STATE OF THE SYSTEM REPORT



Metropolitan Planning Organization

Move People & Goods | Create Jobs | Strengthen Communities

APRIL 2022

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 decisionmaking process as we work to make Broward a great place to live, work, and play for generations to come.



Frank Ortis Chair

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



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.

6 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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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 2020 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.

'For more information about the U.S. Census Bureau's 2020 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)

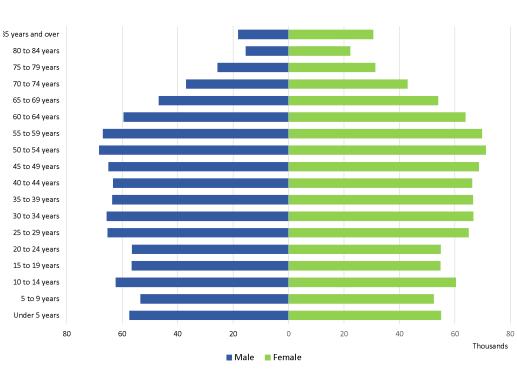
Land Freight

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



Broward County is growing rapidly. **The population has continued to increase by 1.1% annually since 2010 and was estimated to be 1.94 million in 2020** (1.73 million in 2010). The chart below shows the 2020 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, 2020



Source: U.S. Census 2020 ACS 5-Year Estimates

Source: U.S. Census 2020 ACS 5-Year Estimates



TOTAL AREA OF

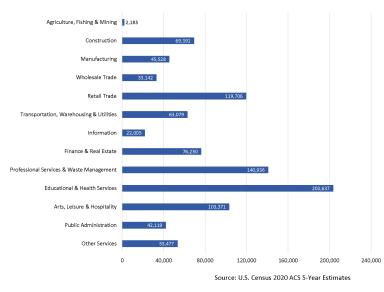
Source: Broward County Land Use Plan (Amendement 2018)

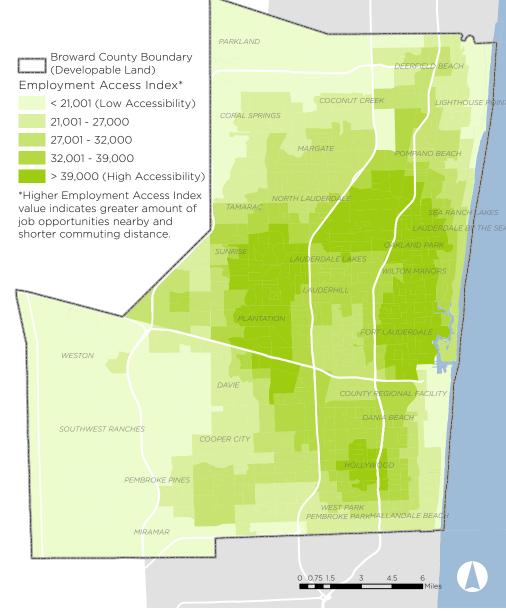


Approximately 974,000 employed people are working within many different industries in Broward County. Fort

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, 2020





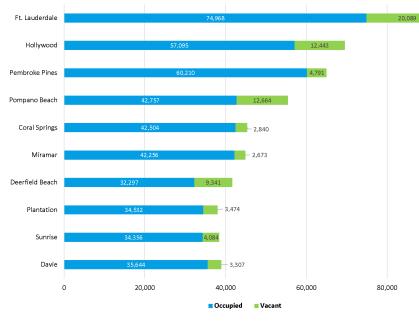
Source: U.S. Census 2020 ACS 5-Year Estimates

Source: LAI (Version 2.0), HUD



Broward County contains an estimated 826,000 housing units, with an average density of 2,486 units per square mile. **14.7% of these housing units are vacant, which is higher than the national housing vacancy rate of 9.7%.** 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, 2020



Source: U.S. Census 2020 ACS 5-Year Estimates

Source: U.S. Census ACS 2020 5-Year Estimates



Broward County has 954,804 residents commuting within the region (South Florida) including 77% working in Broward, 16% working in Miami-Dade, and 6% working in Palm Beach. Approximately, 87.3% of commuters rely on a personal automobile or carpool to get to work. On average, people spent 28.9 minutes commuting to work per trip in 2020.

