

Shipper Partner FLEET Tool: Data Entry Guide

Part 3





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Part 3

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



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Part 3: DATA ENTRY GUIDE

This guide is Part 3 of a three-part series designed to help your company participate fully in the SmartWay Transport Partnership.

In Part 3, you will learn how to enter the company and carrier data you collected using Part 2 into the SmartWay Shipper Partner FLEET Tool. This guide covers:

1. Downloading and setting up to tool to run properly
2. Basic organization of the SmartWay Shipper Partner FLEET Tool
3. Entering your data
4. Viewing company performance summary data
5. Submitting data to SmartWay
6. Troubleshooting the tool



WARNING!

Completing this tool requires a considerable amount of information about your company/companies and the freight carriers used by your companies. There are many sections and screens to complete for each company. 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 and 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.

Downloading and Setting up the Tool

About Microsoft Excel

Microsoft Excel is an electronic spreadsheet program used for storing and manipulating data. The SmartWay Shipper Partner FLEET Tool was built using Microsoft Excel Forms.

Downloading the SmartWay Shipper Partner FLEET Tool

The tool can be downloaded from the SmartWay website at:

<http://www.epa.gov/smartwaylogistics/partnership/shippers.htm>

Please save the tool in a folder on your hard drive; this folder will house copies of your data and future updates.

Security Settings for the SmartWay Tools

The following instructions should appear on your screen *if* you need to change your security settings before running the tool.

Excel 2003 Users

Before you begin, be sure to set your Excel security setting level to “Medium.”

1. When using Excel 2003, on the menu bar, go to *Tools* → *Macro* → *Security Level*.

2. When that window opens, select Medium.

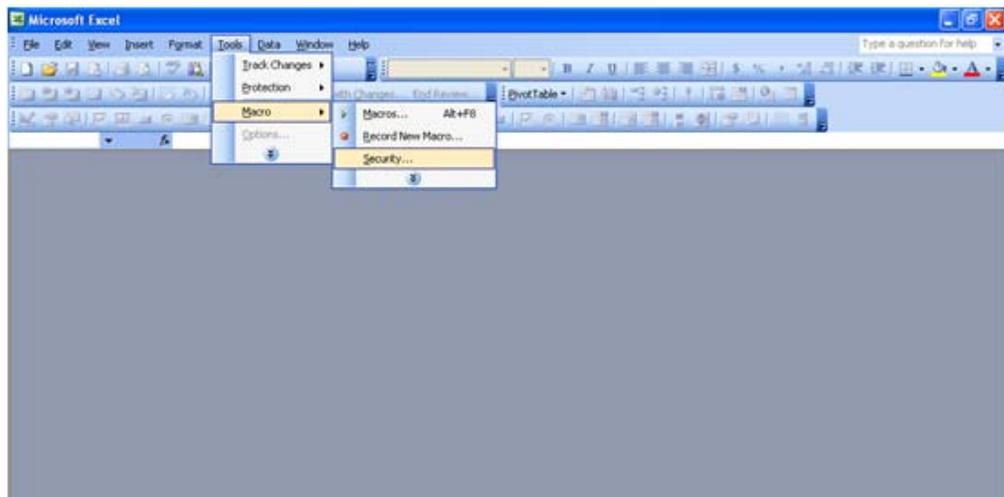


Figure 1: Macro Drop-Down Menu

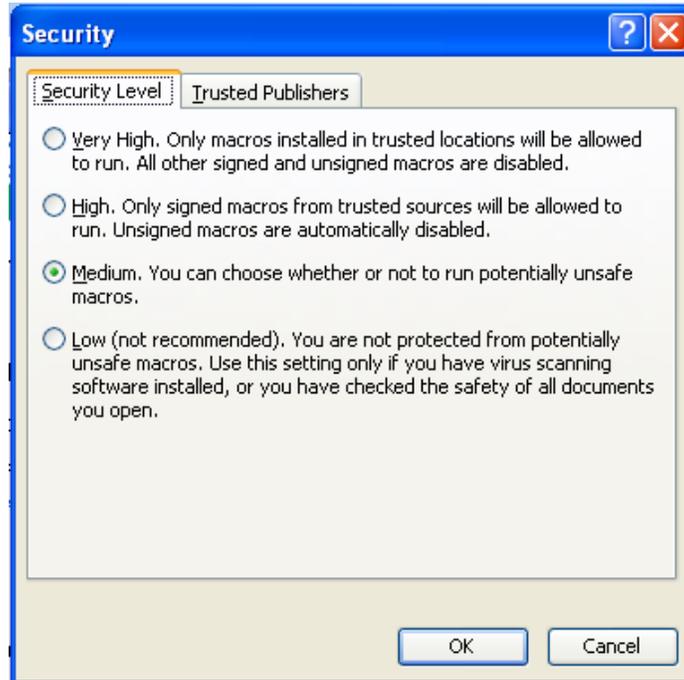


Figure 2: Security Dialog Box

To run the tool:

- 1) Save the tool to your computer in a folder on your hard drive; and,
- 2) Double-click on the file to open the tool.

You will see a security warning box appear (**Figure 3**).

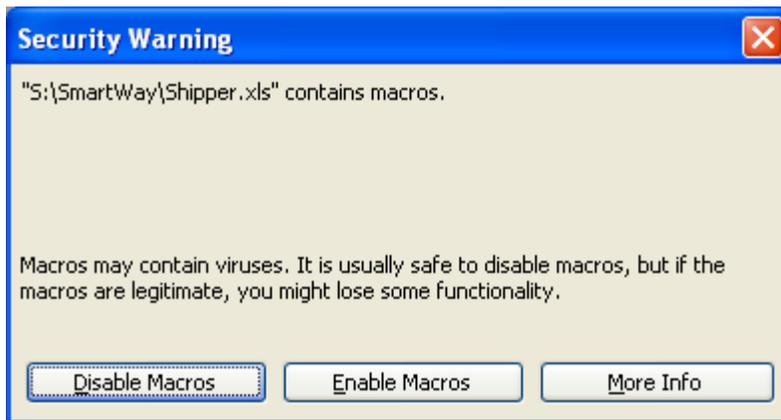


Figure 3: Security Warning Box

- 3) Select the **Enable Macros** button in the security warning box. The following screen (**Figure 4**) should appear:

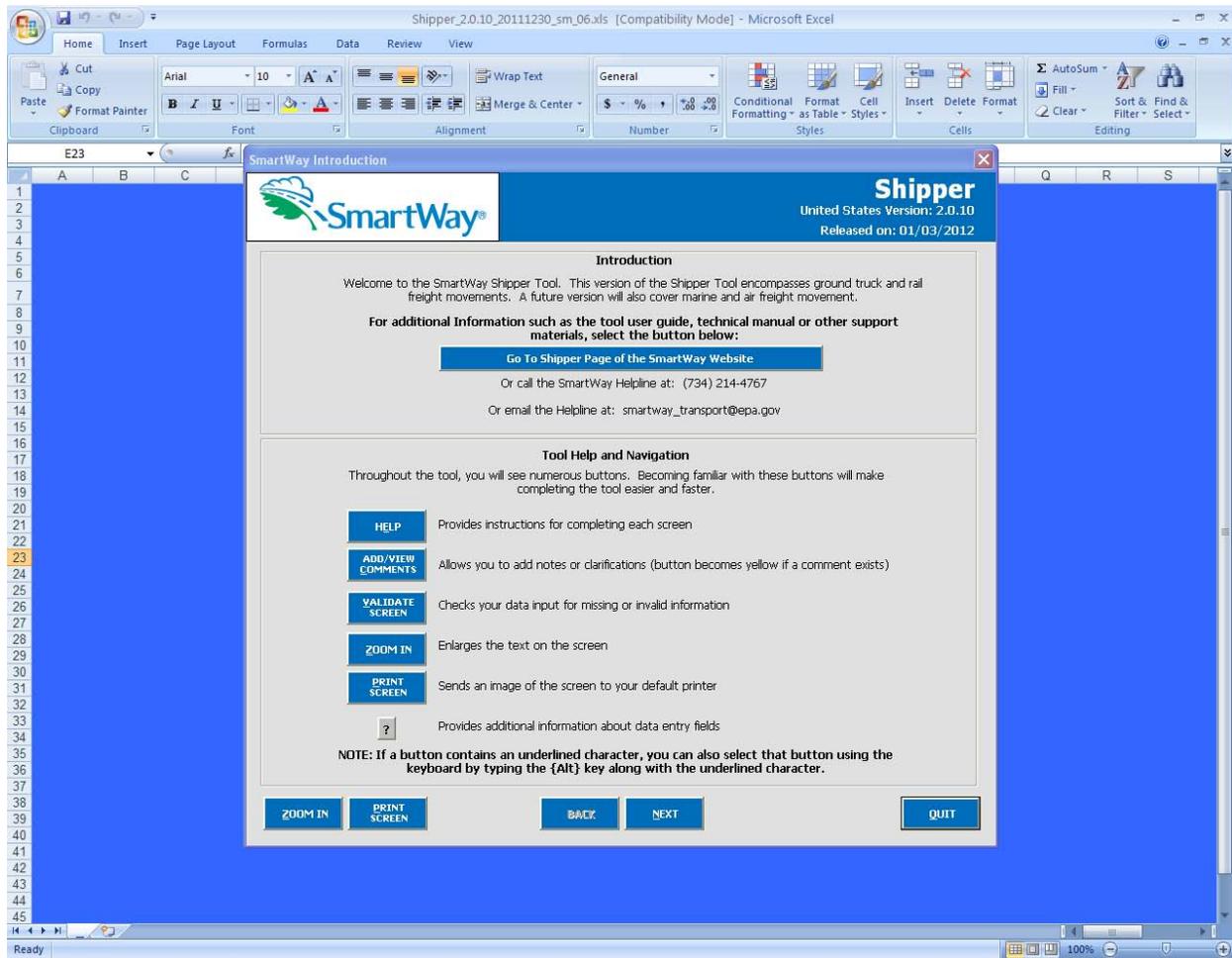


Figure 4: Shipper Partner FLEET Tool Welcome Screen

The part of the tool that you fill out resides in the gray and blue forms that appear on the screen. The Excel workbook that remains in the background – and which normally appears as a blue screen as in **Figure 4** – is where all of the data you enter is actually stored. However, for the purpose of your data entry, please disregard the background workbook.

Security Settings for Excel 2007 Users

The default settings for Excel 2007 should enable you to run the tool without any changes. To run the tool:

- 1) Save the tool to your computer; and,

- 2) Open the file, and select the “Options...” button that appears after the Security Warning just below the menu bar (**Figure 5**). Detailed instructions are also provided on the screen itself.

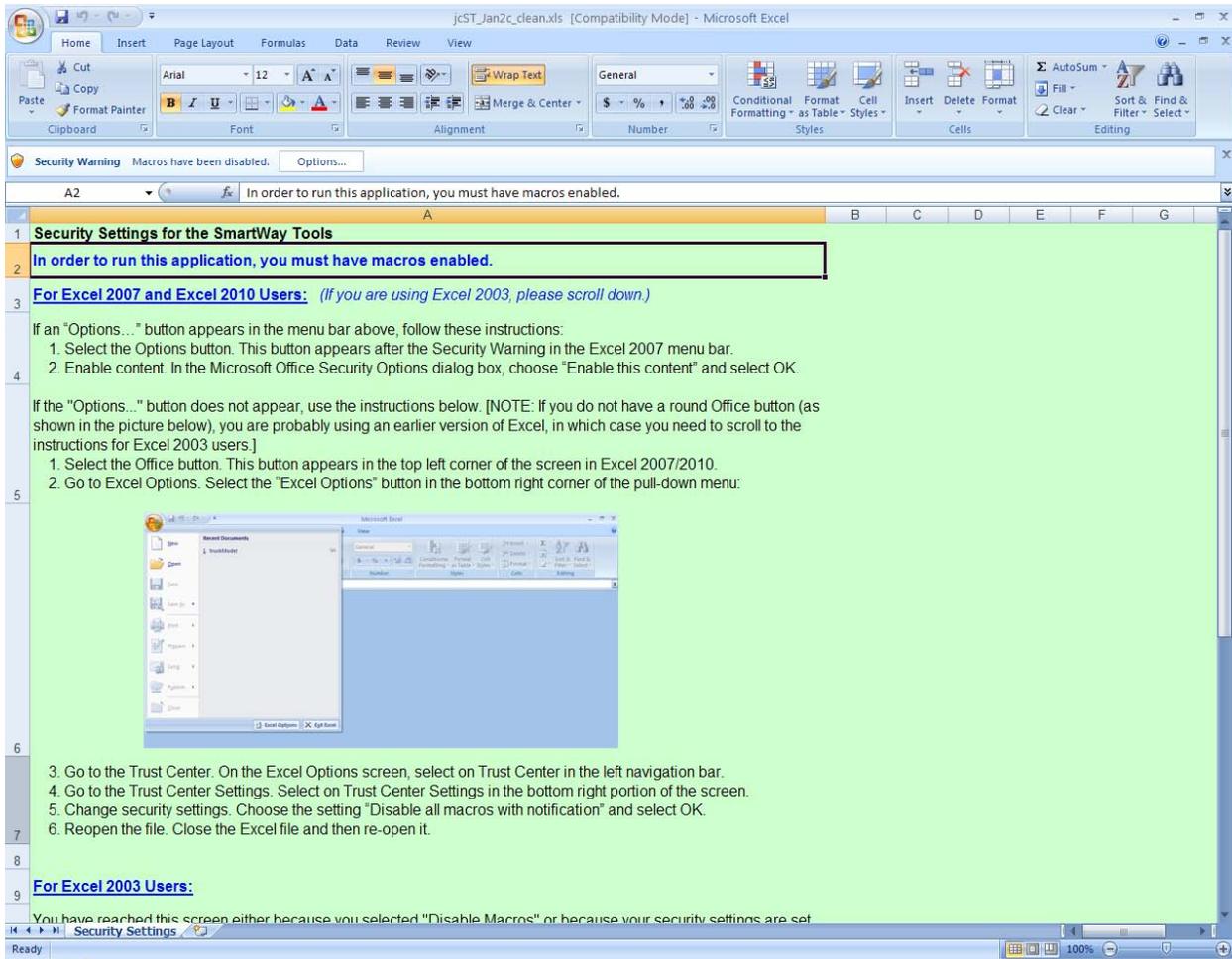


Figure 5: Security Warning Screen

- 3) In the Microsoft Office Security Options dialog box (**Figure 6**), choose “Enable this content” and select **OK**. The tool will then open after a short delay.



