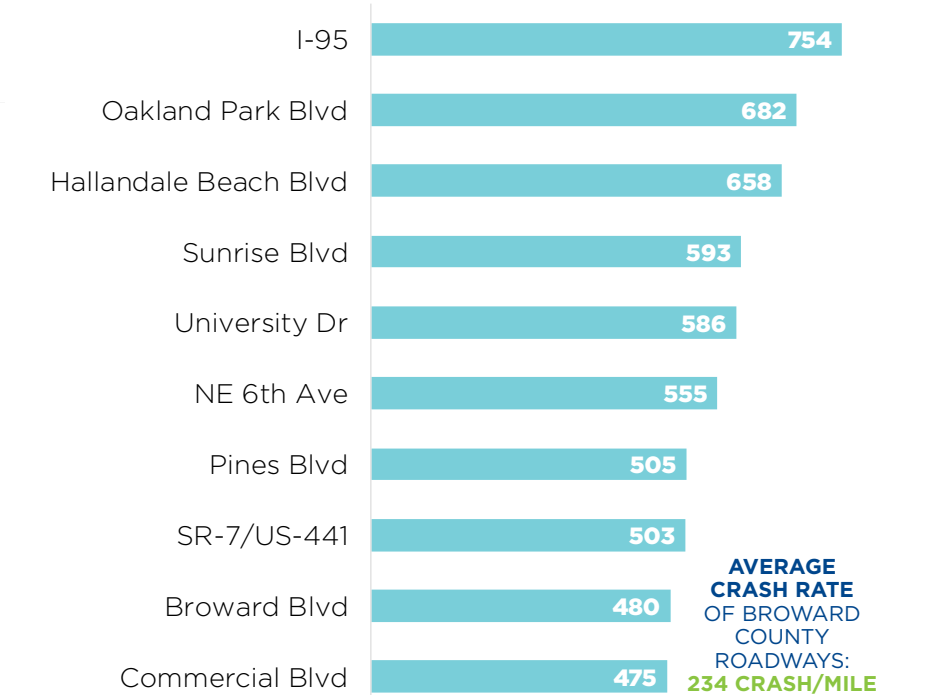
AVERAGE CRASH RATE OF BROWARD COUNTY ROADWAYS: 234 CRASH/MILE

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 = **56.8% Good**

Non-Interstate NHS Pavement Conditions
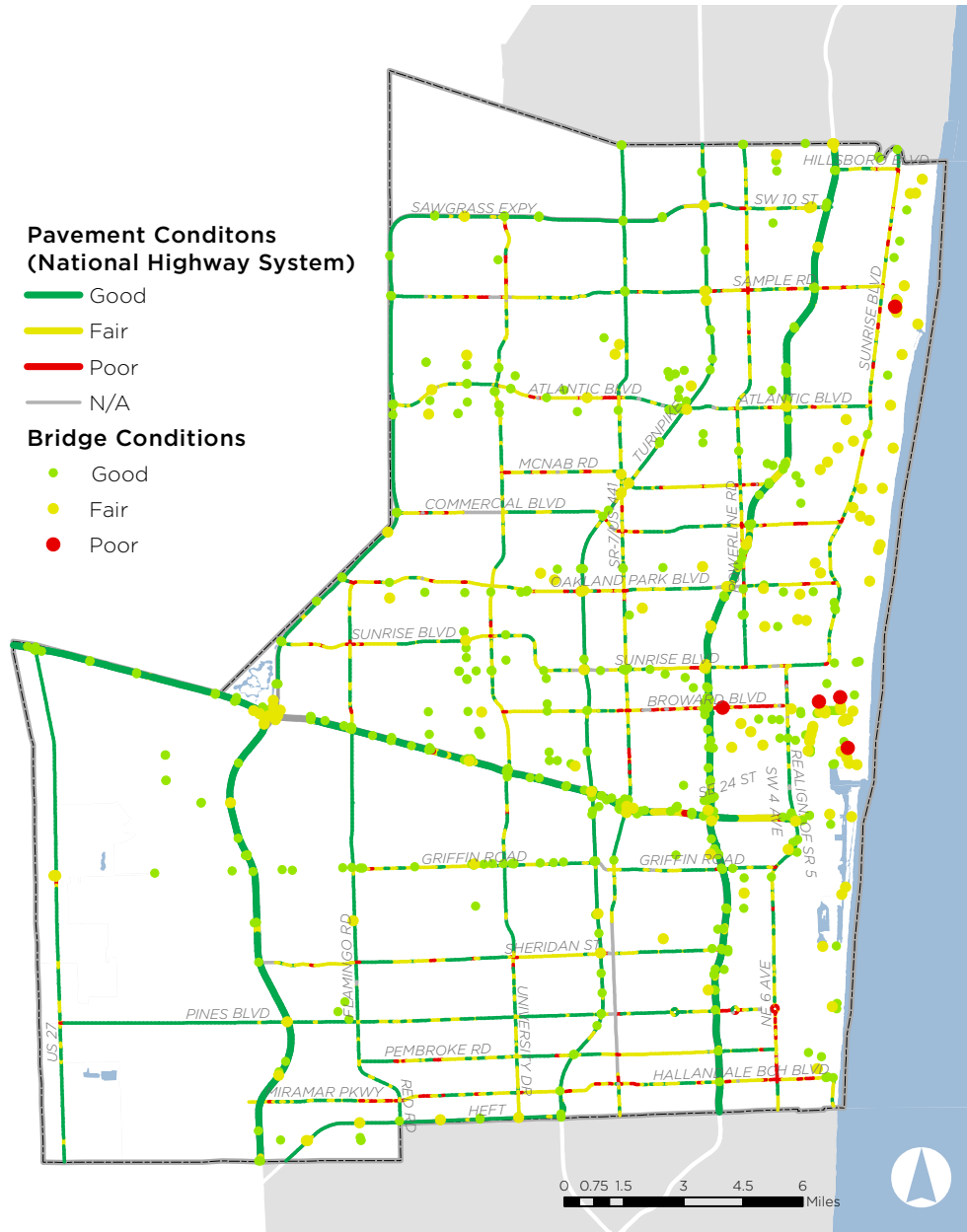Broward MPO 4-Year Target: **40%** of Lane Miles Rated as "Good"

☐ Current Conditions = **36.7% Good**

NHS Bridges
Broward MPO 4-Year Target: **60%** of Deck Area Rated as "Good"

☑ Current Conditions = **77.7% Good**

Source: FDOT (2018)

