

SUMMARY

ATRI provides GPS-based spatial and temporal information for a large sample of trucks with onboard, wireless communication systems in the U.S. Data includes geospatial (coordinates) and temporal (time/date stamp) information for the corresponding trucks. Other information such as spot speed and heading are also provided in the data. The data does not provide information on commodity type, TL/LTL, # of axles, travel purpose or other details of individual trucks. Currently, more than 100 million GPS data points are collected per day by ATRI. The data has been collected since 2002. FDOT retains a sample of processed ATRI data for 2010 which was used by the Systems Planning Office for a freight planning research study ([Final Report BDK84-977-20](#)).

MORE ABOUT THE DATA:

Developer: [American Transportation Research Institute](#)

Update Frequency: Monthly

Latest Year Available: 2016

Temporal Coverage: Real-time data

Geographical Coverage: North America

Geographical Resolution: XY coordinates

Modal Coverage: Truck (classes 8-13 in FHWA Scheme F classifications)

Data Format: CSV

Licensing Agreement: Required

Acquisition Cost: Variable depending on the sample size

Contact:

[FDOT TRANSTAT](#)

Modeling Section

(850) 414-4848

CURRENT APPLICATIONS

- » FDOT – District 4 – SHRP2 C20
 - » SHRP2 C20: Analysis of Truck Route Choice using Truck-GPS Data, 2015
- » Systems Planning Office
 - » Using Truck Fleet Data in Combination with Other Data Sources for Freight Modeling and Planning, 2014 - [Final Report BDK84-977-20](#)
Final Report info at http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_PL/FDOT-BDV25-977-17-sum.pdf

POTENTIAL APPLICATIONS

- » Freight Performance Measures
- » Congestion Management
- » Traffic Operations/Services
- » Safety Planning and Analysis
- » Environmental Planning
- » Emergency Preparedness and Security Planning
- » Regulation and Enforcement
- » Model Validation
- » Terminal and Border Access Planning
- » Sustainable Transportation Investment
- » Freight Transportation and Land Use Planning
- » Urban Tour-based Freight Modeling
- » Roadway Pavement and Bridge Maintenance Planning

Location Visited During One Week by 1000 Trucks Starting in Miami*

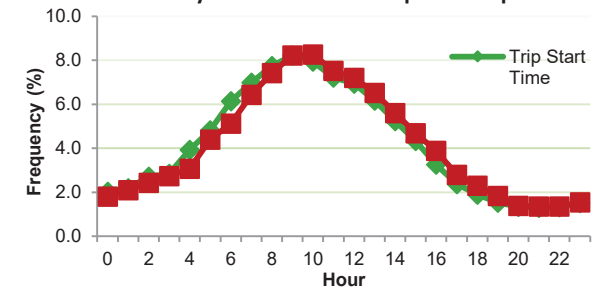


* Source: Analysis of Truck Route Choice using Truck-GPS Data, 15th TRB National Planning Applications Conference, 2015

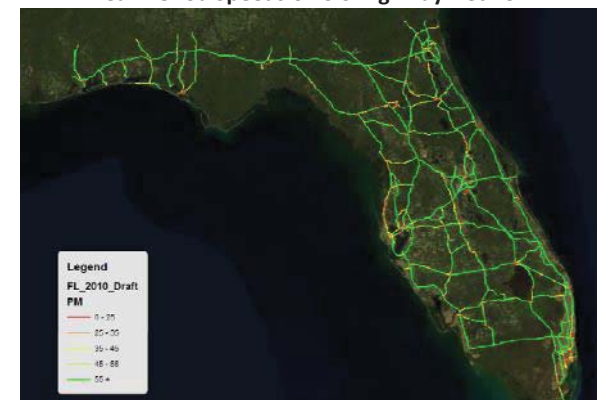
One day ATRI truck GPS data coverage, 2010*



Time of Day Profile for Truck Trips in Tampa*



PM Peak Period Speeds on SIS Highway Network*



Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/update	Accuracy	Access	Usability
Rating	●	○	○	◐	●	●	◐	◐	◐



SUMMARY

The CARS database is generated generally by merging crash data from Department of Highway Safety and Motor Vehicles (DHSMV) with roadway information from FDOT. The database contains all the information recorded in the long form crash report. All reported crashes with a fatality, an injury and high property damage that occurred on state roads are included in the database.

MORE ABOUT THE DATA:

Developer: [FDOT – Safety Office](#) and [Department of Highway Safety and Motor Vehicles \(DHSMV\)](#)

Update Frequency: Annually

Temporal Coverage: Daily-Hourly

Geographical Coverage: Statewide

Geographical Resolution: Roadway/Point file

Modal Coverage: Auto/Non-auto

Range of Data: 1994-present

Data Format: CSV, Shape files, Oracle SQL Databases

Licensing Agreement: N/A

Acquisition Cost: Free

Legal Reference: Florida Senate’s statute 316.066

Contact:

[FDOT TRANSTAT](#)
850-414-4848

CURRENT USERS/APPLICATIONS

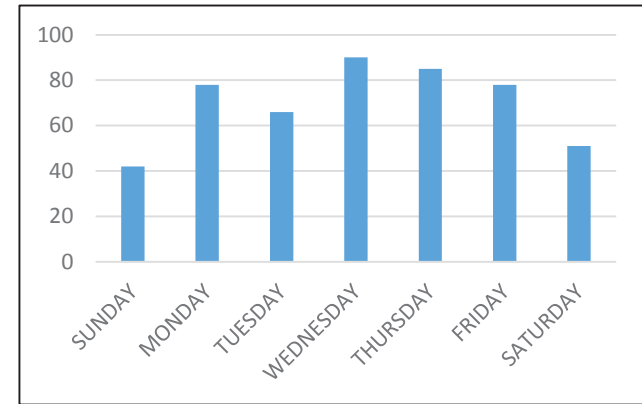
- » Florida Department of Transportation
 - » Safety Office
 - » Office of Policy Planning
 - » Design Office
- » University
 - » Signal Four Analytics
 - » Safety Analyst tool
 - » Florida’s Integrated Report Exchange tool

POTENTIAL APPLICATIONS

- » Identification of risky locations
- » Engineering countermeasures
- » Pavement friction performance analysis
- » Sustainability studies
- » Analysis for complete street projects
- » Infrastructure needs assessment
- » Evaluation of safety reduction technologies
- » Developing freight and bicycle routes
- » Policy actions
- » Safety performance measures

MAJOR ATTRIBUTES IN CARS

For each crash, there are more than 300 variables used to describe the site and time of the crash, the geometric conditions, the traffic control, and drivers/pedestrian’s characteristics. The variables can be classified into three major categories, including person, vehicle and crash. For each variable, several code values were assigned to represent different categories of the variable. For example, for the variable “Light”, the code value is used to denote “daylight”, 02 denotes “dusk”, 03 denotes dawn, 04 denotes dark with street light, 05 denotes dark with no street light and 8 denotes unknown.



