SFT Transportation Data Source Reference Guide

This data source reference guide is designed to help analyst and planners quickly identify the transportation data types and sources commonly used in analytical work. It includes information on data sources, temporal and geographic coverage, data ownership, use cases, data types, and access locations.

Category	Source	Available Data Type	Temporal Coverage	Geographical Coverage	Use Cases	Data Access
Volume	Telemetered Traffic Monitoring Sites TTMS	Volume, vehicle class	Continous (15-min intervals)	Over 300 sites (interstates, major state roads)	• Seasonal analysis • Traffic studies • Model calibration and validation • FDOT Source Book	Transportation Data and Analytics (TDA) Office Florida Traffic Online (FTO)
	Portable Traffic Monitoring Sites PTMS	Volume, vehicle class (limited locations)	Rotational coverage	Over 12,000 sites (county roads, local sampling locations)	• Traffic studies • Model calibration and validation • Trends analysis • FDOT Source Book	
	Microwave Vehicle Detection System (MVDS)	Volume, vehicle speed	Continuous	Interstates and expressways	• Traffic studies • Model calibration and validation • Trends analysis	FDOT's SunGuide Software
Probe Data	HERE Technologies	Travel time, speed, and volume	1-min to 1-hour intervals	Statewide - over 59,000 Traffic Message Channel (TMC) segments	• FDOT Source Book	Regional Integrated Transportation Information System (RITIS)
	National Performance Management Research Data Set (NPMRDS)		5-min to 1-hour intervals	National Highway System - over 15,000 TMC segments	• FDOT Source Book (federal measures)	
Roadway Characteristics	Roadway Characteristics Inventory (RCI)	Functional classification, number of lanes, median type, etc.	N/A	Statewide	• FDOT Source Book • Planning studies	FDOT's Roadway Characteristic Data
Demographics	American Community Survey (ACS) from the U.S. Census Bureau	Demographic and socioeconomic data, commuting characteristics	1-year or 5-year cycle	Statewide, census block, census block group and county	• Travel demand forecast • Planning studies	Census Data
	Bureau of Economic and Business Research (B.E.B.R.)	Current population, future population projection	Yearly	County, municipalities, and unincorporated areas		B.E.B.R.
Employment	Dun & Bradstreet	Number of employees, business type, address and sales volume	N/A	Statewide	• Travel demand model development • Planning studies	Contact Systems Forecasting & Trends (SFT) Office for more information
Safety	Signal Four Analytics (S4)	Information about crash events, vehicle, person, citation and more	90 days after the crash occurred	Statewide	• Crash trends analysis • Safety improvements projects	S4Analytics

FAQ

1. What is the purpose of this data source reference table?

The reference table serves as a quick guide to identify the transportation data types and sources commonly used in analytical work, including some characteristics of the data.

2. When should I use TTMS vs. PTMS for traffic volume analysis?

TTMS provides continuous, frequently updated data from permanent counters but with limited locations, while PTMS offers wider coverage from temporary counters operating for a few days. PTMS records also show the latest year a location was measured. Choose based on whether you need finer-grained data, or broad coverage with acceptable estimation.

3. What is the relationship between RITIS, NPMRDS, HERE, and INRIX data?

INRIX and HERE are from private sector. Both provide probe-based traffic data from GPS and connected vehicles. NPMRDS is a U.S. DOT program that provides travel time data from probe vehicles to transportation agencies, currently sourced from INRIX. NPMRDS data covers National Highway System (NHS). RITIS is the analysis platform that can load INRIX, HERE, and other data sources for visualization, metrics, and reporting.

4. How do the ACS 1-year and 5-year estimates differ?

The ACS continues to publish 1-year estimates based on the most recent 12 months of data, ideal for capturing current trends but only available for areas with populations of 65,000 or more. In contrast, 5-year estimates average data over the past five years, making them smoother and more reliable for small-area analysis.

5. What kind of population data does B.E.B.R provide that the census doesn't?

B.E.B.R provides Florida-specific annual population estimates, detailed small-area data, and long-term forecasts, offering more frequent updates and forward-looking projections. Census data covers all U.S. geographies but updates less frequently for small areas and does not include annual small-area forecasts.

6. How can I access S4 Analytics data for crash analysis?

The basic S4 Analytics dashboard is free to view, but accessing the actual crash data requires creating an S4 account. Account approval depends on the user type (such as public agency employee, vendor, consultant, or researcher) and meeting the criteria for that category.

7. Where can I find supportive GIS files, such as basemap roadway files, to attach the traffic data to?

FDOT GIS Open Data Hub and TDA's Spatial Data & Analytics section include administrative boundaries, FDOT roadway basemaps, routes system, roadway characteristics and more, ideal for visualizing traffic datasets spatially. The U.S. Census Bureau provides a variety of administrative boundaries, including state, county, census tract, block group, and block-level shapefiles via the TIGER/Line Shapefiles which could be used for spatial analysis.