

Logistics Company FLEET Tool: Data Collection Overview and Workbook

Part 2





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Transportation and Climate Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

Introduction to Part 2: DATA COLLECTION OVERVIEW AND WORKBOOK

This guide is **Part 2 of a three-part series** to help trucking companies participate in the SmartWay Transport Partnership.

In this guide you will learn about:

1. The general organization of the SmartWay Logistics Partner FLEET Tool, and
2. Data needs for each section of the tool.

You will also have the opportunity to collect your data using our data collection worksheets in preparation for the data entry step (Part 3).

Please review this guide carefully BEFORE attempting to use the tool or enter data. Understanding the data requirements and gathering all data in advance will save considerable time and frustration while completing your tool submission.

If you wish to explore the Logistics Partner FLEET tool in preparation for joining the program, please review Part 3: Data Entry Guide and return to this workbook to prepare for gathering your data.

Please note that each fleet that you operate will be characterized separately. If you have multiple fleets with different operations modes, or you contract segments of your freight operations to other companies, you may need to complete additional tools (e.g., Truck FLEET and/or Multi-modal FLEET) to accurately assess your operations.

In the event that you have a question about any of the data collection activities, you can contact SmartWay Email Support at smartway_transport@epa.gov and a member of our SmartWay Partner Support Team will assist you.



WARNING!

Completing the Logistics Partner FLEET tool requires a considerable amount of information about your company, the divisions that are joining SmartWay, and the fleets within those divisions. There are multiple sections and screens to complete for each fleet that you operate.

While you will have the ability to save your tool along the way and return to it at anytime, **we STRONGLY ENCOURAGE** you to review Part 1 to understand key information about joining the partnership. Then, use Part 2 of this series to learn about the data requirements and gather your data BEFORE attempting to use Part 3 to complete the tool.

Overview of Data Collection Requirements

The SmartWay Logistics Partner FLEET tool is the data collection and calculation system for truck carriers that join the SmartWay Transport Partnership. There are three sections of the SmartWay Logistics Partner FLEET Tool that require data about your company's operations:

1. **Enter Company and Contact Information**
2. **Define Your Logistics Fleets**
3. **Enter Activity and Fuel Information for Each of Your Fleets**

This guide will explore the data required for completing these three sections. Part 3 of the three-part user guide series explains more about the structure of the tool and the data entry process; this guide will focus primarily on what you need to do to prepare for completing the tool.



NOTE: Before beginning your data collection, select the last calendar year for which you have full annual (12 months) data. This means that you have data from January of the calendar year through December of the same year. If you are a new SmartWay partner and do not have a full year of operational data, please collect a minimum of three months' data for input into the SmartWay tool. In your next update year, you will be required to submit a full year's data.

Section 1: Enter Company and Contact Information

SmartWay needs complete company information for correspondence, web posting, press releases, and awards and recognition (where applicable). The SmartWay tool asks for:

- **General company information** (e.g., name, location, web address, etc.)
- **A primary contact**¹ for any questions about your company's participation and tool submissions
- **An executive contact**² for participation in awards and recognition events
- **Additional contacts (optional)**: Additional contacts may include your press/media contact, your fleet manager, etc.—anyone who is not the primary contact for tool and participation issues but may be involved in your involvement with SmartWay.

Please use Worksheet #1 in this guide to prepare for filling out the Contact Information Screen in the Logistics Partner FLEET Tool.

¹ The Primary Contact is the Individual designated by the Executive Contact to directly interface with SmartWay regarding specific tasks involved in the timely submission of the tool to SmartWay. The Primary Contact coordinates communication between SmartWay and the partner's company.

² The Executive Contact is the company executive who is responsible for agreeing to the requirements in its SmartWay Partnership Agreement, overseeing the Primary Contact (as appropriate) and ensuring the timely submission of the Tool to SmartWay.

Section 2: Define Your Logistics Fleets

The SmartWay Logistics Partner FLEET Tool allows you to characterize your operations at the fleet level. In the Logistics Partner FLEET tool, a fleet is defined as any business unit that a customer has discretion to hire. For example, if your customers can hire your truckload dry van fleet separately from your flatbed fleet, you will need to enter each as a separate fleet.

NOTE: You may enter multiple fleets into a single tool submission.

SmartWay highly recommends developing your list of fleets offline using a company organization chart or perhaps a customer interface webpage. The best strategy is to have a clear idea of how to define your fleets before filling out the tool.