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
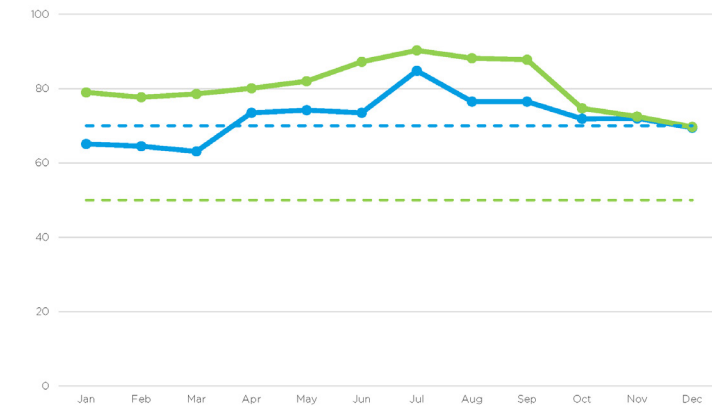
☐ Current Conditions = **73% Reliable**

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

☑ Current Conditions = **83% Reliable**

Source: FDOT (2017)

LEVEL OF TRAVEL TIME RELIABILITY, BROWARD COUNTY, 2018

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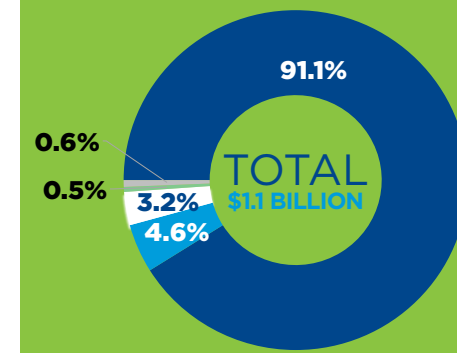
Source: FDOT

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 Metropolitan Transportation Plan (MTP) 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 current MTP, Commitment 2045 (Adopted 12, 2019), 75 roadway projects were selected for future investments,** worth a total of $5.2 billion. Compared to the FDOT projects that are under construction, Commitment 2045's projects focus on capacity expansion and reconstruction of non-interstate arterials.
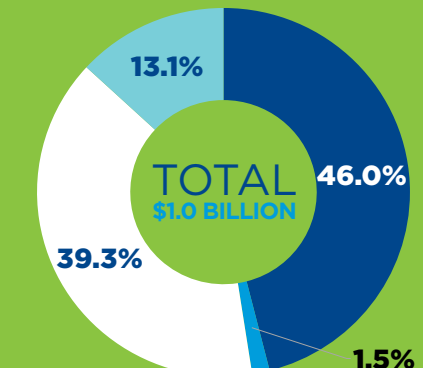
DISTRIBUTION OF COST BY TYPE FOR FDOT PROJECTS UNDER CONSTRUCTION, 2017

TOTAL $1.1 BILLION
- 91.1%
- 0.6%
- 0.5%
- 3.2%
- 4.6%

DISTRIBUTION OF COST BY TYPE FOR BROWARD MPO PROJECTS IN COMMITTMENT 2045 (ADOPTED DEC 12, 2019)

TOTAL $1.0 BILLION
- 13.1%
- 46.0%
- 1.5%
- 39.3%

- ■ CAPACITY EXPANSION
- ■ TRAFFIC MANAGEMENT
- ☐ RECONSTRUCTION
- ■ MAINENANCE
- ■ OTHER

Source: FDOT and Broward MPO

Transit

The transit system in Broward mainly consists of Broward County Transit (BCT; an urban bus system with paratransit service), Tri-Rail (a commuter rail line that serves about 3.1% of commuters in the area), Brightline (privately owned 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 International Airport with 71-miles of tracks including seven rail stations located in Broward.
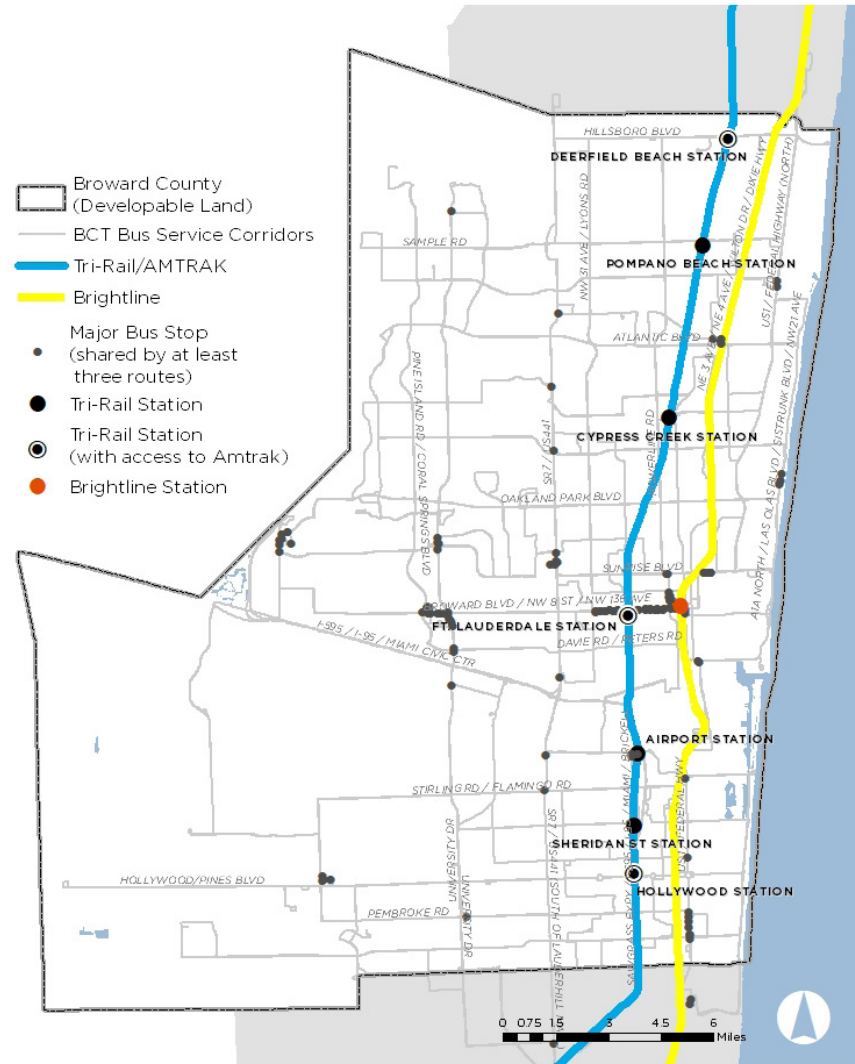
44 BUS ROUTES

