metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

2045

Metropolitan Transportation Plan

Technical Series #2
Data Source Guide

Adopted: 12/09/2020

What is in this document?

MetroPlan Orlando's 2045 Metropolitan Transportation Plan (2045 MTP) uses reliable data sources to inform policy decisions and plan better infrastructure that supports an improved quality of life for all transportation system users. Through a data-driven planning process, the 2045 Plan strives for balance between system demand, community, and transportation goals such as:

- Safety & Security

- Reliability & Performance

- Access & Connectivity

- Health & Environment

- Investment & Economy

This technical series serves as a data dictionary, and outlines the comprehensive set of data types and their sources used for the 2045 Plan. Many of the data sources have numerous data attributes, so generally the primary data source is discussed and a hyperlink with more information is provided. A few frequently used individual data types are also highlighted.

HOW TO GET INVOLVED IN THE 2045 PLAN

Online at MetroPlanOrlando.org
Learn more about how long range planning works and sign up for our e-newsletter to get email updates on comment opportunities

Request printed material
If you don't have digital access and prefer information in paper form, you can make that request by calling the number below

In person
Invite us to attend your event or present to your group by contacting our community outreach staff

Questions?
Contact our community outreach staff at *MTP@MetroPlanOrlando.org* or *407-481-5672*

On social media
Follow us on Facebook and Twitter to learn about transportation news and when we'll be out in the community

Abbreviations & Acronyms

The abbreviations and acronyms listed in this section support MetroPlan Orlando's Metropolitan Transportation Plan. It is not inclusive of all abbreviations and acronyms used in the entirety of this report. A more comprehensive Transportation Planning Acronym Glossary is available on the MetroPlan Orlando website.

AADT	Annual Average Daily Traffic		FWS	United States Fish and Wildlife Service
AADTT	Annual Average Daily Truck Traffic		GOAA	Greater Orlando Aviation Authority
ACS	American Community Survey		HCM	Highway Capacity Manual
APC	Automated Passenger Counters		KGA	Kissimmee Gateway Airport
BEA	U.S. Bureau of Economic Analysis		LAUS	Local Area Unemployment Statistics
BEBR	Bureau of Economic and Business Research		LBS	Location Based Services
BLS	U.S. Bureau of Labor Statistics		LOS	Level of Service
CAFR	Comprehensive Annual Financial Report		LOTIS	Land Overlayed on Transportation Information System
CARS	Crash Analysis Reporting System		NHFN	National Highway Freight Network
CFX	Central Florida Expressway Authority		NPMRDS	National Performance Management Research Data Set
CRFC	Critical Rural Freight Corridors		NTD	National Transit Database
CUFC	Critical Urban Freight Corridors		NWI	National Wetlands Inventory
DBPR	FL Department of Business and Professional Regulation		OIA (MCO)	Orlando International Airport
DHSMV	FL Department of Highway Safety and Motor Vehicles		PHFS	Primary Highway Freight System
			PTMS	Portable Traffic Monitoring Sites
ETDM	Efficient Transportation Decision Making		RCI	Roadway Characteristics Inventory
FAF4	Freight Analysis Framework 4		OSIA (SFB)	Orlando-Sanford International Airport
FDEP	Florida Department of Environmental Protection		SAA	Sanford Airport Authority
FDOR	Florida Department of Revenue		SHS	State Highway System
FDOT	Florida Department of Transportation		SIS	Strategic Intermodal System
FEMA	Federal Emergency Management Agency		STB	Surface Transportation Board
			SUN Trail	Shared-Use Nonmotorized Trail
FHWA	Federal Highway Administration		TDA	FDOT Transportation Data and Analytics Office
FIRM	Flood Insurance Rate Map		TMC	Traffic Message Channel or Traffic Management Center
FNAI	Florida Natural Areas Inventory			
FTA	Federal Transit Administration		TTMS	Telemetered Traffic Monitoring Sites
FTE	Florida's Turnpike Enterprise		UCF	University of Central Florida
FWC	FL Fish and Wildlife Conservation Commission		UF	University of Florida
			VMT	Vehicle Miles Traveled
			WIM	Weigh-in-Motion

Contents

Roadway Facility Characteristics
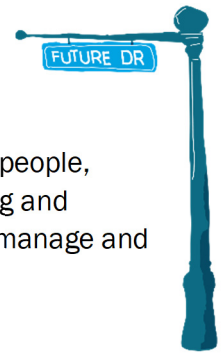
Roadway facility characteristics involve the physical aspects and location of a facility. These are essential in preserving the maintenance and performance of roadway infrastructure that allows people, goods, and services of various modes to move within the system safely and efficiently. Identifying and assessing the organizational, physical, geographic, and operational aspects of a roadway helps manage and improve conditions and address future growth.