Fatal Crashes involving Commercial Vehicles (2011-2013)



Fatal Crashes Involving Commercial Vehicles (2011-2013)

Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/update	Accuracy	Access	Usability
Rating	●	○	○	◐	●	●	●	◐	●



SUMMARY

An electronic freight theft management system was developed for Florida by the Center for Advanced Transportation Systems Simulation in 2005. The system is a comprehensive online application for the reporting, documentation, inventory, and distribution of information on intermodal freight theft and related occurrences. The system provides law enforcement with the immediate distribution of freight related theft information. The online archived database can assist law enforcement in prioritizing theft investigations and conduct recovery operations by the importance of the stolen cargo. The online application was updated in 2008.

MORE ABOUT THE DATA:

Developer: [FDOT Traffic Engineering and Operations Office](#)

Update Frequency: Unknown

Latest Year Available: 2016

Temporal Coverage: Date/Time

Geographical Coverage: Statewide

Geographical Resolution: Roadways

Modal Coverage: Truck

Data Format: Tabular and Spatial

Licensing Agreement: Required

Acquisition Cost: Publicly available/Free

Legal Reference: 49 USC 31106, SAFETEA-LU section 4126

Contact:

[FDOT TRANSTAT](#)

(850) 414-4848

CURRENT APPLICATIONS

- » Department of Highway Safety and Motor Vehicles
- » Traffic Engineering and Operations Office
 - » Commercial Vehicle Operations Program
 - » Traffic Incident Management
 - » Commercial Vehicle Information Systems and Networks

POTENTIAL APPLICATIONS

- » Traffic Operations/Services
- » Safety Planning and Analysis
- » Freight Performance Measures
- » Regulation and Enforcement
- » Freight Transportation and Land Use Planning

Theft/Recovery Activities, Lee County, 2008

Control Number	Date	Address	City	County	Recovery
W2006120016	12/13/2006	5026 LEE STREET	LEHIGH ACRES	LEE	
R2006120036-0	12/18/2006	4839 NW 74TH AVENUE	MEANE	DADE	TRUCK
W2006120037	12/18/2006	5526 LEE STREET	LEHIGH ACRES	LEE	
R2006120037-0	12/18/2006	4829 NW 74TH AVENUE	MEANE	DADE	TRUCK
W2006120038	12/18/2006	351 LEONARD BLVD N	LEHIGH ACRES	LEE	
R2006120038-0	12/18/2006	4839 NW 74TH AVENUE	MEANE	DADE	TRAILER
W2006120039	12/18/2006	351 LEONARD BLVD N	LEHIGH ACRES	LEE	
R2006120039-0	12/18/2006	4839 NW 74TH AVENUE	MEANE	DADE	TRAILER
W2006120066	10/23/2006	35771 BONITA GRANDE DRIVE	BOKEITA SPRINGS	LEE	
R2006120066-0	10/24/2006	DR 921 @ QUAIL ROOST DRIVE	MEANE	DADE	TRUCK
W2006100029	10/12/2006	11798 S. CLEVELAND AVE	FORT MYERS	LEE	
R2006100029-0	10/12/2006	CAPTAIN HENRY DR @ LIVE OAK LN	LABELLE	HENDRY	TRAILER

Source: The Enhancement and Upgrade of The EFTMS, University of Central Florida, 2008

Online Tool for Geocoding the Theft/Recovery Location Using the Address or Map

Electronic Freight Theft Management System

WHERE DID THE THEFT OCCUR?

Address: 505 SUVANNEE ST
 City: LEE HAVEN
 State: FLORIDA (FL)
 ZIP: 32379
 County: LEE

Map | Back | Clear | Reset

Electronic Freight Theft Management System

You are currently logged in as PATRICK R. KIM. If this is not you, you are required to logout.

X: 84.885 Y: 28.255

Zoom In | Zoom Out | Locate

- You can Zoom in to the location by clicking on the map OR by drawing a box over the general vicinity.
- Once you get to a level of zoom that you can pinpoint the location, click the Locate radio button to select the Locate tool.
- Then, click the map to designate the location. The two text boxes above will fill with XY values.
- Then click Submit to return to the previous page.

Source: The Enhancement and Upgrade of The EFTMS, University of Central Florida, 2008

Freight Theft GIS Tool

Electronic Freight Theft Management System

You are currently logged in as PATRICK R. KIM. If this is not you, you are required to logout.

X: 76.862 Y: 22.678

Zoom In | Zoom Out | Locate | Scale | Measure

33 Days | Select Map | HOME

Control Number	Date of Theft	Address
W2006010024	1/16/2006	AT CORNER OF CLEARWOOD ST. & HENSLAW ST., FORT CHARLOTTE
W2006010011	1/22/2006	1402 SW PINE ISLAND RD. CLEAR SPRING
W2006010066	1/21/2006	424 NEW MARKET ROAD WEST DUNEDALE
W2006010021	1/23/2006	6050 PLAZA DRIVE FORT MYERS

Source: The Enhancement and Upgrade of The EFTMS, University of Central Florida, 2008

Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/update	Accuracy	Access	Usability
Rating	●	●	○	◐	●	◐	◐	◐	●



SUMMARY

Florida Department of Transportation (FDOT) operates 53 rest areas at 35 sites along Florida's interstate highways to provide safe, secure and comfortable rest stops for Florida travelers. Rest areas are generally located about 45 minutes traveling time apart. These rest areas provide restrooms, picnic areas (in most locations), pet walk areas, telephones and vending machines to aid travelers seeking a break from a long drive.