COMMUTING FLOW IN SOUTH FLORIDA

| RESIDENCE | 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 |
| | | | |
| | | | |

PLACE OF WORK

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

COMMUTING TIME (AVERAGE MINUTES) BY MODE

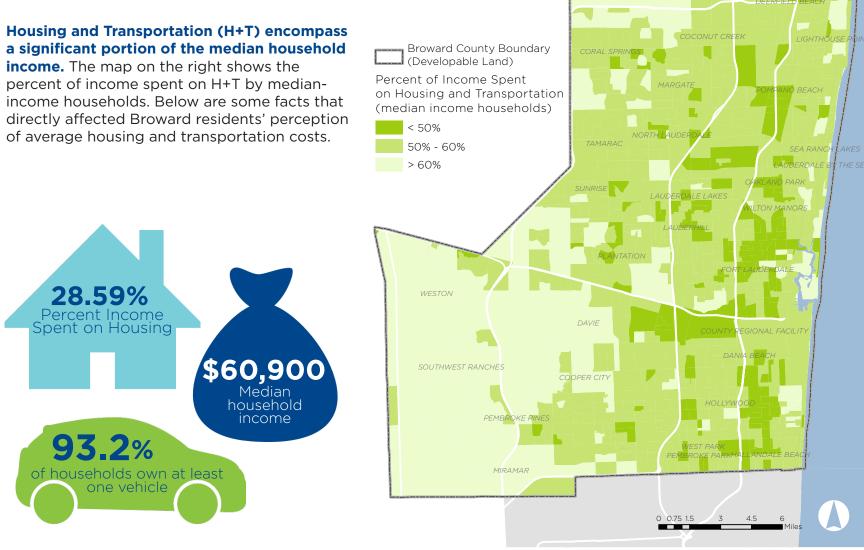


TOTAL AVERAGE: 28

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

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PARKLAND

Source: U.S. Census 2020 ACS 5-Year Estimates

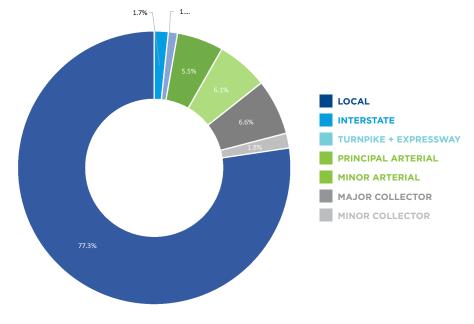
Source: LAI (Version 2.0), HUD



Broward County residents rely heavily on autooriented transportation, which creates demand for a well-designed, efficiently managed, and regularly maintained roadway system. In 2020, there were approximately 5,031 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, 2020

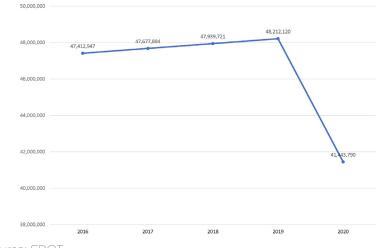




Source: FDOT

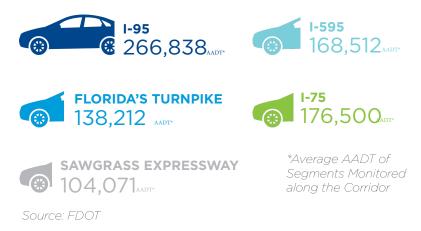
In 2020, as a result of the Covid-19 pandemic, Broward County's vehicle-based trips plummed, and it was reported that the daily vehicle miles traveled (DVMT) on public roads reached 41.4 million.