Roadway Number of Lanes

The number of lanes of a roadway is a frequently used data type that is collected by the Florida Department of Transportation (FDOT) District planners, reported to the FDOT Transportation Data and Analytics (TDA) Office and stored in an online Roadway Characteristics Inventory (RCI) database. The RCI has numerous individual data attributes that are used in transportation planning.

https://www.fdot.gov/statistics/rci/default.shtm

Data Developer:	FDOT TDA Office
Data Collection:	Inventory via FDOT District Offices
Update Frequency:	Weekly
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Roadway
Data Format:	CSV, GIS Shapefile, Oracle SQL Database

Pavement Condition

The Pavement Condition Unit of the State Materials Office conducts annual surveys in support of the FDOT's Pavement Management program. The data collected is used to assess the condition and performance of the state's roads as well as to predict future rehabilitation needs. The data collected during the pavement condition survey is used as an input into the pavement management system and for project evaluation purposes.

https://www.fdot.gov/roadway/pm/pm.shtm

Data Developer:	FDOT State Materials Office
Data Collection:	Flexible and Rigid Pavement Condition Survey
Update Frequency:	Annually
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Roadway
Data Format:	GIS Shapefile, PDF

Bridge Condition

FDOT inspects all public highway bridges in the state. The bridge inventory process includes a systematic method to identify functionally obsolete or structurally deficient bridges. Classifying the functionality of the bridges helps prioritize and determine which bridges need to be scheduled for replacement or rehabilitation.

https://www.fdot.gov/maintenance/bridgeinfo.shtm

Data Developer:	FDOT Structures Maintenance Office
Data Collection:	Superstructure and Substructure Inspection
Update Frequency:	Quarterly
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Bridge
Data Format:	GIS Shapefile, PDF

Land Overlayed on Transportation Information System (LOTIS)

The Land Overlayed on Transportation Information System (LOTIS) is a unified planning database that overlays transportation and land use data over Central Florida. It includes numerous relevant attributes including sidewalks and bicycle facility information.

https://www.ecfrpc.org/lotis

Data Developer:	ECFRPC in cooperation with MetroPlan Orlando
Data Collection:	Baseline data from FDOT, Seminole, Orlando, and Osceola counties
Update Frequency:	On-going
Temporal Coverage:	2019
Geographic Coverage:	Metropolitan Area (3-County)
Geographic Resolution:	Roadway
Data Format:	GIS Shapefile

Roadway Designations

There are multiple methods and approaches for classifying roadways. These methods rely on a combination of the road's intended purpose and the surrounding land use context.

FDOT's context classification system describes the general characteristics of land use, development patterns, and connectivity along a roadway, providing cues as to how the road is used.

https://www.fdot.gov/roadway/csi/default.shtm

Functional classification is the process where streets and highways are grouped into classes, or systems, according to the character of service they provide. The designation of functional classification is made at least once every 10 years following the decennial Census. Roadways designated with functional classifications are eligible to receive federal funding (i.e. non-local roads are eligible).

https://www.fdot.gov/statistics/hwysys/cubfc.shtm

State and National highway networks are also strategically designated by FDOT and FHWA. In Florida, the Strategic Intermodal System (SIS) is FDOT's high priority network of transportation facilities critical to the state's economy and mobility. Per the FAST Act, FHWA designated the National Highway Freight Network to strategically direct Federal resources and policies toward improved performance of roadway portions of the U.S. freight transportation system.

https://www.fdot.gov/planning/sis/
https://ops.fhwa.dot.gov/freight/infrastructure/nfn/index.htm

Traffic & Mobility Data

Traffic and mobility data play a key role in helping to report how a roadway operates. Transportation networks function best when social and economic needs are met. In serving these needs, demand is generated and can be associated to the number, frequency, and overall performance of transportation infrastructure. Joined with facility characteristics, traffic and mobility data can provide a dashboard of system performance measures.

Annual Average Daily Traffic (AADT)

The Annual Average Daily Traffic (AADT) is the total volume passing a point or segment of a roadway in both directions for one year, divided by the number of days in the year. Through the annual traffic data collection program, surveys, raw counts, and current and historic databases for the State Highway System (SHS) are gathered. Often, local jurisdictions also collect this data for their roadways. However, the state data set is the most extensive and provides key information about the region's critical roadways.

Similarly, Annual Average Daily Truck Traffic (AADTT) is collected through the State/local traffic data programs.

https://www.fdot.gov/statistics/trafficdata/default.shtm

Data Developer:	FDOT TDA Office
Data Collection:	Permanent Telemetered Traffic Monitoring Sites (TTMS) and Portable Traffic Monitoring Sites (PTMS)
Update Frequency:	Annually
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Roadway
Data Format:	Web-based, Excel

Vehicle Miles Traveled (VMT)

FDOT's TDA Office offers highway mileage reports that provide data on daily vehicle miles traveled (VMT). The reports include a statewide summary by county of all daily VMT on public roads in Florida.

https://www.fdot.gov/statistics/mileage-rpts/default.shtm

Data Developer:	FDOT TDA Office
Data Collection:	Highway Mileage Reports
Update Frequency:	Annually
Temporal Coverage:	1997-2018
Geographic Coverage:	Statewide, Countywide
Geographic Resolution:	County
Data Format:	PDF, CSV

Vehicle Registrations and Licensed Drivers

The Florida Department of Highway Safety and Motor Vehicles (DHSMV) Office provides annual data on vehicle registrations and licensed drivers in Florida by county.

https://www.flhsmv.gov/resources/driver-and-vehicle-reports/

Data Developer:	DHSMV
Data Collection:	Driver and Vehicle Reports & Statistics
Update Frequency:	Annually
Temporal Coverage:	2008-2018
Geographic Coverage:	Statewide, Countywide
Geographic Resolution:	County
Data Format:	PDF