Figure 6: Security Options Dialogue Box

If you reach this point and the tool does not open, please review the “**Software and Hardware Requirements**” on Page 6 of Part 1 of the guidance series. Otherwise, you may have your security set too high. To adjust your security settings, select the **Office** button (in the top left corner of the screen) and then select the “Excel Options” button in the bottom right corner of the pull-down menu (**Figure 7**):

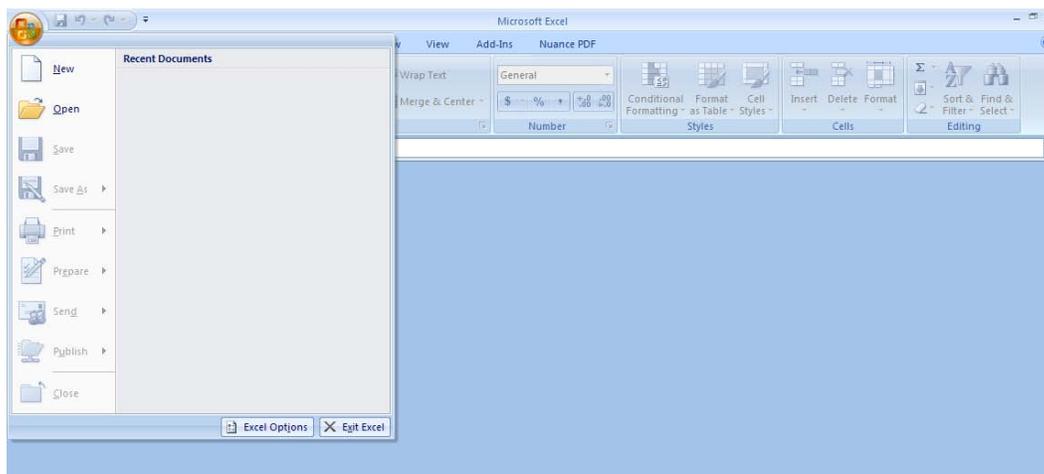


Figure 7: Excel Options Drop-Down Menu

On the Excel Options screen, select **Trust Center** in the left navigation bar (**Figure 8**):

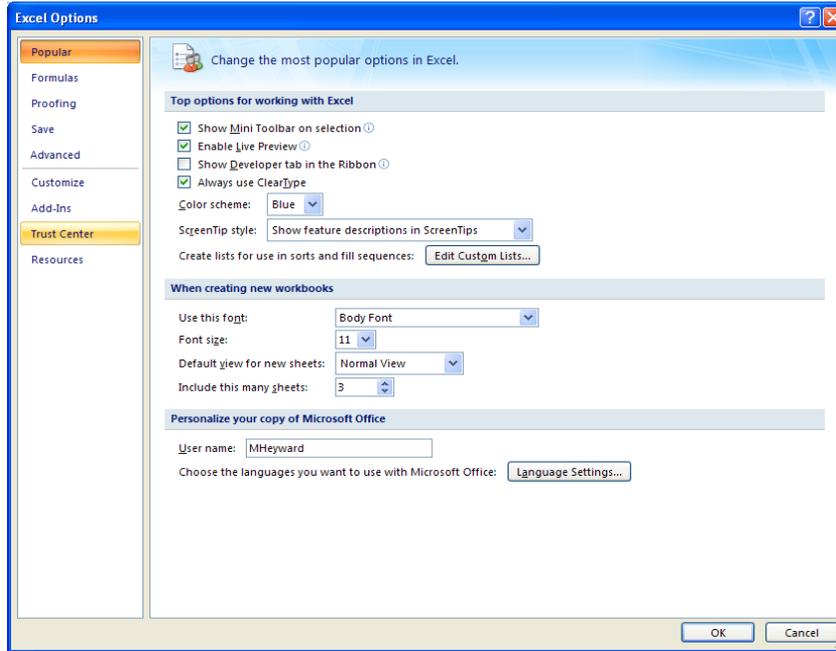


Figure 8: Excel Options Drop-Down Menu

When the Trust Center options display opens, select **Trust Center Settings** in the bottom right portion of the screen (**Figure 9**):

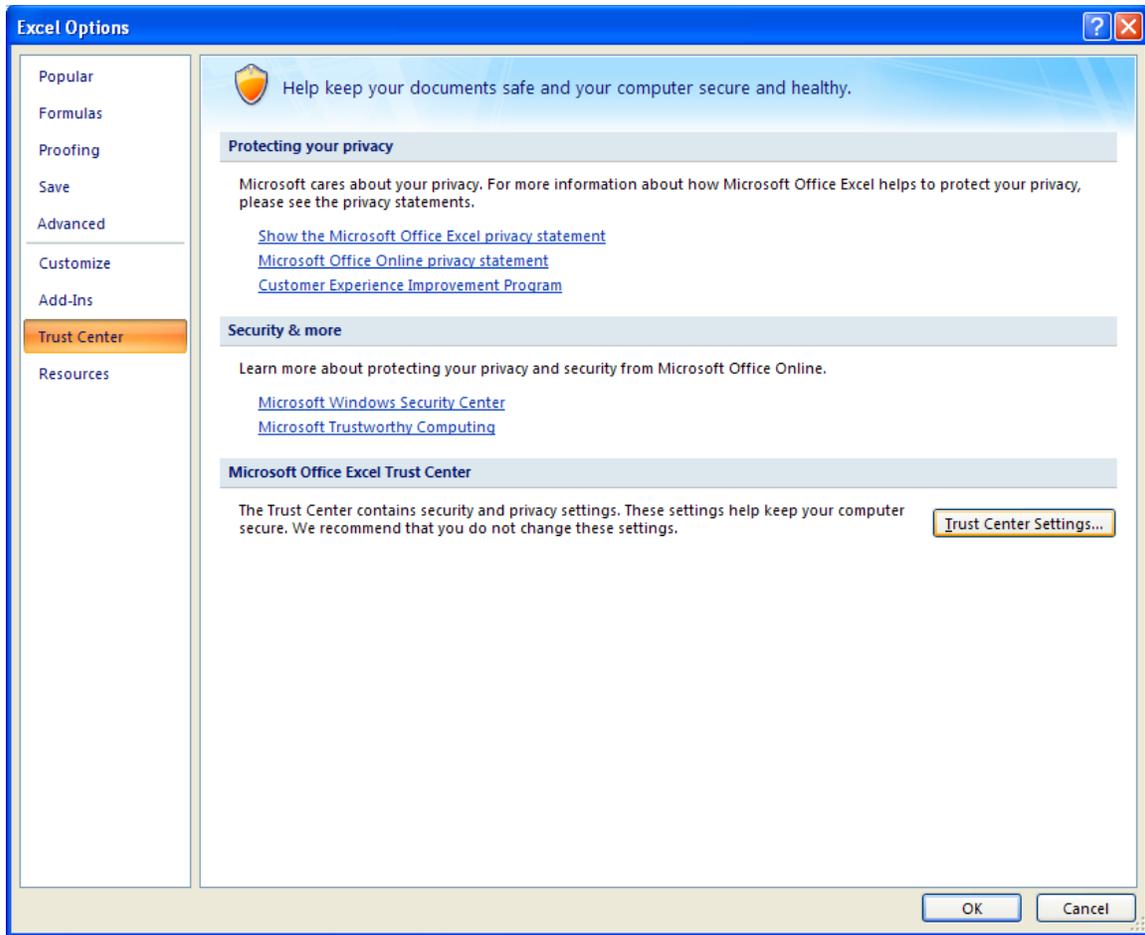


Figure 9: Trust Center Settings Screen

Choose the setting “Disable all macros with notification” (**Figure 10**) and select **OK**.

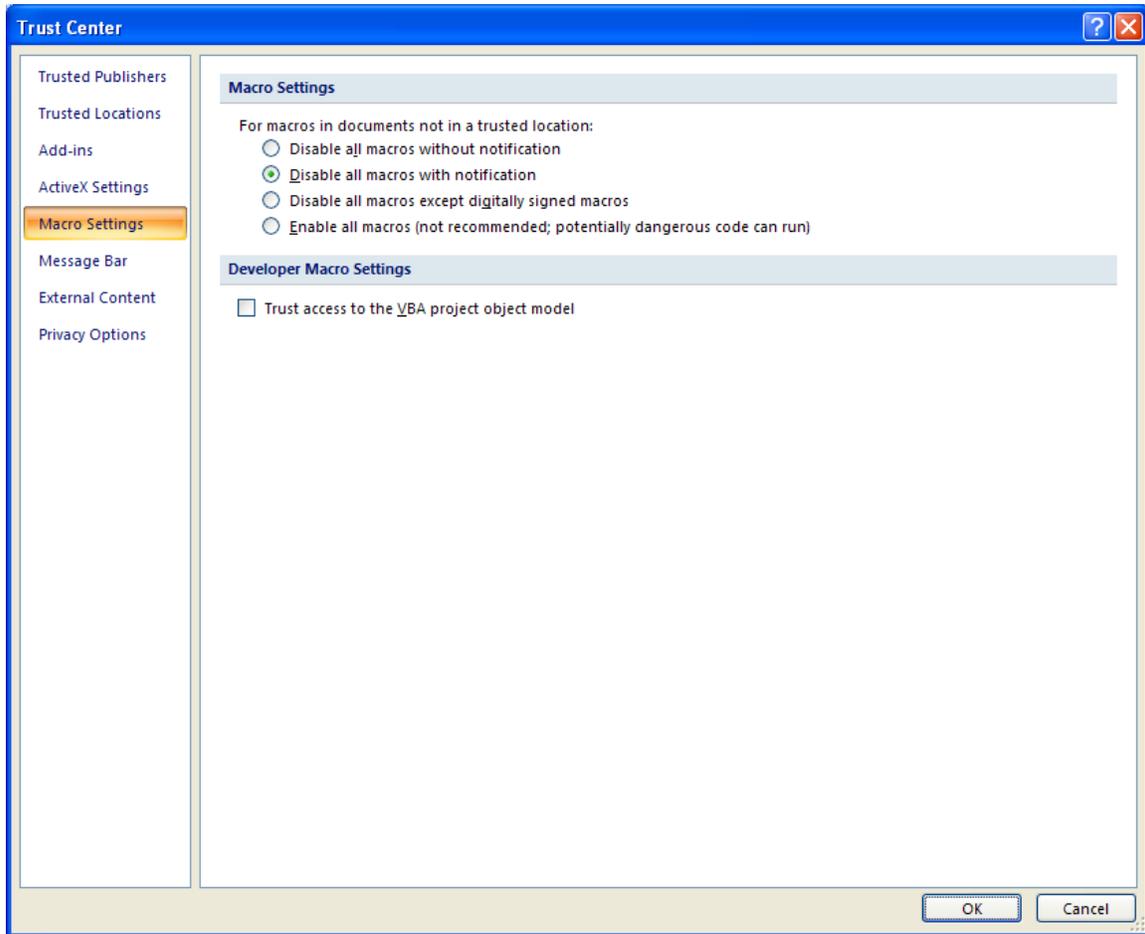


Figure 10: Macro Settings Screen

Next, to run the tool:

- 1) Save it to your computer.
- 2) Open the file, and select the Options or Enable Content button as described above.
- 3) In the Microsoft Office Security Options dialog box (**Figure 6**), choose “Enable this content” and select **OK**. The tool will then open after a brief delay.

