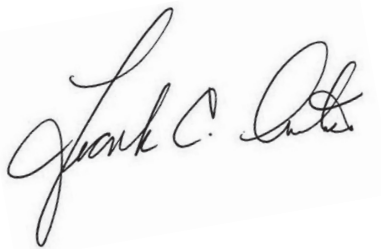


STATE OF THE SYSTEM REPORT

Last year, the Broward MPO celebrated ten years as a separate agency from the county. This year, we have begun to shift our focus and cultivate a vision for the future of Broward. This report created by MPO staff gives **a valuable and unique perspective on our region’s transportation landscape.** On behalf of the Broward MPO, it is my pleasure to share the “State of the System” report with you.

Since this report’s conception in 2018, it has become a tool that vividly captures the Broward MPO’s current planning and programming, and it helps shape the future vision of Broward. Ultimately, it propels us to achieve our mission- to collaboratively plan, prioritize, and fund the delivery of diverse transportation options.

The State of the System Report aids as an annual snapshot of work done by the Broward MPO that will inform the decision-making process as we work to make Broward a great place to live, work, and play for generations to come.



Frank Ortis
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.



“ Ultimately, it [the Report] propels us to achieve our mission- to collaboratively plan, prioritize, and fund the delivery of diverse transportation options. ”

“ This report will inform the decision-making process in our effort to develop, fund, and track projects more effectively in the future. ”



CONTENTS









INTRODUCTION

	Purpose and Approach	1
	Key Components of the Transportation System	2

OVERVIEW OF THE REGION

	Land Use and Population	3
	Employment	4
	Housing	5
	Commuting	5
	Housing + Transportation Affordability	6

SYSTEM CONDITIONS AND FACTS

	Roadway	7
	Transit	11
	Transit Asset Management	14
	Public Transportation Agency Safety Plan (PTASP)	15
	Biking and Pedestrian	16
	Airports	18
	Seaport and Waterway	20
	Land Freight	21

APPENDIX

Glossary of Terms	23
Summary of Data Sources	24

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 2019 American Community Survey (ACS) 5-Year Estimates Profile¹ 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.

¹For 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

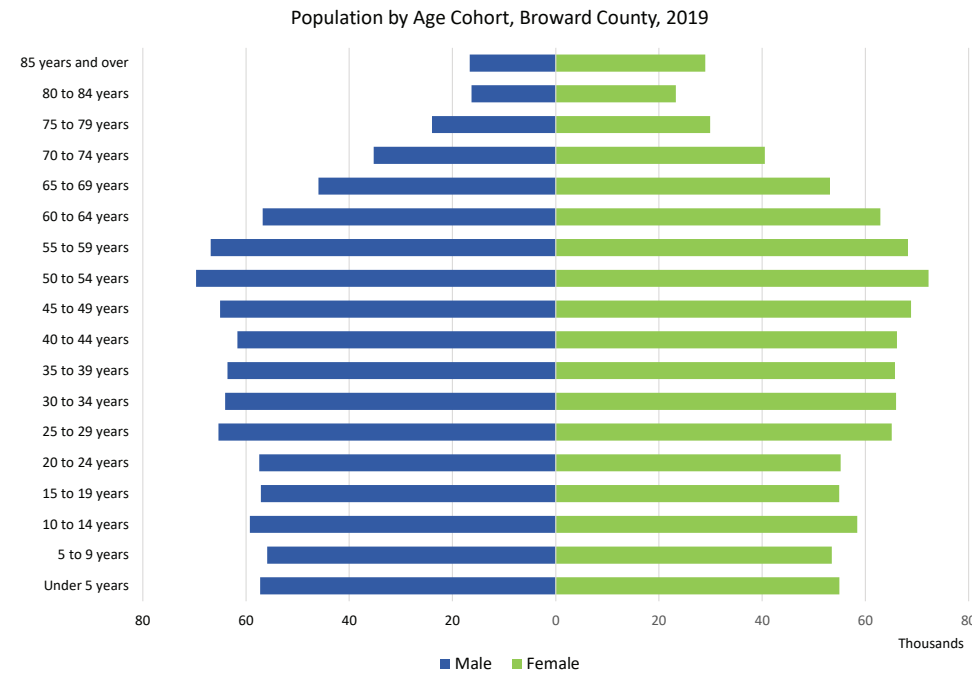
- Freight Railways
- National Freight Highway Network
- Intermodal and Transload Facilities
- Truck Parking Facilities



Land Use and Population

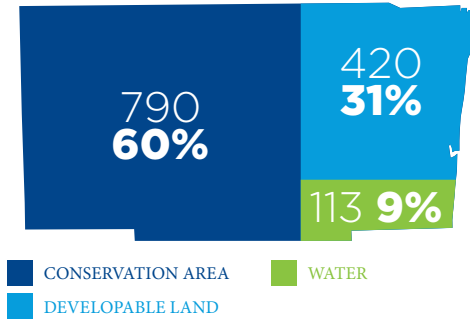
Broward County is growing rapidly. **Since 2010, the population has increased by 1.1% annually and was estimated to be 1.93 million in 2019** (1.73 million in 2010). The chart below shows the 2019 population by age cohort. Among the 31 municipalities in the County, Fort Lauderdale, Pembroke Pines, Hollywood, Miramar, and Coral Springs are the top 5 populated cities.

POPULATION BY AGE COHORT, BROWARD COUNTY, 2019



Source: U.S. Census 2019 ACS 5-Year Estimates

TOTAL AREA OF BROWARD COUNTY (SQUARE MILES)



DEVELOPABLE AREA 2045 LAND USE



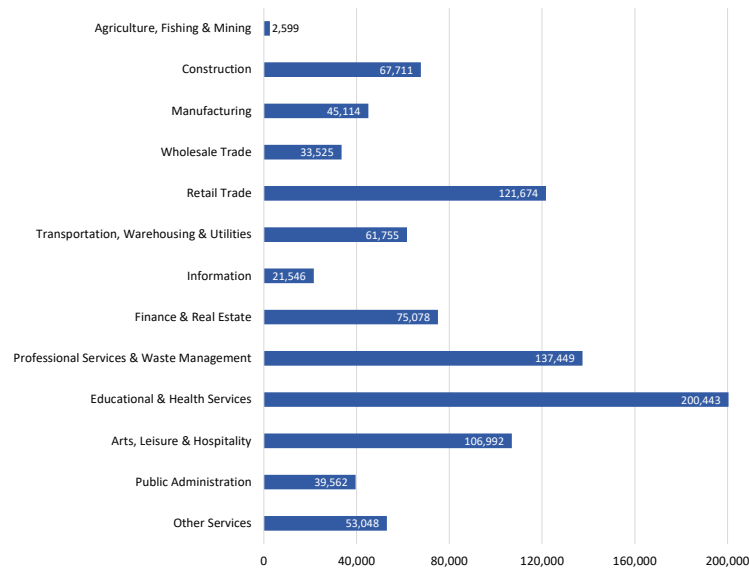
Source: Broward County Land Use Plan (Amendment 2018)



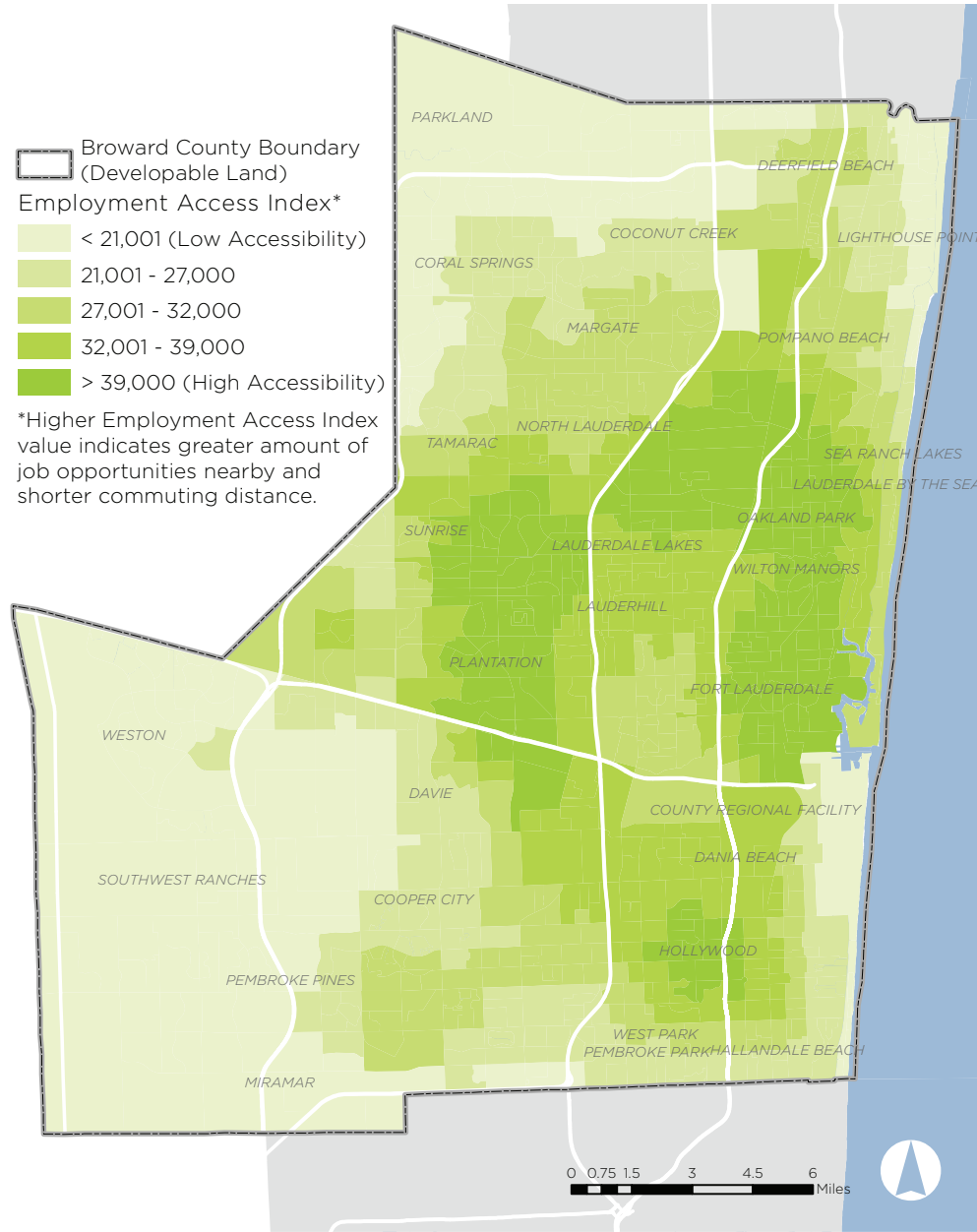
Employment

Approximately 967,000 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, 2019



