

Truck Carrier FLEET Tool: Data Collection Overview and Workbook

Part 2



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Part 2

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 Truck Carrier 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 Truck Carrier 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/division that you operate will be characterized separately. If you have multiple fleets/divisions with different operations modes, or you contract segments of your freight operations to other companies, you may need to complete additional tools (e.g., Logistics FLEET and/or Multimodal FLEET tools) 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 Truck Carrier 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/division 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 Truck Carrier FLEET tool is the data collection and calculation system for truck carriers that join the SmartWay Transport Partnership. There are four sections of the SmartWay Truck Carrier FLEET Tool that require data about your company's operations:

1. **Specify Official Partner Name**
2. **Enter Company Contact Information**
3. **Characterize Your Fleets/Divisions**
4. **Enter Activity and Fuel Information for Each of Your Fleets/Divisions**

This guide will explore the data required for completing these four 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.

Section 1: Specify Official Partner Name

To begin, you must specify your company's Partner name, exactly as you want it to appear on the SmartWay website. For example, if your company's name includes "Inc." or "Ltd.", you may choose not to include that in your Partner name. Please also pay special attention to proper capitalization, abbreviations, and punctuation.

Section 2: Enter Company Contact Information

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

- **General company information** (e.g., 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 Truck Carrier 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. The Primary Contact is responsible for coordinating the assembly of information to complete/update fleet/division data; completing and updating the tool itself; maintaining direct communication with SmartWay; and keeping interested parties within the company apprised of relevant developments with SmartWay.) NOTE: To ensure that emails from SmartWay/EPA are not blocked, new primary contacts may need to add SmartWay/EPA to their preferred list of trusted sources.)

² The executive contact is the company executive who is responsible for agreeing to the requirements in the SmartWay Partnership Agreement, overseeing the Primary Contact (as appropriate), and ensuring the timely submission of the tool to SmartWay. The executive contact also represents the company at awards/recognition events. This person should be a Vice President or higher level representative for the company.

Section 3: Characterize Your Fleets/Divisions

The SmartWay Truck Carrier FLEET Tool allows you to characterize your operations at the fleet/division level. In the Truck Carrier FLEET tool, a fleet/division 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/division separately from your flatbed fleet/division, you will need to enter each separately.

- If you are an owner-operator with one truck you will only have one fleet/division
- If you are a large national trucking company, you may have several fleets/divisions

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

SmartWay highly recommends developing your list of fleets/divisions 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/divisions before filling out the tool.

Your company's name and your fleet/division name(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 and/or your Motor Carrier Number.



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

The “**Characterize Your Fleets/Divisions**” section of the tool has four subsections:

1. Identify Fleets/Divisions
2. Fleet/Division Details
3. Operation Categories
4. Body Types

The data requirements for each tabbed section are described below.

Please use the Worksheet #2 provided in this guide to prepare for filling out the Characterize Fleets/Divisions section in the Truck Carrier FLEET Tool.

NOTE: You may wish to print multiple copies of page 18 if you have multiple fleets/divisions.

Data Requirements for “Identify Fleets/Divisions” Screen

For each fleet/division, you will need to specify:

- **Fleet/Division Prefix (Partner Name):** On the SmartWay website, each of your fleet/division names will begin with the name of your company. This fleet "prefix" will be whatever you enter in the Partner Name field on the Identify Fleets/Divisions screen. By default, the Partner Name for your first fleet/division on the Identify Fleets/Divisions screen is automatically populated with the first 50 characters of the partner name that was entered on the Home screen. You should specify the Partner Name so that it appears EXACTLY as it you want it to show within each fleet/division name. (For example, if your company's name includes "Inc." or "Ltd.", you

may choose not to include that in your fleet names.) Please pay special attention to proper capitalization, abbreviations, and punctuation. Remember that this name will be automatically inserted at the start of each of your fleet/division names on the SmartWay website.

- **Fleet/Division Suffix:** Please make sure to specify each fleet suffix name exactly as you want it displayed on the SmartWay website, including proper capitalization, any abbreviations, and punctuation. Remember that it will automatically be combined with your Partner name. NOTE: If you have only one fleet/division, you may leave the Fleet Name field blank, in which case your fleet/division name will simply be your Partner Name.

Data Requirements for “Fleet/Division Details” Screen

For each fleet/division, you will need to specify:

- **Percent Operational Control:** “Control” means that you operate/route the vehicles, regardless of ownership status. Control includes dedicated fleets that you operate for other parties. Specify if your company controls over 95% of the operation of each fleet/division, weighted by miles. *If you contract out more than 5% of the fleet’s operation, the SmartWay Logistics Tool should be used for that fleet.*
- **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. These are optional fields and may be left blank in the Truck Tool.
- **Fleet Type:** Fleet Type is defined as the service type for your fleet/division. There are two options accepted by the tool—“For-Hire” and “Private/Dedicated.” If your company has only one division, your “Fleet Type” selection will reflect your company’s operations as a whole. If there are multiple divisions, each will have its fleet type defined separately.
- **Fleet/Division Contact:** This contact should be one of the contacts you already identified in the Contact Information section as the contact for each fleet/division. NOTE: A drop-down menu in the tool will supply this information; if there is a contact for the fleet/division that is not already listed in the Contacts worksheet, you will need to go back to that screen to add the required contact information.