If the tool does not open at this point, please review the Software and Hardware Requirements in Part 1 of this guide.

Basic Organization of the SmartWay Shipper Partner FLEET Tool

Understanding the Tool Format and Structure

The SmartWay Shipper Partner FLEET Tool is organized around (1) information screens, (2) forms or worksheets, and (3) reports/summaries that guide you through the process joining the SmartWay Transport Partnership and/or providing your annual update to maintain your good standing with the program.

Each screen or form opens up within a Microsoft Excel spreadsheet. The screens generally look like the one shown here:

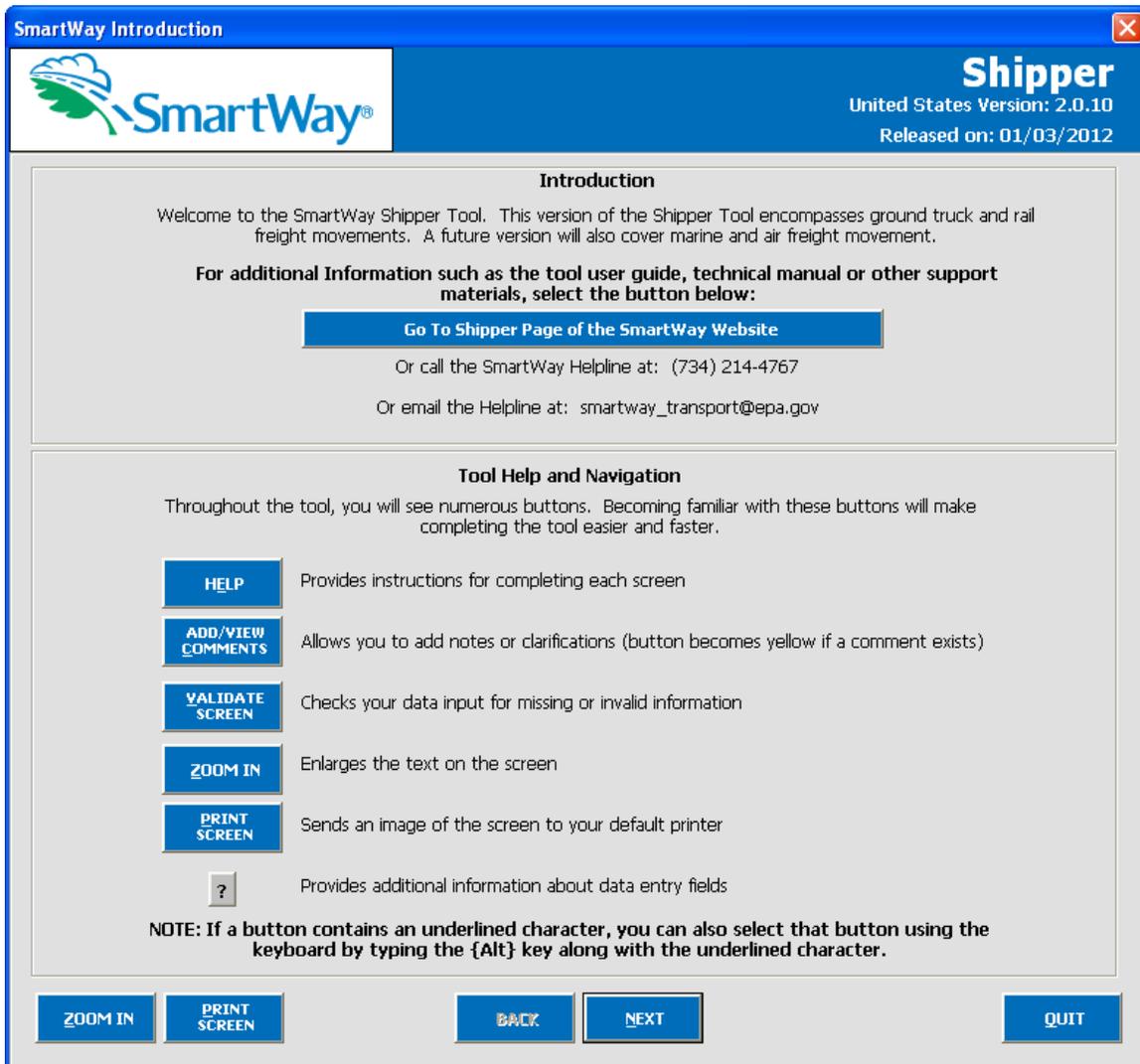


Figure 11: Opening Screen of Shipper Partner FLEET Tool

The name of each form appears at the top left-hand corner of the screen, in white text on the blue window bar.



Figure 12: Screenshot of Title of Screen/Form

Each screen contains text instructions or information about the program. Where applicable, the screen will also include buttons linking to the SmartWay website or other sections of the tool (e.g., the various data entry screens); these buttons will be shown in blue and clearly labeled.



Figure 13 Screenshot of Link in the Tool

The screens also contain navigation buttons to direct you through the tool.



Figure 14 Example Navigation Buttons in the Tool

When new concepts/ topic are introduced on a screen, a small question mark ([?]) appears next to it. When you select the question mark, you will find additional definitions of terms or instructions to help you complete the screen properly.

Reviewing the Introductory Screens

Before you reach your data entry section of the tool, you will move through three introductory screens that allow you to review the basics of participation in SmartWay for shipper partners:

- **The “SmartWay Introduction” Screen**
- **The “Partnership Agreement” Screen**
- **The “Required Information” Screen**

The features of these screens are described below.

The “SmartWay Introduction” Screen

The **SmartWay Introduction** screen is the first window that appears when the tool is opened (**Figure 15**). This screen contains a button linking to the SmartWay website where you can view and download additional information about the program, the tool, and the technical basis for the calculations in the tool.

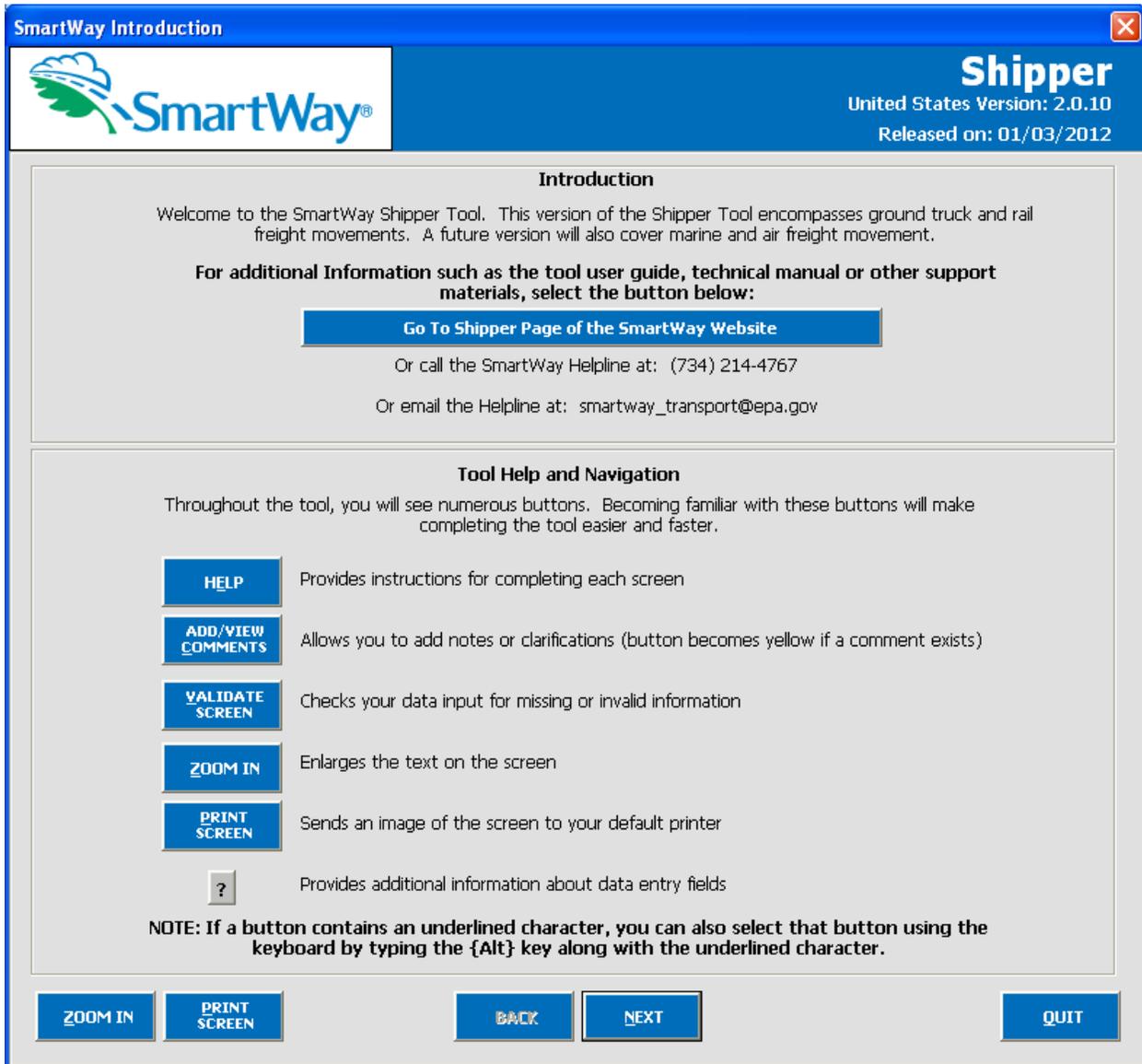


Figure 15: SmartWay Introduction Screen

For your convenience, the link for Shipper Tool information is provided here - <http://www.epa.gov/smartwaylogistics/partnership/shippers.htm>.

The “SmartWay Partner Agreement” Screen

SmartWay Partnership Annual Agreement

Shipper
United States Version: 2.0.10
Released on: 01/03/2012

Partnership Agreement for Shippers

With this agreement, your company joins EPA’s SmartWay Transport Partnership and commits to:

1. Measure and report to EPA on an annual basis the emissions performance of your company using EPA’s SmartWay Shipper Tool. (Existing companies must report the 12 months of data for the prior year ending December 31. Newly formed companies require a minimum of 3 months of operational data.)
2. Have performance results posted on the EPA SmartWay website/database.
3. Agree to submit supporting documentation to EPA for any data used to complete this tool and agree to EPA audit of this data upon request by EPA.

In return, EPA commits to:

1. Promote company participation in the Partnership by posting Partner names on the EPA SmartWay Website and in related educational, promotional, and media materials. EPA will obtain express written consent from the Partner before using the Partner’s name other than in the context of increasing public awareness of its participation as described here.
2. Provide companies with industry-wide performance benchmark data as this data becomes available to EPA.
3. Assist Partners in achieving emission and fuel usage reduction goals (subject to Federal Government Appropriations).

General Terms

1. If the Partner or EPA defaults upon this agreement at any point, the agreement shall be considered null and void.
2. Either party can terminate the agreement at any time without prior notification or penalties or any further obligation.
3. EPA agrees not to comment publicly regarding the withdrawal of specific partners.
4. EPA reserves the right to suspend or revoke Partner status for any Partner that fails to accomplish the specific actions to which it committed in the SmartWay Transport Partnership Agreement and subsequent Agreements.
5. The Partner agrees that it will not claim or imply that its participation in the SmartWay Transport Partnership constitutes EPA approval or endorsement of anything other than the Partner’s commitment to the program. The Partner will not make statements or imply that EPA endorses the purchase or sale of the Partner’s products and services or the views of the organization.
6. Submittal of this SmartWay Shipper Tool constitutes agreement to all terms in this Partnership Agreement. No separate agreement need be submitted.

By checking the box below, I declare that the information submitted via this tool is, to the best of my knowledge, accurate. I understand that any person who, in the course of negotiating or performing under this Agreement, makes, presents or submits a false or misleading statement to the government, or any person who makes a material omission in the course of negotiating or performing under this Agreement, may be subject to liability under all applicable civil and criminal statutes including 18 U.S.C. 1001 (criminal liability for false statements), 31 U.S.C. 3801 - 3812 (civil liability for false statements) and 31 U.S.C. 3729-33 (The False Claims Act).

I understand and agree to the terms of this agreement.

Click to accept Agreement

ZOOM IN PRINT SCREEN BACK NEXT QUIT

Figure 16: SmartWay Partner Agreement for Carriers

After selecting the **NEXT** button on the **SmartWay Introduction** screen, the **SmartWay Partner Agreement for Shippers** will appear. This screen replicates the agreement language found in **Part 1** of this users guide series.