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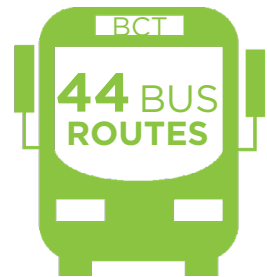
ONE COMMUTER RAIL LINE (TRI-RAIL)

ONE INTERCITY PASSENGER RAIL LINE (BRIGHTLINE)

ONE INTERSTATE PASSENGER RAIL LINE (AMTRAK)

7 TRI-RAIL
3 AMTRAK
1 BRIGHTLINE
STATIONS

Transit Systems in Broward County

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

HILLSBORO BLVD
DEERFIELD BEACH STATION
SAMPLE RD
POMPANO BEACH STATION
ATLANTIC BLVD
CYPRESS CREEK STATION
OAKLAND PARK BLVD
SUNRISE BLVD
FT LAUDERDALE STATION
BROWARD BLVD / NW 8ST / NW 1ST AVE
DAVIE RD / PETERS RD
AIRPORT STATION
STIRLING RD / FLAMINGO RD
SHERIDAN ST STATION
HOLLYWOOD/PINES BLVD
HOLLYWOOD STATION
PEMBROKE RD

0 075 15   45   6
                      Miles
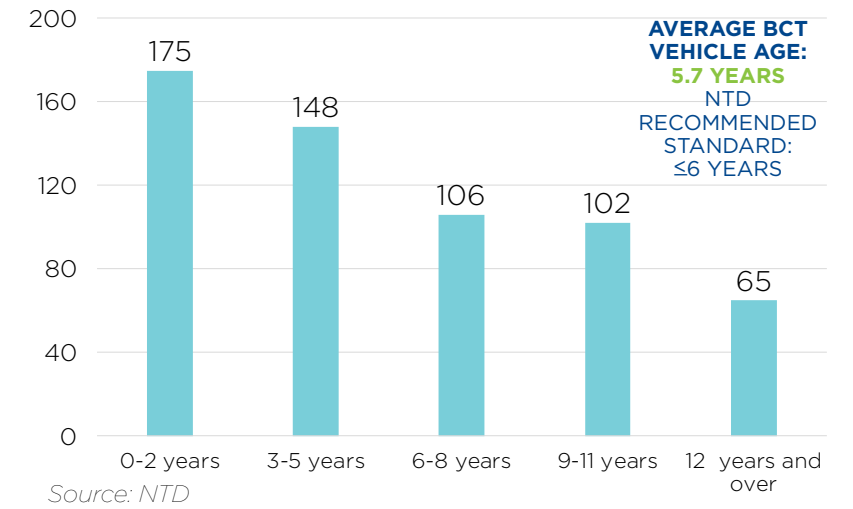
Source: FDOT and BTS

Per 2018 data, BCT operated a mixed fleet of 589 public and privately owned vehicles. Their vehicles available for maximum service (507 vehicles) had an average age of 4.8 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 9.2 mechanical breakdowns per vehicle in 2018, which was lower than its neighboring peer (Miami-Dade Transit, 11.2, and Palm Tran, 7.4).
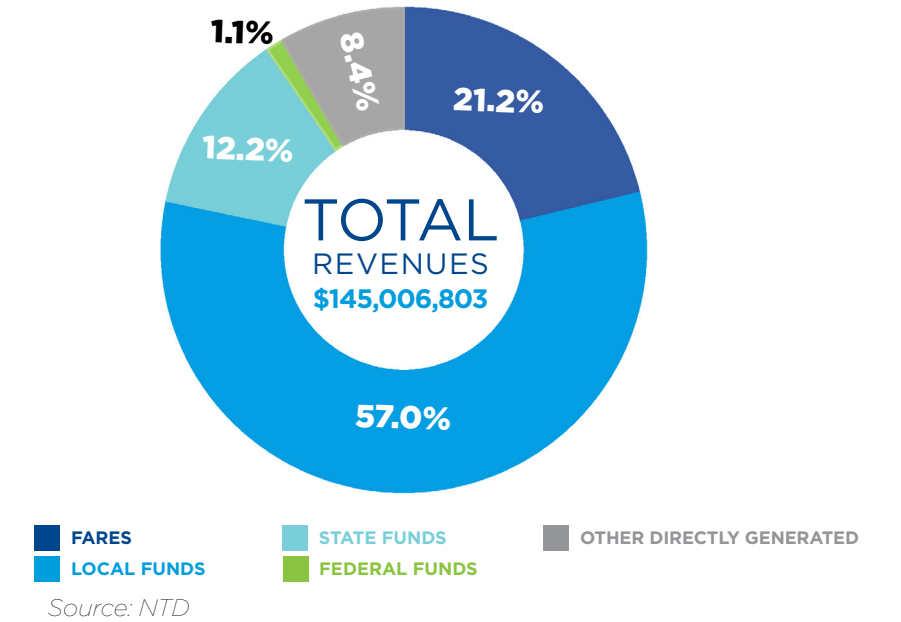
In the past five years, BCT's ridership has declined by 5.2%. In 2018, BCT recorded 28.6 million passenger trips. The average trip length was 5.4 miles/passenger trip. According to their financial reports, BCT had $143.6 million of total operating expenses. 51% of these expenses were from vehicle operations.

RIDERSHIP 28.6 MILLION PASSENGER TRIPS

AVERAGE TRIP LENGTH PER PASSENGER 5.4 MILES

NUMBER OF FLEET VEHICLE BY AGE, BCT, 2018

Age	Number
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, 2018

TOTAL REVENUES $145,006,803

- FARES — 21.2%
- LOCAL FUNDS — 57.0%
- STATE FUNDS — 12.2%
- FEDERAL FUNDS — 1.1%
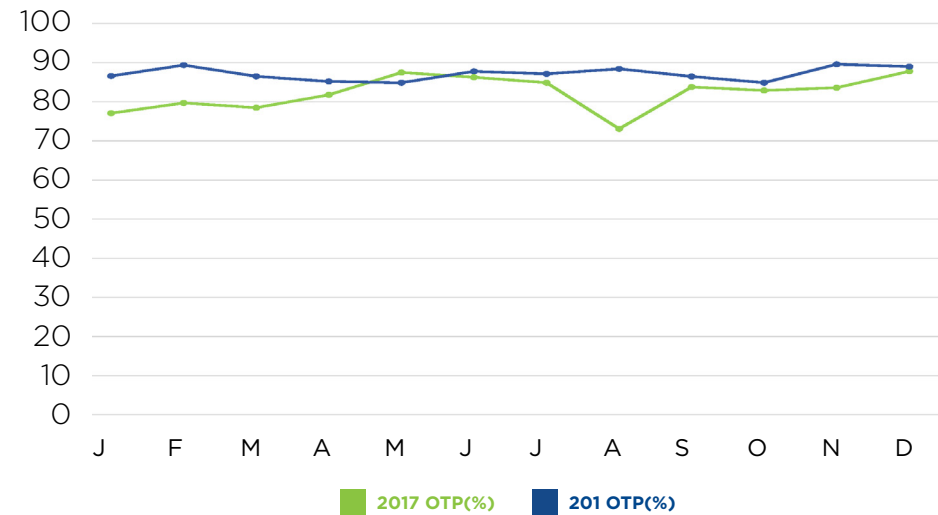- OTHER DIRECTLY GENERATED — 8.4%

Source: NTD

In 2018, 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: 28 miles/passenger trip).