Data Requirements for “Operation Categories” Screen

For each fleet/division, you will need to specify:

- **Operation Category:** Determine the percent of each operation type based on approximate mileage for the reporting year. 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/division operations. Operation categories include:
 - **Truckload (TL)** - Truckload shipping is the movement of large amounts of homogeneous cargo, generally the amount necessary to fill an entire semi-trailer or intermodal

container. A truckload carrier is a trucking 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 line-haul to the delivering terminal or to a hub terminal where the freight will be further sorted and consolidated for additional line-hauls.
- **Drayage (Dray)** – 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)** – 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. Common examples of this type of operation are the brown UPS and white FedEx delivery vehicles.
- **Expedited** - Time-sensitive freight shipments, with trucks typically on stand-by.



NOTE: Define your fleets/divisions based on the ability of your customers to choose them. If a fleet is a mix of TL and LTL, you will indicate the percentages of each. If customers can choose to hire your TL fleet/division, your LTL fleet/division, or your dray fleet/division separately, then each should be regarded as a separate fleet/division.

Data Requirements for “Body Types” Screen

For each fleet/division, you will need to specify:

- **Body Type (by percentage of vehicles):** 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)
 - **Heavy-Bulk hauler**
 - **Auto Carrier**
 - **Moving**
 - **Utility³**
 - **Special hauler** (e.g., Hopper, Livestock, and other specialized carriers)



NOTE: Again, define your fleets/divisions based on the ability of your customers to choose them. If customers can choose to hire your dry van fleet/division, or your reefer

³ The utility category encompasses class 2B to 8B vehicles that do not carry typical commercial freight. Examples include garbage, recycle, service, work, dump, landscape, cement, bucket, boom, ambulance, armored, fire, farm, wrecker and other similar trucks. Because these trucks do not carry traditional freight payload, the user should self-define their payload so as to make the emissions per payload efficiency useful to the user. SmartWay will not use the emissions per payload results for the utility category.

fleet/division, or your flatbed fleet/division, then create each as a separate fleet/division. The percentages for each fleet/division must sum to 100%.

Section 4: Enter Activity and Fuel Information for Each of Your Fleets/Divisions

Once you have identified and characterized your fleets/divisions, you will be asked to provide additional information for EACH fleet/division separately.



NOTE: If you are a new SmartWay partner you should enter the most recent 12 months of data into the tool. If you 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.

Please use the Worksheet #3 provided in this guide to prepare for filling out the General Information section in the Truck Carrier FLEET Tool (make one copy for each fleet/division).

To begin, you will need to provide the following general information about the selected fleet/division:

- **Long- versus short-haul split (%):** A long haul is defined as any haul over 200 miles. A short haul is defined as any haul that is 200 miles or fewer. You will need to define the percentage of all hauls for this fleet/division that are either short haul or long haul.
- **Types of fuel used:** You will be able to track your use of diesel/biodiesel, gasoline/ethanol, propane (LPG), liquefied natural gas (LNG) and compressed natural gas (CNG). For **each type of fuel you use**, you will need to know total amount of fuel used and the amount of fuel used by vehicle class.
- **Use of particulate matter (PM) control equipment:** If you employ particulate matter reduction technologies for trucks with diesel engines that were built in 2006 or earlier, check the box indicating this; later, you will be asked to specify the type of equipment from the following three options: Diesel Oxidation Catalyst (DOC); Closed Crankcase Ventilation (CCV); and Particulate Matter Filter (PM Trap) and/or Flow-through Filter.
- **Cube out percentage:** Enter the percentage of truckloads utilizing 100% of available cargo capacity while remaining within allowable weight limits. This value represents the percentage of your fleet's/division's truckloads that "cube out". This value is different from the "% Capacity Utilization" value on the Activity Information screen, which represents the average fraction of available capacity utilized for all loaded trips. For example, if 50% of your truckloads cube out, and 50% of your truckloads utilize only half of the available capacity, your entry here would be 50%, but your entry for "% Capacity Utilization" on the Activity screen would be 75% ($50\% \times 100\% + 50\% \times 50\%$).
- **Commodity descriptions:** You will be asked to indicate all of the commodities that each fleet carries on a checklist screen.
- **Port Dray Program participation and characterization:** Those fleets with 75% or more of their operation in the Dray category are eligible to participate in SmartWay's Port Drayage Program. This voluntary program recognizes Partners for reducing diesel emissions from port drayage trucks. Appendix A to this document provides the data submittal requirements for participation in this program.