Submitting a SmartWay Shipper Partner FLEET Tool to EPA constitutes agreement to all terms in the Partnership Agreement, so please review this screen or the text version in **Part 1** of this users guide series **before** sending your tool to EPA.

To reach the data entry sections of the tool, you must agree to this language to join the SmartWay Transport Partnership by selecting check box at the bottom of the screen.

SmartWay Shipper Company FLEET Tool submissions are due on an annual basis; therefore, when you submit your tool each year, this will constitute your renewal of your partnership agreement. **Failure to send your annual tool update will constitute a violation of the terms of the agreement and will result in immediate removal of your company name(s) from the SmartWay partner list.**



NOTE: *While in the past, SmartWay supported a lengthy warning process for partners that were delinquent submitting their partnership materials; however, due to the large number of partners currently joining and submitting materials to SmartWay, this level of customized service can no longer be supported.*

The “Required Information” Screen

The next screen summarizes the information needed to complete the Shipper Partner FLEET Tool. Select



in order to retain a hardcopy for reference as you complete the rest of the tool.

SmartWay - Required Information
✕



Shipper

United States Version: 2.0.10
Released on: 01/03/2012

Following is a brief description of the information you will need to complete this tool. For further details, please consult the Shipper Tool User Guide.

Partner Information

- Company Name, Address, City, State, ZIP, Country, Main Phone, Website
- Primary, Executive, and Other Contact Information:
 - Name, Title, Address, City, State, ZIP, Country, Phone, E-mail

Company Characterization Information

- Company Names and Contacts
- North American Industry Classification System (NAICS) Codes

Carrier Use Profile

- a. Identification information for carriers contracted in the reporting year (including mode, name, MCN and/or SCAC)
- b. Carrier pathways: inbound/outbound/internal, US/international
- c. Shipper-specific carrier identifiers: ID Codes, Business Unit ID, Internal Shipper Segment Codes
- d. Carrier activity details:
 - i. Total miles contracted
 - ii. Ton-miles contracted
 - iii. Freight characterization (average density, average load percent, and average payload)
 - iv. Preferred emissions inventory calculation metric (g/mile, g/ton-mile)
- e. % SmartWay calculation method (based on miles, ton-miles, CO2, weight, dollars spent, packages, or other metric)

Optional Calculation Tool Inputs

- Percent improvement associated with removing weight and/or miles from the system
- Modal-shift details:
 - Original and new modes
 - Efficiency estimate details and amount of freight transferred

ZOOM IN

PRINT

BACK

NEXT

Figure 17: Summary of Shipper Tool Required Information

Once you have navigated through the four introductory screens, you will be taken to the SmartWay Shipper Partner FLEET Tool [Home](#) screen.

Navigating the “Home” Screen

Figure 18 displays the structure of the **Home** screen.

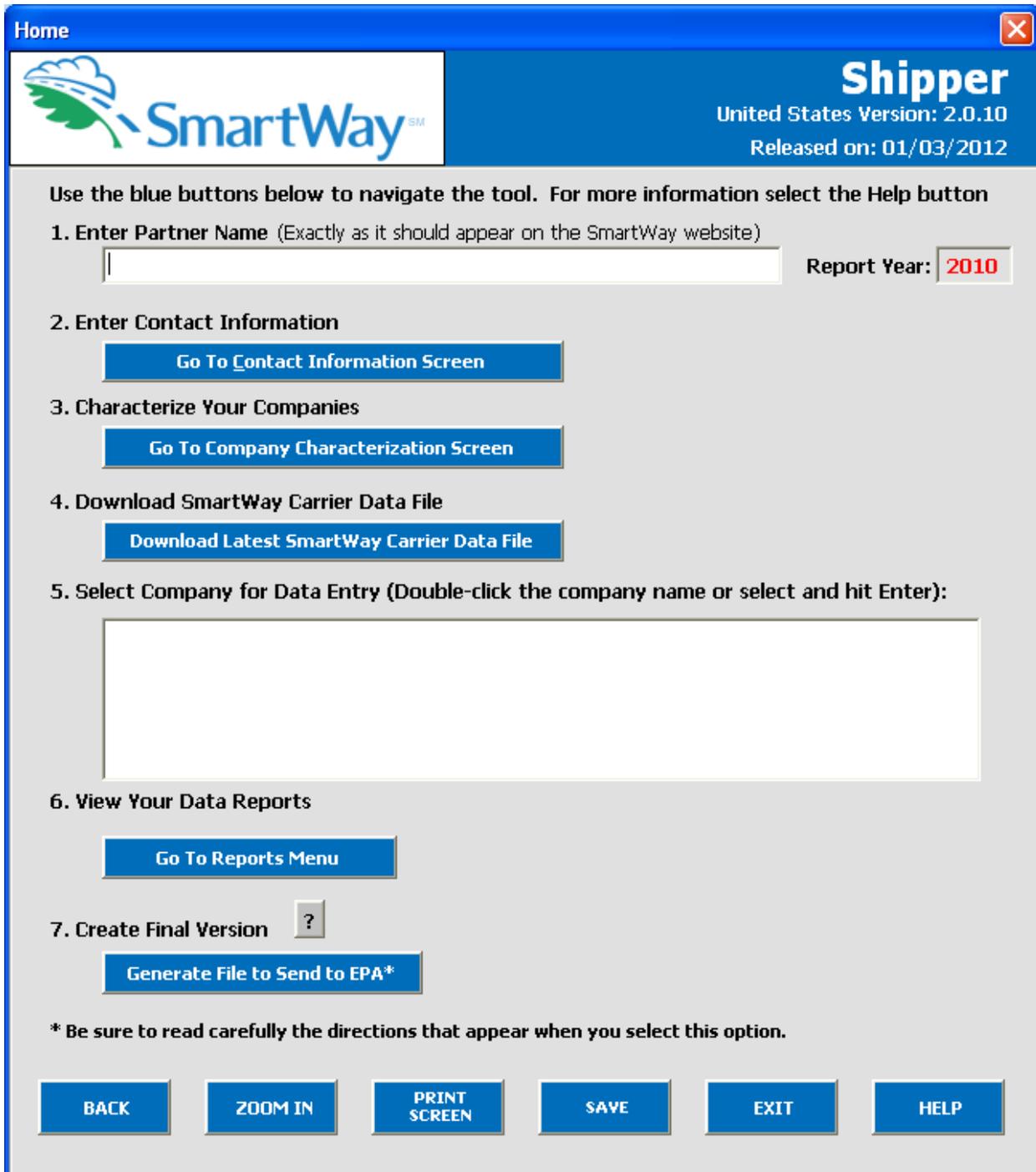


Figure 18: Main Tool Navigation or “Home” Screen

From the **Home** screen, you can:

- 1) Enter your partner name;
- 2) Fill out company contact information;
- 3) Characterize your shipper company/companies;
- 4) Download the latest SmartWay Carrier data file;
- 5) Enter data to characterize your shipper company/companies;
- 6) View results of your data entry; and
- 7) Create final version to submit to EPA.

There are seven sections on the **Home** screen. Each section has buttons linking to additional screens or worksheets within the tool which are described below:

1. **Enter Partner Name:** Here you will enter the name of your organization, exactly as it should appear on the Partner Listing of the SmartWay website.
2. **Enter Company Contact Information**
 - a. **Enter your Contact Information:** This button takes you to a screen that asks for general company contact information, a primary SmartWay point of contact, and an executive-level contact. Additional contacts may also be included.
3. **Characterize your Shipper Company/Companies**
 - a. **Shipper Company Characterization:** On this screen you will define all the shipper companies you operate. Once these parameters are defined, the software will automatically generate blank data entry forms for each company.
4. **Download SmartWay Carrier File**
 - a. **Download Latest SmartWay Carrier File:** Select this button to download the latest SmartWay Carrier performance data for use with your shipper companies.
5. **Enter Carrier and Activity Data for Each of Your Shipper Companies**
 - a. **Select Company for Data Entry:** Selecting a company name will take you to screens asking for the carrier and activity information necessary to calculate efficiency metrics for your company.
6. **View Your Data Reports:** Here you can see final summaries of your data.
 - a. **Go to Reports Menu:** This screen provides multiple options for viewing your performance data and can generate multiple reports for you. You may also review a report of all the explanatory comments entered during the compilation of the different data inputs throughout the tool. These comments can provide a useful reference for documenting data sources and assumptions, as well as for preparation of subsequent year submittals. In addition, you can use this report to view questions and comments from your SmartWay Partner Account Manager after they receive and return your data.
7. **Create Final Version**

- a. **Generate File to Send to EPA:** This button allows you to send your data file as an Excel attachment in an e-mail to your Partner Account Manager (PAM). *Selecting the **OK** button does not automatically submit the data file to EPA – follow the instructions on the popup screens carefully to complete this process.* In the future this screen will automatically send your SmartWay submission to the SmartWay team via e-mail.

Entering Your Data

The first five sections of the home screen should be completed in order, and comprise all the steps needed to complete your SmartWay Shipper Tool. After they are completed, you can review your output and/or submit your tool to EPA.

Saving Your Data

In addition, in order to save data entered into the tool before exiting, you should select  on the **Home** screen. Although you will also be prompted to save your data after selecting  we recommend saving your data entry intermittently, especially if you are entering information for large numbers of carriers and/or companies.

Reviewing Your Data

The data reports provided by the Shipper Partner FLEET Tool are covered in detail below in the **View Your Data Reports** section of this guide.

Entering Your Data

You should complete the first five sections of the **Home** screen (see **Figure 19**) in order. The next five sections of this guide explain how to enter your data on each of the required screens.

Section 1 Data Entry: Enter Partner Name

- Enter the name of your organization, exactly as it should appear on the Partner Listing of 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.
- Note that the reporting year for your data entry is shown next to “Report Year” to the right of the Partner Name.

The screenshot shows the 'Home' window of the Shipper application. The title bar reads 'Home' and the window contains the SmartWay logo and the text 'Shipper United States Version: 2.0.10 Released on: 01/03/2012'. Below the header, there is a list of steps to follow. Step 1, 'Enter Partner Name', is highlighted with a red box and a red arrow pointing to a text input field. To the right of the input field is a 'Report Year' dropdown menu set to '2010'. A red box with the text 'Enter Partner Name Here' is also present, with a red arrow pointing to the input field. Below the input field are several blue buttons for navigating to other screens: 'Go To Contact Information Screen', 'Go To Company Characterization Screen', 'Download Latest SmartWay Carrier Data File', 'Go To Reports Menu', and 'Generate File to Send to EPA*'. At the bottom of the window are several blue buttons: 'BACK', 'ZOOM IN', 'PRINT SCREEN', 'SAVE', 'EXIT', and 'HELP'.

Figure 19: Step 1 – Enter Partner Name

Section 2 Data Entry: Enter Company Contact Information

PLEASE REFER TO **WORKHEET #1: Company Contact Information** in the **Part II Data Collection and Workbook** to complete this section of the Shipper Partner FLEET Tool.

From the **Home** screen, select the **Contact Information Screen** button.