Reliable commuting travel time ensures efficient transfers between modes. The average on-time performance (OTP; measured by the percentage of on-time services) of Tri-Rail was 93% in 2018, 7% higher compared to 2017. Common factors for service delays include regular facility maintenance, right-of-way conflicts with other track users, and mechanical breakdowns.

SFRTA had $99.6 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.
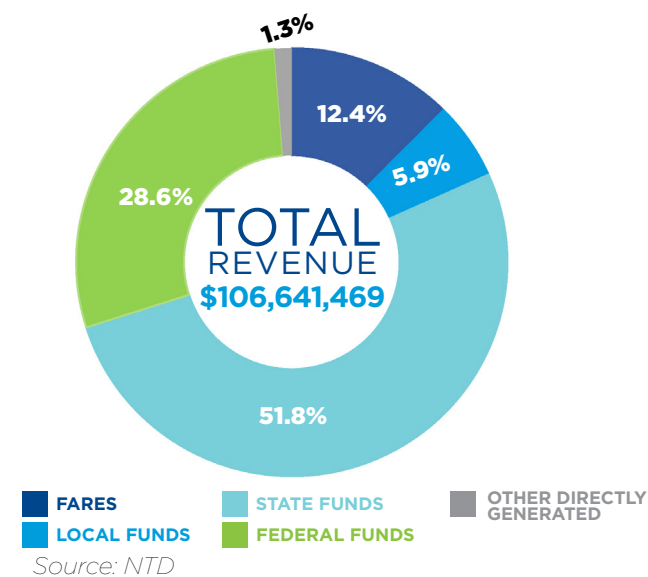
RIDERSHIP
4.3 MILLION
PASSENGER TRIPS

AVERAGE TRIP
LENGTH PER
PASSENGER
(ROUND TRIP)

28.0 MILES

TRI-RAIL ON-TIME PERFORMANCE (OTP) BY MONTH, 2017 AND 2018

Legend: 2017 OTP(%) · 201 OTP(%)

Source: SFRTA

SFRTA OPERATING REVENUE SOURCES, 2018

TOTAL REVENUE $106,641,469

1.3%
12.4%
5.9%
28.6%
51.8%

Legend: FARES · STATE FUNDS · OTHER DIRECTLY GENERATED · LOCAL FUNDS · FEDERAL FUNDS

Source: NTD

Transit Asset Management (TAM)

The Transit Asset Management rule from the Federal Transit Administration (FTA) became effective on October 1, 2016. The rule introduces requirements for new State of Good Repair (SGR) performance measures and Transit Asset Management (TAM) Plans. Transit agencies and MPOs are required to set targets on a yearly basis.
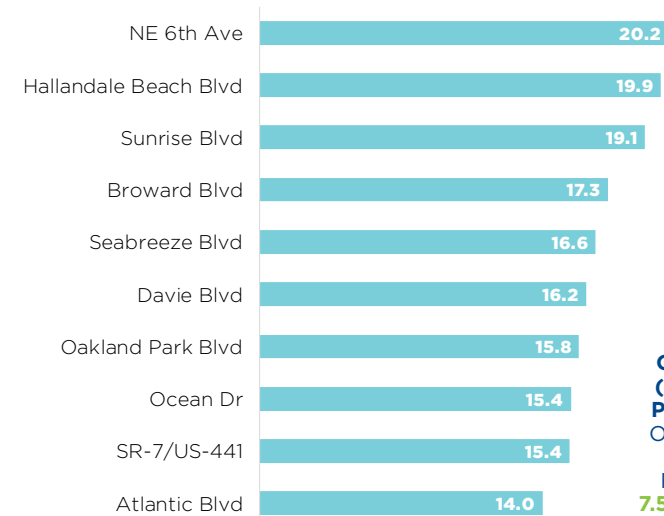
Performance Measure	Asset Class/Type	Useful Life Benchmark (ULB)	Adopted Regional Targets
Rolling Stock- Percentage of Revenue Vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Cutaway Bus (CU)	10 years	0%
	Paratransit Mini Bus (MV)	8 years	0%
	40 Foot Bus (BU)	14 years	15%
	60 Foot Articulated Bus (AB)	14 years	0%
	45 Foot Bus (BR)	14 years	0%
	Commuter Rail Locomotive (RL)	39 years	0%
	Commuter Rail Passenger Coach (RP)	39 years	0%
	Commuter Rail self-propelled passenger car (RS)	39 years	0%
Equipment- Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their (ULB)	All non-revenue vehicles	8 years	0%
	Other rubber tire vehicles	14 years	0%
Facilities- Percentage of facilities rated below Condition 3 on the FTA Transit Economic Requirements Model (TERM)	Passenger, maintenance, parking and administrative facilities	Condition Rating 3.0	30%
Infrastructure- Percentage of track segments with performance restrictions	Rail fixed guideway, track and signals	Performance Restrictions	8%