Source: U.S. Census 2019 ACS 5-Year Estimates



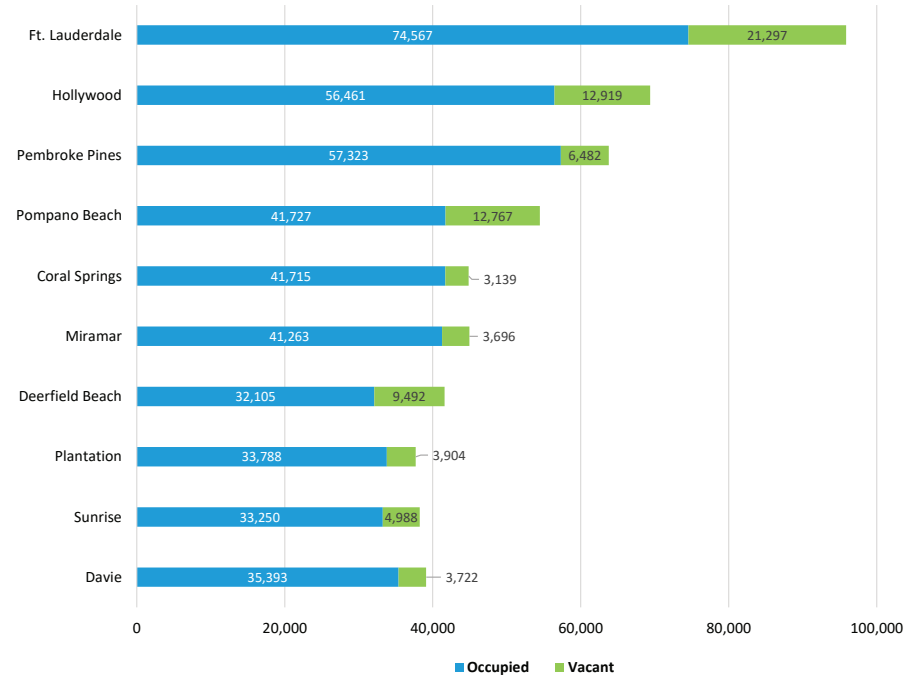
Source: LAI (Version 2.0), HUD



Housing

Broward County contains an estimated 823,000 housing units, with an average density of 1,959 units per square mile. **16.2% 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, 2019



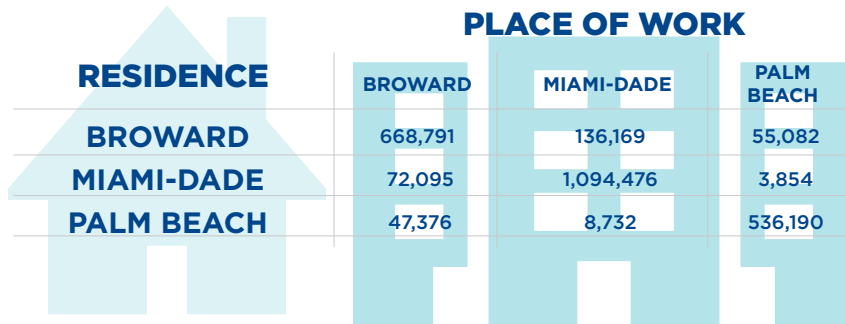
Source: U.S. Census ACS 2019 5-Year Estimates



Commuting

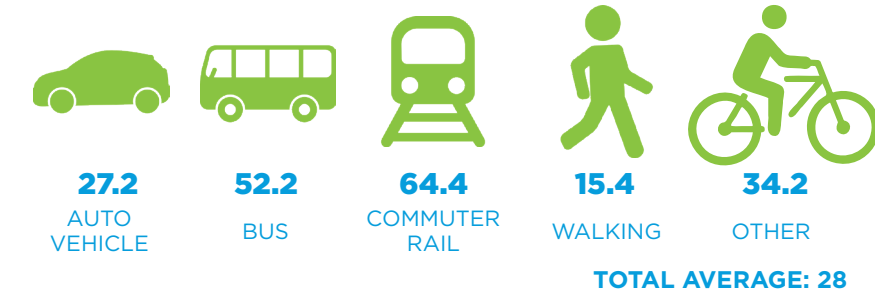
Broward County has 948,166 residents commuting within the region (South Florida) including 78% working in Broward, 16% working in Miami-Dade, and 6% working in Palm Beach. **Approximately, 87% of commuters rely on a personal automobile or carpool to get to work. On average, people spent 28 minutes commuting to work per trip in 2019.**