Level of Service (LOS)

The Level of Service (LOS) is a quantitative stratification of quality into six letter grades; A through F. It reflects the quality of service as measured by a scale associated with user satisfaction and is convertible for multimodal use of roadway infrastructure, including automobiles, trucks, and buses.

https://www.fdot.gov/planning/systems/programs/sm/los/default.shtm

Data Developer:	FDOT Systems Implementation Office
Data Collection:	Calculated through the latest edition of the HCM, or a methodology by FDOT
Update Frequency:	Annually
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Roadway
Data Format:	Web-based, Tabular

National Performance Management Research Data Set (NPMRDS) v2

Real-time, vehicle probe-based travel data for passenger autos and trucks are collected through a variety of sources and developed and recorded on databases maintained by INRIX. The data is available as a Traffic Message Channel (TMC) static file that contains TMC information and travel times. Both datasets need to be joined in GIS-based software to obtain the full picture.

https://ops.fhwa.dot.gov/freight/freight_analysis/perform_meas/index.htm#data

Data Developer:	FHWA
Data Collection:	Mobile devices, connected autos, portable navigation devices, commercial fleet and sensors
Update Frequency:	Annually, with monthly release
Temporal Coverage:	Daily speeds with 5-minute increments
Geographic Coverage:	Nationwide
Geographic Resolution:	NHS & State Roads Only
Data Format:	GIS Shapefile, CSV

INRIX Traffic Scorecard

The Global Traffic Scorecard provides a data-rich evaluation of urban travel, traffic health, and vibrancy across six continents that analyzes congestion and mobility trends. These cities are ranked by the number of peak hours the average commuter spent in congestion.

http://inrix.com/scorecard/

Data Developer:	INRIX
Data Collection:	Connected cars and mobile devices, DOTs, cameras and sensors on roadways
Update Frequency:	Annually
Temporal Coverage:	2017
Geographic Coverage:	Global
Geographic Resolution:	City
Data Format:	Web-based

Fuel Consumption

The Florida Department of Revenue (FDOR) makes gasoline/motor fuel and diesel fuel consumption data available for the Florida counties. The data are provided in annual and monthly increments and measured in taxable gallons consumed.

https://floridarevenue.com/taxes/Pages/distributions.aspx

Data Developer:	FDOR
Data Collection:	General Tax Statistics
Update Frequency:	Annually
Temporal Coverage:	1997-2018
Geographic Coverage:	Statewide, Countywide
Geographic Resolution:	County
Data Format:	CSV

Fuel Prices

The Energy Information Administration offers data on historical fuel prices (per gallon) in different geographies. As there is no specific series for gasoline in Orlando, the data for Florida is used, while the Lower Atlantic Region serves as the proxy for diesel fuel as no data for Florida is available for this fuel type.

https://www.eia.gov/petroleum/data.php#prices

Data Developer:	U.S. Energy Information Administration
Data Collection:	Unknown
Update Frequency:	Annually, Monthly, and Weekly
Temporal Coverage:	2003-2018
Geographic Coverage:	National, Regional, Select States, and Select Cities
Geographic Resolution:	State for gas, Region for diesel
Data Format:	CSV

StreetLight Data

StreetLight Data makes empirical data available on-demand to provide transportation planning support across North America. Data includes AADT, inferred trip purpose, origins, destinations, routes of trips, demographics, trip speed, duration, and length of trip. MetroPlan Orlando purchased this data to support transportation planning for the region.

https://www.streetlightdata.com/

Data Developer:	StreetLight
Data Collection:	Cellular LBS + GPS
Update Frequency:	As procured by MPO
Temporal Coverage:	2016 - 2018
Geographic Coverage:	Orange, Osceola, and Seminole County
Geographic Resolution:	TAZ and roadway network
Data Format:	GIS shapefile, CSV

AirSage

AirSage makes use of wireless network signaling data to create location intelligence information nationwide. AirSage allows for the collection and analysis of real-time mobile signals, GPS, and other location-based data to create and process billions of anonymous data points daily. MetroPlan Orlando purchased this data to support transportation planning within the region.

https://www.airsage.com/solutions/transportation

Data Developer:	AirSage
Data Collection:	Upon request
Update Frequency:	Upon request
Temporal Coverage:	2014 - 2015
Geographic Coverage:	Orange, Osceola, and Seminole County
Geographic Resolution:	TAZ
Data Format:	GIS shapefile, CSV

Bicycle & Pedestrian Data

The demand for transportation services in Central Florida is outpacing the ability to continue to expand road capacity in traditional ways. Supporting the development of bicycle and pedestrian accommodations provides more ways to serve future travel demands in the region.