Your company's name and your fleet(s) will be listed on the SmartWay website to indicate your participation in the SmartWay Transport Partnership. Your shipper and logistics customers can also use the SmartWay Online Database to search for your company by the name you submit in the tool, your SCAC number or your Motor Carrier Number.



Therefore, it is **critical** that you identify your company and fleet(s) in the tool as you would have them appear on the SmartWay website.

The “**Define Your Fleet**” section of the tool has two tabbed subsections:

1. Identify Logistics Fleets
2. Characterize Logistics Fleets

Please use the Worksheet #2 provided in this guide to prepare for filling out the Identify Logistics Fleets and Characterize Logistics Fleets sections in the Logistics Partner FLEET Tool.

NOTE: You may wish to print multiple copies of Worksheet #2 if you have multiple fleets.

Data Requirements for “Identify Logistics Fleets” Tab

For each logistics fleet, you will need to specify:

- **Logistics Fleet Name(s):** To name your fleets properly for listing on the website, begin with your partner name followed by the fleet or division name. Example: for a truckload division of AAA Logistics, the naming convention would be: AAA Logistics-Truckload Services.
- **Standard Carrier Alpha Codes (SCACs) and/or Motor Carrier Numbers (MCNs):** The Standard Carrier Alpha Code is a unique 2-4 alphabetic character code used by the transportation industry to identify transportation companies. The Motor Carrier Number is a 6 or 7 digit number provided by the Federal Motor Carrier Safety Administration.
- **Fleet Type:** Fleet Type is defined as the service type for your fleet. There are two options accepted by the tool—“For-Hire” and “Private/Dedicated.” If your company has only one service division, your “Fleet Type” selection will reflect your company’s operations as a whole. If there are multiple divisions, each should have its fleet type defined separately.

- **Fleet Contact:** This contact should be one of the contacts you already identified in the Company Information section as the fleet contact for each fleet. **NOTE:** A drop-down menu will supply this information; if there is a contact for the fleet that is not already listed in the Company and Contacts worksheet, you will need to go back to that screen to add the contact information.

Data Requirements for “Characterize Logistics Fleets” Tab

For each logistics fleet, you will also need to specify:

- **Fleet-level Operational Category (by percentage of mileage):** Determine the percent of each operational type based on approximate mileage. The percentages for each fleet must sum to 100%. This percentage calculation does not need to be exact but should be reasonably reflective of your fleet. Operational categories include:
 - **Truckload (TL)** - A truckload carrier is a company that generally contracts an entire trailer-load to a single customer.
 - **Less-than-truckload (LTL)** – Less-than-truckload carriers collect freight from various shippers and consolidate that freight onto enclosed trailers for linehaul to the delivering terminal or to a hub terminal where the freight will be further sorted and consolidated for delivery.
 - **Drayage (Dray)** – Dray carriers are predominantly associated with port, or rail-head connections where freight is picked up, and moved to another transfer facility or transport mode terminal. Often these moves are short in nature, but can be longer depending on specific situations.
 - **Package delivery (PD)** – Package delivery covers operations characterized by residential or business package delivery/pickup consisting primarily of single or small groups of packages. It does not include larger scale pickup delivery operations that are more properly characterized as LTL operations.
- **Fleet-level Body Type (by percentage of equipment):** Determine the percent of each body type represented in the fleet. Percentages can be approximate, based on vehicle populations, but must sum to 100%. Body type categories include:
 - **Dry van/box van**
 - **Refrigerated (Reefer)**
 - **Flatbed**
 - **Tanker**
 - **Intermodal chassis containers** (pooled and owned)
 - **Special hauler** (e.g., Heavy Haul, Auto Carriers, Bulk Carriers, Household Moving, Hopper, Livestock, Garbage, Utility, and other specialized carriers)



Use the Logistics Partner FLEET Tool to characterize your rail freight movement. Body type selections for rail freight should match the above selections as closely as possible.

Once you have defined your logistics fleets, you will need to enter detailed information regarding fleet vehicles and activity levels.

Section 3: Enter Data for Each of Your Logistics Fleets

Now that you have defined your logistics fleets, you will be asked to provide additional information for EACH fleet separately.