DAILY VEHICLE MILES TRAVELED BY YEAR, BROWARD COUNTY, 2016-2020



Source: FDOT

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



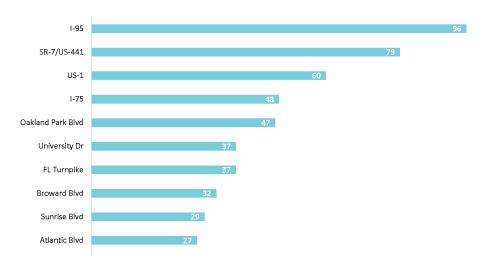
Roadway Safety Profiles

Safety is always a priority in Broward County. From 2016-2020, there were a total of:



The average crash death rate is 5.7 per 100,000 population per year. Approximately 42% of all these fatal crashes were concentrated on these 10 roadway corridors shown below.

NUMBER OF FATAL CRASHES BY ROADWAY CORRIDORS, BROWARD COUNTY, 2016-2020



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 = **76.8% Good**

Non-Interstate NHS Pavement Conditions

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

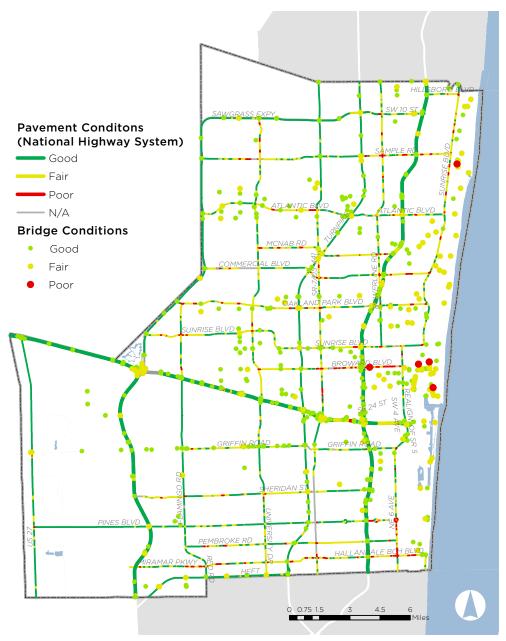
Current Conditions = **35.9% Good**

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



Current Conditions = 65% Good

Source: FDOT (2020)



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-today 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



120

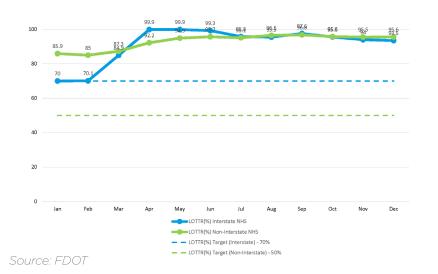
Current Conditions = 90% Reliable

Non-Interstate NHS LOTTR

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



LEVEL OF TRAVEL TIME RELIABILITY, BROWARD COUNTY, 2020

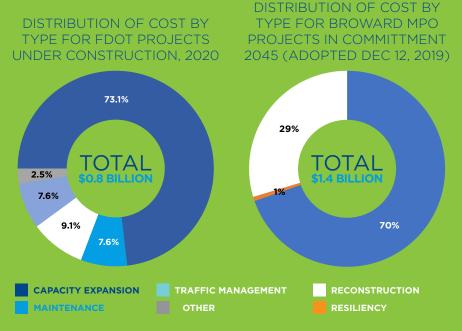


Current Roadway Construction Projects

Currently, there are 29 major roadway projects under construction in Broward County. According to FDOT, these projects are estimated to cost a total of \$8 billion, 79% of which are associated with three (3) interstate highway improvements. Those 3 projects are also "Capacity Expansions," and account for 79% 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.



Source: FDOT and Broward MPC



BCT

45 BUS

ROUTES

4,685 BUS STOPS

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.