COMMUTING FLOW IN SOUTH FLORIDA



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

COMMUTING TIME (AVERAGE MINUTES) BY MODE

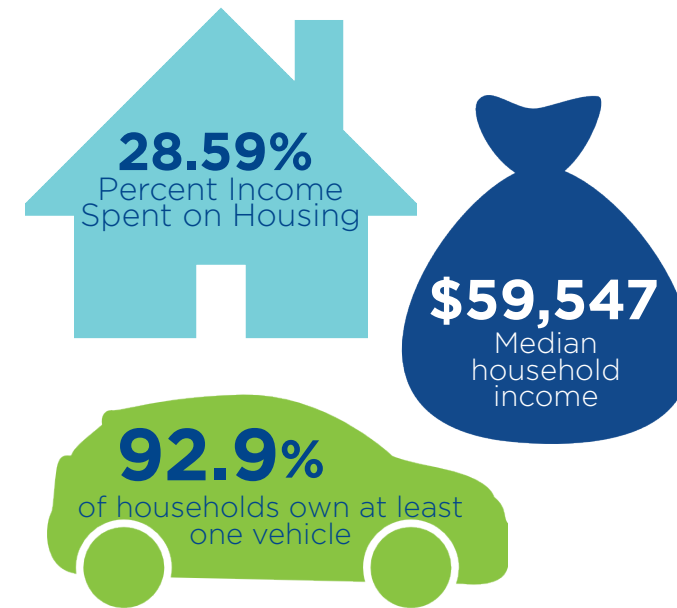


Source: U.S. Census ACS 2016 5-Year Estimates

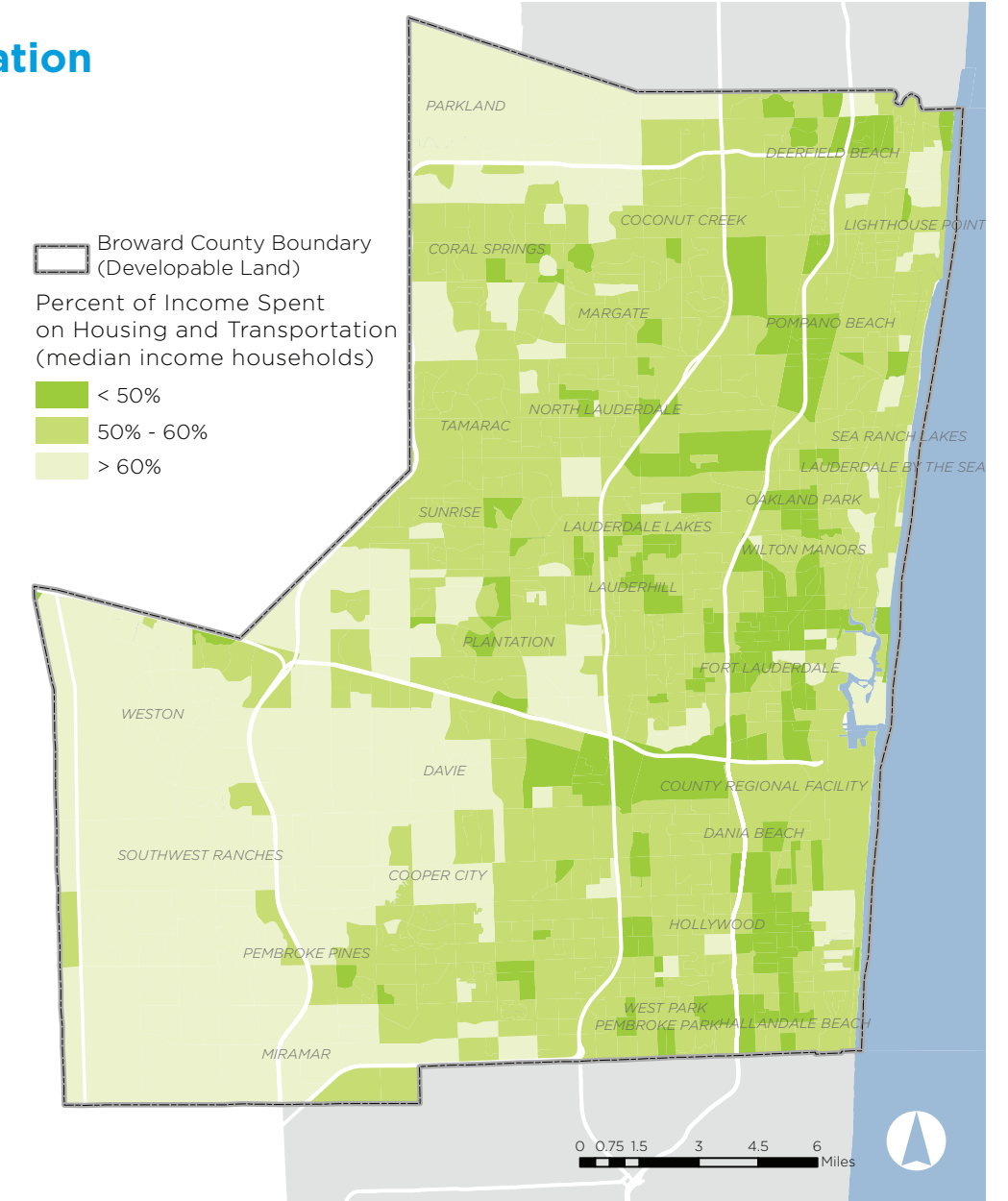


Housing and Transportation Affordability

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.



Source: U.S. Census 2019 ACS 5-Year Estimates



Source: LAI (Version 2.0), HUD

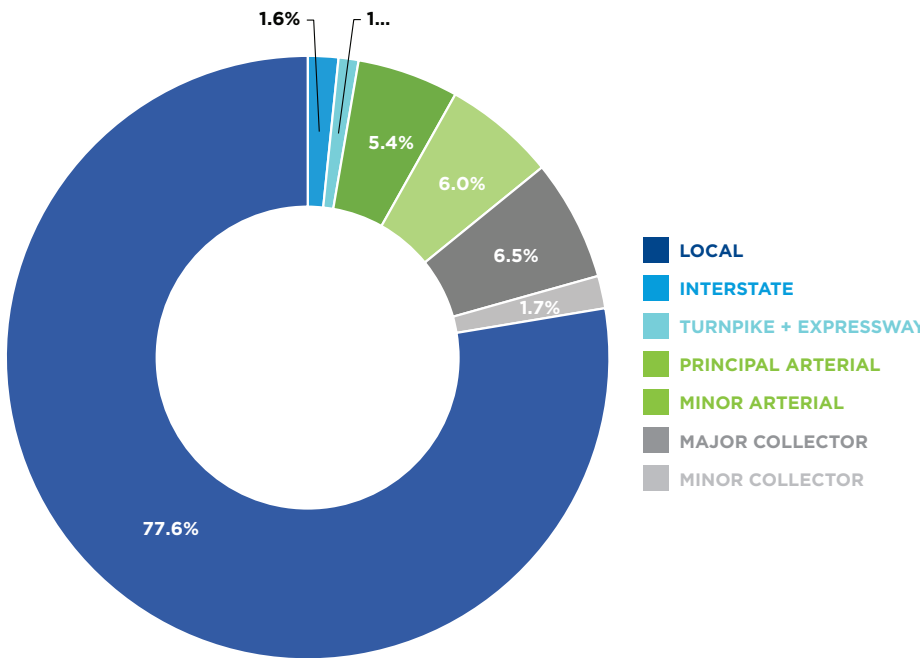


Broward County residents rely heavily on auto-oriented transportation, which creates demand for a well-designed, efficiently managed, and regularly maintained roadway system. In 2019, there were approximately 5,083 miles of roadways throughout the County which FDOT, Broward County, and the local municipalities maintained.

5,083
TOTAL
ROADWAY
MILES

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.

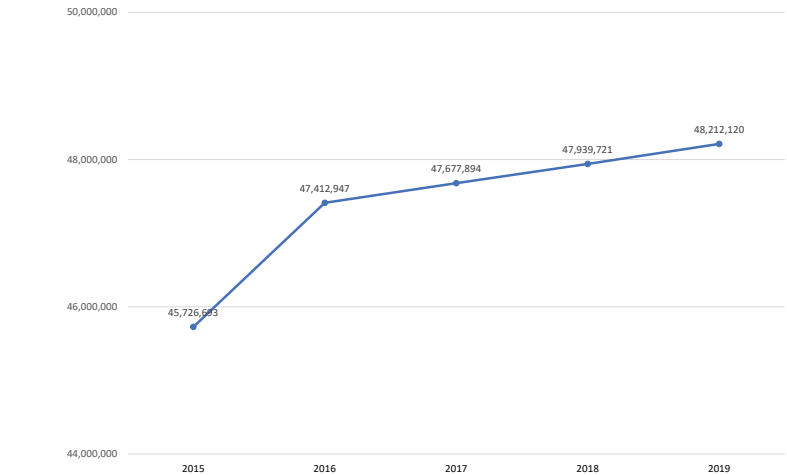
ROADWAY MILEAGE BY FUNCTIONAL CLASS, BROWARD COUNTY, 2019



Source: FDOT

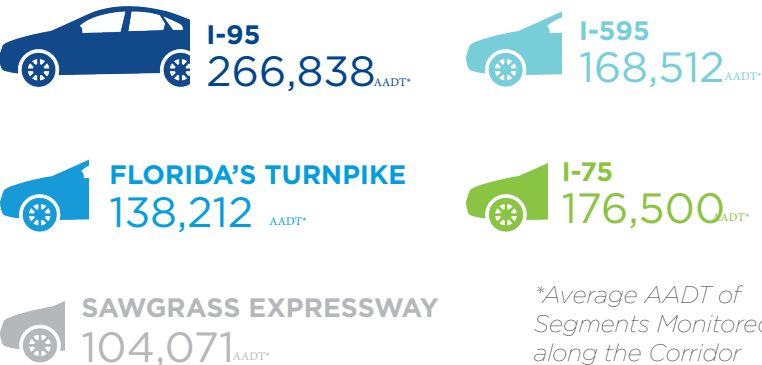
In 2019, Broward County ranked second in Florida for vehicle-based trips, and it was reported that the daily vehicle miles traveled (DVMT) on public roads reached 48.2 million.