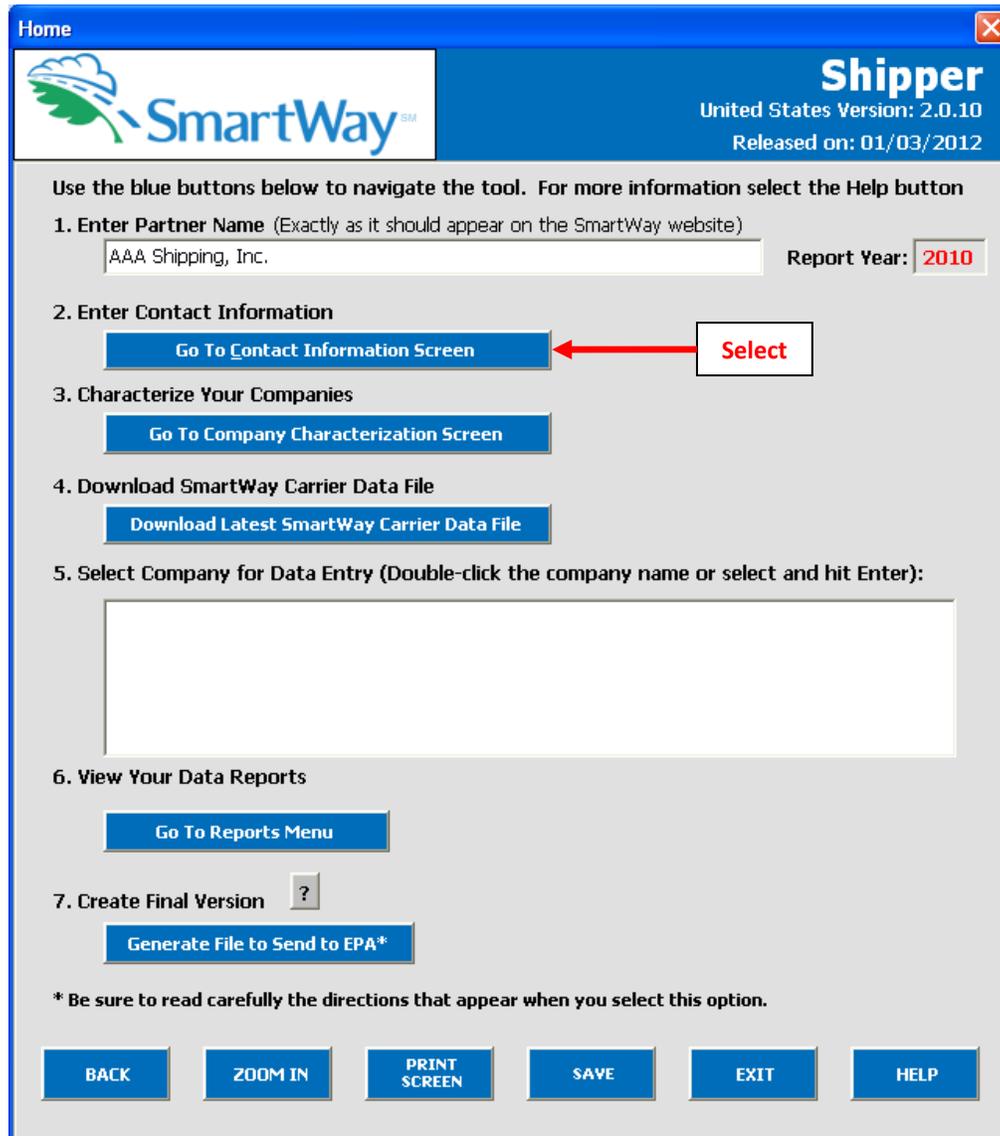


Figure 20: Selecting the Company Contact Information Screen

You will then be taken to the **Company Contact Information** screen. The Partner Name entered in Step 1 will be shown at the top of the screen. This screen will ask you to provide the following information:

SmartWay: Contact Information ✕

1. Partner Information:

Partner Name* AAA Shipping, Inc.

Address1* 301 Kenn Street

Address2 Suite #201

City* Austin State* TX ZIP* 78731 Country* USA

Main Phone* (512) 555-5555 Toll Free:

Web Site* www.AAAShipping.com

2. Primary Contact: ?

Name Mr. First* Bruce MI: Last* Jenkins

Title* VP Operations

[Use Partner Address](#)

Address1* 301 Kenn Street

Address2 Suite #201

City* Austin State* TX ZIP* 78731 Country* USA

Phone* (512) 555-5555 Ext: 20 Cell: (512) 435-2563 Fax:

Email* BRJenk@aaashipping.com

3. Executive Contact: ? Same as Primary Contact ?

Name* (Same as Primary Contact) [Add/Edit Executive Contact](#)

4. Other Contacts: ?

1 - Evelyn Stanard

* - Required

[Add New Contact](#) [Edit Selected Contact](#) [Delete Selected Contact](#)

[ZOOM IN](#) [PRINT SCREEN](#) [HOME](#) [VALIDATE SCREEN](#) [HELP](#)

Figure 21: Entering Company Contact Information

1. Company Information
2. Primary Contact information
3. Executive Contact (Vice President or higher)
4. Other Contacts



Each field marked with an asterisk must be filled out. You will not be able to submit the tool to SmartWay without this information.

Steps for Entering Company Contact Information:

- Enter the **Company data** in section 1.
- Enter the **Primary Contact data** in section 2.
- Enter the **Executive Contact data** in section 3.
- Enter the **Other Contact data** in section 4.

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 company 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 e-mails from SmartWay/EPA are not blocked, new primary contacts may need to add SmartWay/EPA to their preferred list of trusted sources.

If the Primary Contact shares the same address as the company, you may select the

Use Partner Address

button to auto-populate the address section of this record.

- Enter the **Executive Contact Information** by selecting the **Add/Edit Executive Contact** button to the right; enter the required data.

The executive contact is the company executive who is responsible for agreeing to the requirements in the SmartWay Partnership Annual 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.

If the Primary Contact and Executive Contact are one in the same, simply check the

Same as Primary Contact

box to auto-populate the Executive Contact information.

- Enter **Other Contacts** (if applicable) by selecting the **Add New Contact** button. A new contact field will appear, labeled **Other Contact Information** (not pictured).

Enter the first Other Contact then select **OK** when done.



NOTE: In some cases, companies with multiple business units will gather information from different sources within the company. You may find it useful to have this additional contact information stored within the tool.

You can add more names to the **Other Contacts** box by repeating this process. If you wish to edit an existing contact's information, highlight the name you wish to edit and then select the

Edit Selected Contact

button. You can remove an existing contact by highlighting the contact

and then selecting **Delete Selected Contact**.

To make sure you have filled out all required contact information, select **VALIDATE SCREEN** at the bottom of the screen. If any information is missing, a dialogue box will appear informing you what additional information is required.

Next select the **HOME** button to return to the **Home** screen and go to Step 3.

Section 3 Data Entry: Define Your Shipper Companies

PLEASE REFER TO [WORKHEET #2: Shipper Company Characterization](#) in the **Part II Data Collection and Workbook** to complete this section of the Shipper Partner FLEET Tool.

Next, on the **Home** screen select the **Company Characterization Screen** button to display the **Shipper Company Characterization** screen. This is the section where you will define the various components of your shipper companies.

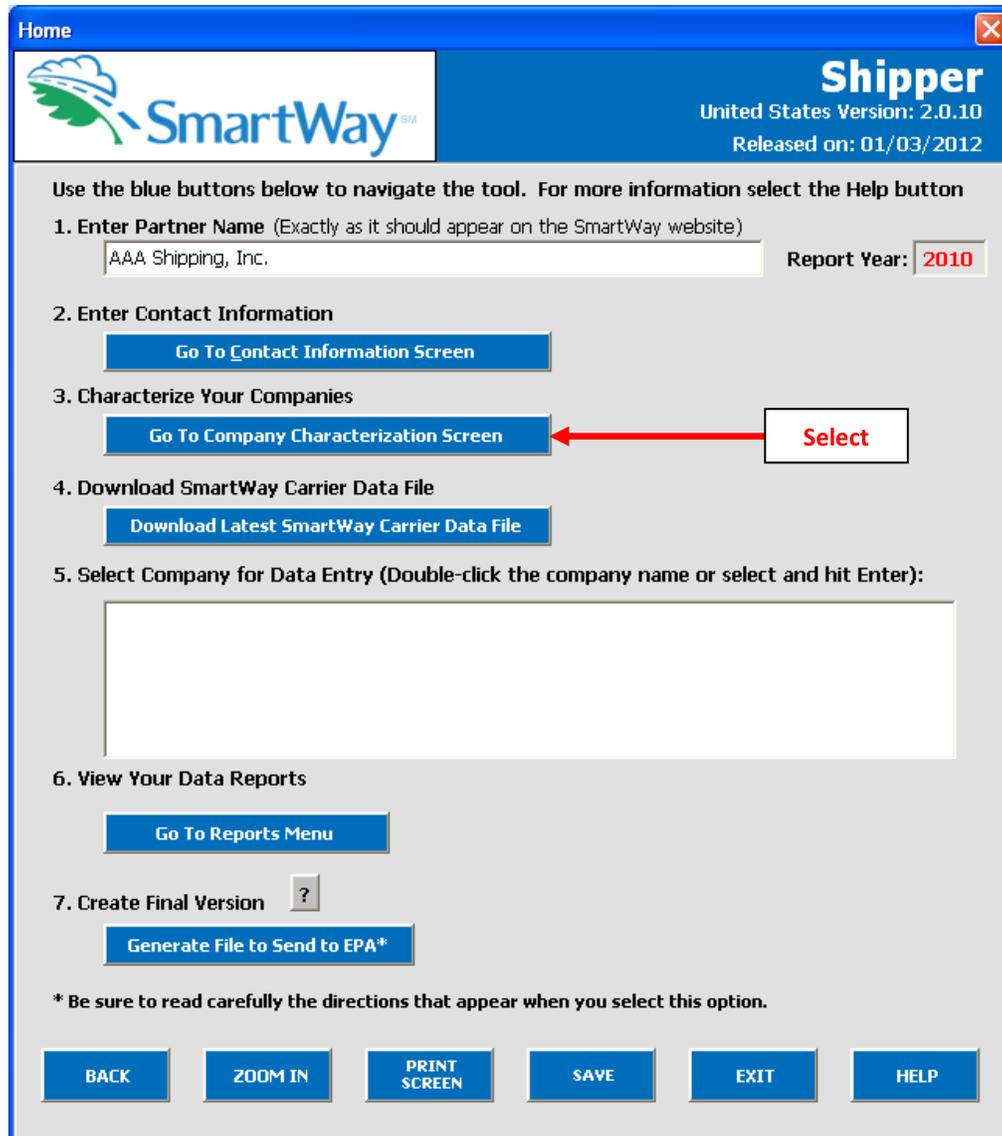


Figure 22: Selecting Shipper Company Characterization on Home Screen

The **Company Characterization** screen of the Shipper Tool is shown below.

SmartWay: Company Characterization

For each separate business entity (company), please fill out the company name and NAICS code(s) and indicate a company contact. If entering multiple NAICS codes, separate them with a comma. For help finding your NAICS code, select on the binoculars to the right of the NAICS data entry field.

To add another company, select the Add Company button at the bottom of the screen. You may delete a company by selecting the Delete box to the left of the company name and then selecting the Delete Checked Rows button at the bottom of the screen. Once data has been entered for all your companies, select the Create Companies button at the bottom to proceed.

IMPORTANT NOTES:
Please list your company(ies) EXACTLY as you wish them displayed on the SmartWay website, including proper capitalization, any abbreviations, and punctuation. If you list multiple companies here, you will be required to provide detailed information for each company in subsequent sections of this tool. Thus you will need to be able to track freight activity separately for each company you list. Internal tracking of different business units, inbound, outbound and internal freight, and domestic versus international freight can be done within a company, so there is no need to list different internal divisions, product lines, etc. as separate companies. Only list more than one company if the additional company is a separate and publicly well known name that you believe requires a separate listing on the SmartWay website.

Delete	Company Name ? (exactly as it should appear on the SmartWay website)	NAICS Code(s) ?	Company Contact ?
<input type="checkbox"/>	1 AAA Shipping - Retail	44	Bruce Jenkins
<input type="checkbox"/>	2 AAA Shipping - Wholesale	42321	Evelyn Stanard

Buttons: Delete Checked Rows, Add Company, ZOOM IN, PRINT SCREEN, VALIDATE SCREEN, HOME, CREATE COMPANIES, ADD/VIEW COMMENTS, HELP

Figure 23: Characterizing Shipping Companies

Steps for Completing “Company Characterization” Screen:

This screen allows you to create multiple company data records. If you operate more than one separate and distinct company you may wish to track each company separately. Each individual data file has the ability to track companies, inbound/outbound freight, and international/domestic freight as well as other user-defined distinctions.

Most partners should create one company, i.e. one line. However, if you are a global conglomerate that, for example, has a large home goods retail company, a wholesale parts supply company, and a service company, all with separate corporate identities and transportation systems, you may want to create three companies. Alternatively, you could fill out three shipper tools with one company defined in each.

Using data collected using **Worksheet #2: Shipping Company Characterization** in the **Part II Workbook**, enter data for your first company.

- **Company Name(s):** Name your companies properly for listing on the website, begin with your partner name followed by the specific company name. Example: AAA Products – Retail.
- **NAICS Code:** NAICS, or North American Industry Classification System codes, are the Federal standard for classifying businesses by activity type. NAICS codes can be up to six digits in length, and are organized hierarchically, with successive digits providing greater specificity in its description. Use the NAICS code(s) that most appropriately describes your company. You can use the search icon to the right of the data entry field to identify the NAICS code(s) appropriate for your company. If you need to enter multiple NAICS codes, simply separate them with commas.

Note: some large companies with multiple operations may only use a two or three digit NAICS code. You do not have to enter the full six digits. Detailed information can be found at <http://www.census.gov/eos/www/naics/>.

- **Company Contact:** Select your company contact(s). Use the drop-down menu to display the list of contacts you entered in the **Company Contacts** screen and select one. If there is a contact for the company that is not already listed in the **Company Contacts** screen, you will need to return to that screen to add the contact information.



SmartWay highly recommends developing your list of companies beforehand by using an organization chart or perhaps a customer interface Web page. For example, evaluate how your organization contracts with carriers, identify your companies different NAICS codes, and determine how they choose what carriers to hire. The best strategy is to have a clear idea of how to define your companies before filling out the tool.

Modifying Shipper Companies

To enter another shipper company, select the  button.