> COMMUTER RAIL LINE

(TRI-RAIL)

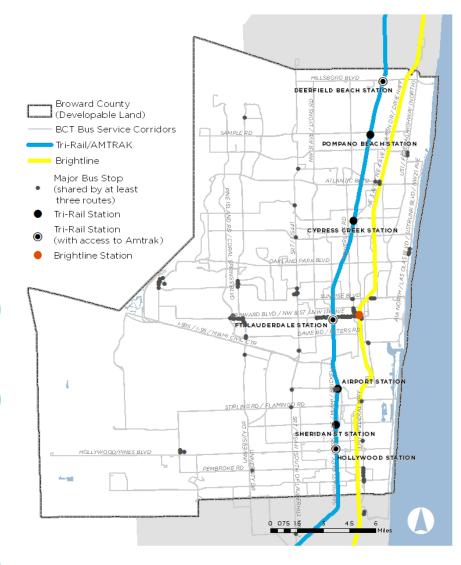
PASSENGER

RAIL LINE

(BRIGHTLINE)

INTERSTATE PASSENGER RAIL LINE (AMTRAK)

Transit Systems in Broward County





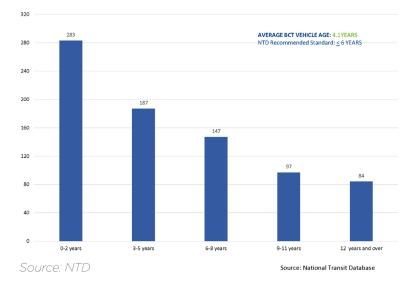
Per 2020 data, BCT operated a mixed fleet of 776 public and privately owned vehicles. Their vehicles available for maximum service (590 vehicles) had an average age of 4.1 years. BCT's bus fleet consisted of articulated buses, buses, cutaway buses and over-the-road buses. Their demand response fleet 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 2020, which was higher than its neighboring peer (Miami-Dade Transit, 6.2, and Palm Tran, 3.6).

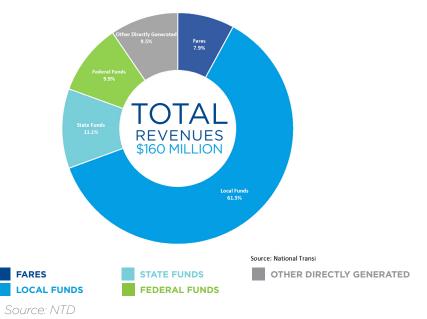
In the past five years, BCT's ridership has declined by 44.7%. In 2020, BCT recorded 18.5 million passenger trips. The average trip length was 4.1 miles/passenger trip. According to their financial reports, BCT had \$158.8 million of total operating expenses. 61% of these expenses were from vehicle operations.



NUMBER OF FLEET VEHICLE BY AGE, BCT, 2020



BCT OPERATING REVENUE SOURCES, 2020



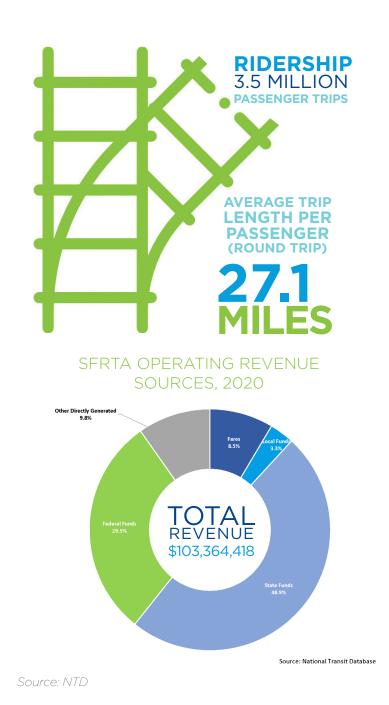
In 2020, there were 3.5 million passenger trips made on Tri-Rail. Compared to the BCT, passengers tend to use commuter rail services for longer trips (average trip length: 27 miles/passenger trip).