Fuel Type-Specific Data Requirements

In the general information section, you identified the types of fuel used, amounts of fuels used, and associated vehicle classes using each fuel type.

You will need to gather data for each fuel type you use. This data will be entered in the tool under separate screens, including:

- Diesel and biodiesel, entered under the same screen.
- Gasoline and ethanol, entered under the same screen.
- LPG, LNG, and CNG, each entered under separate screens.

For each fuel type, you will need to provide:

- **Model Year and Truck Class Information**
- **Activity Information**
- **PM Reduction (if applicable):** In the case of diesel trucks, if you selected the PM Reduction box on the General Info screen, you will also need to provide information about the types of devices used.

Data requirements for each of these sections are described below.

Data Requirements for “Model Year and Truck Class” Screen

For each fleet/division, you will need to define the fuel type used and the engine model years and classes represented.



NOTE: You will need data for **ENGINE** model years, not tractor model years.

You will need to report data for vehicles with 1988 - 2012 model year engines. The number of engines older than 1988 are grouped together for reporting and analysis. You will need to enter both the **total number for each model year and truck class**.



NOTE: If you defined multiple fleets/divisions in the Fleet/Division Characterization section, and if you operate certain trucks across multiple fleets/divisions, please distribute your vehicle counts across the fleets/divisions to avoid double counting of your trucks. For example, if you operate the same 100 trucks across two fleets/divisions, with 20% of the truck mileage attributable to the first fleet/division, then enter 20 trucks for fleet #1, and 80 trucks for fleet #2.

Worksheet 4 in this guide will help you collect model year and class data for each fleet/division; this worksheet is included on pages 21-22. You will need to print multiple copies of this worksheet if you have more than one fuel type in your fleet/division or multiple fleets to account for.

Data Requirements for “Activity Information” Screen

For each fuel type, you will now be asked to complete detailed activity information.

To complete the activity screens, you will need to gather the data described below including information about the data source. **Worksheet # 4A will help you gather the information required for characterizing your fleet’s activity.**



NOTE: EPA is collecting this information about data sources as a way of validating data and establishing the accuracy of data inputs within the tool. This data is treated as confidential business information, but certain data may be used for aggregated analysis of data from multiple companies. Please enter your selected data sources in Worksheet #5A—a helpful reference table with recommended sources is included in this guide on pages 12-15.

The following provides detailed information for each required data type under the Activity Information section:

- **Total Miles Driven:** Enter the total miles driven by this fleet/division by vehicle class in the worksheet. Include all out-of-route, positioning, and other miles driven. Once specified **for each class**, the total fleet/division mileage will be summed and displayed within the tool in the **Overall Fleet** column.
- **Revenue Miles Driven:** Enter the number of miles your fleet/division drove that were charged to a customer account. (If you have a private fleet/division that does not track revenue miles for internal cost accounting, set revenue miles equal to total miles - **DO NOT SET REVENUE MILES EQUAL TO ZERO.**) This information is not used to calculate your SmartWay carbon score, but will be used determine an adjustment factor for shippers' carbon inventories⁴.
- **Empty Miles Driven:** Enter the total number of empty miles traveled by your fleet. Empty is defined as zero cargo. **NOTE:** The number of empty miles will not affect your SmartWay score. Companies in categories with high empty miles, such as tanker operations, will not be negatively affected by high empty-mile values.
- **Gallons of Fuel Used:** Enter all gallons of fuel used by your fleet in the past 12 month reporting period. This includes any gallons of biofuels (biodiesel for diesel vehicles, ethanol for gasoline vehicles). It also includes gallons used for refrigeration, bunk heaters, yard moves, or any other gallons directly attributable to transportation. It does NOT include gallons used in heating buildings, forklifts, or other non-transportation uses.



NOTE: Gallons of fuel may be input directly or may be allocated based on class-level MPG estimates using the **Allocate Using Class MPG** worksheet in the tool. Total miles for each truck class must be specified for each truck class before you can open the worksheet. The **Fuel Allocator Worksheet** requires you to input your estimate of total fuel consumption for your entire fleet/division across all vehicle classes, as well as an MPG estimate for each truck class. You can gather this data in Worksheet #5A. The total fleet-level fuel consumption values will provide the basis for estimating carbon performance metrics for your fleet/division.

- **Gallons of Biodiesel (Diesel Vehicles only):** If your fleet/division consumed any amount of biodiesel during the reporting period, you can specify your biodiesel volumes by blend level in the tool. Use your best estimates when completing the worksheet. **Worksheet #5B in this guide will help you estimate biodiesel data by blend level.**

⁴ Since shippers determine their carbon inventory based on revenue miles charged by their carriers, shippers collectively must also include the non-revenue miles in their carbon inventory. Thus shippers will be charged the carbon for the non-revenue miles that carriers have to travel. This will be calculated on an industry basis and will not affect individual carriers.