MORE ABOUT THE DATA:

Developer: [FDOT – Maintenance Data](#)

Update Frequency: Annually

Temporal Coverage: 2014

Geographical Coverage: Statewide

Geographical Resolution: Point

Modal Coverage: Trucks/Cars

Data Format: GIS, Tabular

Licensing Agreement: N/A

Acquisition Cost: Free

Legal reference: 334.044(2), 337.405, 337.406

Contact:

[FDOT TRANSTAT](#)

(850)-414-4848

MAJOR ATTRIBUTES

- » Florida Department of Transportation
- » Traffic Operations
- » Safety Office
- » TRANSTAT
- » Office of Maintenance
- » Office of Policy and Planning

POTENTIAL APPLICATIONS

- » Emergency Response
- » Regulatory Management and Compliance
- » Smart Growth Planning
- » Environmental Planning
- » Commercial Vehicle Safety Evaluation
- » Parking Studies

CURRENT USERS

Number of facilities:

- » **Rest Areas:** 53 Units (2 are closed for remodeling)
- » **Service Plazas:** 8 Units
- » **Truck Comfort Stations (WIM):** 19 units
- » **Welcome Centers:** 4 units

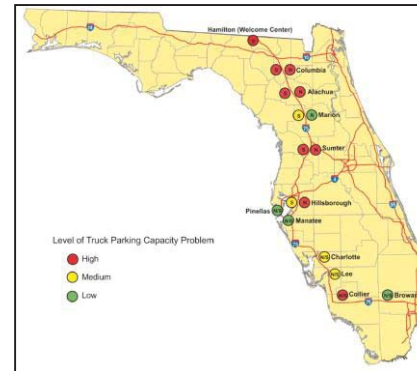
Total number of parking spaces in rest areas, WIMs and welcome centers is 2529 (from Jason's law study)

Additional remarks:

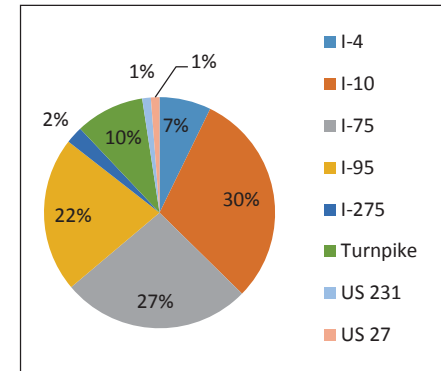
- » Welcome Centers are operated by Visit Florida, Inc. (FLAUSA)
- » The facilities in our Welcome Centers and Interstate Rest Areas are open and maintained 24 hours a day, 7 days a week

Major Attributes:

- » Presence of family restrooms
- » Presence of nighttime security
- » Interstate information



I-75 truck capacity parking problem
 Source: [Commercial Motor Vehicle Parking Trends at Rest Areas and Weight Stations](#)



Percent of facilities on different corridors



Rest Areas and Service Area Facility

Source: [Office of Maintenance](#)

Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/ update	Accuracy	Access	Usability
Rating	●	○	◐	◑	●	●	●	◐	●



SUMMARY

FDOT's Transportation Statistics Office conducts traffic data collection to obtain, compile, and maintain traffic data including volumes, types of vehicles, and the weight of trucks using the state highway network. The office also conducts an Annual Traffic Data Collection program to obtain traffic surveys, process raw counts, and maintain current and historic databases for the State Road System. This program is supplemented with additional counts that are performed as needed for special purposes. FDOT operates over 300 permanent Telemetered Traffic Monitoring Sites (TTMS) and over 12,000 Portable Traffic Monitoring Sites (PTMS). The data collected through these stations are provided via different mediums including, Traffic Data Shapefiles, Florida Transportation Information DVDs, Real-time Traffic Information, and Florida Traffic Online.

MORE ABOUT THE DATA:

Developer: [FDOT TRANSTAT Traffic Data Section & GIS Section](#)

Update Frequency: Annually

Latest Year Available: 2015

Temporal Coverage: Annual

Geographical Coverage: Statewide

Geographical Resolution: Roadways

Modal Coverage: Truck

Data Format: Tabular and Spatial

Licensing Agreement: N/A

Acquisition Cost: Publicly available/Free

Legal Reference: 23 CFR 420.105 (b)

Contact: [FDOT TRANSTAT](#)
(850) 414-4848

CURRENT APPLICATIONS

- » Transportation Statistics Office (TRANSTAT)
 - » FDOT Truck Volume Maps, 2015
 - » Traffic Demand Forecasting
 - » Florida Traffic Online
 - » Florida Traffic Information Mobile App (App Store)
 - » Freight Performance Metrics Development, 2015
 - » Emergency Management Planning and Operations
 - » Florida Commercial Vehicle Information Systems and Networks
 - » Florida Port of Entry Feasibility Study
 - » Traffic Studies

POTENTIAL APPLICATIONS

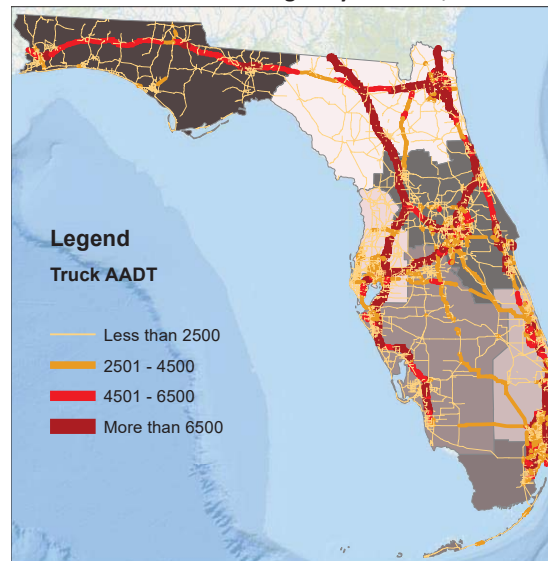
- » Congestion Management
- » Traffic Operations/Services
- » Freight Performance Measures
- » Safety Planning and Analysis
- » Environmental Planning
- » Roadway Pavement and Bridge Maintenance Planning
- » Sustainable Transportation Investment
- » Freight Transportation and Land Use Planning

Florida Traffic Online Interface, 2014



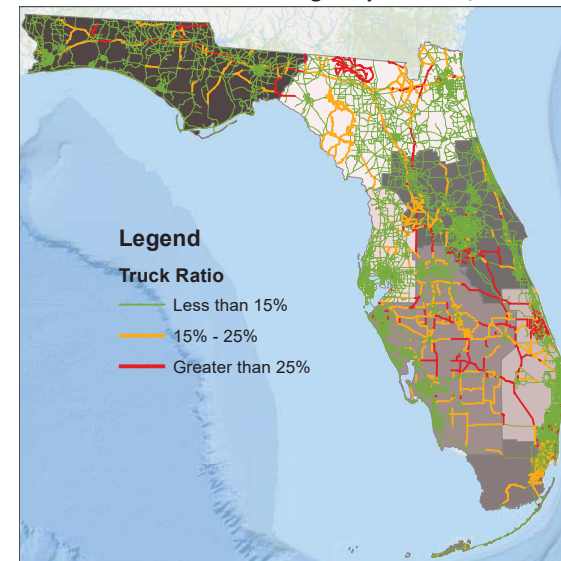
Source: <http://www2.dot.state.fl.us/FloridaTrafficOnline/viewer.html>

Truck AADT on Florida Highway Network, 2014



Source: RS&H, Inc.