To delete a company, select the box next to the company you wish to delete, and then select the  button.

Adding Comments/Notes

Creating useful comments assists SmartWay tool reviewers in approving your tool as quickly as possible. Your comments help reviewers understand your business model. Any details that you can provide related to your business operations will speed up approval time.



Please note the  button located at the bottom right of the screen. This allows you to enter notes about the collection process, your assumptions and methods, data, or other information. These details could prove useful for your reviewer when you or someone else fills out the tool next year. If comments have been added for a particular screen, the button will be

highlighted and now read , indicating to your reviewer that there are comments to be read.

A  button is also available should you need assistance. You will also notice small gray icons with question marks  displayed throughout the tool. When selected, these icons provide additional information about specific items located on the screen.

Once you are sure your information is input correctly, you may select the  button at the bottom of the screen. Before proceeding to the next screen however, a popup screen will appear asking you to verify that the name(s) of your companies are correct – see **Figure 24**.

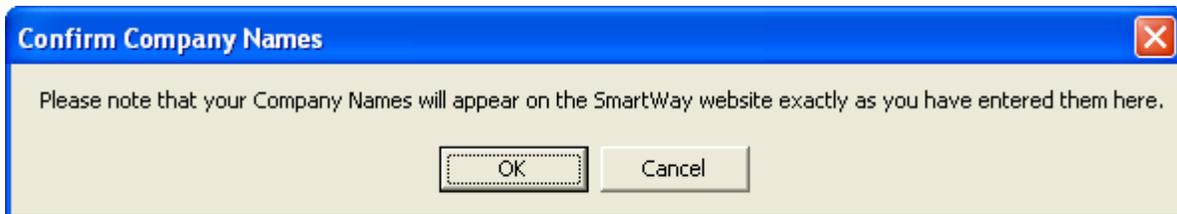


Figure 24: Shipper Company Name Verification Message



*Please verify that the shipper company name(s) are exactly as you want them to appear on the SmartWay website, indicating your participation in the SmartWay program. Select **OK** to proceed, or **Cancel** to revise your company name(s).*

If, at a point later in the data entry process, you realize that you need to add a new company or delete an existing company, you can return to the **Company Characterization** screen. To add a new company, follow all of the instructions on the screen regarding defining your companies, including selecting the

 button at the end of the process. When you select this button, the system will create blank data entry forms only for the new company/companies you have added; any existing companies will not be affected. If you need to delete an existing company, simply check the box next to the company name and then select the  button. Note that, if you have already generated data entry forms for the company you are deleting, the system will prompt you to confirm the deletion.

As on the other screens there is a  button as well as an  button. Selecting  will take you back to the [Home](#) screen (see **Figure 25**). At this point you may define another shipper company following the same process, or proceed to **Step 4** on the [Home](#) screen.

Section 4: Download SmartWay Carrier Data File

On the **Home** screen, select the button below item Step 4, **Download Latest SmartWay Carrier Data File**. This will ensure that you have the latest carrier performance data for characterizing shipper company performance. You will not be able to input the required shipper company data in Step 5 without this file. *You must have an active Internet connection to perform this step.*

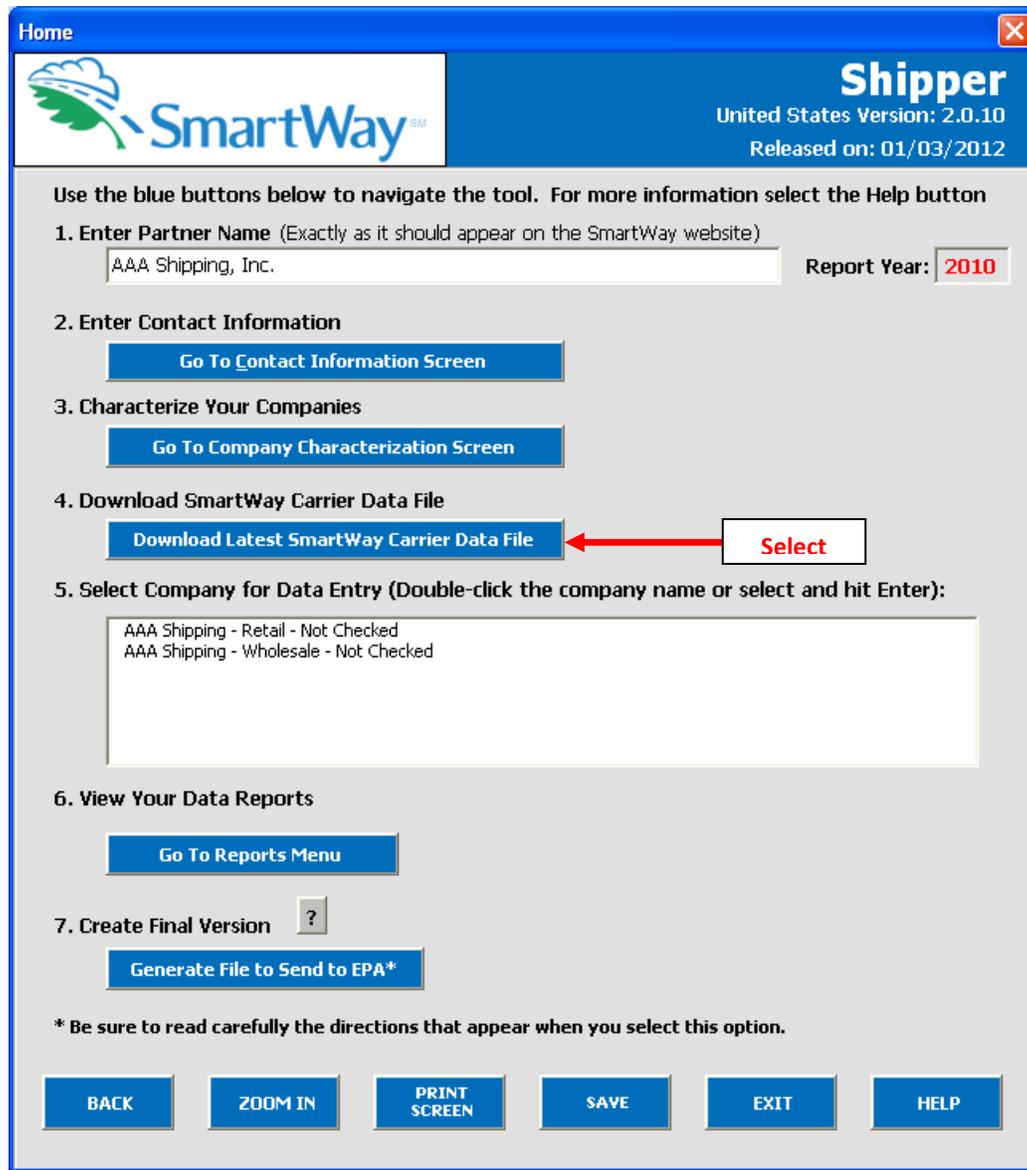


Figure 25: Downloading Latest SmartWay Carrier Data File

After selecting the button, the carrier file will be downloaded to your computer and the date of the file will be displayed to the right on the **Home** screen, as shown in **Figure 26**.

Section 5: Data Entry for Shipper Companies

On the **Home** screen, you will now see all the companies you created listed in the window below item **Step 5: Select Company for Data Entry**.

The screenshot shows a software interface titled "Home" with a blue header. On the left is the "SmartWay" logo, and on the right is the "Shipper" logo with "United States Version: 2.0.10" and "Released on: 01/03/2012". Below the header, instructions state: "Use the blue buttons below to navigate the tool. For more information select the Help button".

Step 1: "Enter Partner Name (Exactly as it should appear on the SmartWay website)". A text box contains "AAA Shipping, Inc." and a "Report Year" dropdown is set to "2010".

Step 2: "Enter Contact Information". A blue button reads "Go To Contact Information Screen".

Step 3: "Characterize Your Companies". A blue button reads "Go To Company Characterization Screen".

Step 4: "Download SmartWay Carrier Data File". A blue button reads "Download Latest SmartWay Carrier Data File". To the right, "Date of Current Carrier File:" is set to "12/30/2011".

Step 5: "Select Company for Data Entry (Double-click the company name or select and hit Enter):". A list box contains two entries: "AAA Shipping - Retail - Not Checked" and "AAA Shipping - Wholesale - Not Checked". A red arrow points from a callout box to the first entry. The callout box contains the text "Company status Not Checked".

Step 6: "View Your Data Reports". A blue button reads "Go To Reports Menu".

Step 7: "Create Final Version" with a question mark icon. A blue button reads "Generate File to Send to EPA*".

A note at the bottom states: "* Be sure to read carefully the directions that appear when you select this option." At the very bottom, there are six blue buttons: "BACK", "ZOOM IN", "PRINT SCREEN", "SAVE", "EXIT", and "HELP".

Figure 26: Home Screen with Shipper Company Status

There will be a status message after each company name, indicating whether or not the data entry for that company is complete. The following information may appear beside a company name:

- **Not checked** - Data has not been entered yet.
- **Incomplete** - Some data is still missing and/or inconsistent.
- **Complete** - All data requirements have been met and validation has occurred.

In addition to the status indicators above, you may also see one of two qualifiers: “Errors” or “Warnings.”

- **Errors** will prevent you from generating the **Internal Metrics Reports** under item **Step 6, View Your Data Reports**, and must be addressed before you can submit your tool to EPA.
- **Warnings** will allow you to view the **Internal Metrics Reports** and submit your data to EPA. However, it is strongly recommended that you carefully review each warning message before sending your data to EPA so that you can anticipate questions that you may receive you’re your partner account manager (PAM) as a result of your data being outside the expected ranges. Addressing errors and warnings is described for subsequent input screens in the following sections.

To add data to a particular company, highlight the company name and then double-click on the name of the company, or simply hit **Enter**. You will then proceed to the tool **Data Entry Screens** for the selected company.

Steps for Completing the Select Carrier(s) Screen

PLEASE REFER TO [WORKHEET #3A: Select Carrier\(s\)](#) to complete this section of the Shipper Partner FLEET Tool.

After selecting a shipper company for data entry, you will see the **Select Carrier(s)** screen (see **Figure 27**).

SmartWay Shipper Tool: AAA Shipping - Retail

Select Carrier(s) Emissions or % Smartway

You may enter your carrier data directly into the tool using the Manual Entry Method, or you may upload a pre-populated file containing data on multiple carriers using the Data Import Method. Since multiple non-SmartWay carriers are entered on one line, be sure to indicate the number of non-SmartWay carriers you use. When you have completed this screen, proceed to the "Emissions or % SmartWay" screen by selecting the tab above or clicking NEXT at the bottom of the screen.

Option #1: Data Import Method: Export Master File Export Selected Carriers Import Carriers from File [Detailed Instructions for Data Export/Import \(pdf\)](#)

REMEMBER TO ADD YOUR NON-SMARTWAY CARRIER INFORMATION BY SELECTING THE "NON-SMARTWAY" OPTION FROM THE AVAILABLE CARRIERS LIST.

Option #2: Manual Entry Method: Carrier Mode Bin Category Available Carriers Filter Carriers By: SCAC: MEN: Apply Filter Remove Filter

Select a Mode Select a Carrier Add Selected Carrier to List Below

Selected Carriers									
<input type="checkbox"/> Select All for Deletion									
Delete	Selected Carriers	Carrier Mode	Bin Category	# Non-SmartWay Carriers	Business Unit	ID Code	Inbound / Outbound	US / International	Internal Shipper Segments
									1 2

Delete Checked Rows

BACK NEXT ZOOM IN PRINT SCREEN SAVE HOME VALIDATE SCREEN VALIDATE COMPANY ADD/VIEW COMMENTS HELP

Figure 27: Select Carrier(s) Screen

The **Select Carrier(s)** screen allows you to input specific data about each carrier that you hire by referencing the carrier data file downloaded to your computer from the SmartWay website.

Two options are available for identifying your carriers. If you have a large number of carriers you may wish to develop your carrier details separately and upload your data in a single file using **Option 1: Data Import** method. Alternatively, if your shipper company has a limited number of carriers, you may choose to specify your carriers one at a time using **Option 2: Manual Entry** method. These two methods are described in detail below.



Note: Select the blue link at the upper right of the screen, [Detailed Instructions for Data Export/Import \(pdf\)](#), to view and/or print these instructions. This information is also available at <http://epa.gov/smartway/documents/partnership/420b11040.pdf>

Data Import Method

The purpose of the Shipper Tool's **Data Import** function is to allow larger shipper partners to extract and combine data from their in-house computer systems, and to then import this data directly into the Shipper Tool, alleviating the need to key in this data using the tool's input forms.

The carrier data that you collect and prepare needs to be stored in a Comma Separated Values (CSV) file. In order for the CSV file to be properly read, it must be saved with the proper format. Although CSV files can be viewed and updated using a variety of different PC applications, SmartWay recommends that you use Microsoft® Excel. Excel has standard support for CSV files, and can easily read and write this type of file.