Bicycle Network

The MetroPlan Orlando Bicycle Network is made up of shared use paths, designated bike lanes, paved shoulders, and undesignated bike lanes. The on-street information for the network for non-state roadways is a component of the LOTIS data previously described. MetroPlan Orlando also manages a bicyclist count program that is used throughout the region to gauge regional and local levels of bicycling beyond what is available from Census data.

https://metroplanorlando.org/plans/bicycle-program/
https://www.ecfrpc.org/lotis

Data Developer:	ECFRPC + MetroPlan Orlando
Data Collection:	Aerial Review & Video Counters
Update Frequency:	Annual Counts; Network Update As Needed
Temporal Coverage:	2019
Geographic Coverage:	Metropolitan Area (3-County)
Geographic Resolution:	Roadway
Data Format:	PDF

Pedestrian/Sidewalk Network

The MetroPlan Orlando Pedestrian/Sidewalk Network is organized by percent of sidewalk coverage along corridors. The percent of sidewalk coverage and roadway segment length were used to determine the length of missing sidewalk for each roadway segment. The information for the network for non-state roadways is also a component of the LOTIS data. In addition, MetroPlan Orlando also manages a pedestrian count program that is used throughout the region to gauge regional and local levels of walking beyond what is available from Census data.

https://metroplanorlando.org/plans/pedestrian-program/
https://www.ecfrpc.org/lotis

Data Developer:	ECFRPC + MetroPlan Orlando
Data Collection:	Aerial Review & Video Counters
Update Frequency:	Annual Counts; Network Update As Needed
Temporal Coverage:	2019
Geographic Coverage:	Metropolitan Area (3-County)
Geographic Resolution:	Roadway
Data Format:	PDF

Walk Score + Bike Score

Walk Score measures the walkability of any address using a patented system. Walk Scores range from 0 to 100. In the range, 0 symbolizes maximum car dependence and 100 symbolizes an area where a car is not needed to accomplish daily travel needs.

https://www.walkscore.com/

Similar to the Walk Score, the Bike Score is a service that measures if a location is good for biking. This scale measures from 0 to 100, based on four components that are weighted equally. The components are Bike Lanes, Hills, Destinations and Road Connectivity, and Bike Commuting Mode Share.

https://www.walkscore.com/bike-score-methodology.shtml

Data Developer:	Walk Score
Data Collection:	Google, Factual, Great Schools, Open Street Map, the U.S. Census, Localeze and places added by the Walk Score user community
Update Frequency:	On-going/As Needed
Temporal Coverage:	2019
Geographic Coverage:	Nationwide
Geographic Resolution:	Point of Location
Data Format:	GIS Shapefile, API Access, Excel

Greenways and Trails Data

The Florida Department of Environmental Protection (FDEP) provides Florida Greenways and Trails System data through their Geospatial Open Data website. The existing trails data show existing recreational trails, defined as paved or unpaved trails for hiking, biking, equestrian, multi-use, paddling, or motorized use, such as for ATVs, that is open to the public. These trails do not include on-street bike lanes or pedestrian sidewalks. They also provide data related to identified trail priority and opportunity corridors.

https://geodata.dep.state.fl.us/

Data Developer:	FDEP Office of Greenways and Trails, UF GeoPlan Center
Data Collection:	Federal, State, and Local Agencies
Update Frequency:	As needed
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Trail Segment
Data Format:	GIS Shapefile, Excel sheet, KML, API

Shared-Use Nonmotorized (SUN) Trail Network

The Shared-Use Nonmotorized (SUN) Trail Network is a statewide system of regionally connected paved off-street multi-use trails for bicyclists and pedestrians. FDOT through the Systems Implementation Office is responsible for prioritizing the development of these trails through persistent coordination and education at the local, regional, and state level. The SUN Trail Network is a more refined version of the Florida Greenways and Trails System Land Trail Priority Network.

http://floridasuntrail.com/

Data Developer:	FDOT Systems Implementation Office
Data Collection:	District Trail Coordinators
Update Frequency:	As Needed
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Trail Segment
Data Format:	GIS Shapefile, KMZ, PDF

Transit Data

Transit plays an important role in the Central Florida region moving residents and tourists. Transit is provided in multiple ways throughout the region and each provider maintains data.

National Transit Database (NTD)

The Federal Transit Administration (FTA) uses the National Transit Database (NTD) to record financial, operating, and asset condition of transit systems in order to keep track of the transit industry, as well as provide public information as transit continues to grow. Contents of the NTD include agency funding sources, inventories of vehicles and maintenance facilities, safety event reports, measures of transit service provided and consumed, and data on employees in transit.

https://www.transit.dot.gov/ntd

Data Developer:	FTA
Data Collection:	Agencies reporting to NTD via forms
Update Frequency:	Monthly/Annually
Temporal Coverage:	2019
Geographic Coverage:	Nationwide
Geographic Resolution:	Parcel
Data Format:	Excel, PDF

Park and Ride Locations

FDOT offers several Park and Ride lots throughout the state. Parking is available for free on a first come, first serve basis to promote carpooling and use of transit services. Some Park and Ride lots are shared-use lots.

https://www.rethinkyourcommute.com/more-options/park-ride/

Data Developer:	FDOT
Data Collection:	FDOT Inventory
Update Frequency:	As Needed
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Point of Location
Data Format:	Online List, Online Interactive Map

LYNX

LYNX collects a significant amount of transit related data and reports much of it to NTD. A summary of much of the data is provided in their Transit Development Plan. Much of the existing ridership data is collected through the use of Automated Passenger Counters (APC). An APC system provides a transit system with an automated method for collecting information about the number of passenger boardings and alightings at a variety of system levels, including route, segment, or specific bus stops by time of day and by day of week. It is also important to note that information on LYNX routes has been coded into the software program Remix. LYNX uses Remix for long-term planning in developing new transit lines. The Remix platform is a modern, secure technology stack based on open data standards.