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 91.5% in 2020, 6% slightly lower compared to 2019. Common factors for service delays include regular facility maintenance, right-of-way conflicts with other track users, and mechanical breakdowns.

SFRTA had \$95.7 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,





e. SFRIA

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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) | Proposed Regional Targets | Current Data |
|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------|------------------------------|--------------|
| Rolling Stock— | Cutaway Bus (CU) | 10 years | 0% | 0% |
| Percentage of Revenue Vehicles that have met or exceeded their | Paratransit Mini Van (MV) | 8 years | 0% | 0% |
| Useful Life Benchmark (ULB) | 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% | 27% |
| | Commuter Rail Passenger Coach (RP) | 39 years | 25% | 27% |
| | Commuter Rail self-propelled passenger car (RS) | 39 years | 25% | 27% |
| Equipment — Percentage of non-revenue, support-service and | All non-revenue vehicles | 8 years | 24% | 24% |
| maintenance vehicles that have met or exceeded their (ULB) | Other rubber tire vehicles | 14 years | 24% | 38% |
| 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 | 5% | 3% |
| Infrastructure — Percentage of track segments with performance restrictions | Rail fixed guideway, track and signals | Performance Restrictions | 4% | 0% |

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.

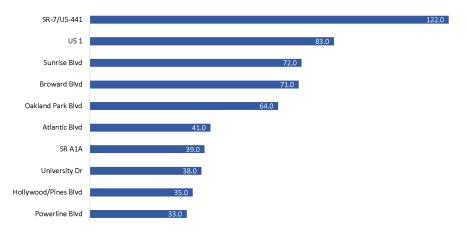
The PTASP is anticipated to help ensure that public transportation systems are safe nationwide. Transit agencies and MPOs are required to set transit safety targets on a yearly basis.

| 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 | 111 | 0.741 | 66 | 0.441 | 4,200 |
| Community Bus | 0 | 0.0 | 3 | 0.141 | 4 | 0.181 | 5,500 |
| Paratransit | 0 | 0.0 | 4 | 0.040 | 6 | 0.056 | 78,000 |



Compared to auto and transit users, bicyclists and pedestrians are considered the most vulnerable group of people on the roadway. Between 2016 and 2020, there were 1,475 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 2016 to 2020.

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



Source: FDOT

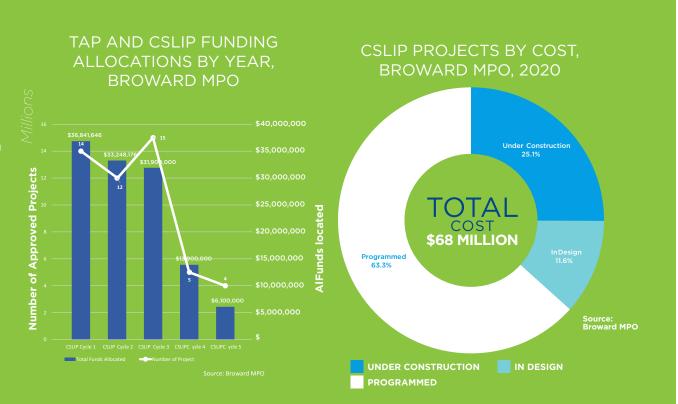
A good transportation system should be planned and designed for all users. In recent years, state, county, and local governments have been working to improve bicycle and pedestrian facilities in Broward County. In 2017, 49.7% of roadways featured sidewalks, and 5% had installed designated bike lanes.