- **Gallons of Ethanol (Gasoline Vehicles only):** If your fleet consumed any amount of ethanol during the reporting period, specify your ethanol volumes by blend level (E10 or E85) in the **Ethanol Blend Worksheet**. If you do not know the volume of ethanol used by your fleet, you can select “Use national average” in the tool. In either case, the total volume of ethanol at each blend level will be allocated across the different truck classes in your fleet/division in proportion to the total gallons of gasoline used. **Worksheet #5B in this guide will help you estimate ethanol data by blend level.**
- **Average Payload (tons or pounds) – Cargo Weight Only:** You may enter your calculated average payloads into the tool by selecting one of the two Bills of Lading data source options within the **SmartWay Payload Calculator**. In this case, you must input your specific payload information by truck class and general body type.

Potential payload allocation methods include:

- # miles by class (PREFERRED)
- # trips by class
- % of operation by class
- # vehicles by class (LEAST PREFERRED)



NOTE: Payloads should represent the average cargo weight per LOADED trip – while empty backhauls should be excluded from the calculation, account for all other (non-empty) trips. In addition, users should obtain average payload data from their company’s bills of lading records if at all possible.

Average payload values are required for each body type you select and can be entered in short tons or pounds. If you do not have precise payload estimates for a specific vehicle class you should select the “Used ranges provided by the calculator” in the Data Source selection. Then you may select from pre-defined Ranges 1 – 5 (1 being the lowest payload values available, 5 being the highest.)⁵ If you need to use different sources of data to characterize different body types, select the “Other – list all that apply” Data Source option within the Payload Calculator.

If you provide exact payload information, an explanation describing how the value was estimated will be required. In addition, if Range 1 (extreme low) or Range 5 (extreme high) values are selected, similar explanations must be provided summarizing the reasons for the unusual payload value (e.g., you may explain that a flatbed fleet is regularly used to transport heavy construction equipment) . **Worksheet # 5C in this guide will help you gather the data for the payload calculations.**

⁵ Specific range values were determined based on reported industry payload distributions, and are discussed in detail in the [Truck Tool Technical Documentation](http://epa.gov/smartway/documents/partnership/trucks/techdoc.pdf) <http://epa.gov/smartway/documents/partnership/trucks/techdoc.pdf>.

- **Average Capacity Volume (cubic feet or TEU):** Volume refers to the total cargo carrying capacity of your vehicles, not the utilized space on the vehicles. Volumes are specific to each major body type/configuration, and can be expressed in cubic feet or twenty-foot equivalent units (TEU). Similar to payload data entry, you may enter your calculated volume capacity information by selecting the “Determined using company records” Data Source option within the **SmartWay Volume Calculator**. Alternatively, you may select default values for each body type by selecting the “Used defaults provided by calculator” Data Source option. Finally, if you need to use different sources of data to characterize different body types, select the “Other – list all that apply” Data Source option within the calculator. **Worksheet #5C in this guide will help you gather volume data for this section.**
- **% Capacity Utilization (excluding empty miles):** Percent capacity utilization applies *only* to loaded (non-empty) miles. For most carriers, this will reflect your loaded volumetric fill rate. LTL carriers should estimate the weighted average fill rate over the span of operations. Flatbed haulers may estimate fill rate based on deck area covered. Auto carriers may estimate based on percent of car slots filled. **Worksheet #5A in this guide will help you gather capacity data.**



NOTE: Do not factor in empty miles for percent capacity utilization.

- **% Highway or Rural Driving:** Indicate the percentage of total miles spent driving in highway vs. rural conditions (e.g., on restricted access roads such as freeways, or in non-urban areas) by truck class. **Worksheet #5D will help you gather data for highway or rural driving.**
- **Average Urban Speed Distribution:** Input the percent of total miles, by class, spent driving in urban conditions (e.g., on unrestricted access surface streets in urban areas), by speed category (0 – 25 / 35 – 50 / 50+ mph). This data should be available from your vehicles’ electronic control modules (ECM).⁶ **Worksheet #5D will help you gather data for urban speed distribution.**
- **Average Annual Idle Hours per Truck:** Input the average annual idle hours per truck by class. If you need assistance estimating these values, the tool provides a calculator to help you calculate estimates based on daily averages. Separate values should be input for short duration (less than 15 consecutive minutes) and long-duration (greater than 15 minutes) idling.⁷ **Worksheet #5D will help you gather data for annual idle hours per truck.**
- **Diesel PM Reduction:** If you have installed retrofit equipment on pre-2007 model year engines within your fleet, you will need to provide information on the **PM Reduction** section of the tool. You will be asked to select the type of device (DOC, CCV, or PM trap), and then enter the number of trucks equipped with these devices by engine (not vehicle) model year. You will be allowed to input data for multiple devices. **Worksheet #5E will help you gather data for this section.**