Data Requirements for “Select Carrier(s)” Tab

Please use the Worksheet #3A provided in this guide to prepare for filling out the Select Carrier(s) section in the Logistics Partner FLEET Tool (make one copy for each fleet).

To begin, you will need to identify the carriers included in each logistics fleet. Two options are available for identifying your carriers. If you have a large number of carriers (e.g., as a large 3PL), you may wish to develop your carrier details separately and upload your data in a single file using the **Data Import** method. Alternatively, if your logistics fleet has a limited number of carriers, you may choose to specify your carriers one at a time using the **Manual Entry** method. These two methods are described in detail in the **Logistics Partner FLEET Tool User Guide Part 3**.

Regardless of the method you choose, you will need to first identify the mode of transport for the carrier. Four carrier mode selections are available, including:

- Rail
- Truck
- Multi-modal
- Logistics

(Note: By selecting “All” on the Tool’s **Select Carrier(s)** screen, you may search across all carriers, regardless of mode.)

Next, you may also specify a carrier bin category for the Truck mode. Truck bin categories include:

- TL Dry Van
- LTL Dry Van
- Refrigerated
- Flatbed
- Tanker
- Dray
- Package
- Specialized
- Mixed

Bin category selections are not currently available for other modes but may be added in the future. (Note: Multi-modal selections should list “Truck/Rail” as the bin category.)

After identifying the mode (and bin category if available), you should identify each carrier’s specific fleet name, as listed in the SmartWay Carrier Data file, along with any associated Standard Carrier Alpha Codes (SCACs) and/or Motor Carrier Numbers (MCNs). The Carrier data file can be downloaded from

the SmartWay website using the link under Step 4 on the Logistics Tool **Home** screen and viewed on the **Select Carrier(s)** screen or offline using Microsoft® Excel.

In certain cases, a carrier may have multiple fleets associated with its operations. In the case of trucking and logistics partners, you may use the SCAC list in the Carrier Data file to select among multiple fleets. The **Select Carrier(s)** screen also allows you to filter carrier fleets by SCAC and MCN if needed.

If one or more carriers in your fleet are not SmartWay Partners, you should specify “Non-SmartWay” for the given mode – for example, Non-SmartWay Truck Carrier or Non-SmartWay Multi-modal Carriers. If you have any non-SmartWay carriers in your list, then you must also specify the number of non-SmartWay carriers utilized for each mode, *but only include carriers used during the reporting year*.

Data Requirements for “Activity Data” Tab

Please use the Worksheet #3B provided in this guide to prepare for filling out the Activity Data section in the Logistics Partner FLEET Tool (make one copy for each fleet).

First provide a detailed text **Data Source Description** for the sources used to estimate your mileage and ton-mile data for your carriers. Be sure to indicate how you calculated the values, and where this data was obtained. For example, you may use PC Miler, carrier reports, or accounting/purchasing records to determine miles. Payload and ton-mile estimates may be based on bills of lading or other internal records.

Next you must specify a **Data Availability** option for each carrier. There are seven **Data Availability** options, as summarized below.

1. Enter ton-miles and miles (preferred option)
2. Enter ton-miles and average payload
3. Enter ton-miles, density, and load fraction
4. Enter ton-miles only
5. Enter miles and average payload
6. Enter miles, density, and load fraction
7. Enter miles only

If you have the necessary data, select Option 1 to provide estimates for both ton-miles and total miles. If only one of these values is known, the other value can be calculated using a combination of your average freight density, your average load percentage (e.g., 100% for truckload), and/or your average payload in tons. Although dependent on industry type and product mix, Option 2 is *generally* preferred to Option 3 in terms of data quality, while Option 3 is preferred to Option 4. Similarly, Option 5 is *generally* preferred to Option 6 in terms of data quality, while Option 6 is preferred to Option 7.

Finally, providing ton-mile data (Options 2, 3, and 4) is generally preferable to simple mileage data for most modes. For example, when shipping bulk commodities by rail, ton-mile estimates are often available and will result in a more precise estimate of mass emissions (when combined with gram per ton-mile metrics for each carrier) than relying on gram per mile metrics. Ton-mile estimates are also most appropriate for LTL truck shipments, given the uncertainty in cargo volume utilization. Ton-miles

are also more appropriate for heavier TL shipments. Alternatively, mileage activity measures are most appropriate for light truckload shipments. However, for all calculations, where precise estimates of weight are often unknown, and distance estimates are highly reliable, mileage activity measures may be the better metric.