https://www.golynx.com/

https://www.remix.com/

I-RIDE Trolley Service

The I-RIDE Trolley is a transportation service within the International Drive Resort Area. The I-RIDE Trolley travels on a 24-mile circulator route with two primary lines – Red Line and Green Line. I-Ride Trolley, in partnership with NextBus, provides a web-based, real time, ADA-friendly, GPS-tracked service to reveal trolley arrival times for each stop. Ridership data is collected by stop, on a daily, monthly, and yearly basis. I-RIDE Trolley service also collects data for maintenance for the buses.

https://www.internationaldriveorlando.com/iride-trolley/

University of Central Florida Shuttle Services

The University of Central Florida (UCF) provides shuttle services through the Parking & Transportation Services department. Shuttle services operate every class day, excluding weekends. The on-campus shuttle system called Pegasus is offered to students, faculty, and staff members. The off-campus shuttle service provides 15 regular, fixed shuttle routes between the UCF campus and 22 off-campus apartment complexes and Central Florida Research Park. UCF offers the Grocery Shuttle providing services on Tuesdays from selected stops to Publix Super Market and back. Implemented Fall 2019, shuttle services are also available from the UCF Main Campus' LYNX Transit Center to UCF Downtown Campus.

https://parking.ucf.edu/shuttles/

SunRail

SunRail is Central Florida's commuter rail system. The SunRail network currently operates over 49 miles with 16 stations along a former CSX Transportation line connecting Volusia County and Osceola County through Downtown Orlando, passing through Seminole and Orange Counties. SunRail captures ridership statistics monthly and annually by station and monthly by train.

https://sunrail.com/

Sanford Trolley

The City of Sanford provides a free downtown trolley through its Community Redevelopment Agency (CRA). The Sanford trolley travels from the Sanford SunRail station to downtown Sanford, making frequent stops along the way before returning to the SunRail station. In addition to the trolley, the CRA also offers a free shuttle from the Amtrak Auto Train to the Sanford Welcome Center.

https://www.sanfordfl.gov/residents/trolley

reThink Your Commute (Central Florida Commuter Services Program)

reThink Your Commute promotes alternative transportation solutions for the Central Florida workforce. This Transportation Demand Management (TDM) program hosted by FDOT tracks and monitors data points such as park and ride utilization data, carpool and vanpool data, and more.

https://www.rethinkyourcommute.com/

Amtrak

Amtrak is a rail passenger service that travels across the country with stations in Central Florida. Amtrak collects service and ridership data by each station.

https://www.amtrak.com/state-fact-sheets

Freight Commodity Type & Flow Data

Freight refers to any good moved by truck, railroad, waterborne vessel, airplane, pipeline, or launched into space. Identifying and implementing improvements to accommodate increasing demand for freight and goods movement in the Central Florida region is critical to the region's economic vitality and quality of life. Commodity flows are typically used in freight planning to provide insights about the economic and trade environment of a region. Commodity flow attributes help tie goods movement to economic development by providing information about consumption dependencies such as raw material or service input markets (imports), and markets for finished products (exports).

IHS Global Insight: TRANSEARCH Database

TRANSEARCH data relies on economic models and provides very detailed information about most domestic shipments and more than 340 commodity types. The data shares information between US counties by commodity type and mode of transportation. Some of the data provided includes truckload, less-than-truckload, private truck, rail carload, rail/highway intermodal, air and water, tonnage, dollar value, units, and ton-miles. Currently, the FDOT Systems Implementation Office, Transportation Data and Analytics Office, and Freight, Logistics and Passenger Operations Office analyze freight mobility, freight intensity measures, and county-wide freight and logistics.

https://global.ihs.com/

Freight Analysis Framework 4 (FAF4)

The Freight Analysis Framework (FAF) creates a comprehensive picture of freight movement by integrating data from a variety of sources for all modes of transportation. The FAF version 4 (FAF4) baseline edition provides estimates for tonnage and value by regions of origin and destination, commodity type, and mode to show the movement among states and major metropolitan areas. Currently, the FAF4 is implemented within the FDOT Forecasting and Trends Office of Transportation Data and Analytics to analyze the impacts of transportation, travel demand, and Florida's transportation trends and conditions. The FAF4 can be applied to many applications for future transportation planning purposes such as: congestion management, traffic operations and services, and transportation investment.

https://ops.fhwa.dot.gov/freight/freight_analysis/faf/

Port Import/Export Reporting Service (PIERS)

PIERS provides import and export data at the detailed, bill-of-lading level – a heritage rooted in 40 years of amassing the industry's largest US waterborne trade data set. PIERS processes close to 60,000 bills of lading that are filed with US Customs. Data is available back to 2003, with detailed import and export transactions for 14 international markets and trade statistics for more than 80 countries. All US import data is sourced directly through a data feed from US Customs and Border Protection (CBP). The majority of export shipments are also sourced from US CBP, either through data feeds including automated export and the U.S. Customs' Document Imaging Systems or through paper filings gathered in Customs offices at ports across the United States. PIERS also obtains some data directly from carriers in order to supplement this process.