⁶ If you do not know your speed distribution for urban areas, you may check the box labeled “Populate the urban driving fields with default values.” Default percentages will be calculated based on data from EPA’s MOVES model, adjusted for the Highway/Rural Driving percentage you specified. (For additional details see the [Truck Tool Technical Documentation](http://epa.gov/smartway/transport/documents/fleet-models/truckingmodel-technicaldoc-recent.pdf) available at <http://epa.gov/smartway/transport/documents/fleet-models/truckingmodel-technicaldoc-recent.pdf>).

⁷ NOx and PM emission rates are different for short- and long-duration idling, reflecting the varying engine loads and operating temperatures for these events. At this time the SmartWay emission calculations do not distinguish between these events, although different emission factors may be integrated in future versions of the tool.

RECOMMENDED DATA SOURCES FOR ACTIVITY DATA

Table 1 summarizes the standard Data Source categories available for selection for each data type.

Table 1. Data Source Detail Selection Options

<u>Data Type</u>	<u>Data Source</u>	<u>Data Source Detail</u>
Total Miles Driven	As reported to IFTA Form 441 for tax reporting (interstate)	Collected via fleet-wide GPS reporting software
		Collected via odometer readings
		Collected via maintenance records
		Collected via driver trip sheets
		Collected via standard mileage routes, e.g. PC Miler, Household Goods Guide
	As reported to individual states for tax reporting (intrastate)	Collected via fleet-wide GPS reporting software
		Collected via odometer readings
		Collected via maintenance records
		Collected via driver trip sheets
		Collected via standard mileage routes, e.g. PC Miler, Household Goods Guide
	Determined using software	Dispatching Software*
		Transportation Management System (TMS)*
	Vehicle-based data collection	Determined via Electronic Control Module (ECM) data recorder/logger*
Revenue Miles Driven	As used in Federal tax reporting	Collected via electronic Transportation Management System (TMS)
		Collected via GPS-enabled TMS
		Collected via manual input into company database
		Collected via non-electronic company records
	Financial data	Accounting/billing software*
		Tax reports/IRS and State*

<u>Data Type</u>	<u>Data Source</u>	<u>Data Source Detail</u>
Revenue Miles Driven (cont'd)	Determined using software	Dispatching Software*
		Transportation Management System (TMS)*
	Based on total mileage	Equal to total miles
		Total miles less empty miles
		Calculated as a percentage of total miles*
Empty Miles Driven	Collected automatically / electronically / manually	Collected via electronic Transportation Management System (TMS)
		Collected via GPS-enabled TMS
		Collected via manual input into company database
		Collected via non-electronic company records
		Collected via odometer readings
		Collected via driver trip sheets
	Financial Data	Accounting/billing software*
		Tax reports/IRS and State*
	Determined using software	Dispatching Software*
		Transportation Management System (TMS)*
	Based on total mileage	Total miles less revenue miles
		Calculated as a percentage of total miles*
Gallons of Fuel Used	As reported to IFTA Form 441 for tax reporting (interstate)	collected via electronic fuel receipt
		collected via paper fuel receipt
		collected via driver trip sheets
		collected via electronic expenditure data
		collected via paper expenditure data
	As reported to individual state for tax reporting (intrastate)	collected via electronic fuel receipt
		collected via paper fuel receipt
		collected via driver trip sheets

<u>Data Type</u>	<u>Data Source</u>	<u>Data Source Detail</u>
Gallons of Fuel Used (cont'd)		collected via electronic expenditure data
		collected via paper expenditure data
	Determined using software	Dispatching Software*
		Transportation Management System (TMS)*
	Vehicle-based data collection	Determined via Electronic Control Module (ECM) data recorder/logger*
	Based on MPG estimates*	User-provided
Average Payload	Bills of Lading – electronic records (preferred)	Based on actual miles traveled by specific payloads*
		Trip-weighted (total payload weights / total trips)*
	Bills of Lading – manual records	Based on actual miles traveled by specific payloads*
		Trip-weighted (total payload weights / total trips)*
	Ranges provided by calculator	N/A (calculator)
Average Volume	Determined using company records*	User-provided
	Defaults from calculator	N/A (calculator)
Capacity Utilization	Collected automatically / electronically / manually	Collected through load volume information
	Determined using software	Dispatching Software*
		Transportation Management System (TMS)*
Road Type / Speed Categories	Collected automatically / electronically	Driver trip reports*
		Governed speed*
		Determined via GPS
		Determined via Electronic Control Module (ECM) data recorder/logger*
	Transportation Management System (TMS)	Driver trip reports*
		Governed speed*
		Determined via GPS

<u>Data Type</u>	<u>Data Source</u>	<u>Data Source Detail</u>
		Determined via Electronic Control Module (ECM) data recorder/logger*
Average Annual Idle Hours per Truck	Vehicle-based data collection	Determined via Electronic Control Module (ECM) data recorder/logger*
	Driver trip reports*	User-provided
	Idle reduction strategy	Company “No Idle” policy in place*
		Local/State idle regulation in place*
	Determined using software	Dispatching Software*
		Transportation Management System (TMS)*

* User must provide additional description regarding data collection system and calculation method.