2,511 MILES OF SIDEWALKS 2222 KE-SHARING CORTLAUDERDALE ALLOS OF BIKE LANES BIKE LANES

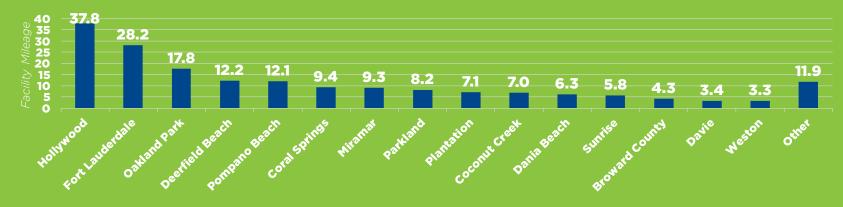
Existing Planning Efforts (Biking & Pedestrian)

Between 2016 and 2020, 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 \$68 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)



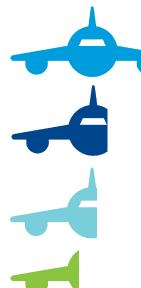
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Broward County currently has 19 airfields serving the aviation industry, including four major airports (i.e., Fort Lauderdale-Hollywood International Airport, Fort Lauderdale Executive Airport, Pompano Beach Airpark, and North Perry Airport). In total, they generated approximately 385,648 flights (departures and arrivals) in 2020.

In 2020, Fort Lauderdale-Hollywood International Airport (FLL) ranked 19th among all major U.S. airports with 16.0 million passengers served (includes arrivals and departures). Miami International Airport (MIA), Palm Beach International Airport (PBI), shown below and, FLL all experienced significant decreases in their passenger traffic in 2020 due to Covid-19 pandemic.

NUMBER OF FLIGHTS BY MAJOR AIR FIELDS IN BROWARD COUNTY, 2020



FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT 150,460

POMPANO BEACH AIRPARK 57,425

FORT LAUDERDALE EXECUTIVE AIRPORT 112,380

NORTH PERRY AIRPORT 65,383



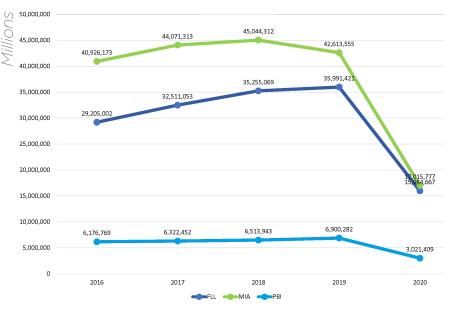
PASSENGERS

| Domestic | 13,148,142 |
|---------------|------------|
| International | 2,836,525 |
| Arrival | 7,972,975 |
| Departure | 8,011,692 |

AIR CARGO 391.4 lb. of landed weight

Source: BTS

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



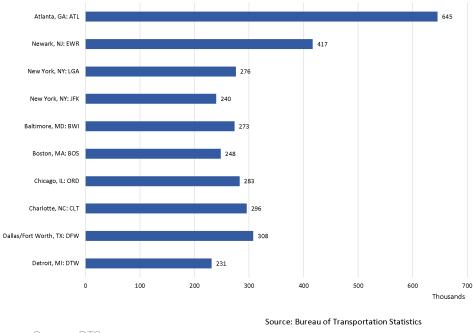
Source: BTS

Source: FDOT

In 2020, 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 70% of flights coming to and from FLL. The on-time rate of FLL departed flights was 84% (ranked 23rd in the nation) with an average delay of 65.2 minutes (ranked 15th in the nation).

In 2020, FLL's operating revenue were \$295.2 million, 64% of which were from passenger airline revenues, and parking and ground transportation. FLL's annual operating expense was \$159.8 million.

TOP 10 DESTINATIONS (FOR FLIGHTS DEPARTING FROM FLL) BY NUMBER OF PASSENGERS, 2020



Source: BTS



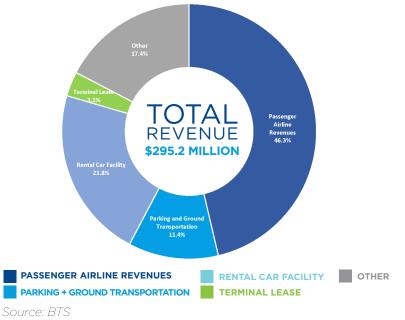
Source: FLL 2020 Financial Statements

FLL OPERATING REVENUE SOURCES, 2020

Jetblue 17.2%

15.9 MILLION

Southwest 17.8%



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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 2020, Port Everglades remained one of the busiest container port in the nation, serving 5.7 million tons of containerized cargo and 14.4 million tons of petroleum and other cargo. Port Everglades' operating revenue was \$145.6 million, and operating expense was \$81.7 million.