Guidance regarding payload, density, and load percentage data is provided below.



Ideally, when entering information for a carrier, you should use **Data Availability Option 1**. If this is not possible, *please choose the method that uses the most accurate data at your disposal*. In this way the tool will utilize the most accurate data available for the ton-mile and mile comparison metrics as well as for the emissions footprint calculations.

After specifying the **Data Availability** options, you must then pick the preferred metric (**Inventory Calculation Metric**) for calculating mass emissions for each of your carriers. Options include:

- grams per (truck) mile;
- grams per railcar-mile, and;
- grams per ton-mile (all modes).

Select the metric most appropriate for characterizing your carrier activity. You should select g/mile metrics for estimating mass emissions for lighter weight truck freight, while g/ton-mile should generally be used for rail and heavier truck freight.

After specifying the **Inventory Calculation Metric**, record the total **Ton-Miles** and **Total Miles** data for each carrier. If the carrier mode is rail, record total railcar-miles, otherwise specify total truckload-miles. Enter the data to the nearest whole number.

Data Availability Option 1 - Enter both total annual miles and ton-miles for the given carrier.

Data Availability Option 2 - Enter total ton-miles along with your estimated average payload (per truck or railcar, as appropriate) in short tons (2,000 lbs).

Data Availability Option 3 – Enter your total ton-miles. Next, you must estimate your freight density using the **Average Density Calculator** on the **Activity Data** screen. The calculator allows you to specify the fraction of shipments that fall into various commodity groupings. Each grouping has an associated average density, expressed in pounds per cubic foot of available cargo space. The densities for a given commodity category vary for rail and truck modes, since utilized container space varies by mode.³

For each carrier, record the percentage distribution (as a fraction of total miles) for each of the Commodity Groupings, as shown in **Worksheet 3B**.

Next you will need to estimate the number of loads (truck or railcar) by load fraction category. The Logistics Tool has ten load categories:

³ The density categories for Logistics and Multi-modal carriers are assumed to be the same as for Truck carriers.

- 1/10 truckload (or railcar-load)
- 2/10 truckload (or railcar-load)
-
- 9/10 truckload (or railcar-load)
- Full truckload (or railcar-load)

Record the annual number of loads for each of these categories, for each carrier, matching your estimates to the most appropriate (closest) category. Load estimates can be volume-based (with full truckload equivalent to cubing out) or weight-based (with full truckload equivalent to weighing out).

Data Availability Option 4 - Enter total ton-miles.

Data Availability Option 5 - Enter total miles along with your estimated average payload (per truck or railcar, as appropriate) in short tons (2,000 lbs).

Data Availability Option 6 –Enter total miles, then record the commodity type distributions and load fraction information as described for **Option 3** above.

Data Availability Option 7 - Enter total miles.

Worksheets for Data Collection

List of Worksheets

#1: Company and Contact Worksheet.....	12
#2: Logistics Fleet Characterization Worksheet.....	13
#3A: Select Carriers Worksheet.....	14
#3B: Activity Data Worksheet.....	15

Worksheet #1: Company and Contact Information

#1. Enter your Contact Information:

General Company Contact Information

Company Name							
Headquarters Mailing Address							
City		State/Province		Zip		Country	
Main Phone Number		Toll-free Number		Cell number		Web Address	

Primary Contact Information

Primary Contact Name							
Primary Contact Mailing Address							
City		State/Province		Zip		Country	
Primary Contact Phone Number				Email Address			

Executive Contact Information

Executive Contact Name							
Executive Contact Mailing Address							
City		State/Province		Zip		Country	
Executive Contact Phone Number				Email Address			

Other Contact Information

Executive Contact Name							
Executive Contact Mailing Address							
City		State/Province		Zip		Country	
Executive Contact Phone Number				Email Address			
Contact's role in program							

Worksheet #2: Logistics Fleet Characterization

Complete this worksheet for each logistics fleet you will be submitting in the Logistics Partner FLEET Tool.

#2: Define your Logistics Fleets

Fleet Name (partner name followed by specific name)

SCAC: _____ MCN: _____ FLEET TYPE: _____

Fleet Contact: _____

Operation Category Percentages:

Truckload _____ LTL _____ Drayage _____ Package Delivery _____

Body Type Percentages:

Dry Van _____ Reefer _____ Flatbed _____ Tanker _____ Chassis _____ Special Hauler _____

Worksheet #3B: Activity Data (page 1 of 5)

Complete the following for each logistics fleet you will be submitting in the Logistics Partner FLEET Tool. Make multiple copies of the tables if needed to enter all carriers in the fleet.