Truck Factor on Florida Highway Network, 2014



Source: RS&H, Inc.

Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/update	Accuracy	Access	Usability
Rating	●	○	○	◐	◐	◐	●	●	●



SUMMARY

The Motor Carrier Size and Weight program is designed to assist FDOT in providing a safe transportation system by enforcement of commercial vehicle size and weight regulations. The program operates 20 fixed weigh station and several mobile enforcement location with portable scales throughout the state. More than 20 million vehicles are weighted annually at these stations. The primary objective of the program is to reduce the damage from overweight vehicles on Florida’s highway system and bridges. The program provides detailed information on weight stations and data collected at each station.

MORE ABOUT THE DATA:

Developer: [FDOT Office of Maintenance](#)

Update Frequency: Weekly

Latest Year Available: 2016

Temporal Coverage: 1974-present

Geographical Coverage: Statewide

Geographical Resolution: Roadways

Modal Coverage: Truck

Data Format: Tabular, Spatial

Licensing Agreement: N/A

Acquisition Cost: Publicly available/Free

Legal Reference: 49 USC, Chapter 316 of the Florida Statutes

Contact:

[FDOT TRANSTAT](#)

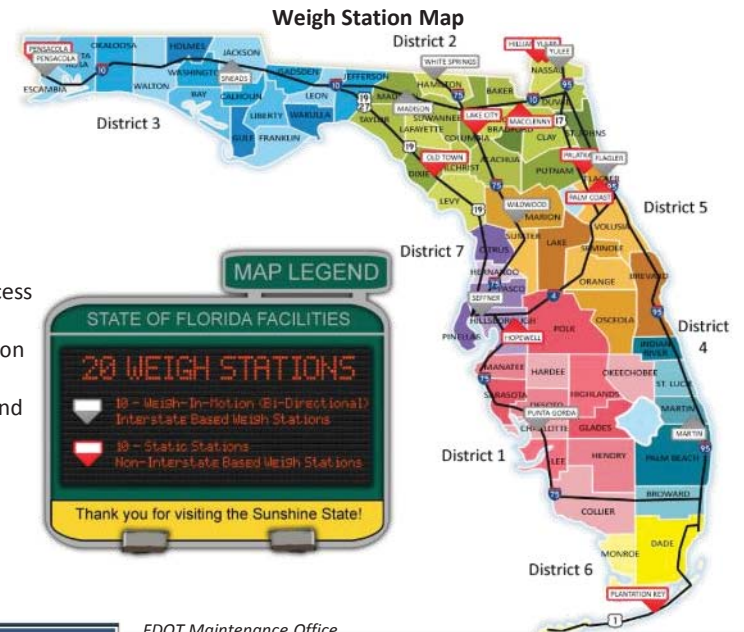
(850) 414-4848

CURRENT APPLICATIONS

- » Traffic Engineering and Operations Office
 - » Commercial Vehicle Information Systems and Networks
 - » Florida Port of Entry Feasibility Study, 2014
- » Research Center
 - » Commercial Motor Vehicle Parking Trends At Rest Areas And Weigh Stations, 2012

POTENTIAL APPLICATIONS

- » Freight Performance Measures
- » Traffic Operations/Services
- » Safety Planning and Analysis
- » Freight Mobility Planning
- » Emergency Preparedness and Security Planning
- » Hazardous Material Planning
- » Terminal and Border Access Planning
- » Sustainable Transportation Investment
- » Freight Transportation and Land Use Planning
- » Regulation and Enforcement



Seffner I-4 Weigh Station (WIM) with Driver Facility



Seffner I-4 Weigh Station (WIM) with Truck Comfort Station			
Mile Marker	13 - Hillsborough Co. - D7	Supervisor	Staff Directory
Parking Spaces EB	15 Truck, 19 Standard	Parking Spaces WB	15 Truck, 19 Standard
Lat./Long. EB	28.015546, -82.265185	Lat./Long. WB	28.018564, -82.272593
Phone Number EB	(813) 657-7780	Phone Number WB	(813) 651-2143
Address (EB) 1251 Interstate 4, Seffner, Fl. 33584			
Address (WB) 1250 Interstate 4, Seffner, Fl. 33584			

FDOT Maintenance Office,
<http://www.dot.state.fl.us/statemaintenanceoffice/motorcarrier.shtm>

FDOT Maintenance Office,
<http://www.dot.state.fl.us/statemaintenanceoffice/motorcarrier.shtm>

Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/update	Accuracy	Access	Usability
Rating	●	○	○	◐	●	●	●	●	●



SUMMARY

Jason's Law directed the U.S. Department of Transportation (DOT) to conduct a survey and a comparative assessment to:

1. Evaluate the capability of each State to provide adequate parking and rest facilities for commercial motor vehicles engaged in interstate transportation;
2. Assess the volume of commercial motor vehicle traffic in each State; and,
3. Develop a system of metrics to measure the adequacy of commercial motor vehicle parking facilities in each State.

MORE ABOUT THE DATA:

Developer: USDOT – Federal Highway Administration (FHWA)

Update Frequency: N/A

Temporal Coverage: 2015

Geographical Coverage: Nationwide

Geographical Resolution: Point

Modal Coverage: Truck

Data Format: GIS, Tabular

Licensing Agreement: N/A

Acquisition Cost: Free

Legal reference: MAP-21; P.L. 112-141

Contact:

[FDOT TRANSTAT](#)

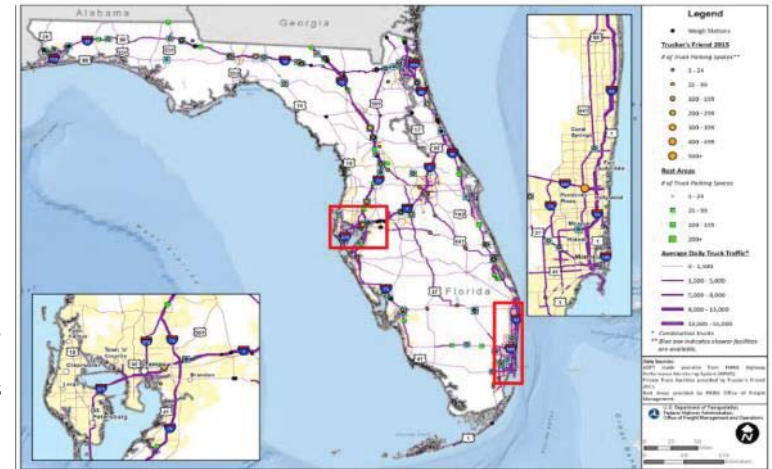
(850)-414-4848

POTENTIAL APPLICATIONS

- » Emergency Response
- » Regulatory Management and Compliance
- » Smart Growth Planning
- » Environmental Planning
- » Critical Infrastructure Protection Assessment

