

@@ Basic Definitions

1.1 Mode of Transportation

Same as FAF4, FAF5 includes the seven modes of transportation from the Commodity Flow Survey (CFS) plus an extra category involving imports. Table 1 in Section 3 below provides a summary and brief description of each mode.

- Domestic Modes are the modes used between domestic origins and destinations, modes used between zones of entry and domestic destination for imports, and modes used between domestic origins and zones of exit for exports.
- Foreign Modes comprise the mode of arrival to zones of entry within the U.S. for imports or mode of departure from zones of exit within the U.S. for exports.

Note about Multiple Modes and Mail: FAF and the CFS use Multiple Modes and Mail rather than intermodal to represent movements of commodities that utilize more than one mode. Intermodal typically refers to containerized cargo that moves between ship and surface modes or between truck and rail. Shipments reported as Multiple Modes can include anything from containerized cargo to coal moving from mine to railhead by truck and rail to harbor. The “Mail” component recognizes that shippers who use parcel delivery services typically do not know what modes were involved after the shipment was picked up.

Type of Commodity

Commodities are classified at the 2-digit level of the Standard Classification of Transported Goods (SCTG), summarized in Table 2. A complete description of these categories and their constituent parts can be found on the Bureau of Transportation Statistics (BTS)’s CFS website.

Geography

To minimize potential confusion between geography-related terms, the following convention is used in this document.

- Origin – The beginning of a freight movement regardless of geography
 - Domestic Origin
 - For domestic freight movement, the FAF region or state where a freight movement begins
 - For imports, the FAF region or state where a freight movement begins the domestic portion of the trip (see Zone of Entry)
 - For exports, the FAF region or state where a freight movement begins the domestic portion of the trip
 - Foreign Origin – For imports, the foreign region where a freight movement begins
- Destination – The ending of a freight movement regardless of geography
 - Domestic Destination
 - For domestic freight movements, the FAF region or state where a freight movement ends

- For imports, the FAF region or state where a freight movement ends the domestic portion of the trip
 - For exports, the FAF region or state where a freight movement ends the domestic portion of the trip (see Zone of Exit)
- Foreign Destination – For exports, the foreign region where a freight movement ends
- FAF Region – The 132 domestic regions, defined in Table 3.
- State – The 50 States and Washington, D.C.
- Foreign Region – The 8 international regions defined in Table 4, based on the information obtained from the United Nations Statistics Division. Specific countries included in each region are presented in Appendix A.
- Zone of Entry – This is the FAF region or state where an import enters the United States. This term refers to the entire region or state and does not limit to any single location. This replaces the term “international gateway” used previously.
- Zone of Exit – This is the FAF region or state where an export leaves the United States. This term refers to the entire region or state and does not limit to any single location.

@@ Accessing FAF5 Data

FAF5 can be accessed via links from the Federal Highway Administration (FHWA) or the Bureau of Transportation Statistics (BTS). Users can download the entire FAF5 regional origin-destination-commodity-mode (ODCM) dataset directly from these websites or customize datasets by utilizing FAF5 Data Tabulation Tool (DTT).

2.1 Origin-Destination-Commodity-Mode Database

FAF5 data sets are available at the FAF5 domestic region level and the state level, both provided in Microsoft Access and Comma Separated Values (CSV) formats.

FAF Regional Database

FAF5 domestic region level datasets and products provide information for states, state portions of large metropolitan areas, and remainders of states as listed in Table 3. Metropolitan areas consist of Metropolitan Statistical Areas or Consolidated Statistical Areas as defined by the Office of Management and Budget. When a metropolitan area is entirely within a state or when a state's portion of a multi-state metropolitan area is large enough to support the sampling procedures in the CFS, the area becomes a separate FAF region. Small single-state metropolitan areas and small portions of a multi-state metropolitan area are part of the State or Remainder of State.

State-Level Database

The state-level datasets and products include information for the 50 States and the District of Columbia. Note that the data for updated historical base years (1997, 2002, 2007, and 2012), which provide a more consistent time series of freight flow information based on FAF5 methodology and data sources, are provided at only state level.

@@ Data Tabulation Tool (DTT)

The DTT is a web-based interface that allows FAF users to select specific categories of data, through easy-to-use pull-down menus, to create customized subsets of FAF5 data. Users can choose one of the three types of FAF5 data: Total Flows, Domestic Flows, and Foreign Trade Flows (Import and Export Flows). For access and a detailed description of the DTT, users can visit [ORNL FAF webpage](#).

