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

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

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

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 CND database provides Motor Carrier Size and Weight System (MCSAW) weigh stations, Department of Agriculture and Consumer Services (DACS) interdiction stations and Florida Highway Patrol – Commercial Vehicle Enforcement (FHP-CVE) with real-time information needed to identify carriers with and out of service status or carriers that have overdue fines. FHP-CVE also uses the system to verify log books during stops. The database system stores commercial vehicle identification, license plate numbers and USDOT numbers for use by FDOT weigh stations and DACS agricultural interdiction stations. Retrieval and display of this data is limited to users authorized by FDOT’s Commercial Vehicle Operations (CVO). There are 36 LPR cameras deployed statewide and images/data is retained for 30 days.

## MORE ABOUT THE DATA:

**Developer:** [FDOT – MCSAW and Florida DACS](#)

**Update Frequency:** Daily

**Temporal Coverage:** Daily-Hourly

**Geographical Coverage:** Statewide

**Geographical Resolution:** Roadway

**Modal Coverage:** Trucks

**Data Format:** Web format

**Licensing Agreement:** Need permission

**Acquisition Cost:** Free

**Contact:**

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

---

## POTENTIAL APPLICATIONS

- Database can be filtered as per date range, reader stations, violators/non-violators, vehicle information (USDOT Number, Make and Year) and reasons for citation.
- The database will allow users to query container numbers and ancillary data and develop software for tracking the container movements and presenting this data graphically.
- Ancillary data includes location of the container and a time-stamp.
- Potentially will involve links to other databases such as Florida’s Electronic Freight Theft Management Systems, to check for stolen cargo activity and aid recovery.
- Real-time notifications for a registered investigator or an enforcement officer of specific commercial vehicles.
- This database can be used as an important component to determine origin and destination information of commercial vehicles.
- Future potential of tracking back haul truck movements.

---

### Data Collection/Reader Stations

<table>
<thead>
<tr>
<th>Complexity Measure</th>
<th>Spatial Coverage</th>
<th>Commodity Coverage</th>
<th>Industry Coverage</th>
<th>Modal Coverage</th>
<th>Temporal Coverage</th>
<th>Collection Frequency/ Update</th>
<th>Accuracy</th>
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</tbody>
</table>
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.
ELECTRONIC FREIGHT THEFT MANAGEMENT SYSTEM (EFTMS)

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

Complexity Measure
Rating
Spatial Coverage
Commodity Coverage
Industry Coverage
Modal Coverage
Temporal Coverage
Collection Frequency/Update
Accuracy
Access
Usability

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

**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**

- 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

**NUMBER OF FACILITIES:**

<table>
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<tr>
<th>Facility Type</th>
<th>Number of Facilities</th>
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<tr>
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<tr>
<td>Service Plazas</td>
<td>8</td>
</tr>
<tr>
<td>Truck Comfort Stations (WIM)</td>
<td>19</td>
</tr>
<tr>
<td>Welcome Centers</td>
<td>4</td>
</tr>
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</table>

**Percent of facilities on different corridors**

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>I-4</td>
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<td>I-10</td>
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<td>7%</td>
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<tr>
<td>US 231</td>
<td>1%</td>
</tr>
<tr>
<td>US 27</td>
<td>2%</td>
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</table>

**REST AREAS AND SERVICE AREA LOCATIONS - OFFICE OF MAINTENANCE**

![Map Legend](image)

**Rest Areas and Service Area Facility Topic**

**SOURCE:** Office of Maintenance
FDOT TRAFFIC DATABASE

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

Legend
Truck AADT on Florida Highway Network, 2014

Legend
Truck Factor on Florida Highway Network, 2014

Florida Traffic Online Interface, 2014

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

Source: RS&H, Inc.

Rating

<table>
<thead>
<tr>
<th>Complexity Measure</th>
<th>Spatial Coverage</th>
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<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
</tbody>
</table>

Source: RS&H, Inc.
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

FDOT Maintenance Office,
http://www.dot.state.fl.us/statemaintenanceoffice/motorcarrier.shtml

Seffner I-4 Weigh Station (WIM) with Truck Comfort Station

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

Weigh Station Map

FDOT Maintenance Office,
http://www.dot.state.fl.us/statemaintenanceoffice/motorcarrier.shtml
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. 112-114
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.

<table>
<thead>
<tr>
<th>Complexity Measure</th>
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<th>Commodity Coverage</th>
<th>Industry Coverage</th>
<th>Modal Coverage</th>
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<th>Collection Frequency/Update</th>
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<td>★</td>
<td>★</td>
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</tbody>
</table>
NATIONAL PERFORMANCE MANAGEMENT RESEARCH DATA SET (NPMRDS)

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

AM Peak Hour Speed Profiles – Turnpike Extension to North of I-595, 2014
Source: Turnpike Uses of NPMRDS Data, FDOT-Turnpike

Broward County October 2013 AM Peak Average Speeds
Source: FDOT-04, Application of the NPMRDS

Sample NPMRDS Data

<table>
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<tr>
<th>TMC</th>
<th>Date</th>
<th>Epoch</th>
<th>All vehicles</th>
<th>Passenger vehicles</th>
<th>Freight trucks</th>
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<tbody>
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<td>11122013</td>
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</tbody>
</table>

Source: Using NPMRDS to Generate Statewide Performance Measures, Chen-Fu Liao, University of Minnesota
PERMIT APPLICATION SYSTEM FOR OVERWEIGHT AND OVER-DIMENSIONAL VEHICLES

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

POSSIBLE APPLICATIONS
» Freight Performance Measures
» Traffic Operations/Services
» Safety Planning and Analysis
» Freight Mobility Planning
» Sustainable Transportation
» Investment
» Freight Transportation and Land Use
» 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

Source: FDOT Permit Application System, 2016

Log-on Web Page for PAS Application Submittal

Blanket Map Restrictions for TTT2

Source: FDOT Permit Office

https://gis.dot.state.fl.us/PermitApplicationSystem/Account.aspx?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 provide 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 provided: 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.

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

Distribution of Analysis of Truck Locations in 24 hours (Ignition is ‘Off’)
Number of records per county
Annual Average Truck Speed on NAVTEQ Network (Sample Data)
**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](tel:(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

**Distribution of Truck Gross Vehicle Weight Rating By Type of Fuel**

**Distribution of Truck Gross Vehicle Weight Rating By Truck Age**

**Annual Miles Traveled by Surveyed Truck Sample, 2002**
WEIGH IN MOTION (WIM) STATIONS

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.

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