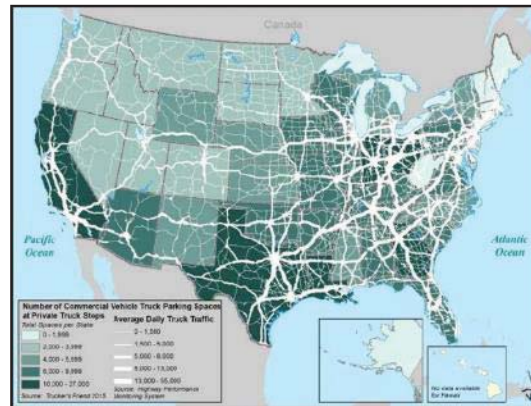
MAJOR ATTRIBUTES

- » Private parking facilities were acquired from 2015 Trucker's Friends directory.
- » Public parking facilities were obtained from state DOTs and NATSO provided Service plazas information.



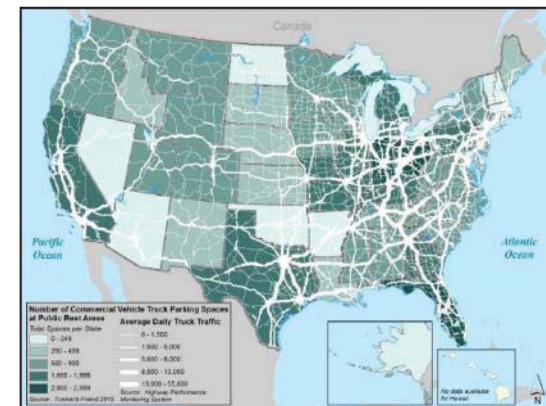
Truck Parking Locations (2015)

Source: [Jason's Law Truck Parking Survey Results and Comparative Analysis](#)



Commercial Vehicle Truck Parking at Private Truck Stops

Source: [Jason's Law Truck Parking Survey Results and Comparative Analysis](#)



Commercial Vehicle Truck Parking at Public Rest Areas

Source: [Jason's Law Truck Parking Survey Results and Comparative Analysis](#)

Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/ update	Accuracy	Access	Usability
Rating	●	○	◐	◐	●	●	●	◐	●



SUMMARY

NPMRDS provides vehicle probe-based travel time data for passenger autos and trucks. The data is made up of HERE and ATRI databases. The real-time probe data are collected from a variety of sources including mobile devices, connected autos, portable navigation devices, commercial fleet and sensors. NPMRDS includes historical average travel times in 5 minutes increments on daily basis covering the National Highway System (NHS). The data is provided in two parts. The first part is a Traffic Message Channel (TMC) static file that contains TMC information that does not change frequently. The second part includes travel times and identifies roadways geo-referenced to TMC location codes. The two datasets need to be joined in GIS-based software to provide the full picture.

MORE ABOUT THE DATA:

Developer: [HERE Traffic](#)

Update Frequency: Annually, with monthly release

Latest Year Available: 2016

Temporal Coverage: Daily Speed Info with 5 minutes increments

Geographical Coverage: NHS

Geographical Resolution: States/Region

Modal Coverage: Truck and car

Data Format: CSV & ArcGIS shapefiles

Licensing Agreement: Required

Acquisition Cost: Free for DOTs & MPOs

Legal Reference: 49 CFR 111(c)(2).

Contact:

[FDOT TRANSTAT](#)

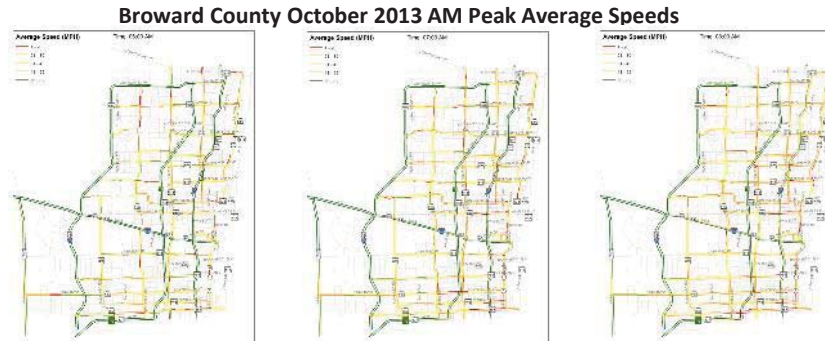
(850) 414-4848

CURRENT APPLICATIONS

- » Transportation Statistics Office
 - » Express Lanes Reliability Measures, 2014
 - » Data for Florida’s Mobility Performance Measures, 2015
- » Turnpike
 - » Performance Scorecard

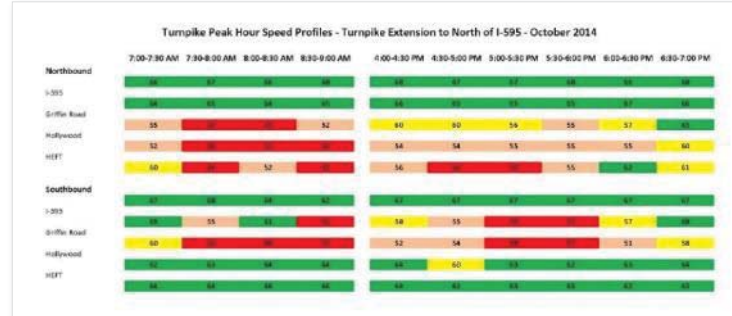
POTENTIAL APPLICATIONS

- » Congestion Management
- » Traffic Operations/Services
- » Safety Planning and Analysis
- » Environmental Planning
- » Economic Development Planning
- » Roadway Pavement and Bridge Maintenance Planning
- » Terminal and Border Access Planning
- » Sustainable Transportation Investment
- » Emergency Preparedness and Security Planning