DAILY VEHICLE MILES TRAVELED BY YEAR, BROWARD COUNTY, 2015-2019



Source: FDOT

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



Source: FDOT

*Average AADT of Segments Monitored along the Corridor

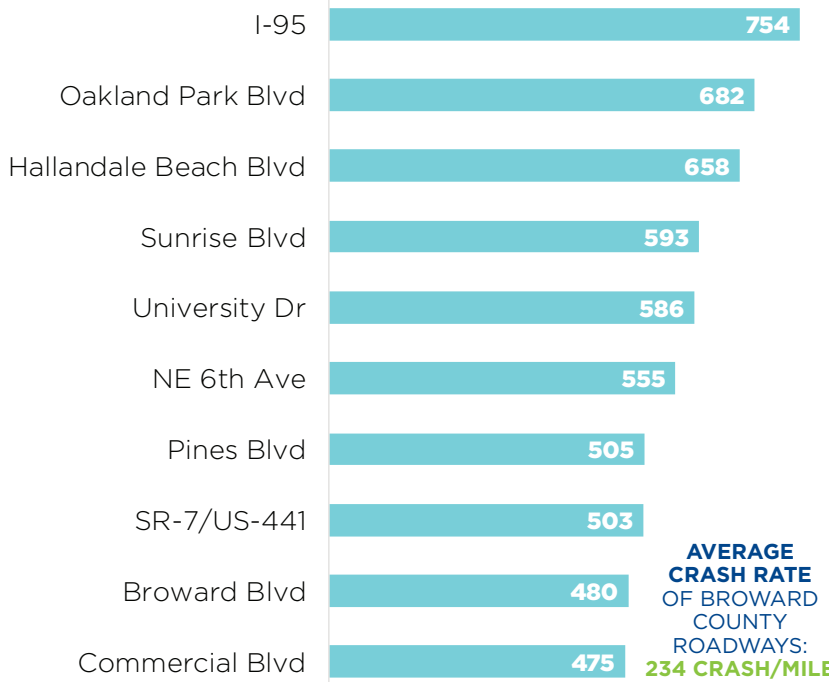
Roadway Safety Profiles

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



Source: FDOT

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

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 = 76.8% Good

Non-Interstate NHS Pavement Conditions

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

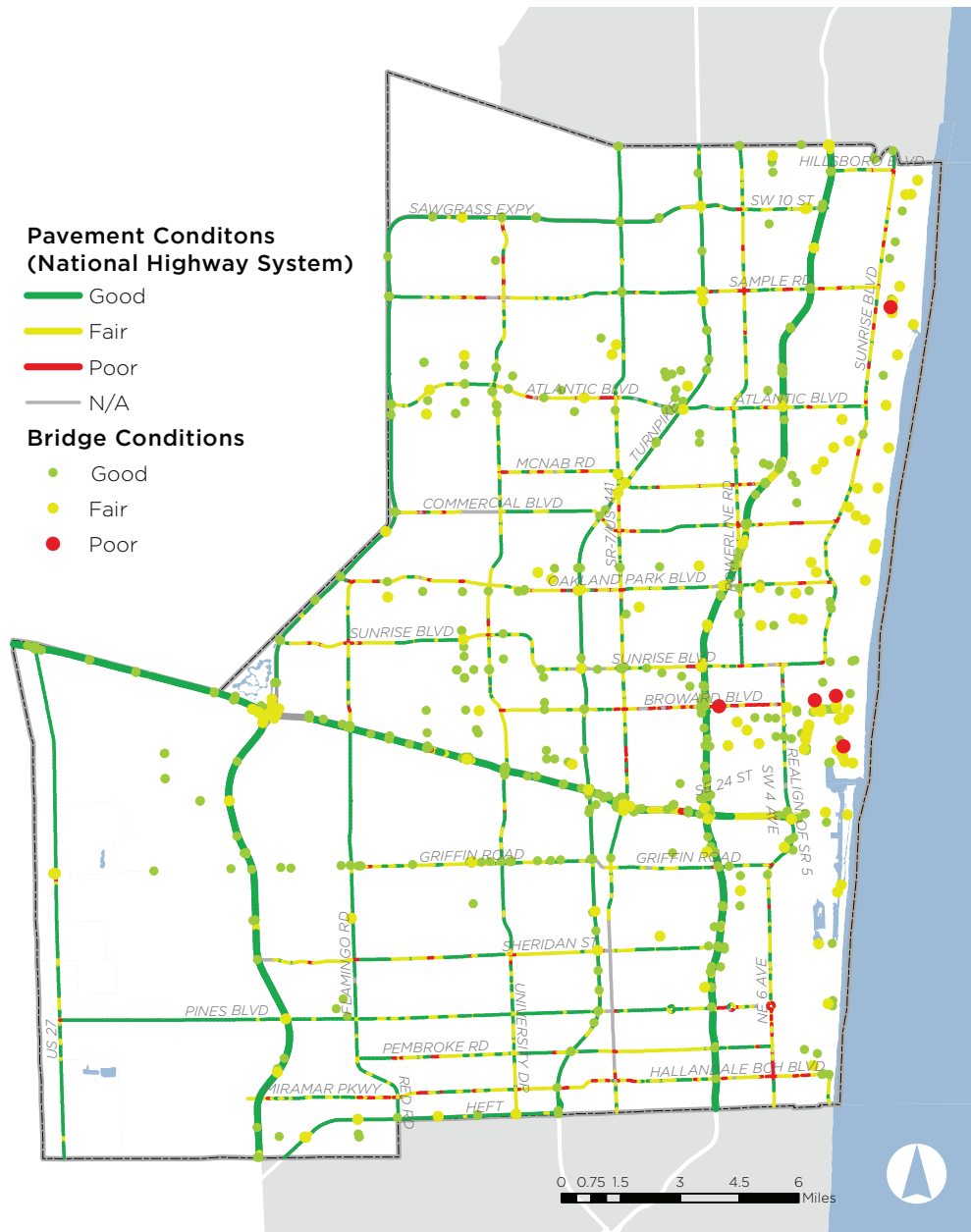
Current Conditions = 35.9% Good

NHS Bridges

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

Current Conditions = 77.9% Good

Source: FDOT (2019)



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 = 77% Reliable

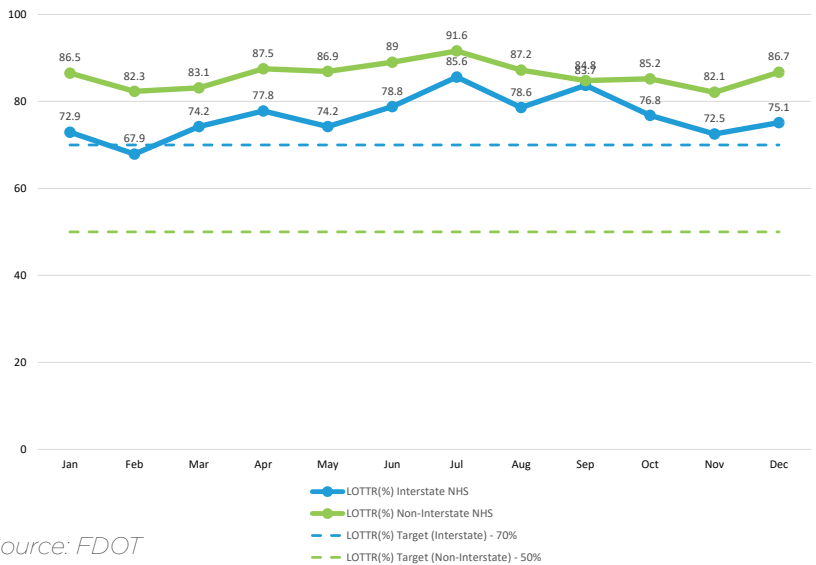
Non-Interstate NHS LOTTR

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

Current Conditions = 86% Reliable

Source: FDOT (2019)

LEVEL OF TRAVEL TIME RELIABILITY, BROWARD COUNTY, 2019



Source: FDOT

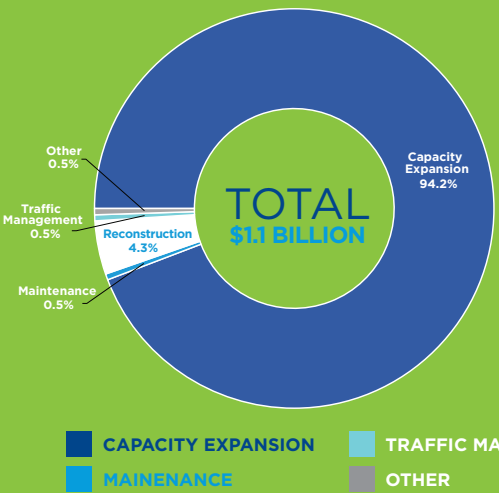
Current Roadway Construction Projects

Currently, there are 25 major roadway projects under construction in Broward County. According to FDOT, these projects are estimated to cost a total of \$1.4 billion, 94% of which are associated with six (6) interstate highway improvements. Those 6 projects are also "Capacity Expansions," and account for 94.2% of all costs.

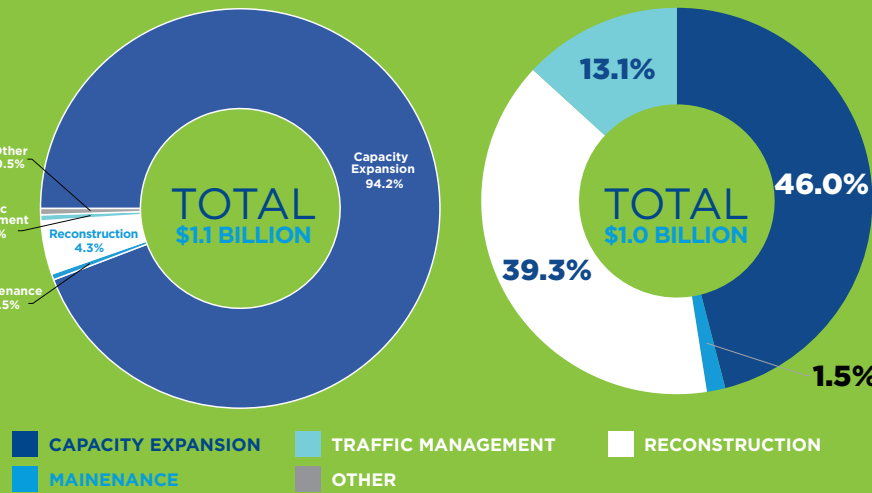
Existing Roadway Planning Efforts

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, 2019



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



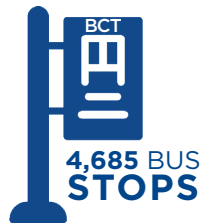
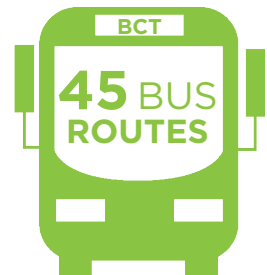
Source: FDOT and Broward MPO



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.