TOTAL SHIP CALLS 3,701 (2016-2020 growth: -6.5%)

TOTAL CRUISE PASSENGERS 2.5 million (2016-2020 growth: -33.6%)

TOTAL CARGO MOVEMENTS 25.6 million tons

PORT EVERGLADES OPERATING **REVENUE SOURCES, 2020**

TOP 5 MARKETS OF CONTAINERIZED CARGO



CENTRAL AMERICA (269,469 TEUS) **MEDITERRANEAN (1,401 TEUS)** EAST COAST SOUTH AMERICA (58,417 TEUS) WEST COAST SOUTH AMERICAN (62.590 TEUS) CARIBBEAN (207,221 TEUS)

TOP 5 COMMODITIES OF CONTAINERIZED CARGO

26.958 TEUS







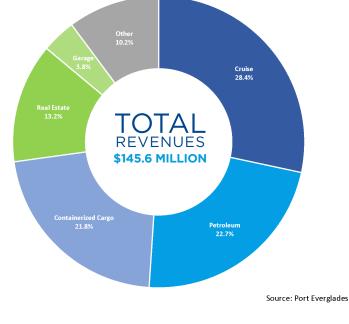




32.395 TEUS



MOTOR VEHICLES 29.553 TEUS



Source: Port Everglades



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% |

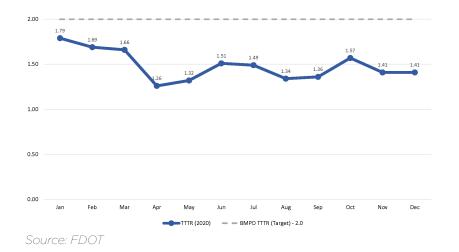
Broward County Boundary SAWGRASS EXPY Port Everglades Fort Lauderdale-Hollywood ≁ International Airport - Railway Major Waterway National Highway Freight Network Intermodal Facility MCNAB RD Air and Truck Port and Truck COMMERCIAL BLVD Rail and Truck OAKLAN SUNRISE BLVD BROV |+>_ GRIFFIN ROAD GRIFFIN SHERIDAN ST PINES BLVD PEMBROKE RD -AMAR PKWY 0 0.75 1.5

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 2020, the average TTTR was 1.58, which exceeded the Broward MPOs' 4-year target (i.e., below 2.0).

TRUCK TRAVEL TIME RELIABILITY (TTTR) INDEX, BROWARD COUNTY, 2020

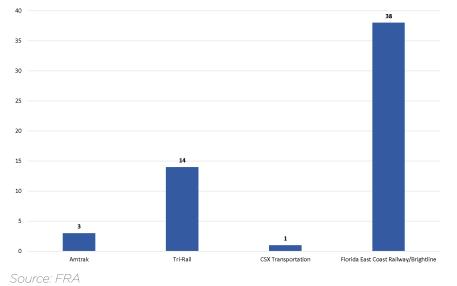


Broward County's rail freight system includes the Florida East Coast (FEC) Railway (whose rail tracks are shared with Brightline) and CSX Transportation line (whose rail tracks are shared with Tri-Rail and Amtrak). Between 2018 and 2020, the rail freight system had 56 grade crossing accidents that were reported by rail freight providers.

> 50.5 MILES OF



RAILWAY GRADE CROSSING CRASHES BY REPORTING AGENCY/COMPANY, 2018-2020



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 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)

Traffic (AADT)

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 (NBIS)

Established by Federal Highway Inspection Standards 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/

D E N D







Metropolitan Planning Organization



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