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 2018, there were 9,290 crashes in Broward County that involved bicyclists and pedestrians. 4.1% of them had at least one fatality, which means the odds of having a fatality in a bicycle or pedestrian crash is higher than any other type of crash.
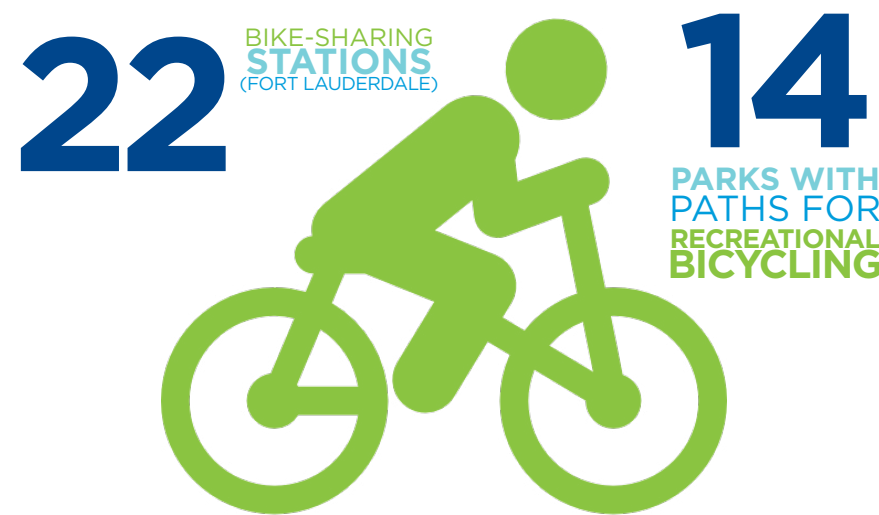
A good transportation system should be planned and designed for all users. In recent years, state, county, and local governments have been working to improve bicycle and pedestrian facilities in Broward County. In 2017, 49.7% of roadways featured sidewalks, and 5% had installed designated bike lanes.

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

Corridor	Crashes per mile
NE 6th Ave	20.2
Hallandale Beach Blvd	19.9
Sunrise Blvd	19.1
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 CRASH/MILE

Source: FDOT

2,511 TOTAL MILES OF SIDEWALKS

254 TOTAL MILES OF BIKE LANES

88.6 TOTAL MILES OF GREENWAYS

22 BIKE-SHARING STATIONS (FORT LAUDERDALE)

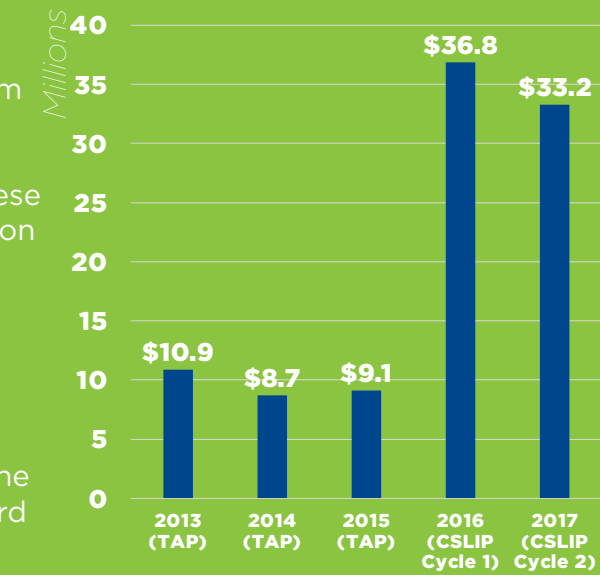**14 PARKS WITH PATHS FOR RECREATIONAL BICYCLING**

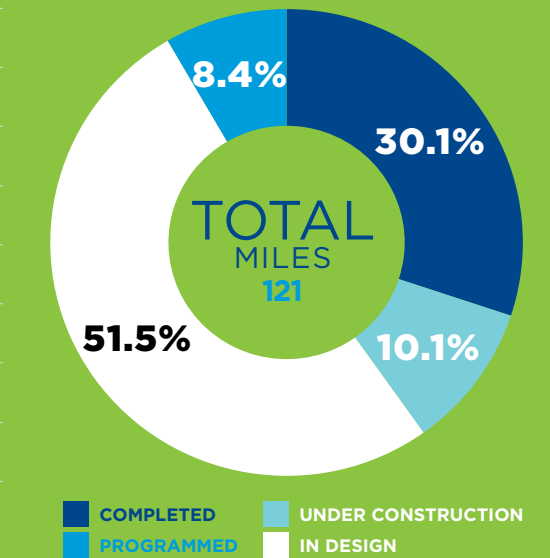## Existing Planning Efforts (Biking & Pedestrian)

Between 2014 and 2018, the Broward MPO's Transportation Alternative Program (TAP) and Complete Streets and Other Localized Initiatives Program (CSLIP; the replacement for TAP) helped fund 47 smaller, non-regionally significant transportation projects. These projects cost approximately $100 million of total capital expenses.

The Broward 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.
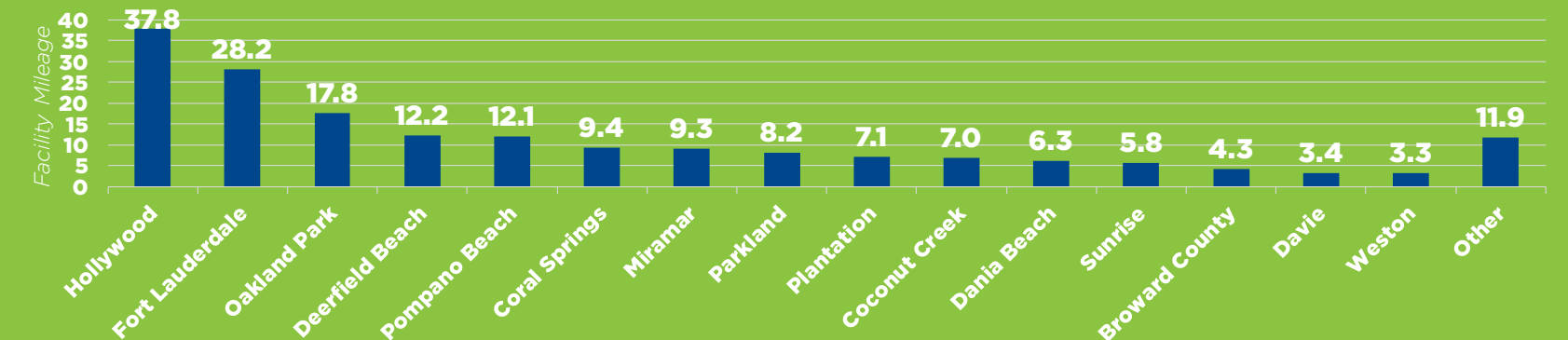
TAP AND CSLIP PROJECT COSTS BY YEAR, BROWARD MPO

Year	Cost (Millions)
2013 (TAP)	$10.9
2014 (TAP)	$8.7
2015 (TAP)	$9.1
2016 (CSLIP Cycle 1)	$36.8
2017 (CSLIP Cycle 2)	$33.2

STATUS OF MOBILITY PROJECT MILEAGE, BROWARD MPO, 2018

TOTAL MILES 121

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

Legend:
- COMPLETED
- PROGRAMMED
- UNDER CONSTRUCTION
- IN DESIGN

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

Municipality	Facility Mileage
Hollywood	37.8
Fort Lauderdale	28.2
Oakland Park	17.8
Deerfield Beach	12.2
Pompano Beach	12.1
Coral Springs	9.4
Miramar	9.3
Parkland	8.2
Plantation	7.1
Coconut Creek	7.0
Dania Beach	6.3
Sunrise	5.8
Broward County	4.3
Davie	3.4
Weston	3.3
Other	11.9

![Airplane icon] **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 approximately 713,000 flights (departures and arrivals) in 2018.