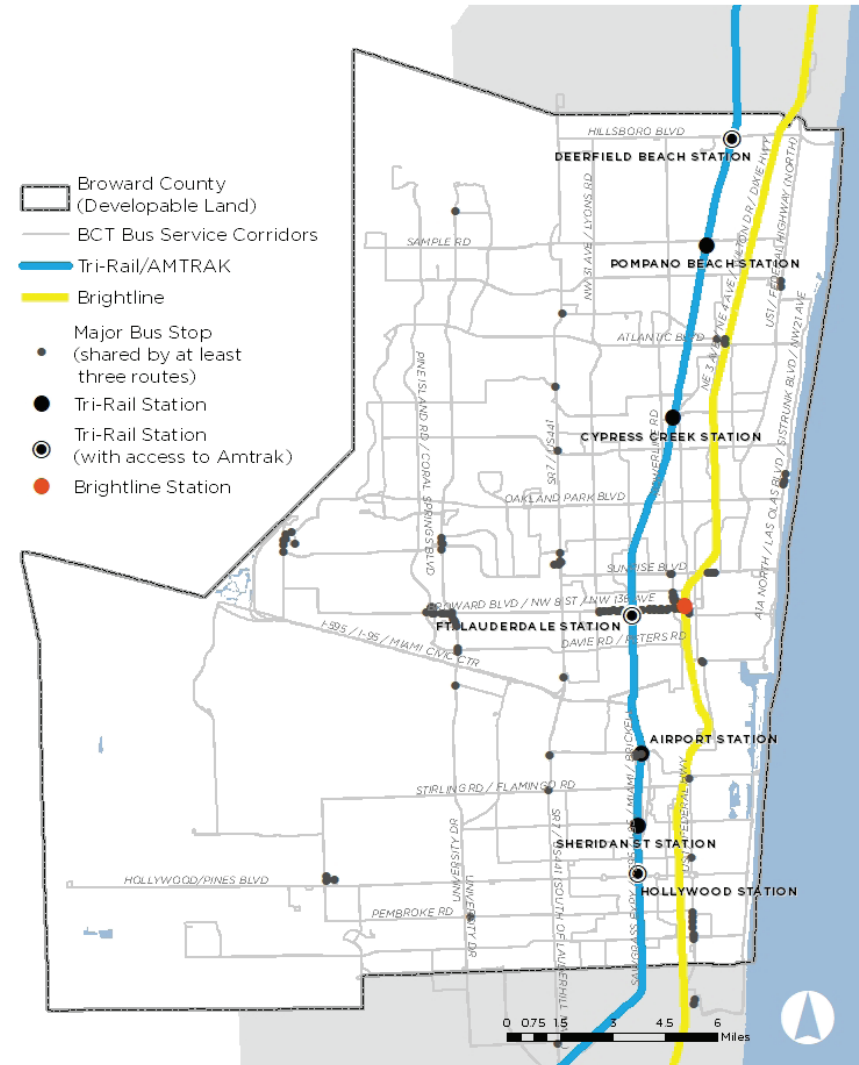
ONE
COMMUTER
RAIL LINE
(TRI-RAIL)

ONE
INTERCITY
PASSENGER
RAIL LINE
(BRIGHTLINE)

ONE
INTERSTATE
PASSENGER
RAIL LINE
(AMTRAK)

7
STATIONS
3
1
STATIONS

Transit Systems in Broward County



Source: FDOT and BTS

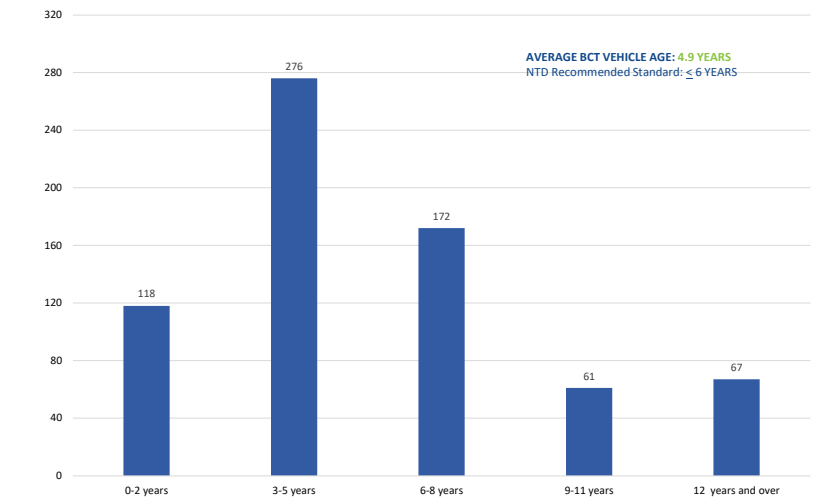
Per 2019 data, BCT operated a mixed fleet of 711 public and privately owned vehicles. Their vehicles available for maximum service (551 vehicles) had an average age of 4.9 years. BCT's bus fleet consisted of articulated buses, buses, cutaway buses and over-the-road buses. Their demand response fleet consisted of cutaway buses, minivans, and vans. No data was available for BCT's on-time performance.

BCT had 8.7 mechanical breakdowns per vehicle in 2019, which was lower than its neighboring peer (Miami-Dade Transit, 11, and Palm Tran, 17.7).

In the past five years, BCT's ridership has declined by 27.8%. In 2019, BCT recorded 27.3 million passenger trips. The average trip length was 4.9 miles/passenger trip. According to their financial reports, BCT had \$152.3 million of total operating expenses. 64% of these expenses were from vehicle operations.

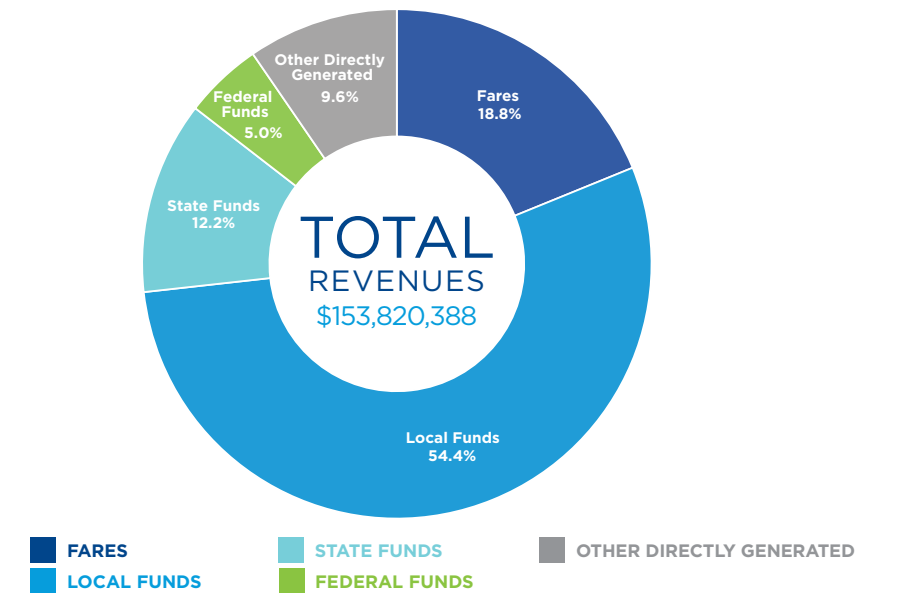


NUMBER OF FLEET VEHICLE BY AGE, BCT, 2019



Source: NTD

BCT OPERATING REVENUE SOURCES, 2019



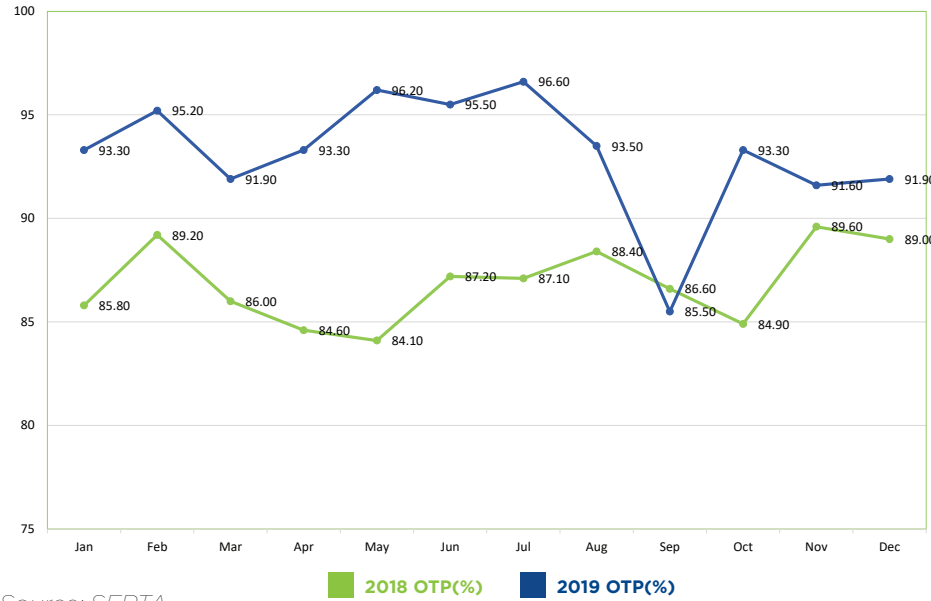
Source: NTD

In 2019, there were 4.6 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 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 2019, 6% higher compared to 2018. Common factors for service delays include regular facility maintenance, right-of-way conflicts with other track users, and mechanical breakdowns.

SFRTA had \$100.7 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.