Note: You MUST save your import file as a CSV file. If you accidentally save your file as an Excel workbook, you can easily change the format back to a CSV file by using the **Save As** option in Excel.



Note: EPA does not have the resources or technical expertise to assist you in creating and importing this file. Please work with your own in-house IT/MIS computer staff as needed.

Step 1: Select your carrier(s).

When the Shipper Tool imports your CSV file, it matches the carrier mileage and ton-mile information in the file with emission factors from EPA's SmartWay Carrier Database. The carrier data is matched together in one of two ways: (1) using an internal carrier Identifier, or (2) using the carrier's name, mode, and bin category. The CSV file also needs to be a specific format. In order to satisfy both of these requirements, EPA recommends following one of two approaches:

Option A:

On the [Select Carrier\(s\)](#) screen, select the  button. This will list all of the current SmartWay Carriers into a CSV file in the correct format. You can then open this CSV file in Excel and delete the carriers you don't use. The required steps for this Option are listed below.

1. Select the "Export Selected Carriers" button.
2. A "Save As" screen will pop-up.
3. Save document as "XXX.csv" file, where "XXX" is a name of your choosing, in any folder on your computer.

4. Open this CSV file and delete the SmartWay carriers that you did not use during the reporting year.
5. Save this modified CSV file to your computer.
6. Go to **Step 3** (Populate the CSV file with carrier data from your in-house computer systems) below.

Option B:

On the **Select Carrier(s)** screen, find and select your carriers using the **Carrier Mode** drop-down listbox, the **Bin Category** drop-down listbox, and the **Available Carriers** drop-down listbox. As you find each of your carriers, use the **Add Selected Carrier to List Below** button. When you use this button, the carrier that has been selected in the **Available Carriers** drop-down listbox will be added to the list of selected carriers at the bottom of the screen. Once you have selected your carriers, use the **Export Selected Carriers** button. This will copy the carriers you selected into a CSV file in the proper format.

The required steps for this Option are listed below.

1. Select the “Export Selected Carriers” button.
2. A “Save As” screen will pop-up.
3. Save document as “XXX.csv” file, where “XXX” is a name of your choosing, in any folder on your computer.
4. Go to **Step 3** (Populate the CSV file with carrier data from your in-house computer systems) below.

Although EPA does not recommend it, you may also create your CSV from scratch using an in-house data application. If you use this approach, you should select a few carriers on the **Select Carrier(s)** screen and export them so you have a sample CSV file with the correct format. This will aid your IT staff in producing a CSV file with the correct format.



EPA recommends that you save a copy of your CSV file at this point.

Step 2: Populate the CSV file with data from your in-house computer system.

1. Open the CSV file you created in the previous step. At the top of the file are important warnings and descriptions of the data that needs to be entered in each column. These warnings and descriptions can be deleted from your CSV, however do not change the header row which begins with the label “Carrier ID”. A list of the data fields can also be found in **Appendix A** the end of this **User Guide**, including a list of valid values.
2. Populate the CSV file with carrier data from your in-house spreadsheet.

Step 3: Validate and Import your CSV file into the tool

You can import the data in your CSV file by using the  button on the [Select Carrier\(s\)](#) screen. This function will perform an initial validation of the data within your CSV file. After the validation is complete, the Shipper Tool will display a list of any errors and warnings, which you may print out. After the validation is complete, the tool will display a list of any errors and warnings that were found while the tool was validating your CSV file. , If you have any warnings or errors, the tool will ask you if you would like to continue with the data import process.

The steps required for file validation are listed below.

1. Select the  button.
2. An “Open File” box will pop-up.
 - a. For Option A, select “CarrierDataSelected.csv” from the appropriate folder;
 - b. For Option B, select “CarrierDataMaster.csv” from the appropriate folder.
3. Select **Open**.
4. A “SmartWay File Import” box will pop-up, asking “Do you wish to continue?”
5. Select **Yes**.
6. If your file contains errors or warnings, a “SmartWay File Import” box will pop-up identifying what they are. If you have any warnings or errors, you can stop the import process and correct these errors/warnings in your CSV file and try again. You may also choose to note the warnings/errors and correct them within the tool. If your file did not contain any errors, a “SmartWay File Import” box will pop-up, saying “Your data meets the minimum standards required for import.”
7. Select **OK** to continue importing your CSV file.



Note: Any carrier records in your CSV file that had an error will not be imported into the tool. Fields with warnings will be imported, but the field receiving the warning will either be ignored or replaced with a zero. Zeros will need to be corrected in the tool if they are imported. For example, Total Miles and Total Ton-Miles must be an integer value greater than zero and less than 9.99×10^{18} . If you enter 41457.3 as the total miles for one of your carriers, this Total Miles field will receive a warning because it is not an integer. The import process will not accept this data, and instead insert a zero for the Total Miles field for this carrier.

Step 4: Adding or replacing imported carrier data

The Shipper Tool’s **Data Import** function was designed so that you can add additional carrier data at a later date. If you anticipate adding additional carrier data in the future, you should use the

 button as described above so that all of the carrier data in the tool is exported to a CSV file. You should then add your additional carrier data to the exported CSV file.

Once you have imported your CSV file into the tool, you may augment, correct, or modify any of the carrier data using the Shipper Tool’s screen options. If you make any changes to your carrier data using

the Tool, you should export this data using the **Export Selected Carriers** button on the [Select Carrier\(s\)](#) screen.



Note: When you perform a **Data Import**, all previously entered or imported carrier data in the Shipper Tool is deleted. If you need to merge carrier data from the tool with other carrier data, you can either enter the additional information into the tool directly, or enter it into an exported CSV file. If you chose the latter approach, you should use the

Export Selected Carriers button to export that data, add or copy/paste this additional carrier data into this newly exported CSV, and then re-import the updated CSV back into the Shipper Tool.



Note: When exporting and then re-importing your selected carriers, if you have also entered information on the [Activity Data](#) screen prior to the export, any values you may have typed into the **Average Density** and **Average Payload Percentage** calculators will be lost. Any calculated values will still be retained – only the calculator inputs themselves will be deleted.

Step 5: Enter additional data into the Shipper Tool.

In addition to the carrier-specific information imported into the CSV file, the Shipper Tool will require you to enter additional information describing the **Data Source** on the [Activity Data](#) screen. Note that the **Data Source** field is deleted each time you perform a new **Data Import**.

After importing your carrier data, please view each [Data Entry Screen](#). The Shipper Tool will prompt you

when data is missing or in error. Alternatively, you may select the **VALIDATE COMPANY** button at the bottom of each screen, which will allow you to see a complete list of errors/warnings.



Note: Depending upon your computer specifications and the number of carriers uploaded (e.g., hundreds or thousands of carriers), the Tool may experience noticeable delays in response, requiring a minute or more to perform certain calculations.

Manual Entry Method

If you have a reasonably small number of carriers in your shipper company you may use the **Manual Entry** method to identify them. To use this method, first select the mode of transport from which you wish to choose a carrier. Five carrier mode selections are available, including:

- All
- Rail
- Truck
- Multi-modal
- Logistics

By selecting “All”, you may search across all carriers, regardless of mode.

Next, if you select the Truck mode, you may also specify a carrier bin category. 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 lists “Truck/Rail” as the bin category, by default.)

After specifying the mode (and bin category if available), a drop-down menu will allow you to select by carrier name,¹ and/or by SCAC and MCN numbers if the carrier is a trucking or logistics partner. **You may also type carrier names directly into the text box to find the carrier more quickly.**

If one or more carriers in your company are not SmartWay Partners, you should select the appropriate “Non-SmartWay” option provided at the top of the listing. (Non-SmartWay carriers are assumed to have performance levels equivalent to the lowest performing partners for a given mode, for calculation purposes.²) After the carrier is selected, select the **Add Selected Carrier to List Below** button to add them to your carrier list.



Note: Either the **Data Import** method or the **Manual Entry** method are acceptable to SmartWay, and SmartWay places no judgment on whether data was submitted via import or manual entry. The decision is at the discretion of the user.



Note: The User will likely need to have IT support for the data upload option. The directions for data upload must be followed exactly for the data import to work. It is recommended that if you are not an experienced computer user with a familiarity creating CSV files, that you ask your IT department for assistance.

¹ In certain cases, a single search selection may require additional filtering. For example, a given carrier may have multiple SCAC's associated with its operations. In this case, if your carrier choice has multiple SCAC's, you may use the SCAC drop-down menu to select among several codes to narrow your search to the appropriate selection.

² These estimates have been developed for carriers from 2010 partner submittals. Currently, the Non-SmartWay Rail selection utilizes industry-average performance metrics. Please see the **Shipper Tool Technical Documentation** for additional details.

If you have successfully identified your carriers using the **Manual Entry** method, and if you have any non-SmartWay carriers in your list, then you must input the number of non-SmartWay carriers utilized, as shown in **Figure 28**.

The screenshot shows the 'SmartWay Shipper Tool: AAA Shipping - Retail' window. The 'Select Carrier(s)' tab is active. Below the tab, there are instructions and two options for data import: 'Option #1: Data Import Method' and 'Option #2: Manual Entry Method'. The 'Manual Entry Method' section includes a 'REMEMBER TO ADD YOUR NON-SMARTWAY CARRIER INFORMATION BY SELECTING THE "NON-SMARTWAY" OPTION FROM THE AVAILABLE CARRIERS LIST.' and a table of 'Selected Carriers'. The table has columns for 'Delete', 'Selected Carriers', 'Carrier Mode', 'Bin Category', '# Non-SmartWay Carriers', 'Business Unit', 'ID Code', 'Inbound / Outbound', 'US / International', and 'Internal Shipper Segments'. A red callout box with the text 'Enter # of non-SmartWay Carriers here' points to the '# Non-SmartWay Carriers' column in the table. The table contains several rows, including 'non-SmartWay Truck Carrier' with a value of '12' and 'non-SmartWay Logistics Carrier' with a value of '2'. At the bottom, there are buttons for 'BACK', 'NEXT', 'ZOOM IN', 'PRINT SCREEN', 'SAVE', 'HOME', 'VALIDATE SCREEN', 'VALIDATE COMPANY', 'ADD/VIEW COMMENTS', and 'HELP'.

Figure 28: Specifying the Number of Non-SmartWay Carriers on the Select Carrier(s) Screen

Once the required data has been entered on the **Select Carrier(s)** screen, you can proceed to the **Activity Data** screen.

Steps for Completing the Emissions or % SmartWay Screen

On the **Emissions or % SmartWay** screen you will note whether you wish to identify the emissions related to your shipping operations, or simply generate a % SmartWay value only. Selecting **Emission Footprint and % SmartWay** will allow you to calculate mass emissions for your operations, as well as to determine your % SmartWay value based on percent of miles traveled or other activity measure attributable to SmartWay carrier partners. The **Emissions Footprint and % SmartWay** selection also allows you to determine emission reductions from mile or weight-reducing strategies employed by your company. You will also be able to estimate the change in emissions due to various mode shifts.



Note: You must select the **Emissions Footprint and % SmartWay** option to be considered for a SmartWay annual award.

SmartWay Shipper Tool: AAA Shipping - Retail

Select Carrier(s) Emissions or % SmartWay

Your % SmartWay value is used to determine if you qualify to use the SmartWay logo. To determine your % SmartWay value, select one of the options below. The Emission Footprint option requires you to enter direct activity estimates (i.e., miles and ton-miles) which are used to calculate mass emissions estimates for the carrier fleets you utilize. Mass emissions estimates are required for you to be considered for a SmartWay Annual Award. Once you've completed entering your data on the Activity tab you may calculate your rating on the % SmartWay tab.

If mileage or ton-mile activity data is not available, you may specify indirect activity indicators on the % SmartWay tab, such as dollars spent, weight or packages shipped with each of your carriers. Indirect activity indicators can be used to estimate the relative weights for calculation of your % SmartWay value, although they do not provide enough information to calculate mass emissions. Therefore Partners are strongly encouraged to collect and report direct activity data for Emission Footprint calculations wherever possible.

The accuracy of your emission footprint estimate depends heavily on both the quality of your activity data as well as the accuracy of the associated carrier performance metrics. Please think carefully about which data input option you will use, considering the availability, reliability and overall appropriateness of the required activity and performance metrics.

Please Select an Option

Emissions Footprint and % SmartWay

% SmartWay Only

BACK NEXT ZOOM IN PRINT SCREEN SAVE HOME VALIDATE SCREEN VALIDATE COMPANY ADD/VIEW COMMENTS HELP

Figure 29: Emissions or % SmartWay Selection Screen

If you do not have total mileage and/or ton-mile estimates available for each carrier you have hired in the reporting year, select the **% SmartWay Only** option. This will allow you to calculate your % SmartWay value based on the weighted utilization of your carrier selections. However, note that the **Shipper Strategies** and **Modal Shift** screens will be unavailable, and you will be ineligible for a SmartWay annual award.