In 2018, Fort Lauderdale-Hollywood International Airport (FLL) ranked 18th among all major U.S. airports with 36.0 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 2014 and 2018 (46% increase).

FLL AIR TRAFFIC, 2018

PASSENGERS

Domestic	27,355,007
International	8,608,363
Arrival	18,307,046
Departure	17,656,324

AIR CARGO
547.6 lb. of landed weight

Source: BTS

NUMBER OF FLIGHTS BY MAJOR AIR FIELDS IN BROWARD COUNTY, 2018

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT
275,508

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: 38.2, 41.2, 40.9, 44.1, 45.0
FLL: 24.6, 26.9, 29.2, 32.5, 36.0
PBI: 5.8, 6.2, 6.2, 6.3, 6.5
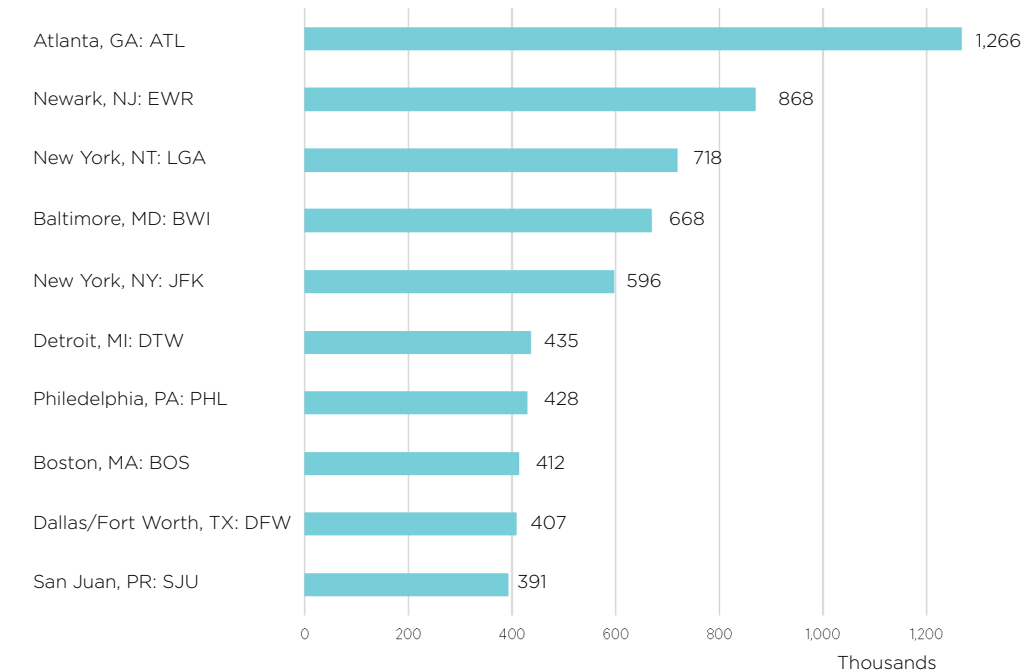
Legend: MIA, FLL, PBI
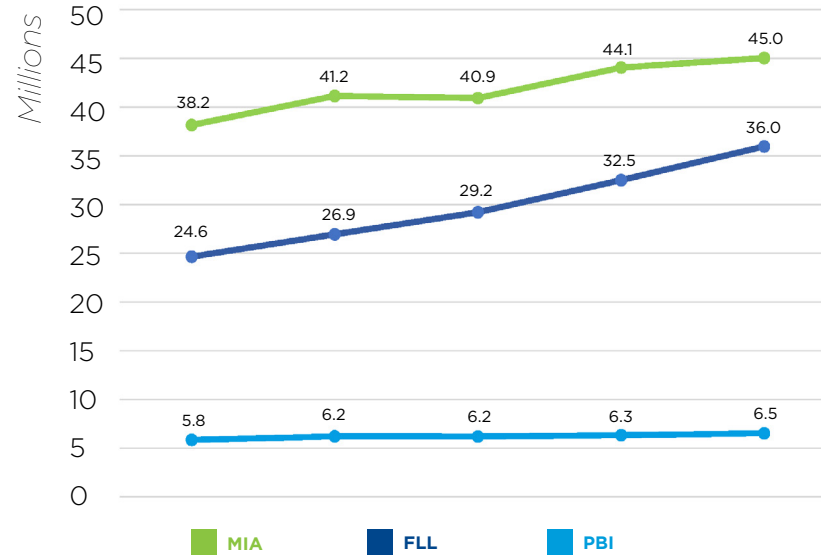
Source: BTS

In 2018, Hartsfield–Jackson Atlanta International Airport (ATL) receives 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 77% (ranked 25th in the nation) with an average delay of 65.3 minutes (ranked 16th in the nation).
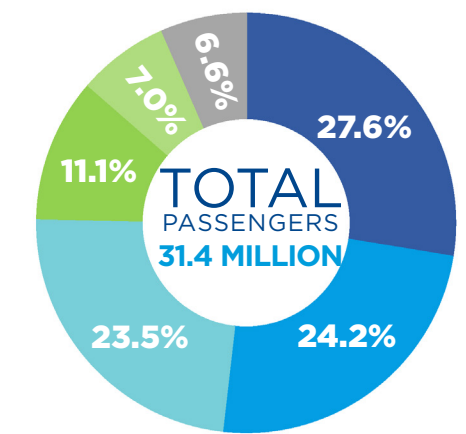
In 2018, FLL's operating revenue reached $284.7 million, 54% of which were from passenger airline revenues, and parking and ground transportation. FLL's annual operating expense was $175.8 million.