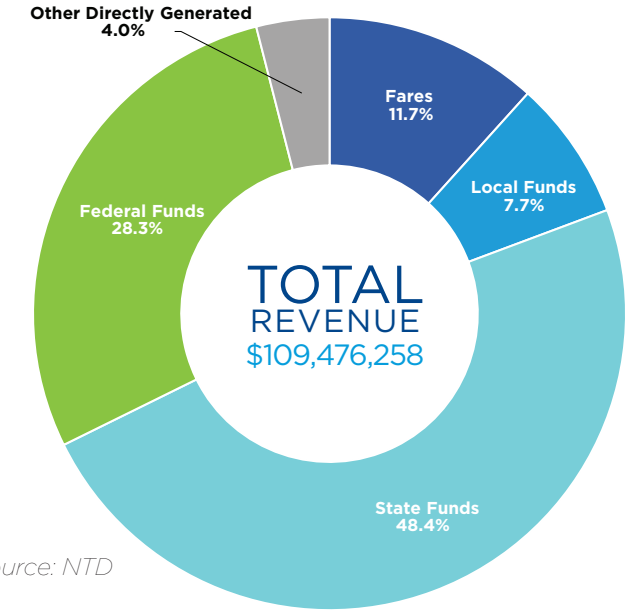
TRI-RAIL ON-TIME PERFORMANCE (OTP) BY MONTH, 2018 AND 2019



Source: SFRTA



SFRTA OPERATING REVENUE SOURCES, 2019



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	Current Data
ROLLING STOCK Percentage of Revenue Vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Cutaway Bus (CU)	10 years	0%	0%
	Paratransit Mini Van (MV)	8 years	0%	0%
	40 Foot Bus (BU)	14 years	0%	0%
	60 Foot Articulated Bus (AB)	14 years	0%	0%
	45 Foot Bus (BR)	14 years	0%	0%
	Commuter Rail Locomotive (RL)	39 years	25%	25%
	Commuter Rail Passenger Coach (RP)	39 years	25%	25%
EQUIPMENT Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their (ULB)	Commuter Rail self-propelled passenger car (RS)	39 years	25%	25%
	All non-revenue vehicles	8 years	22%	22%
FACILITIES Percentage of facilities rated below Condition 3 on the FTA Transit Economic Requirements Model (TERM)	Other rubber tire vehicles	14 years	25%	25%
	Passenger, maintenance, parking and administrative facilities	Condition Rating 3.0	5%	3%
INFRASTRUCTURE Percentage of track segments with performance restrictions	Rail fixed guideway, track and signals	Performance Restrictions	4%	3%



Public Transportation Agency Safety Plan (PTASP)

The Public Transportation Agency Safety Plan (PTASP) rule from the Federal Transit Administration (FTA) became effective on July 19, 2019. The rule introduces requirements for certain recipients and sub-recipients of FTA grants that operate public transportation to develop and implement a PTASP based on a safety management systems approach.

The PTASP is anticipated to help ensure that public transportation systems are safe nationwide. Transit agencies and MPOs are required to set transit safety targets on a yearly basis.

Transit Safety Performance Measure Targets							
Transit Mode	Fatalities (Total)	Fatalities (Rate) 100k Rev Miles	Major Injuries (Total)	Major Injuries (Rate) 100k Rev Miles	Safety Events (Total)	Safety Events (Rate) 100k Rev Miles	System Reliability MDBF
Fixed Route Bus	0	0.0	0	0.0	1,320	8.65	3,000
Community Bus	0	0.0	0	0.0	10	0.50	3,500
Paratransit	0	0.0	0	0.0	64	2050	77,500

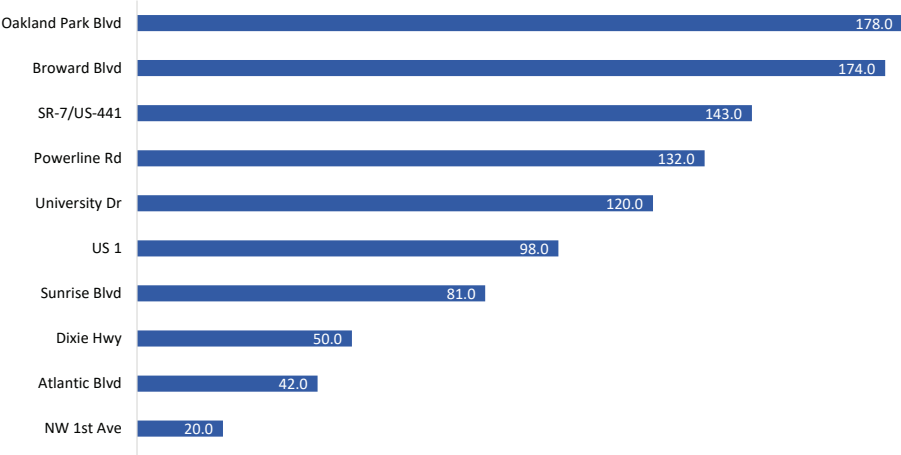


Biking and Pedestrian

Compared to auto and transit users, bicyclists and pedestrians are considered the most vulnerable group of people on the roadway. Between 2015 and 2019, there were 1,282 fatalities and serious injuries in Broward County involving bicyclists and pedestrians. Broward has seen a decline in fatalities and serious injuries involving bicyclists and pedestrians from 2015 to 2019.

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.

TOP 10 HIGH INJURY NETWORK CORRIDORS FOR BIKING & PEDESTRIAN FATALITIES & SERIOUS INJURIES BROWARD COUNTY



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

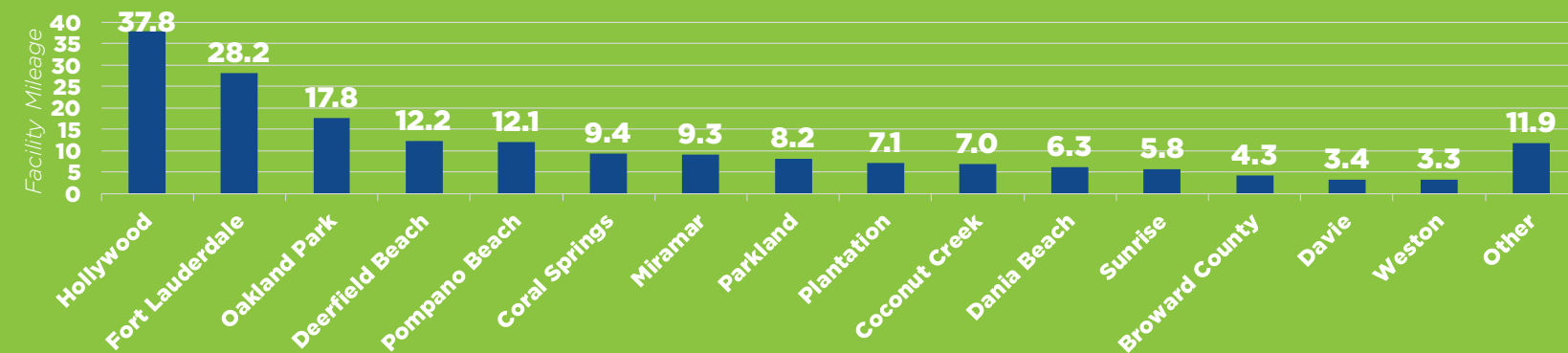
PARKS WITH PATHS FOR RECREATIONAL BICYCLING

Existing Planning Efforts (Biking & Pedestrian)

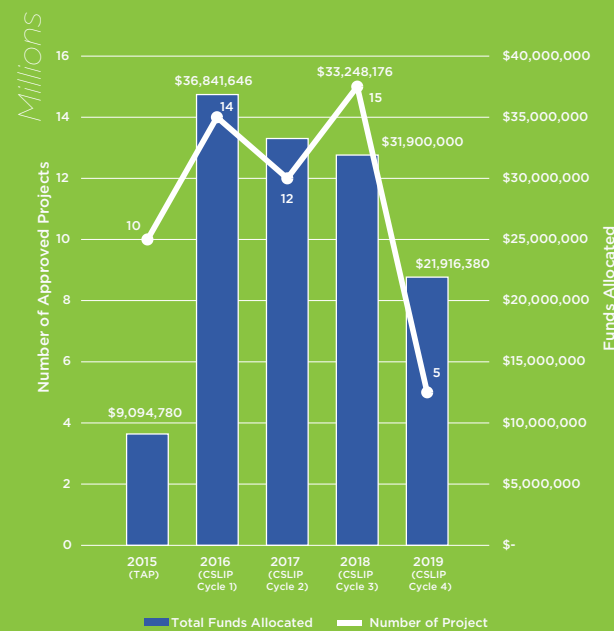
Between 2015 and 2019, the Broward MPO's Transportation Alternative Program (TAP) and Complete Streets and Other Localized Initiatives Program (CSLIP; the replacement for TAP) helped fund 56 smaller, non-regionally significant transportation projects. These projects cost approximately \$133 million of 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.

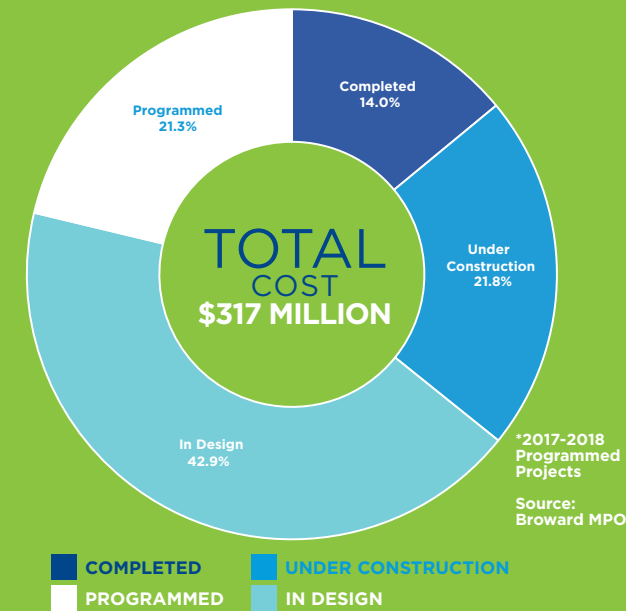
BIKE LANE AND SIDEWALK PROJECT MILEAGE BY MUNICIPALITY, BROWARD MPO
(2013-2015 TAP, CSLIP CYCLE 1, CSLIP CYCLE 2 AND 2017-2018 MOBILITY PROGRAM)



TAP AND CSLIP PROJECT COSTS
BY YEAR, BROWARD MPO



COST OF MOBILITY PROJECT BY
COST BROWARD MPO, 2019

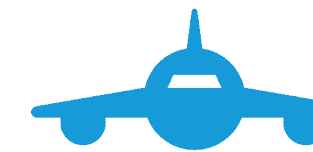


Airports

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 712,000 flights (departures and arrivals) in 2019.