Source: FDOT-D4, Application of the NPMRDS

AM Peak Hour Speed Profiles – Turnpike Extension to North of I-95, 2014

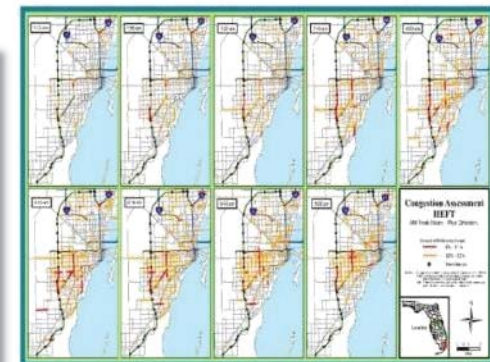


Source: Turnpike Uses of NPMRDS Data, FDOT-Turnpike

Sample NPMRDS Data

TMC	Date	Epoch	Travel time All vehicles	Travel time Passenger vehicles	Travel time Freight trucks
118N04174	11132013	180	113	115	113
118N04174	11132013	181	108	105	115
118N04174	11132013	182	110		110
118N04174	11132013	183	113	110	113
118N04174	11132013	184	117	115	122
118N04174	11132013	185	113	112	114
118N04174	11132013	186	109	108	110
118N04174	11132013	187	111	111	113

Source: Using NPMRDS to Generate Statewide Performance Measures, Chen-Fu Liao, University of Minnesota



Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/update	Accuracy	Access	Usability
Rating	●	○	○	◐	●	●	●	◐	●



SUMMARY

The Overweight and Over-Dimensional Vehicle Permit Program provides required permits for vehicles that exceed the maximums specified weight and size limits in Sections 316.515 and 316.535, Florida Statutes. New features in the automated Permit Application System (PAS) include the creation of an account profile to store user data, automated permit delivery, vehicle analysis, route analysis, and payment processing. Based on the input information, a database on oversize and overweight vehicles is created. Different attributes are included in the data such as permit application number, vehicle type, load description, vehicle dimension, gross weight, number of axles and route information. The data can be used to identify segments of highway system that undergo stress from overweight and oversize freight vehicles.

MORE ABOUT THE DATA

Developer: [FDOT Office of Maintenance](#)

Update Frequency: Variable (Based on construction projects)

Latest Year Updated: 2016

Temporal Coverage: N/A

Geographical Coverage: Statewide

Geographical Resolution: Highways/Bridges

Modal Coverage: Truck

Data Format: Online Application Tool

Licensing Agreement: Required

Acquisition Cost: Publicly available/Free

Legal Reference: Rule 14-26, F.A.C.

Contact:

[FDOT TRANSTAT](#)

(850) 414-4848

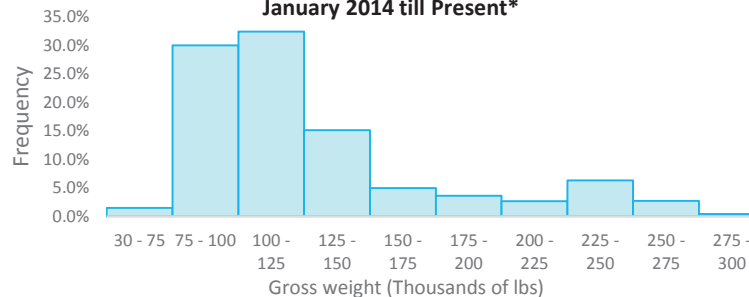
CURRENT APPLICATIONS

- » Office of Inspector General
 - » Annual Report FY 2014-2015
- » Traffic Engineering and Operations Office
 - » Commercial Vehicle Information Systems and Networks
 - » Florida Port of Entry Feasibility Study, 2014
- » Office of Maintenance
 - » Bridge Load Rating Manual, 2012

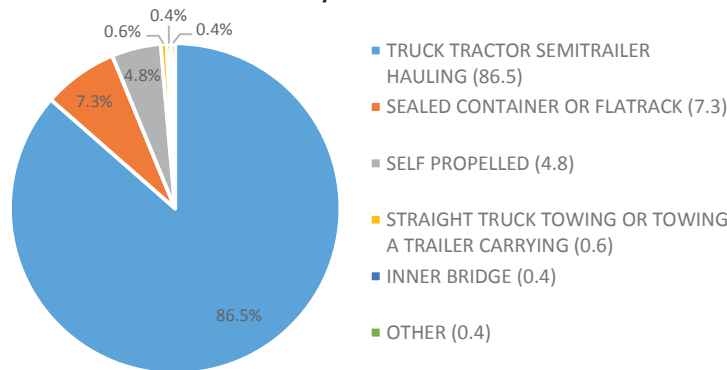
POTENTIAL APPLICATIONS

- » Freight Performance Measures
- » Traffic Operations/Services
- » Safety Planning and Analysis
- » Freight Mobility Planning
- » Sustainable Transportation Investment
- » Freight Transportation and Land Use Planning
- » Regulation and Enforcement

Distribution of Overweight Vehicles by Weight January 2014 till Present*

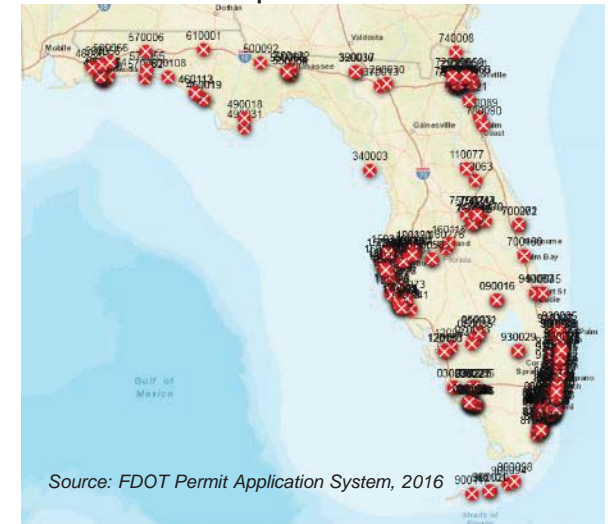


Share of Overweight Vehicles By Vehicle Configuration January 2014 till Present*

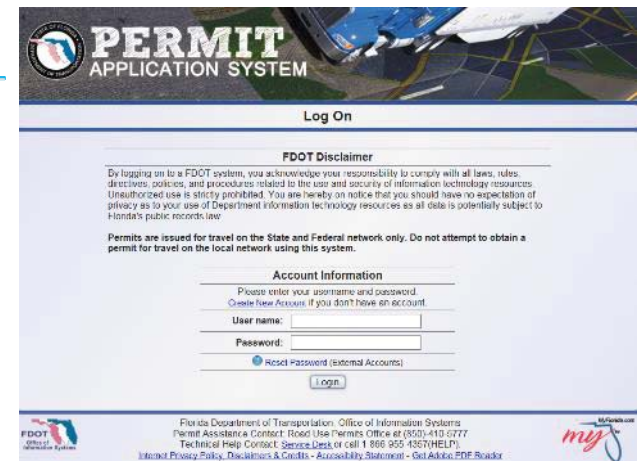


* Source: FDOT Permit Office

Blanket Map Restrictions for TTT2



Log-on Web Page for PAS Application Submittal



<https://ais.dot.state.fl.us/PermitApplicationSystem/Account.aspx/LogOn?ReturnUrl=%2fPermitApplicationSystem>



SUMMARY

Rand McNally GPS devices provide mileage and routing information to truck drivers. It also provides advanced lane guidance, estimated toll costs, fuel log, speed warnings, service/maintenance alerts, and route logs. For fleets, Rand McNally provides receivers which provides tracking, speeding and braking events information/alerts to drivers as well as fleet operators. These features help drivers/operators to improve safety and efficiency. To monitor performance of trucks and vehicles, the device provides hours of service compliance alerts and electronic vehicle inspection routing. Rand McNally data is a GPS point data for trucks with FHWA vehicle classes 5-13. GPS information is collected by a Rand McNally receiver in variable intervals of 10-20 min (determined by fleet owners). GPS device accuracy is approximately 1 m to 5 m. Rand McNally does not provide: truck identifier data, sample size, route, nor directionality.