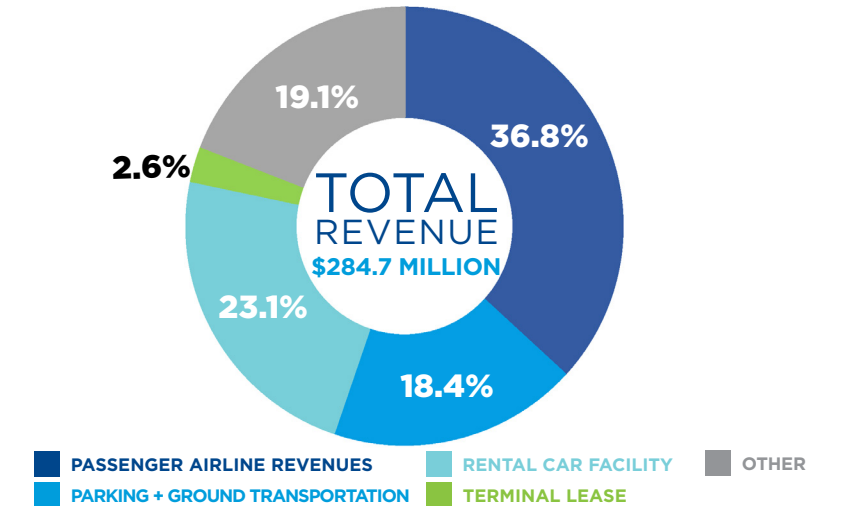### TOP 10 DESTINATIONS (FOR FLIGHTS DEPARTING FROM FLL) BY NUMBER OF PASSENGERS, 2018

Destination	Passengers (Thousands)
Atlanta, GA: ATL	1,266
Newark, NJ: EWR	868
New York, NT: LGA	718
Baltimore, MD: BWI	668
New York, NY: JFK	596
Detroit, MI: DTW	435
Philadelphia, PA: PHL	428
Boston, MA: BOS	412
Dallas/Fort Worth, TX: DFW	407
San Juan, PR: SJU	391

Source: BTS

NUMBER OF PASSENGERS BY AIRLINE, FLL, 2018

TOTAL PASSENGERS 31.4 MILLION

27.6%, 24.2%, 23.5%, 11.1%, 7.0%, 6.6%

Legend: JETBLUE, SPIRIT, UNITED, SOUTHWEST, DELTA, AMERICAN

FLL OPERATING REVENUE SOURCES, 2018

TOTAL REVENUE $284.7 MILLION

36.8%, 18.4%, 23.1%, 2.6%, 19.1%

Legend: PASSENGER AIRLINE REVENUES, RENTAL CAR FACILITY, OTHER, PARKING + GROUND TRANSPORTATION, TERMINAL LEASE
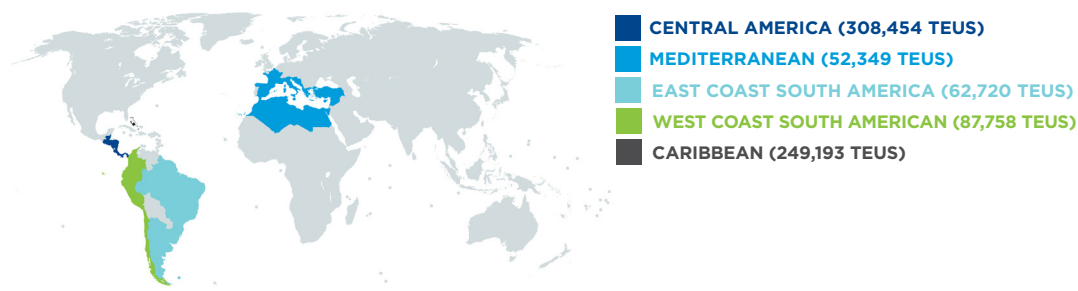
Source: BTS

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 2018, Ranked Port Everglades was considered the 18th largest container port in the nation, serving 7.4 million tons of containerized cargo and 18.5 million tons of petroleum and other cargo. Port Everglades' operating revenue was $167.9 million, and operating expense was $103.9 million.
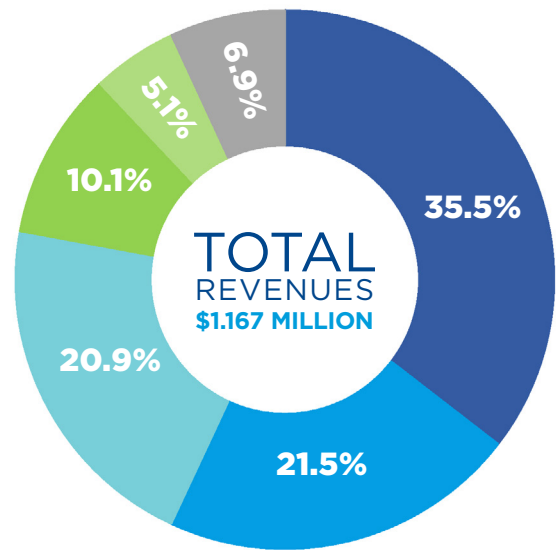
TOP 5 MARKETS OF CONTAINERIZED CARGO

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

TOP 5 COMMODITIES OF CONTAINERIZED CARGO

APPAREL	MACHINERY	FOOD PRODUCTS	BEVERAGES	MOTOR VEHICLES
64,398 TEUS	60,883 TEUS	55,620 TEUS	38,502 TEUS	44,253 TEUS

Source: Port Everglades

TOTAL SHIP CALLS
4,214
(2014-2018 growth: 6.2%)

TOTAL CRUISE PASSENGERS
3.9 million
(2014-2018 growth: -3.3%)

TOTAL CARGO MOVEMENTS
25.7 million tons
(2014-2018 growth: 10.6%)