In 2019, Fort Lauderdale-Hollywood International Airport (FLL) ranked 19th among all major U.S. airports with 35.0 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 2015 and 2019 (34% increase).

NUMBER OF FLIGHTS BY MAJOR AIR FIELDS IN
BROWARD COUNTY, 2019



**FORT LAUDERDALE-
HOLLYWOOD
INTERNATIONAL AIRPORT**
275,460



POMPAÑO BEACH AIRPARK
169,642



**FORT LAUDERDALE
EXECUTIVE AIRPORT**
149,553



NORTH PERRY AIRPORT
117,457

Source: FDOT

FLL AIR TRAFFIC, 2019

PASSENGERS

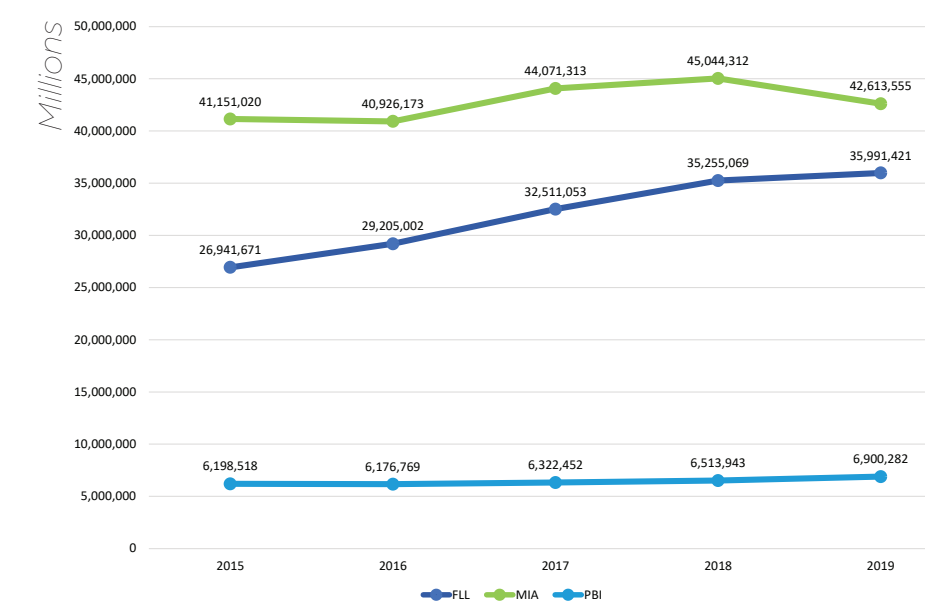
Domestic	27,481,302
International	8,510,119
Arrival	18,048,855
Departure	17,942,566

AIR CARGO

475.2 lb. of landed weight

Source: BTS

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

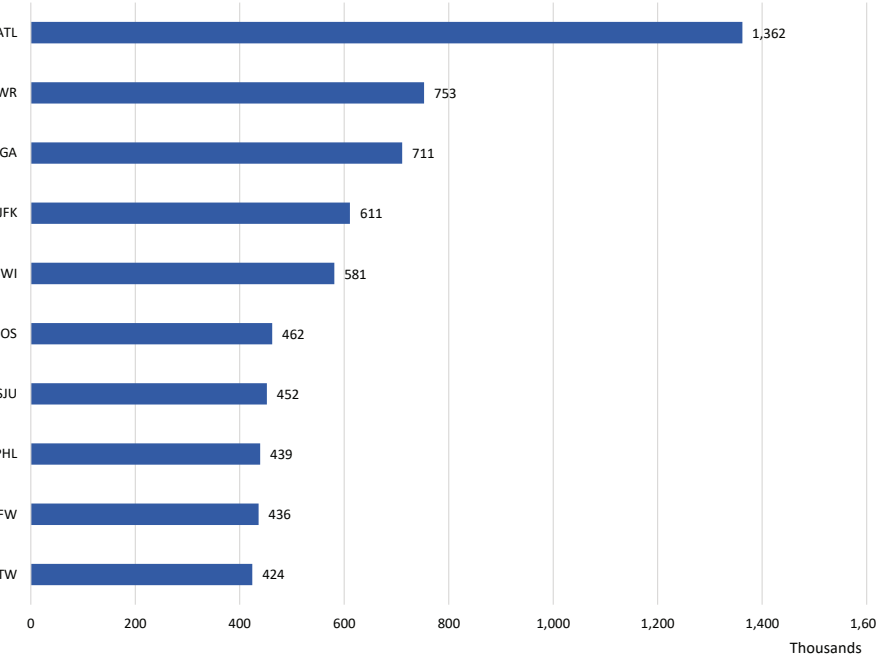


Source: BTS

In 2019, Hartsfield–Jackson Atlanta International Airport (ATL) receives the most number of flights from FLL, compared to other major destinations. Southwest, JetBlue, Spirit, Delta, and United 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 67.9 minutes (ranked 10th in the nation).

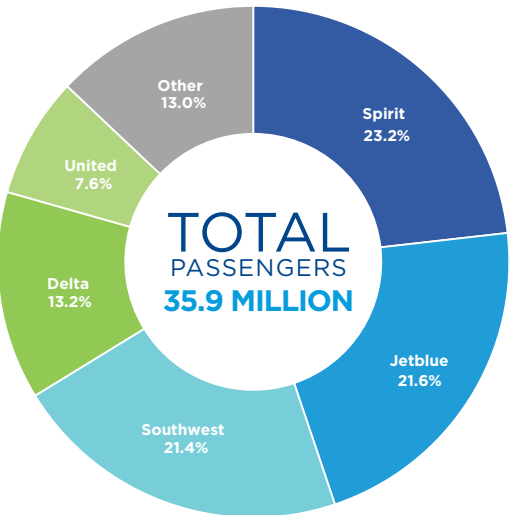
In 2019, FLL’s operating revenue reached \$303.1 million, 64% of which were from passenger airline revenues, and parking and ground transportation. FLL’s annual operating expense was \$196.7 million.

TOP 10 DESTINATIONS (FOR FLIGHTS DEPARTING FROM FLL) BY NUMBER OF PASSENGERS, 2019

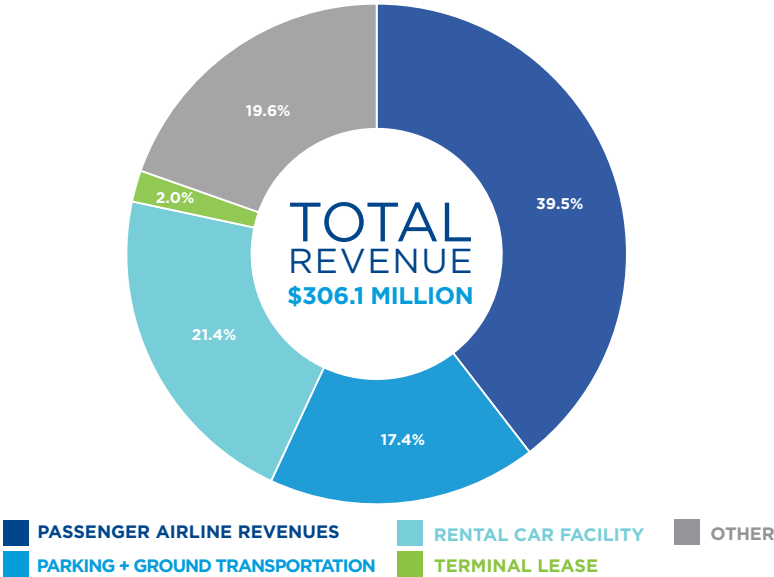


Source: BTS

NUMBER OF PASSENGERS BY AIRLINE, FLL, 2019



FLL OPERATING REVENUE SOURCES, 2019



Source: BTS

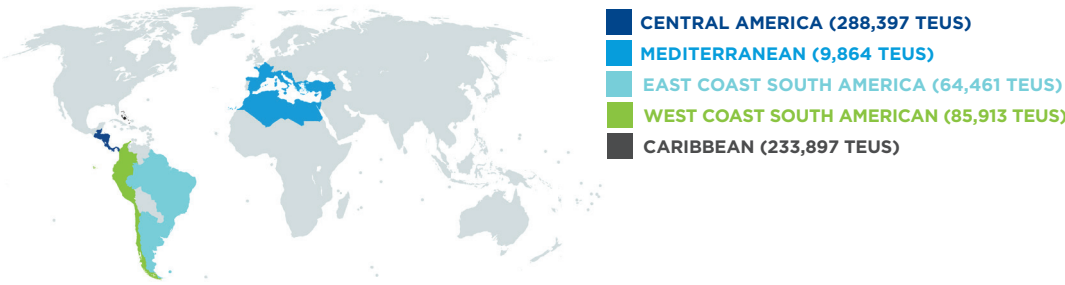


Seaports and Waterways

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 2019, Port Everglades was one of the busiest container port in the nation, serving 6.8 million tons of containerized cargo and 16.9 million tons of petroleum and other cargo. Port Everglades’ operating revenue was \$170.7 million, and operating expense was \$105.8 million.