MORE ABOUT THE DATA:

Developer: [Rand McNally](#)

Update Frequency: Monthly/Annually

Temporal Coverage: Month/Annual

Geographical Coverage: Statewide

Geographical Resolution: Point Location

Modal Coverage: Truck

Data Format: CSV

Licensing Agreement: Required

Acquisition Cost: Variable

Contact:

[FDOT TRANSTAT](#)
(850)-414-4848

CURRENT APPLICATIONS

- » TRANSTAT (FDOT – Central Office)
- » Pilot study with a sample data

POTENTIAL APPLICATIONS

- » Identification of major freight activity-centers parking locations, warehouses and distribution centers
- » Supplement local network speed profiles to National Performance Management Research Data Set which covers speed profiles for National Highway System Network
- » Identify and validate truck bottlenecks.
- » Data cannot provide truck identifier, sample size or directionality information.

DATA ANALYSIS

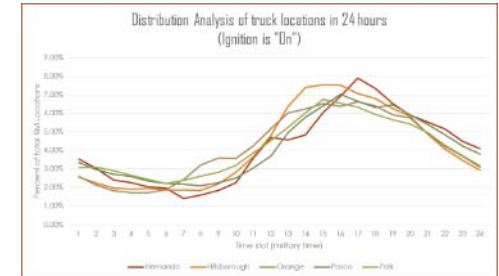
- » Utilization of Rand McNally Data on the network requires GIS spatial assignment to the NAVTEQ road network.
- » Rand McNally technical support recommends a 10 m (32.81 ft.) tolerance be used.

Number of records per county

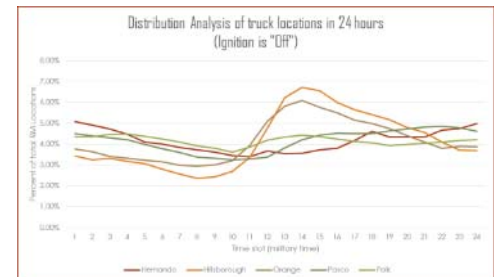
Number of RM locations as per county	Total Number of RM locations
Hernando	37315
Hilaborough	245723
Orange	291999
Pasco	415576
Polk	537925

VARIABLES

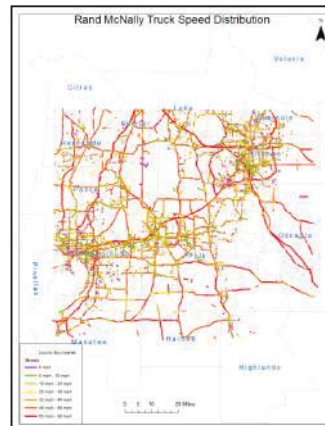
- » Spot Speed (mph)
- » Time stamp (hh:mm)
- » Date (mmddyyy)
- » Ignition On (Yes/No)



Distribution of Analysis of Truck Locations in 24 hours (Ignition is 'Off')



Distribution of Analysis of Truck Locations in 24 hours (Ignition is Off)



Annual Average Truck Speed on NAVTEQ Network (Sample Data)



Snapshot of Rand McNally Locations

SUMMARY

The VIUS (formerly Truck Inventory and Use Survey) provides detailed information on physical and operating characteristics of a large sample of private and commercial truck population in the U.S. The collected data includes weight, number of axles, length, engine and body type, major use, operator classification, gas mileage, annual and lifetime miles driven, transported commodity type, and hazardous materials hauled. The data includes “weighting factors” to expand sample truck counts and miles to the total truck population in the country. The survey was conducted every 5 years following the census year but it is discontinued since 2002. However, restoring the survey by FHWA has been discussed recently.

MORE ABOUT THE DATA:

Developer: [U.S. Census Bureau](#)

Update Frequency: Discontinued

Latest Year Available: 2002

Temporal Coverage: Annual

Geographical Coverage: National Sample with Weight Factors

Geographical Resolution: N/A

Modal Coverage: Truck

Data Format: SAS & TEXT files

Licensing Agreement: NA

Acquisition Cost: Publicly available/Free

Legal Reference: 13 USC

Contact:

[FDOT TRANSTAT](#)

(850) 414-4848

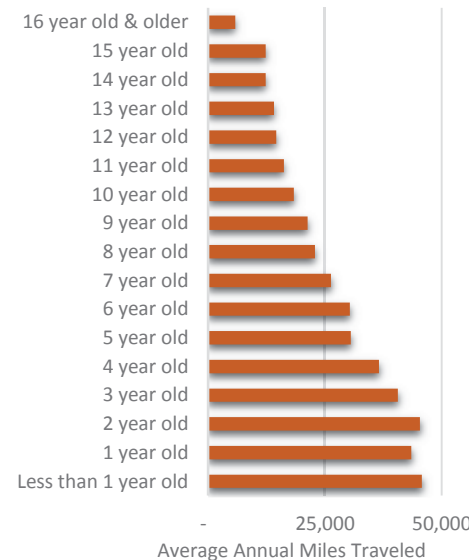
CURRENT APPLICATIONS

- » FHWA
 - » Estimation of Truck Flows in FAF data, 2010

POTENTIAL APPLICATIONS

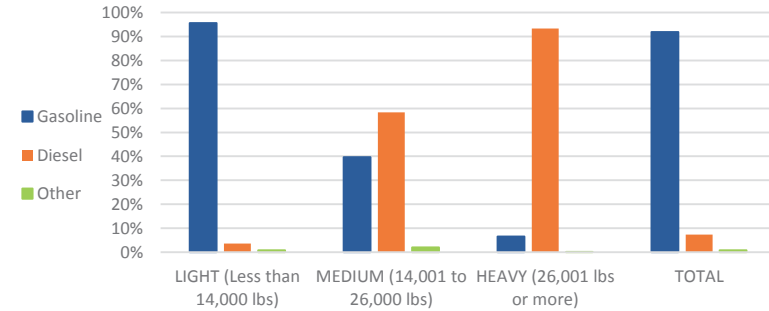
- » Congestion Management
- » Traffic Operations/Services
- » Safety Planning and Analysis
- » Freight Mobility Planning
- » Environmental Planning
- » Roadway Pavement and Bridge Maintenance Planning
- » Freight Performance Measurements
- » Sustainable Transportation Investment
- » Fuel Economy of Freight Trucks