- Total Flows contains the data associated with freight moved between domestic origins and domestic destinations and includes both domestic and foreign shipments. For import shipments, the origin of the flow is zone of entry (the FAF region or state of entry), and for export shipments, the destination of the flow is zone of exit (the FAF region or state of exit). Mode of transportation for Total Flows is the mode used within and between domestic regions or states.
- Domestic Flows contains only shipments associated with domestic freight moved between domestic origins and domestic destinations. Domestic movements of foreign trade flows (i.e., movements of international shipments inside the U.S.) are not included in the Domestic Flows. Mode of transportation for the Domestic Flows is the mode used within domestic regions or states.
- Foreign Trade Flows
 - Import Flows contains data associated with freight moved from foreign origins to domestic destinations. Geographies for this flow data include Foreign Origin, US Entry Region (Domestic Origin), and Domestic Destination. Mode of transportation consists of two parts: (1) foreign mode used between a foreign origin zone and a zone of entry in the United States and (2) domestic mode used between the zone of entry and its domestic destination.
 - Export Flows contains data associated with freight moved from domestic origins to foreign destinations. Geographies for this flow data include Domestic Origin, US Exit Region (Domestic Destination), and Foreign Destination. Mode of transportation consists of two parts: (1) domestic mode used between the domestic origin of the shipment and its zone of exit and (2) foreign mode used between the zone of exit and foreign destination.

@@ Code Tables and Data Dictionary

Table 1 FAF Modes

Code	Mode	Description
1	Truck	Includes private and for-hire trucks. Does not include truck that is part of Multiple Modes and Mail or truck moves in conjunction with domestic air cargo.
2	Rail	Includes any common carrier or private railroad. Does not include rail that is part of Multiple Modes and Mail .
3	Water	Includes shallow draft, deep draft, Great Lakes, and intra-port shipments. Does not include water that is part of Multiple Modes and Mail .
4	Air (includes truck-air)	Includes shipments move by air or a combination of truck and air in commercial or private aircraft. Includes air freight and air express. In the case of imports and exports by air, domestic moves by ground to and from the port of entry or exit are categorized with Truck .
5	Multiple Modes and Mail	Includes shipments by multiple modes and by parcel delivery services, U.S. Postal Service, or couriers (capped at 150 pounds). This category is not limited to containerized or trailer-on-flatcar shipments.
6	Pipeline	Includes crude petroleum, natural gas, and product pipelines. Note: It also includes pipeline flows from offshore wells to land, which are counted as Water moves by the U.S. Army Corps of Engineers. Does not include pipeline that is part of Multiple Modes and Mail .
7	Other and Unknown	Includes movements not elsewhere classified such as flyaway aircraft, and shipments for which the mode cannot be determined.
8	No Domestic Mode	Includes shipments that have an international mode, but no domestic mode and is limited to import shipments of crude petroleum transferred directly from inbound ships to a U.S. refinery at the zone of entry. This classification enables a proper accounting of flows that do not utilize any domestic transportation network.

@@ Table 5 Data Dictionary for FAF Dataset

Field	Description	Codes	Comment
fr_orig	Foreign region of shipment origin	<u>Table 4</u>	Import: Foreign Origin
dms_orig	FAF region or state where a freight movement begins the domestic portion of shipment. For imports, this is the US entry region where an import enters the United States.	<u>Table 3</u> FIPS code	Total/Domestic: Domestic Origin Import: US Entry Region Export: Domestic Origin
dms_dest	FAF region or state where a freight movement ends the domestic portion of shipment. For exports, this is the US exit region where an export leaves the United States.	<u>Table 3</u> FIPS code	Total/Domestic: Domestic Destination Import: Domestic Destination Export: US Exit Region
fr_dest	Foreign region of shipment destination	<u>Table 4</u>	Export: Foreign Destination
fr_inmode	Mode used between a foreign region and the US entry region for the imported goods	<u>Table 1</u>	Import: Foreign In-Mode
dms_mode	Mode used between domestic origins and destinations	<u>Table 1</u>	Total/Domestic: Domestic Mode Import: Mode from Entry Region to destination Export: Mode from origin to Exit Region
fr_outmode	Mode used between the US exit region and foreign region for the exported goods	<u>Table 1</u>	Export: Foreign Out-Mode
setg2	2-digit level of the Standard Classification of Transported Goods	<u>Table 2</u>	--
trade_type	Type of trade	1 Domestic Only 2 Import 3 Export	--
value	Total value (in 2017 dollar) of commodities shipped (unit: Million \$)	--	--
tons	Total weight of commodities shipped (unit: Thousand Tons)	--	--
current_value	Total value (in current dollar of each year) of commodities shipped (unit: Million \$)		