Worksheets for Data Collection

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Worksheet #1: Company 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: Fleet/Division Characterization

Complete this worksheet for each fleet/division you will be submitting in the Truck Carrier FLEET Tool.

Specify Company/ Division Name (exactly as it should appear on the SmartWay website):

Fleet/Division Prefix (Partner Name) _____

Fleet/Division Suffix _____

95% Control _____ SCAC: _____ MCN: _____ FLEET TYPE: _____

Fleet/Division Contact: _____

Operation Category Percentages:

Truckload _____ LTL _____ Drayage _____ Package Delivery _____ Expedited _____

Body Type Percentages:

Dry Van _____ Reefer _____ Flatbed _____ Tanker _____ Chassis _____
Heavy-Bulk _____ Auto Carrier _____ Moving _____ Utility _____ Special Hauler _____

Worksheet #3: General Fleet/Division Information (page 1 of 2)

Long- versus Short-haul split (%): _____ Short Haul _____ Long Haul

Types of Fuel Used:

_____ diesel/biodiesel _____ gasoline/ethanol _____ propane (LPG)
_____ liquefied natural gas (LNG) _____ compressed natural gas (CNG)

Use of Particulate Matter (PM) Control Equipment:

_____ Diesel Oxidation Catalyst (DOC)
_____ Closed Crankcase Ventilation (CCV)
_____ Particulate Matter Filter (PM Trap)

Cube Out Percentage: _____

Worksheet #3: Fleet Characterization (page 2 of 2)

Commodity Descriptions: Select all that apply to this fleet:	
	Live Animals and Fish
	Cereal Grains (including seed)
	Other Agricultural Products, except for Animal Feed
	Animal Feed and Products of Animal Origin, n.e.c.
	Meat, Fish, and Seafood, and Their Preparations
	Milled Grain Products and Preparations, and Bakery Products
	Other Prepared Foodstuffs, and Fats and Oils
	Alcoholic Beverages
	Tobacco Products
	Monumental or Building Stone
	Natural Sands
	Gravel and Crushed Stone
	Non-Metallic Minerals, n.e.c.
	Metallic Ores and Concentrates
	Coal
	Crude Petroleum Oil
	Gasoline and Aviation Turbine Fuel
	Fuel Oils
	Coal and Petroleum Products, n.e.c.
	Basic Chemicals
	Pharmaceutical Products
	Fertilizers
	Chemical Products and Preparations, n.e.c.
	Plastics and Rubber
	Logs and Other Wood in the Rough
	Wood Products
	Pulp, Newsprint, Paper, and Paperboard
	Paper or Paperboard Articles
	Printed Products
	Textiles, Leather, and Articles of Textiles or Leather
	Non-Metallic Mineral Products
	Base Metal in Primary or Semi-Finished Forms and in Finished Basic Shapes
	Articles of Base Metal
	Machinery
	Electronic and Other Electrical Equipment and Components, and Office Equipment
	Motorized and Other Vehicles (including parts)
	Transportation Equipment, n.e.c.
	Precision Instruments and Apparatus
	Furniture, Mattresses and Mattress Supports, Lamps, Lighting Fittings, and Illuminated Signs

















Worksheet #4 Model Year/Class (page 1 of 2)

















NOTE: Print multiple copies of this worksheet to gather data for each fuel type within each fleet/division.

Fleet/Division Name: _____

Fuel Type: _____

Engine Model Year(s) and Class(es):

	Class 2b	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8a	Class 8b
	8,501-10,000	10,001-14,000	14,001-16,000	16,001-19,500	19,501-26,000	26,001-33,000	33,001-60,000	60,001 & above
	 	 	 	 	 	 	 	 
ENGINE MODEL YEAR	2B	3	4	5	6	7	8A	8B
2012								
2011								
2010								
2009								
2008								
2007								
2006								
2005								
2004								
2003								
2002								
2001								

	Class 2b 8,501-10,000	Class 3 10,001-14,000	Class 4 14,001-16,000	Class 5 16,001-19,500	Class 6 19,501-26,000	Class 7 26,001-33,000	Class 8a 33,001-60,000	Class 8b 60,001 & above
	 	 	 	 	 	 	 	 