#3B: Enter Activity Data

Logistics Fleet Name:

Provide Data Source Description:

Worksheet #3B: Enter Activity Data (page 3 of 5)

Complete the following for each truck *carrier* in the logistics fleet. Only required for Data Availability Options 3 and 6.

Make multiple copies of the tables as needed to enter all carriers in the fleet.

Commodity Distribution (for Average Density Calculator)

Carrier Fleet Name:

Truck Carrier Commodity Distribution

Commodity Group	Description	Avg lbs/cu ft	% of Carrier Freight*
1	Pharmaceutical products	7.8	
2	Electronic and electrical equipment; furniture, mattresses, lamps, etc; machinery; mail and courier parcels; misc. manufactured products; mixed freight; non-powered tools; plastic and rubber; powered tools; precision instruments and apparatus; printed products; vehicles, including parts.	9.3	
3	Alcoholic beverages; all other agricultural products; all other prepared foodstuff; all other transportation equipment; articles of base metal; bakery and milled grains; base metal – finished or semi-finished; live animals and fish; meat, seafood and their preparation; paper and paperboard articles; pulp, newsprint, paper or paperboard; recyclable products; textile, leather, and related products; tobacco products; wood products.	11.3	
4	All other waste and scrap; animal feed or products of animal origin; hazardous waste; misc/other; monumental or building stones; non-metallic mineral products.	13.2	
5	All other chemical products; all other coal and refined petroleum; base chemicals; crude petroleum; fertilizers and fertilizer materials.	14.1	
6	All other non-metallic minerals; cereal grains; logs and other wood in rough; metallic ores and concentrates; natural sand.	16.3	
7	Coal; fuel oils; gasoline and aviation turbine.	17.2	
8	Gravel and crushed stones	18.3	

* mileage basis - **must sum to 100**

Worksheet #3B: Enter Activity Data (page 4 of 5)

Complete the following for each rail/intermodal *carrier* in the logistics fleet. Only required for Data Availability Options 3 and 6.

Make multiple copies of the table as needed to enter all carriers in the fleet.

Commodity Distribution (for Average Density Calculator)

Carrier Fleet Name:

Rail Carrier Commodity Distribution

Commodity Group	Description	Avg lbs/cu ft	% of Carrier Freight*
1	Electrical equipment; furniture; live animals and fish; textiles and leather; vehicles.	7.7	
2	Mixed freight	16.1	
3	Machinery; tobacco products; transportation equipment	22.6	
4	Logs and rough wood; meat, fish, seafood; misc. manufacturing; paper products; products of petroleum	34.6	
5	Alcoholic beverages; animal feed; fabricated base metals; fats and oils; fuel oils; gasoline and fuel; milled grain products; other agricultural products; pulp and paper; waste and scrap; wood products	42.0	
6	Base metal; basic chemicals; building stone; cereal grains; chemical products; fertilizers; gravel and crushed stone; metallic ores; natural sands; non-metallic minerals; plastics and rubber	48.3	
7	Coal	54.3	

* mileage basis - **must sum to 100**

Worksheet #3B: Enter Activity Data (page 5 of 5)

Complete the following for each *carrier* in the logistics fleet. Only required for Data Availability Options 2 and 5.

Make multiple copies of the table as needed to enter all carriers in the fleet.

Load Distribution (for Average Load Calculator)

Carrier Fleet Name:

Carrier Load Distribution

Load Fraction*	# Loads/yr
1/10	
2/10	
3/10	
4/10	
5/10	
6/10	
7/10	
8/10	
9/10	
Full	

* Truckload or railcar-load, depending on mode

Next Steps

Now that you understand the data collection requirements for the SmartWay Logistics Partner FLEET Tool, and you have collected the data you need in the worksheets, you are ready to download the tool and begin the data entry process. Part 3 of the user guide series will guide you through the tool screens, and help you enter the data and troubleshoot any problems you may have with your submission. Please visit <http://www.epa.gov/smartway/partnership/logistics.htm> to download **Part 3: Data Entry Guide** and the Logistics Partner FLEET Tool if you haven't already.