TOP 5 MARKETS OF CONTAINERIZED CARGO



TOP 5 COMMODITIES OF CONTAINERIZED CARGO



Source: Port Everglades

TOTAL SHIP CALLS
4,016

(2015-2019 growth: 6.6%)

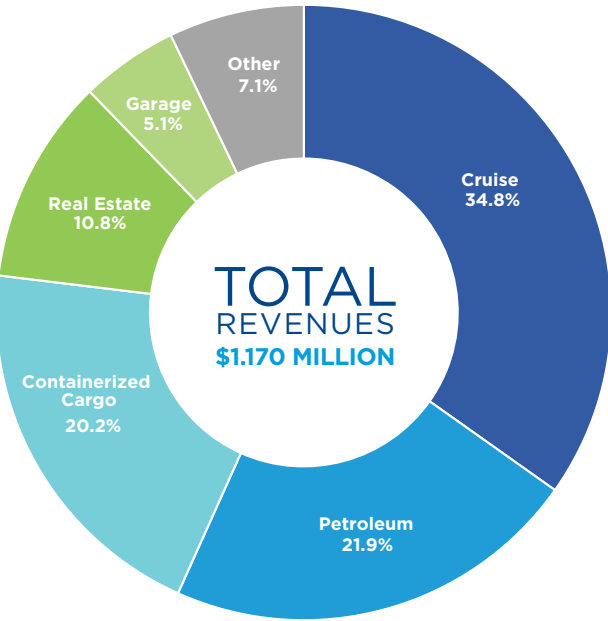
TOTAL CRUISE PASSENGERS
3.9 million

(2015-2019 growth: -3.1%)

TOTAL CARGO MOVEMENTS
25.6 million tons

(2015-2019 growth: 6.6%)

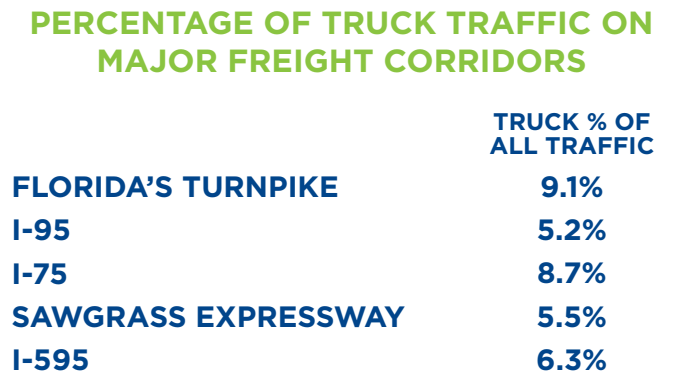
PORT EVERGLADES OPERATING REVENUE SOURCES, 2019



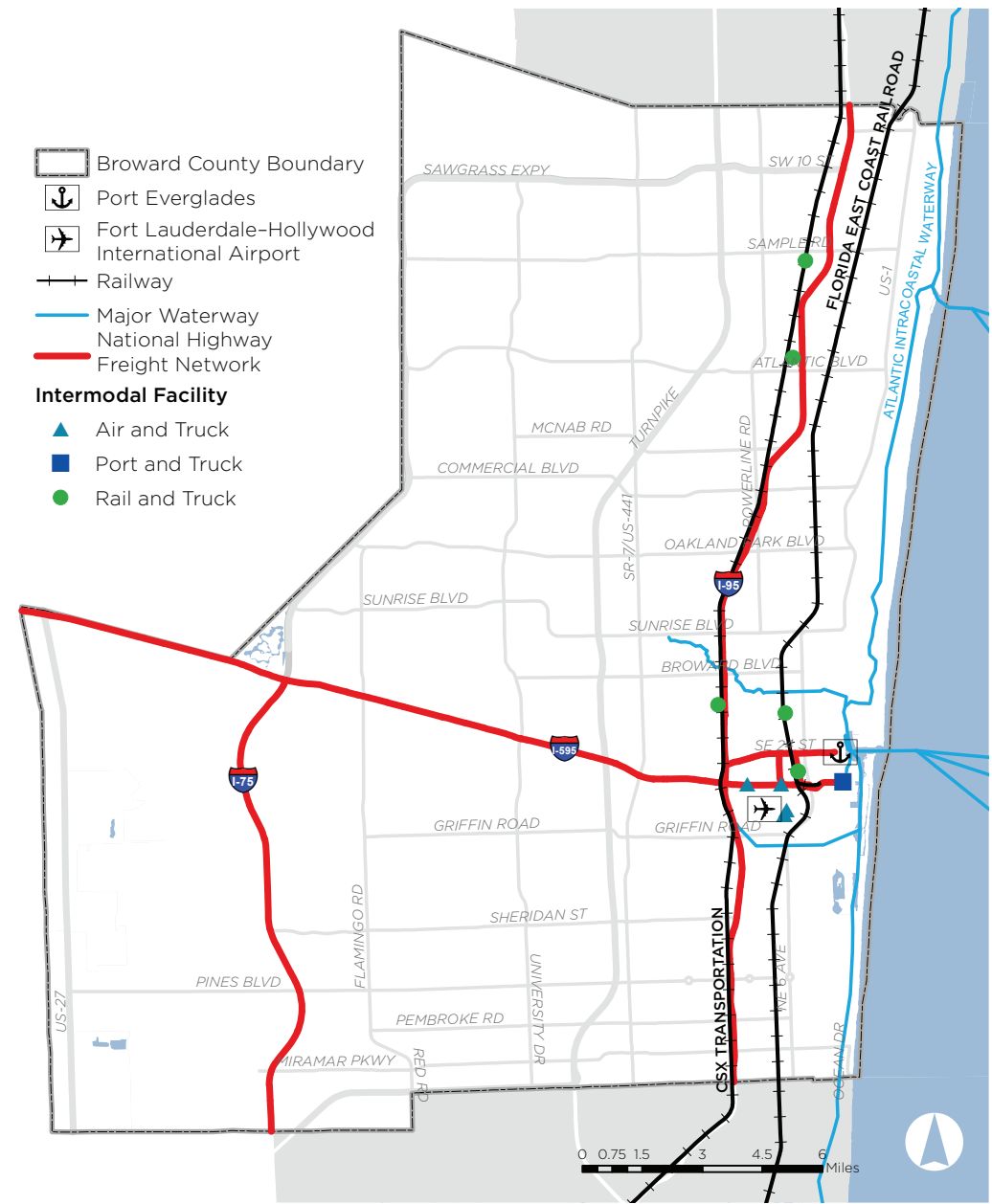
Land Freight

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.



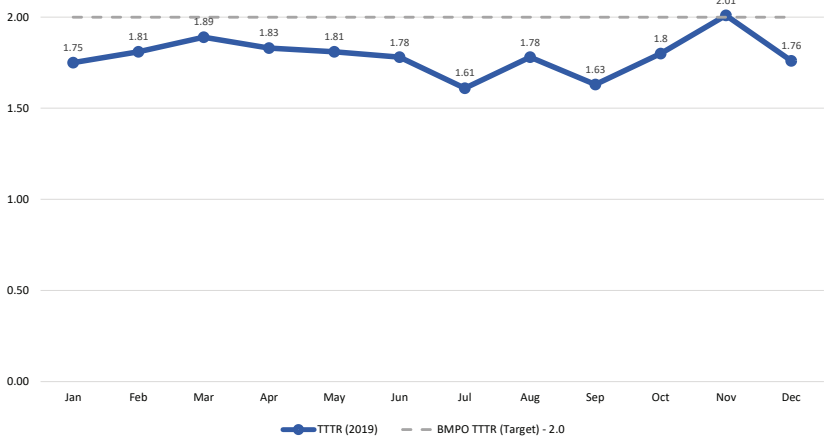
Source: FDOT



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 2019, the average TTTR was 1.7, which exceeded the Broward MPOs' 4-year target (i.e., below 2.0).

TRUCK TRAVEL TIME RELIABILITY (TTTR) INDEX, BROWARD COUNTY, 2019



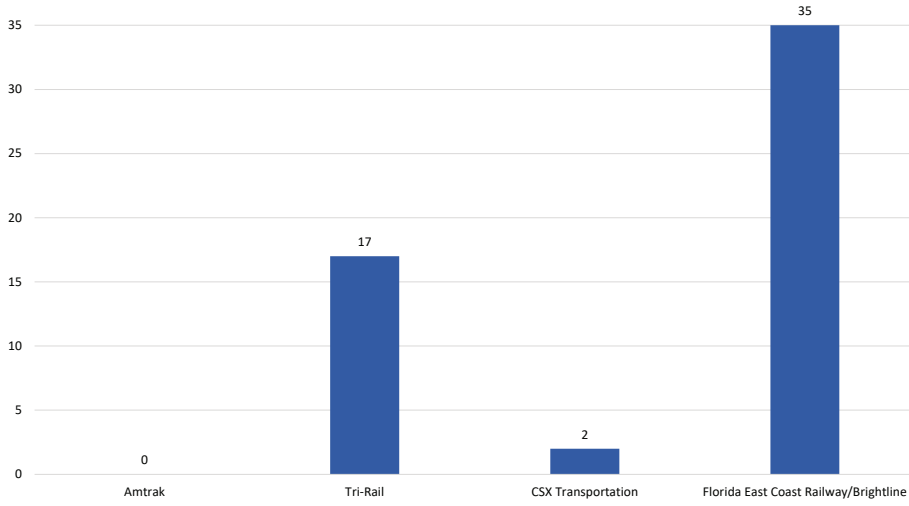
Source: FDOT

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 2017 and 2019, the rail freight system had 54 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, 2017-2019



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.

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/



100 West Cypress Creek Road. 6th Floor, Suite 650. Fort Lauderdale, FL 33309-2181
(954) 876-0033 | **BrowardMPO.org**