ENGINE MODEL YEAR	2B	3	4	5	6	7	8A	8B
2000								
1999								
1998								
1997								
1996								
1995								
1994								
1993								
1992								
1991								
1990								
1989								
1988								
Pre-1988								

Worksheet #5A: Activity Data Sources and Information (page 1 of 2)

Fleet/Division-Level Data Sources

Total Miles Driven _____

Revenue Miles Driven _____

Empty Miles Driven _____

Gallons of Fuel Used (incl. Biofuel – biodiesel or ethanol) _____

% Capacity Utilization (excluding empty miles) _____

Road Type / Speed Category _____

Idle Hours _____

Truck Class-Level Data Sources (payload and volume only)

	2B	3	4	5
Average Payload (tons or pounds – circle one) Cargo Weight Only				
Average Capacity Volume (cubic feet or TEUs – circle one)				

	6	7	8A	8B
Average Payload (tons or pounds – circle one) Cargo Weight Only				
Average Capacity Volume (cubic feet or TEUs – circle one)				

Worksheet #5A: Activity Data Sources and Information (page 2 of 2)

Activity Data by Truck Class

	2B	3	4	5	6	7	8A	8B
Total Miles Driven (exact values)								
Revenue Miles Driven (exact values)								
Empty Miles Driven (exact values)								
Gallons of Fuel used, including biofuels and Reefer used (exact values)								
% Capacity Utilization (excluding empty miles)								

Worksheet #5B: Activity - Biodiesel and Ethanol Blends (If Applicable)

For each of the biodiesel blends used by your fleet, note the appropriate number of gallons used.

B1		B21		B41		B61		B81	
B2		B22		B42		B62		B82	
B3		B23		B43		B63		B83	
B4		B24		B44		B64		B84	
B5		B25		B45		B65		B85	
B6		B26		B46		B66		B86	
B7		B27		B47		B67		B87	
B8		B28		B48		B68		B88	
B9		B29		B49		B69		B89	
B10		B30		B50		B70		B90	
B11		B31		B51		B71		B91	
B12		B32		B52		B72		B92	
B13		B33		B53		B73		B93	
B14		B34		B54		B74		B94	
B15		B35		B55		B75		B95	
B16		B36		B56		B76		B96	
B17		B37		B57		B77		B97	
B18		B38		B58		B78		B98	
B19		B39		B59		B79		B99	
B20		B40		B60		B80		B100	

Actual ethanol usage figures:

Blend percentage:	Total Gallons Used
E0	
E10	
E85	

Worksheet #5C: Payload and Volume (page 1 of 12)

To determine average payload for the entire fleet you will need to select an allocation method to determine the amount each truck class/vehicle type contributes to the overall total. Four allocation methods are provided, listed from most preferred to least preferred. You will also need to specify the data source(s) used to develop your estimates, and select the units for Payload (short tons or pounds) and Volume (cubic feet or TEU).






Worksheet #5C: Payload and Volume (page 2 of 12)

Class 2b Vehicles

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds

Select volume unit (circle one): Cubic Ft TEU

Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method	Average Volume	Describe Volume Data Source/Calculation Method
2B	 Flatbed					
2B	 Step van					
2B	 Walk In					
2B	 Conventional van					
2B	 OTHER					




Worksheet #5C: Payload and Volume (page 3 of 12)

Class 3 Vehicles

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds

Select volume unit (circle one): Cubic Ft TEU

Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method	Average Volume	Describe Volume Data Source/Calculation Method
3	 Step van					
3	 Walk In					
3	 Conventional van					
3	? OTHER					





Worksheet #5C: Payload and Volume (page 4 of 12)

Class 4 Vehicles

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds

Select volume unit (circle one): Cubic Ft TEU

Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method	Average Volume	Describe Volume Data Source/Calculation Method
4	 Flatbed					
4	 Step van					
4	 Large walk-in					
4	 Conventional van					
4	? OTHER					



Worksheet #5C: Payload and Volume (page 5 of 12)

Class 5 Vehicles

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds

Select volume unit (circle one): Cubic Ft TEU

Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method	Average Volume	Describe Volume Data Source/Calculation Method
5	 Large walk-in					
5	 Conventional van					
5	? OTHER					



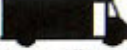

Worksheet #5C: Payload and Volume (page 6 of 12)

Class 6 Vehicles

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds

Select volume unit (circle one): Cubic Ft TEU

Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method	Average Volume	Describe Volume Data Source/Calculation Method
6	 Flatbed					
6	 Reefer					
6	 Large walk-in					
6	 Single axle van					
6	? OTHER					






Worksheet #5C: Payload and Volume (page 7 of 12)