https://ihsmarkit.com/products/piers.html

Surface Transportation Board (STB) – Carload Waybill

The Carload Waybill (Rail Waybill), contains shipment data from a stratified sample of rail waybills. The Waybill contains origin and destination points, types of commodity, number of cars, tons, length of haul, and more information pertaining to shipment deliveries and interchanges.

https://www.stb.gov/stb/industry/econ_waybill.html

Data Developer:	STB
Data Collection:	Shipment and revenue information submitted by freight railroads to the STB and collected by the Association of American Railroads
Update Frequency:	Annually
Temporal Coverage:	Annual
Geographic Coverage:	Nationwide
Geographic Resolution:	Freight railroads
Data Format:	Tabular

Seaport (Port Canaveral) Cargo Tonnage

Cargo Tonnage is a measure of freight throughput at the port. It is an annual metric expressed in short tons, and included in the Port Authority's Comprehensive Annual Financial Report (CAFR).

https://www.portcanaveral.com/About/Financials

Data Developer:	Canaveral Port Authority
Data Collection:	Terminal Operations Models
Update Frequency:	Annually
Temporal Coverage:	2009-2018
Geographic Coverage:	Port Canaveral
Geographic Resolution:	Port Canaveral
Data Format:	PDF

Rest Areas

A rest area is a public facility, located next to a large thoroughfare such as a highway, expressway, or freeway at which drivers and passengers can rest, eat, and refuel (only on Florida's Turnpike) without exiting onto secondary roads. They play a critical role in providing parking for commercial trucks.

https://www.fdot.gov/maintenance/restareas.shtm

Data Developer:	FDOT Maintenance Office
Data Collection:	FDOT Inventory + FHWA Jason's Law Survey initiative
Update Frequency:	Annually
Temporal Coverage:	N/A
Geographic Coverage:	Statewide
Geographic Resolution:	Point of Location
Data Format:	GIS Shapefile, Tabular

Weigh in Motion (WIM) Locations

Weigh in Motion (WIM) locations are monitored through a weight enforcement program to protect Florida's highway system and bridges from damage by overweight vehicles. The data collected is maintained in an Oracle database system which stores per-vehicle, time-stamped information including speed, volume, vehicle classification, and other attributes.

https://gis-fdot.opendata.arcgis.com/datasets/weigh-in-motion-tda

Data Developer:	FDOT TDA Office
Data Collection:	WIM equipment through sensors installed in the ground
Update Frequency:	Weekly
Temporal Coverage:	1974–Present
Geographic Coverage:	Statewide
Geographic Resolution:	Point of Location
Data Format:	GIS Shapefile, Oracle SQL Databases, CSV, PDF

Safety Data

Considerations for safety are important for planning for the future. When creating the MTP, safety impacts on various users will be considered including drivers, bicyclists, and pedestrians. There are two major sources for safety data within the region.

Crash Analysis Reporting System (CARS)

The Crash Analysis Reporting System (CARS) is created by generating and merging crash data from DHSMV with roadway information provided by FDOT. Potential uses for CARS includes identifying risky locations, assessing infrastructure needs, creating engineering countermeasures, evaluating safety reduction technologies, performance analysis of pavement friction, as well as assisting in the development of freight and bicycle routes.

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/statistics/statistics/multimodaldata/multimodal/crash-analysis-reporting-system(cars).pdf?sfvrsn=5e16ac1d_0

Data Developer:	FDOT
Data Collection:	FDOT – Safety Office and DHSMV
Update Frequency:	Annually
Temporal Coverage:	Daily–Hourly
Geographic Coverage:	Statewide
Geographic Resolution:	Roadway/Point
Data Format:	CSV, GIS Shapefile, Oracle SQL Databases

Signal Four Analytics

Signal Four Analytics was developed and is hosted by the University of Florida (UF) in their GeoPlan Center. Agencies use Signal Four Analytics for work in law enforcement, traffic engineering, transportation planning, school transportation, as well as injury prevention, universities, and any organization related to traffic safety. It is a statewide interactive, web-based geospatial crash analytic tool that focuses on accessibility, timeliness, utilization, and geospatial analytics of data to make it easy to use. The crash database is updated daily by DHSMV.

https://s4.geoplan.ufl.edu/

Data Developer:	University of Florida
Data Collection:	DHSMV
Update Frequency:	Daily
Temporal Coverage:	Date and Time of Crash
Geographic Coverage:	Statewide
Geographic Resolution:	Roadway/Point
Data Format:	GIS Shapefile

Socioeconomic Data

Socioeconomic data includes demographics such as population, employment, unemployment, and neighborhood segmentation. Socioeconomic data is used by planners for a variety of reasons such as environmental justice, public involvement, and understanding specific community issues. These data sources are also used in transportation models for forecasting travel demand.