PORT EVERGLADES OPERATING REVENUE SOURCES, 2018

TOTAL REVENUES $1.167 MILLION

- 35.5%
- 21.5%
- 20.9%
- 10.1%
- 5.1%
- 6.9%

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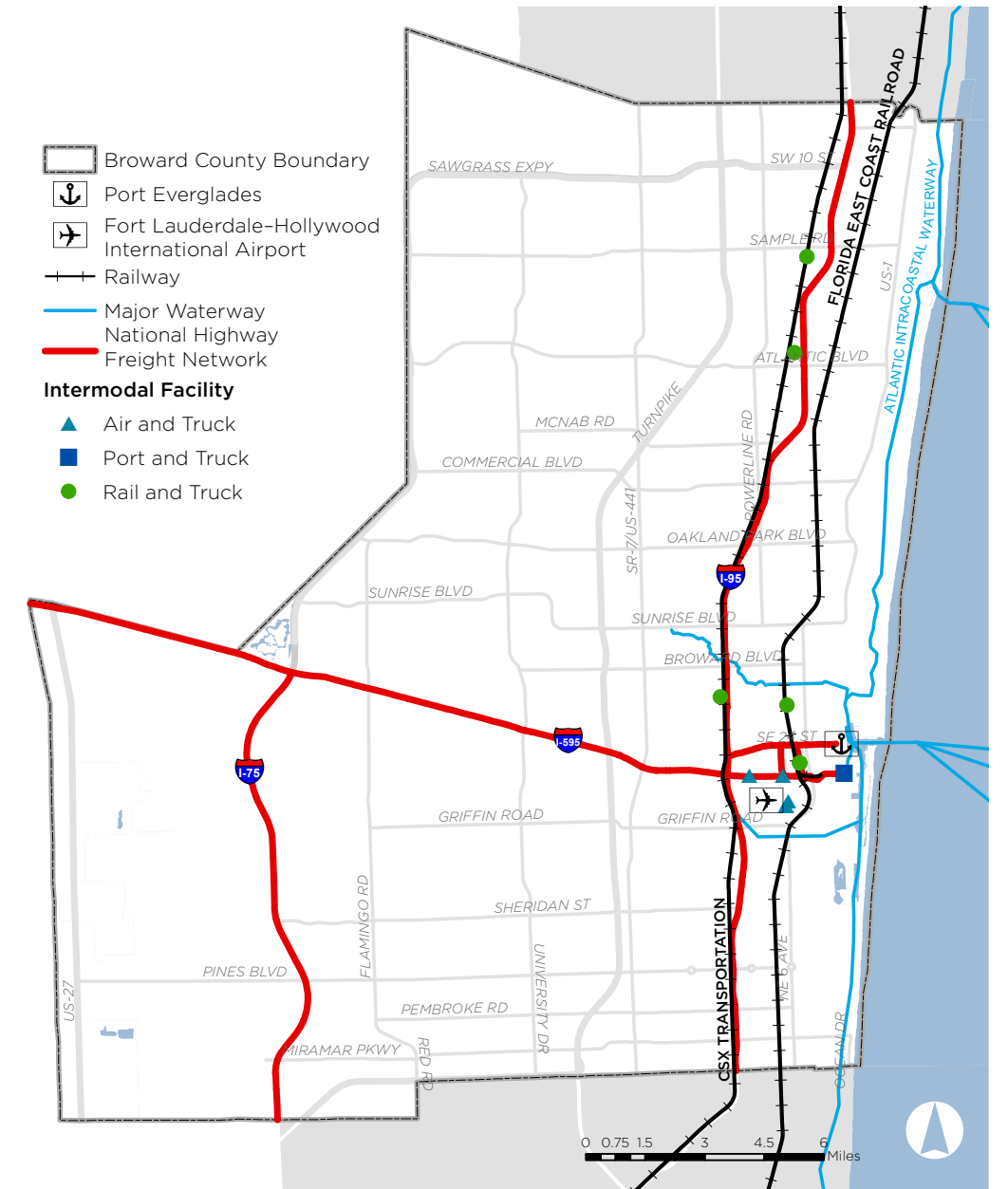- REAL ESTATE
- OTHER

Land Freight

Broward County freight network consists of the roadways for trucks and railways for freight trains. Various intermodal and transload 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	9.1%
I-95	5.2%
I-75	8.7%
SAWGRASS EXPRESSWAY	5.5%
I-595	6.3%

Source: FDOT

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

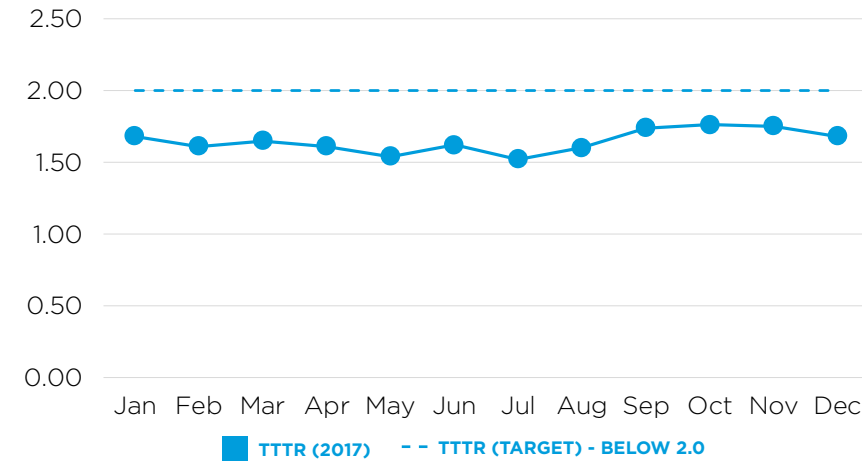Intermodal Facility
- Air and Truck
- Port and Truck
- Rail and Truck

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 2018, the average TTTR was 1.6, which met the Broward MPOs' 4-year target (i.e., below 2.0).

## TRUCK TRAVEL TIME RELIABILITY (TTTR) INDEX, BROWARD COUNTY, 2018

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 2015 and 2017, the rail freight system had 36 grade crossing accidents that were reported by rail freight providers

50.5
MILES OF
RAIL TRACKS

80
RAILWAY GRADE CROSSINGS

RAILWAY GRADE CROSSING CRASHES BY REPORTING AGENCY/COMPANY, 2014-2018
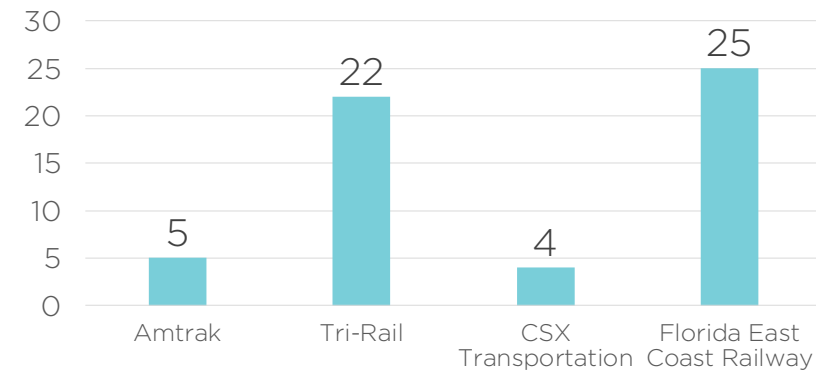
Source: FRA

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 worked with FEC, CSX, Brightline, Tri-Rail and eight Broward municipalities to create the Quiet Zone. This effort was meant to decrease noise levels from train horns throughout local communities. 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 has been implemented. This Quiet Zone is the largest continuous quiet zone in the country.

APPENDIX

Glossary of Terms

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.

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.

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

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

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.

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.

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.

Twenty-Foot Equivalent Unit (TEU) — TEU is an 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/

Broward MPO

Metropolitan Planning Organization

Move People & Goods | Create Jobs | Strengthen Communities

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