Class 7 Vehicles – Straight Trucks

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds

Select volume unit (circle one): Cubic Ft TEU

Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method	Average Volume	Describe Volume Data Source/Calculation Method
7	 Beverage					
7	 Flatbed					
7	 Reefer					
7	 Tanker					
7	 Single axle van					
7	? OTHER					




Worksheet #5C: Payload and Volume (page 8 of 12)

Class 7 Vehicles – Combination Trucks

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds

Select volume unit (circle one): Cubic Ft TEU





Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method	Average Volume	Describe Volume Data Source/Calculation Method
7	 Combination Flatbed					
7	 Combination Reefer					
7	 Dry Van - Single					
7	? OTHER					

Worksheet #5C: Payload and Volume (page 9 of 12)

Class 8a Vehicles – Straight Trucks (payload data only)

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds





Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method
8A	 Flatbed			
8A	 Tanker			
8A	 Single axle van			
8A	 OTHER			

Worksheet #5C: Payload and Volume (page 10 of 12)

Class 8a Vehicles – Combination Trucks (payload data only)

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds





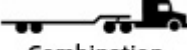


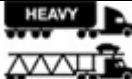

Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method
8A	 Beverage			
8A	 Combination Flatbed			
8A	 Dry Van - Single			
8A	 OTHER			

Worksheet #5C: Payload and Volume (page 11 of 12)

Class 8b Vehicles – Combination Trucks (payload data only)

Select allocation method for this class (circle one):	# of miles	# of trips	% of operation	# of vehicles
---	------------	------------	----------------	---------------

Select payload unit (circle one): Tons Pounds

Vehicle Class	Vehicle Type	Allocation factor (#miles, trips, etc.)	Average Payload	Describe Payload Data Source/Calculation Method
8B	 Dry Van - Single			
8B	 Dry Van - Double			
8B	 Dry Van - Triple			
8B	 Combination Reefer			
8B	 Combination Flatbed			
8B	 Combination Tanker			
8B	 Chassis			
8B	 Specialty			
8B	 OTHER			

Worksheet #5C: Payload and Volume (page 12 of 12)

The volume worksheet for Class 8A/B reflects a range of standard trailer and container configurations. This worksheet will help you prepare for completing the worksheet in the Truck Carrier FLEET Tool.

Please specify your data source: _____

Please specify your reporting basis:

___ Percent Usage ___ Number of Truckloads/Year ___ Number of Trailers

Enter the numbers by type of trailer or container; the tool will calculate an average capacity volume for your fleet:

Trailer Size	Percentage/# Truckloads/# Trailers	Container Size	Percentage/# Truckloads/# Trailers		Other Trailers	
20 ft		20 ft			Cubic Feet per Truck	
40 ft		40 ft			Number/Percent	
42 ft		53 ft				
45 ft						
48 ft		Bulk Carrier Size				
53 ft		Large (42" X 8.5" X 11.5")				
57 ft		Medium (32" X 8" X 11")				
28 + 28		Small (22" X 8" X 10.25")				
40 + 28						
40 + 40		Liquid Tanker Size				
48 + 48		Large (7,500+ gallons)				
28 + 28 + 28		Medium (3,001-7,499 gallons)				
		Small (3,000 and under gallons)				

Worksheet #5D: Road Type/Speed Distribution and Idle Hours Worksheet

		2B	3	4	5	6	7	8B	8B
ROAD TYPE / SPEED DISTRIBUTION	% Highway vs. Rural Driving								
	% Urban Driving Under 25 mph								
	% Urban Driving 25 to 50 mph								
	% Urban Driving 50 mph+								
AVERAGE DAILY IDLE HOURS PER TRUCK	Daily Long Duration Idle Hours Per Truck								
	Daily Short Duration Idle Hours Per Truck								
	Average Days in Service Per Truck								

Worksheet #5E: Diesel PM Worksheet

Trucks with PM Controls by truck class – Note # of trucks by control type (CCV, DOC, PM Trap, Flow-through Filter)

ENGINE MODEL YEAR	2B	3	4	5	6	7	8B	8B
2006								
2005								
2004								
2003								
2002								
2001								
2000								
1999								
1998								
1997								
1996								
1995								
1994								
1993								
1992								
1991								
1990								
1989								
1988								
Pre-1988								

Next Steps

Now that you understand the data collection requirements for the SmartWay Truck Carrier 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/trucks.htm> to download “Part 3: Data Entry Guide” and the Truck Carrier FLEET Tool if you haven’t already.

Remember! You must gather data regarding Model Year & Class and Activity Information for each of the fuel types you operate. Please make copies the Worksheets #3 through #5F provided in this guide and complete them for each fuel type before moving on to data entry.

Appendix A: Port Drayage Program Data Requirements

Provide the following additional information for each fleet/division participating in the SmartWay Port Drayage Program.

of trucks equipped with auxiliary power units (APUs): _____

of trucks equipped with SmartWay tires: _____