American Community Survey (ACS)

The ACS helps local officials, community leaders, and businesses understand the changes taking place in their communities. It is a source of detailed population and housing information.

https://www.census.gov/programs-surveys/acs/data.html

Data Developer:	U.S. Census Bureau
Data Collection:	Survey
Update Frequency:	Annually
Temporal Coverage:	2018
Geographic Coverage:	Nationwide
Geographic Resolution:	Multi-resolution (block groups to national scales)
Data Format:	CSV

Bureau of Economic and Business Research (BEBR)

The Bureau of Economic and Business Research (BEBR) at the University of Florida develops population projections for Florida and its counties on an annual basis.

https://www.bebr.ufl.edu/population/data

Data Developer:	BEBR
Data Collection:	Surveys, Estimation and Forecasting
Update Frequency:	Annually
Temporal Coverage:	2018-2045
Geographic Coverage:	Statewide, Countywide
Geographic Resolution:	County
Data Format:	PDF, XLS

Land Use Data

FDOR dataset contains parcel boundaries and associated tax information from the Florida Department of Revenue's tax database.

https://floridarevenue.com/property/Pages/DataPortal.aspx

Data Developer:	FDOR
Data Collection:	Tax Database
Update Frequency:	Bi-Annually
Temporal Coverage:	Annual
Geographic Coverage:	Statewide
Geographic Resolution:	Parcel
Data Format:	GIS Shapefile, Tabular, CSV

Population

To provide population, density, households, and commute to work time information, data from the United States Census Bureau was used. The Census Bureau, through its American Community Survey/Fact Finder and other tools, provides a variety of annual data regarding the nation's demographics and its people.

https://www.census.gov/programs-surveys/popest.html

Data Developer:	U.S. Census Bureau
Data Collection:	Various Agencies/Sources, Surveys
Update Frequency:	Annually
Temporal Coverage:	1990-2018
Geographic Coverage:	Nationwide, Region, Statewide, Countywide, Metropolitan Area (3-County)
Geographic Resolution:	County
Data Format:	CSV

Employment

Area employment estimates were collected from the United States Commerce Department's Bureau of Economic Analysis (BEA). The estimates include data on total and industry employment at the state, and county levels.

https://www.bea.gov/data/by-place-county-metro-local

https://www.bea.gov/data/income-saving/personal-income-county-metro-and-other-areas

In addition, Woods & Poole employment data were utilized for modeling of future employment. Information on this data is available online at:

https://www.woodsandpoole.com/

Data Developer:	BEA
Data Collection:	Surveys, Agencies
Update Frequency:	Annually
Temporal Coverage:	1990-2017
Geographic Coverage:	Nationwide, Statewide, Countywide
Geographic Resolution:	County
Data Format:	CSV

Unemployment Rate

The United States Bureau of Labor Statistics' (BLS) Local Area Unemployment Statistics (LAUS) program is a federal-state cooperative effort in which monthly and annual estimates of unemployment rates are prepared for states, counties, and metro areas.

https://www.bls.gov/lau/

Data Developer:	BLS
Data Collection:	Current Population Survey
Update Frequency:	Annually and Monthly
Temporal Coverage:	1990-2018
Geographic Coverage:	Nationwide, Statewide, Countywide, Metropolitan Area (3-County)
Geographic Resolution:	County
Data Format:	CSV

Hotel & Motel Units

The Florida Department of Business and Professional Regulation (DBPR) provides annual reports on lodging, including hotel and motel units in Florida counties.

http://www.myfloridalicense.com/DBPR/hotels-restaurants/reports-statistics/

Data Developer:	Florida DBPR
Data Collection:	Public Food Service and Lodging License and Unit Summary
Update Frequency:	Annually
Temporal Coverage:	2009-2018
Geographic Coverage:	Countywide
Geographic Resolution:	County
Data Format:	PDF

Tapestry Segmentation

Tapestry Segmentation, developed by ESRI as a geodemographic market segmentation system, classifies neighborhoods across the country into 67 unique segments throughout 14 different groups. These segment classifications are based on demographics, as well as socioeconomic characteristics. The 14 different groups, called LifeMode Summary Groups, represent and reflect different lifestyles and stages of life. Tapestry Segmentation is used to describe neighborhoods in easy-to-visualize terms in order to better understand and meet the needs of the population living there.

The 14 LifeMode Summary Groups are:

- L1: Affluent Estates
- L2: Upscale Avenues
- L3: Uptown Individuals
- L4: Family Landscapes
- L5: GenXurban
- L6: Cozy Country Living
- L7: Ethnic Enclaves
- L8: Middle Ground
- L9: Senior Styles
- L10: Rustic Outposts
- L11: Midtown Singles
- L12: Hometown
- L13: Next Wave
- L14: Scholars and Patriots

https://www.esri.com/en-us/arcgis/products/tapestry-segmentation/overview

Environmental & Health Data

Environmental data involves conservation areas, wetlands, floodplains, and wildlife and natural habitats. Environmental and community health resources will be considered in the development of the MTP.

Efficient Transportation Decision Making (ETDM)

The Efficient Transportation Decision Making (ETDM) process is Florida's procedure for reviewing qualifying transportation projects to consider potential environmental effects in the Planning phase. The website includes an extensive amount of environmental and social demographic data.

https://www.fdot.gov/environment/etdm.shtm

Data Developer:	FDOT Office of Environmental Management
Data Collection:	EST Tool
Update Frequency:	On-going
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Project Location
Data Format:	Web-based

Conservation Areas

The Florida Natural Areas Inventory (FNAI) is the central repository for information on Florida's conservation lands. The inventory database includes boundaries and statistics for more than 2,500 federal, state, local, and private managed lands.

https://www.fnai.org/webmaps/ConLandsMap/

Data Developer:	FNAI
Data Collection:	FNAI Inventory
Update Frequency:	Quarterly
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Area
Data Format:	GIS Shapefile, KMZ, Online Interactive Map