Average Annual Miles Traveled Per Truck by Truck Age



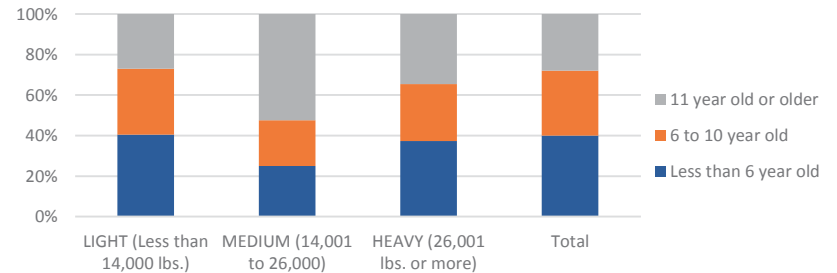
Source: RS&H, Inc.

Distribution of Truck Gross Vehicle Weight Rating By Type of Fuel



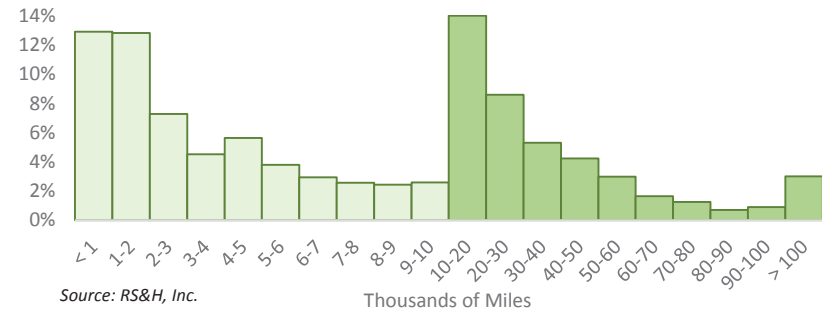
Source: RS&H, Inc.

Distribution of Truck Gross Vehicle Weight Rating By Truck Age



Source: RS&H, Inc.

Annual Miles Traveled by Surveyed Truck Sample, 2002



Source: RS&H, Inc.

Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/update	Accuracy	Access	Usability
Rating	●	●	○	●	○	○	●	●	●



SUMMARY

FDOT'S Transtat Office maintains an Oracle database which stores per-vehicle, time-stamped WIM data. The Transtat WIM stations are maintained independently from the MCSAW office's weigh stations. The primary purpose of the weight enforcement program is to protect Florida's highway system and bridges from damage from overweight vehicles. The following vehicles are required to use weigh stations: agricultural, motor vehicles except private passenger automobiles with no trailer in tow, travel trailers, camping trailers, and motor homes; any commercial vehicle (a) with a GWR of 10,000 lbs. or more, (b) designed to transport more than 10 passengers, (c) used to transport hazardous materials.

MORE ABOUT THE DATA:

- Developer:** [FDOT TRANSTAT](#)
- Update Frequency:** Weekly
- Temporal Coverage:** 1974 - present
- Geographical Coverage:** Statewide
- Geographical Resolution:** Point
- Modal Coverage:** Trucks
- Data Format:** CSV, Shape files, Oracle SQL Databases, pdf files
- Licensing Agreement:** N/A
- Acquisition Cost:** Free
- Contact:** [FDOT TRANSTAT](#) (850)-414-4848

CURRENT APPLICATIONS

- » **FDOT TRANSTAT**
 - » Project Traffic Forecasting Handbook
 - » Traffic Performance Measures

POTENTIAL APPLICATIONS

- » Synthesis of truck traffic by type and loading conditions using WIM data
- » Combining Container Number Database with Weigh-In Motion database
- » Useful in validation exercise in modeling and performance measures

IMPORTANT HIGHLIGHTS

- » Currently, the FDOT TRANSTAT Office maintains 31 WIM stations within the state.
- » A 32nd WIM station is planned for I-75 at the Florida / Georgia state border but the site is not active yet. Some additional infrastructure installation is required before polling/data collection begins at the site.
- » WIM stations are maintained independently from the Office of Maintenance's Weight stations.
- » Oracle Database characteristics:
 - » WIM equipment collects the speed, volume, vehicle classification, axle weights, and axle spacing of every vehicle that passes over the sensors.
 - » The vehicle classification and speed data are binned similarly to the continuous speed and classification sites.
 - » The vehicle weight and axle spacing data are only saved for buses, vehicle classes 4 and higher, in order to conserve memory in the counters.
 - » Major attributes include weight, axle weight, volume, speed, FHWA classifications and time stamp of every truck crossing WIM stations.



Weigh in Motion Locations
Source: [Traffic Data Section](#)

A	B	C	D	E	F	G	H	I	J	K
COUNTY	SITE	DIR	LANE	BEGDATE	VEHNO	SCHEMF_CODE	VEHTYP	SPEED	VEH_LENGTH	GROSS_W
74	9923	S	6	01/01/2016 00:00:00	38494	08	38	62	5614	18,739
74	9923	S	6	01/01/2016 00:00:00	38526	08	38	67	4941	15,232
74	9923	N	1	01/01/2016 00:00:00	38529	09	40	66	7352	74,433
74	9923	N	1	01/01/2016 00:00:00	38540	09	40	64	7277	41,855
74	9923	S	6	01/01/2016 00:00:00	38574	09	40	74	7910	71,094
74	9923	N	2	01/01/2016 00:00:00	38579	05	20	66	2274	9,754
74	9923	N	1	01/01/2016 00:00:00	38677	08	38	66	4695	14,667
74	9923	S	5	01/01/2016 00:00:00	38775	08	38	66	5387	17,750
74	9923	S	6	01/01/2016 00:00:00	38792	09	40	71	7986	75,198

Snapshot of WIM Data in Oracle database

Complexity Measure	Spatial Coverage	Commodity Coverage	Industry Coverage	Modal Coverage	Temporal Coverage	Collection Frequency/ update	Accuracy	Access
Rating	●	○	○	●	●	●	●	●