Wetlands

The United States Fish and Wildlife Service (FWS) National Wetlands Inventory (NWI) is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of United States wetlands.

https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

Data Developer:	US. Fish & Wildlife Service
Data Collection:	NWI Inventory
Update Frequency:	Biannually
Temporal Coverage:	2019
Geographic Coverage:	Nationwide
Geographic Resolution:	Area
Data Format:	GIS Shapefile, Online Map

Floodplains

The Federal Emergency Management Agency (FEMA) designates flood zones. Flood zones are geographical areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map.

https://msc.fema.gov/portal/home

Data Developer:	FEMA
Data Collection:	FEMA Designation
Update Frequency:	As Needed
Temporal Coverage:	2019
Geographic Coverage:	Nationwide
Geographic Resolution:	Zone
Data Format:	GIS Shapefile, Online Map

Wildlife and Habitats

The Florida Fish and Wildlife Conservation Commission (FWC) has a management interest in natural resource lands in Florida. The FWC contains a collection of spatial resources delineating the observed or modeled boundaries of species-specific habitats.

https://myfwc.com/wildlifehabitats/wildlife/manatee/data-and-maps/

Data Developer:	FWC
Data Collection:	FWC Inventory
Update Frequency:	As Needed
Temporal Coverage:	2019
Geographic Coverage:	Statewide
Geographic Resolution:	Point of Location/Boundary
Data Format:	GIS Shapefile, Online Map

Mitigation Banks

Mitigation banking is a practice in which environmental enhancement and preservation is conducted by public agencies or private entities to provide mitigation for wetland impacts that are unavoidable within a defined region, called a mitigation service area. Data regarding mitigation banks is organized by the Florida Department of Environmental Protection; however mitigation bank permitting is approved by either the FDEP or a water management district, and the U.S. Army Corps of Engineers.

https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/mitigation-and-mitigation-banking

Community Health

The American Community Survey (ACS) and Florida Department of Health maintain databases of community health indicators, such as: disability, fertility, healthcare and social assistance services, HIV/AIDS, physical activity, diet, tobacco, alcohol use, asthma, diabetes, and cancer screenings, among several other factors.

https://www.census.gov/topics/health/data.html
http://www.floridahealth.gov/statistics-and-data/survey-data/index.html
http://www.floridahealth.gov/statistics-and-data/survey-data/behavioral-risk-factor-surveillance-system/index.html

Air Quality Monitoring Sites

The Florida Department of Environmental Protection also routinely monitors air quality and pollutant levels throughout the state. Four monitoring locations are located within the region.

https://fldep.dep.state.fl.us/air/flags/selectreport.asp?

Visitation Data

Tourism and travel have great significance in the region. Transportation has provided the backbone of our economy, connecting visitors to attractions. With the growing visitor trends, it is critical that there is continuous investment in the transportation infrastructure necessary to meet the mobility needs of tourists and local residents.
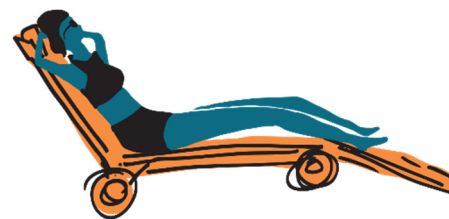
Visitors

Visit Florida provides estimates and analyzes trends of visitors to the state of Florida in its annual reports. Visit Orlando publishes additional trends in visitation for the Greater Orlando area. Both agencies report non-identifying historic data, with more detailed information available for partner agencies.

https://www.visitflorida.org/resources/research/

https://www.visitorlando.com/en/corporate-blog/visit-orlando-research-insights

https://www.visitorlando.com/en/about-us/documents/reports

Data Developer:	Visit Florida | Visit Orlando
Data Collection:	Varies by agency and study
Update Frequency:	Quarterly | Quarterly
Temporal Coverage:	2009-2019 | 2016-2019
Geographic Coverage:	Statewide | Greater Orlando Area
Geographic Resolution:	State of Florida | Multi-County Area
Data Format:	PDF Reports | Online newsletter

Seaport (Port Canaveral) Cruise Passenger Traffic

Cruise revenue passengers at Port Canaveral are reported in annual increments in the Port Authority's CAFR.

https://www.portcanaveral.com/About/Financials

Data Developer:	Canaveral Port Authority
Data Collection:	Port Authority CAFR
Update Frequency:	Annually
Temporal Coverage:	2009-2018
Geographic Coverage:	Port Canaveral
Geographic Resolution:	Port Canaveral
Data Format:	PDF

Airport Passenger Traffic

Area commercial service airport passengers are reported annually by the Authorities in charge of the two international airports in the region: Greater Orlando Aviation Authority (GOAA) for the Orlando International Airport (MCO), and the Sanford Airport Authority (SAA) for the Orlando-Sanford International Airport (SFB).

https://orlandoairports.net/site/uploads/CAFR_2018.pdf

https://flysfb.com/saa/

Data Developer:	Sanford Airport Authority and Greater Orlando Aviation Authority
Data Collection:	Commercial Service Passenger Counts
Update Frequency:	Annually
Temporal Coverage:	2009-2018
Geographic Coverage:	SFB & MCO
Geographic Resolution:	SFB & MCO
Data Format:	Web-based

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