After you select your preferred option, click the  button. If you selected **% SmartWay Only**, you may proceed directly to the **% SmartWay section** below.

Steps for Completing the Activity Screen

PLEASE REFER TO **WORKHEET #3B: Activity Date** to complete this section of the Shipper Partner FLEET Tool.

Data reported on this screen are used to calculate your shipper company’s overall performance and mass emissions. Carriers specified in the **Select Carrier(s)** screen are automatically listed on this screen, along with their associated mode and bin category, if applicable (see **Figure 30**).

1. Select to enter Data Source

2. Select Data Availability Option

3. Select Inventory Calculation Metric

4. Enter Ton-miles and/or Miles

Figure 30. Activity Data Screen

1. Entering Data Source Description

Before you begin entering activity data for your companies, select the **Describe Data Source** button and enter a detailed description of the sources used to generate your activity data in the popup text box (see **Figure 31**). Be sure to indicate how you calculated miles and ton-miles, and where this data was obtained.

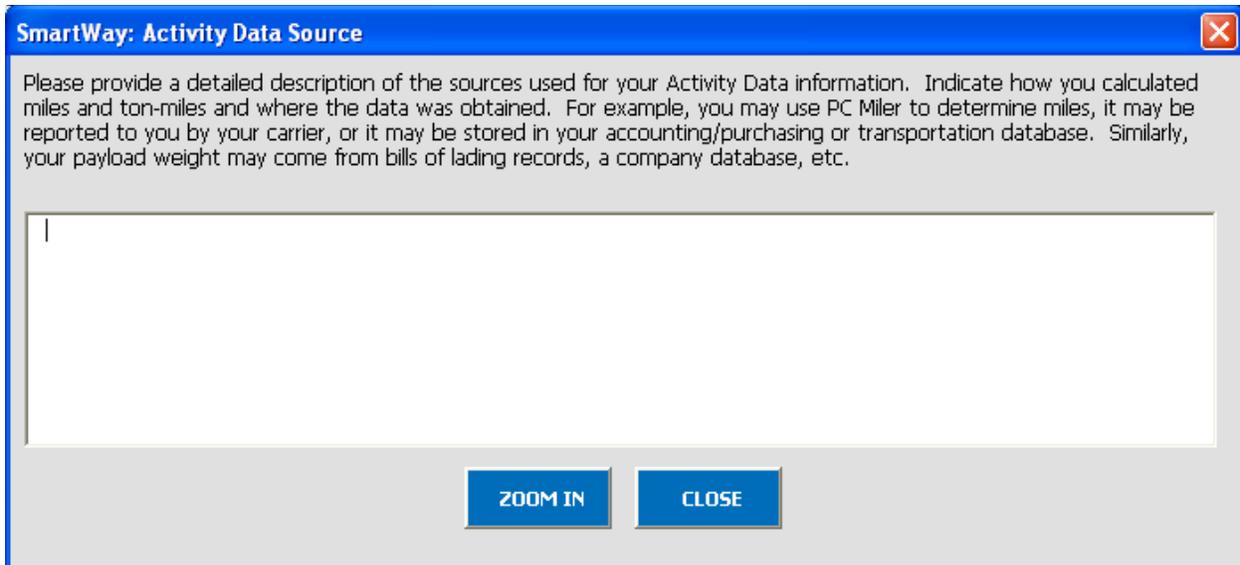


Figure 31: Activity Data Source Description Text Box

2. Selecting the Data Availability Option

To begin entering data regarding how you use each carrier, you must first specify a **Data Availability** option. There are seven **Data Availability** options offered, 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, as described below. For example, ton-miles combined with average payload estimates allows the Shipper Tool to estimate total miles. Similarly, average density combined with average load percentages allows conversion between miles and ton-miles. Cargo density is estimated based on the commodities shipped with each carrier. See the **SmartWay Shipper Tool Technical Documentation** for additional information on these calculations.

Depending on the **Data Availability** option selected, the fields on the screen will become active (white) or remain grayed out.



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.

If you know only ton-miles, then you may choose Options 2, 3 or 4. In Option 2, you will need to provide average payload, which will be used to develop a mileage estimate. In Option 3, you may include information on load fractions and the types of cargo, and the tool will calculate an average payload for you. In Option 4, SmartWay will use an average payload number based on the bin category of the carrier to estimate a miles number for you. For all of these options, the miles estimates are paired with the carriers' g/mile efficiency factors to estimate mass emissions for each carrier.

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.

If you know only miles, then you may choose Options 5, 6 or 7. In Option 5, you will also need to provide average payload which will be used to develop a ton-miles estimate. In Option 6, you may include information on load fractions and the type of cargo, and the tool will calculate an average payload for you. In Option 7, SmartWay will use an average payload number based on the bin category of the carrier to estimate a ton-miles number for you. In all these options, the ton-miles estimates are paired with the carriers' g/ton-mile efficiency factors to estimate mass emissions for each carrier.

Although dependent on industry type and product mix, 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.

3. Selecting the Preferred Inventory Calculation Metric

After specifying the **Data Availability** option, you must then define your preferred metric (**Inventory Calculation Metric**) for calculating mass emissions for each of your carriers. Options include gram per (truck) mile, grams per railcar-mile, and gram per ton-mile (all modes).

Please 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. Further guidance will be provided when the Shipper Tool is expanded in the future to include g/volume-mile metrics as well as air and marine modes.



Note: The Shipper Tool calculates your emission performance based on the best available data for each of your carriers. Since your mass emissions inventory can be produced using either g/ton-mile or g/mile metrics, you may mix your selected metrics across carriers. Regardless of the metric you select, the Tool will calculate tons of emissions. In order to compare efficiencies across different carriers and/or modes, the Tool expresses performance in both g/ton-mile and g/mile.

4. Entering Mile and Ton-Mile Data

After specifying the **Inventory Calculation Metric** for each carrier, enter the total activity data for the carrier for the associated unit type (ton-miles, miles, or railcar-miles). You should enter the data to the nearest whole number. If you selected Option 1 (preferred), enter both miles and ton-miles for the given carrier.

If you selected Option 2, you must enter ton-miles along with the estimated average payload in short tons (2,000 lbs). In this case the total miles for the carrier will be back-calculated by dividing ton-miles by tons.

If you selected Option 3, first enter your ton-miles. Next, you must estimate your freight density using the **Average Density Calculator**. The calculator, which is activated by selecting the appropriate **Calc** button in the **Average Density** column, 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 **Figure 32** presents example inputs for the Truck **Average Density Calculator**.



Note: Be as precise as possible entering your mileage and ton-mile data. Enter to the nearest whole number.

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

SmartWay Shipper Density Calculator

This calculator breaks commodities into separate groups, each with its own average density. Under "Freight Percentage" enter the percentage of your freight (by weight) that is made up of that commodity group. Note that for each group, a list of the commodity types appears in the box at right.

Truck Service, Inc.

	Freight Percentage	Average Density (lbs/cu ft):	Commodity Types
1		7.8	Commodity Group 7: Coal Fuel oils Gasoline and aviation turbine
2		9.3	
3	53.1	11.3	
4		13.2	
5		14.1	
6		16.3	
7	46.9	17.2	
8		18.3	
Total	100	14.1	

ZOOM IN OK CANCEL

Figure 32. Example Average Density Calculator Inputs (Truck, Logistics, and Multi-modal Carriers⁴)

After inputting your freight distribution data into the **Average Density Calculator**, use the **Average Load Percent Calculator** to adjust your activity estimates for partial loads. Load percentages can be either weight-based, with full truckloads weighing out, or volume-based, with full truckloads cubing out.

For example, if 3,000 loads of your LTL shipments are 50% truckload and 5,000 loads are 70% truckload, enter the corresponding load information in the **Average Load Percent Calculator** (see **Figure 33**). The calculator will then estimate the weighted average load (in this case 62 percent) which will be applied to your total miles estimate for this carrier.



Note: If you do not convert partial shipments into whole shipments, you will be assigned the carbon impact of the entire load. Please refer to the **Shipper Company Tool Technical Documentation** for details regarding the application of the calculator inputs.

⁴ Average density bins differ for rail carriers.

	# Loads
1/10 Truckload	
2/10 Truckload	
3/10 Truckload	
4/10 Truckload	
5/10 Truckload	3,000
6/10 Truckload	
7/10 Truckload	5,000
8/10 Truckload	
9/10 Truckload	
Full Truckload	
Percent	62

Figure 33. Example Average Load Calculator (Truck, Logistics, and Multi-modal Carriers⁵)

Once the calculator data has been entered, the resulting average density and load percentage will appear on the **Activity Data** screen. The back-calculated mileage values will also appear in grey boxes on the screen.

If you select **Data Availability** Option 4, simply enter your ton-mile estimates, and a corresponding mileage estimate will be back-calculated using the carrier's average payload value, as determined from the bin category averages. This option is the least accurate of the ton-mile-based calculations, since no information is provided regarding your shipper company's payload profile.

If you select **Data Availability** Option 5, enter your total miles estimate, expressed as either truck miles (for truck, logistics, and multi-modal carriers), or railcar-miles for rail carriers. Next enter your average payload estimate in tons and ton-miles will be back-calculated for you.

Selecting Option 6 requires total miles to be entered, along with payload density information and load percentages using the calculators described above.

Selecting Option 7 only requires entry of total miles, and ton-miles will be back-calculated using the carrier's average payload value.

⁵ A similar calculator is used for calculating railcar load percentages.

4. Validating your Activity Data

The Shipper Tool also contains data validation checks designed to identify missing and potentially erroneous data. Selecting the **VALIDATE SCREEN** button at the bottom of the screen will allow you to view any potential data entry errors. **Figure 34** provides an example validation screen check result.

The screenshot shows the 'SmartWay Shipper Tool: AAA Shipping - Retail' interface. The 'Activity Data' tab is selected. A table lists carriers with columns for Selected Carriers, Carrier Mode, Bin Category, Data Avail.*, Inventory Calc Metric, Ton-Miles, Total Miles**, Average Density, Average Load Pct, and Average Payload. Row 1 (ATS, INC) has a red highlight on the Average Payload cell (3.4). Row 4 (ABC Rapid Delivery Inc.) has a red highlight on the Data Avail.* cell (2). Row 7 (non-SmartWay Logistics Carrier) has a yellow highlight on the Average Payload cell (30.1). Callouts on the left point to these highlights: 'Low calculated Payload value' (row 1), 'Missing Payload value' (row 4), 'Errors – select for details' (row 4), 'Warning – select for details' (row 7), and 'High Payload Value' (row 7). A 'VALIDATE SCREEN' button is visible at the bottom right.

Row	Selected Carriers	Carrier Mode	Bin Category	Data Avail.*	Inventory Calc Metric	Ton-Miles	Total Miles**	Average Density	Average Load Pct	Average Payload
1	ATS, INC	Truck	TL/Dry Van	1	g/mile	1,140,022	330,491	Calc	--	3.4
2	Truck Service, Inc.	Truck	TL/Dry Van	6	g/mile	30,409,557	1,255,063	Calc	14.1	Calc
3	non-SmartWay Truck Carrier	Truck	TL/Dry Van	7	g/mile	12,522,088	732,500	Calc	--	Calc
4	ABC Rapid Delivery Inc.	Truck	Mixed	2	g/ton-mile	1,240,958		Calc	--	Calc
5	CSX Transportation	Rail		3	g/ton-mile	6,050,000	44,057	Calc	51.3	Calc
6	ABF Freight System, Inc.	Multi-modal	Truck/Rail	4	g/ton-mile	4,100,236	119,378	Calc	--	Calc
7	non-SmartWay Logistics Carrier	Logistics		5	g/mile	27,097,977	900,265	Calc	--	30.1

Totals: 82,470,811 Ton-Miles, 3,381,754 Total Miles

** Total Miles = Truck-miles or Railcar-miles (NOT Train-miles)

Figure 34. Example Validate Screen Check Result

The red highlighting in Row 4 indicates an error. Errors must be addressed before proceeding with the rest of your data entry. Selecting on the red highlighting will display details – in this case, informing you that an **Average Payload** entry is required for **Data Availability** Option 2.

The yellow highlighting indicates a warning condition. Warnings do not have to be addressed before proceeding, but may indicate a **possible** data entry error. In row 7 above, the average payload entered, 30.1 tons, is greater than the validation threshold of 27.6 tons.

Finally, row 1 indicates a possible error – dividing ton-miles by total miles results in a very low average payload value for this carrier (3.4 tons). By double-clicking on the Average Payload cell (highlighted in red on the far right), you may enter an explanation detailing the reasons for the unusual value (see **Figure 35**). After entering your text explanation and selecting **OK**, the highlighting will change from red (error) to yellow (warning) status.

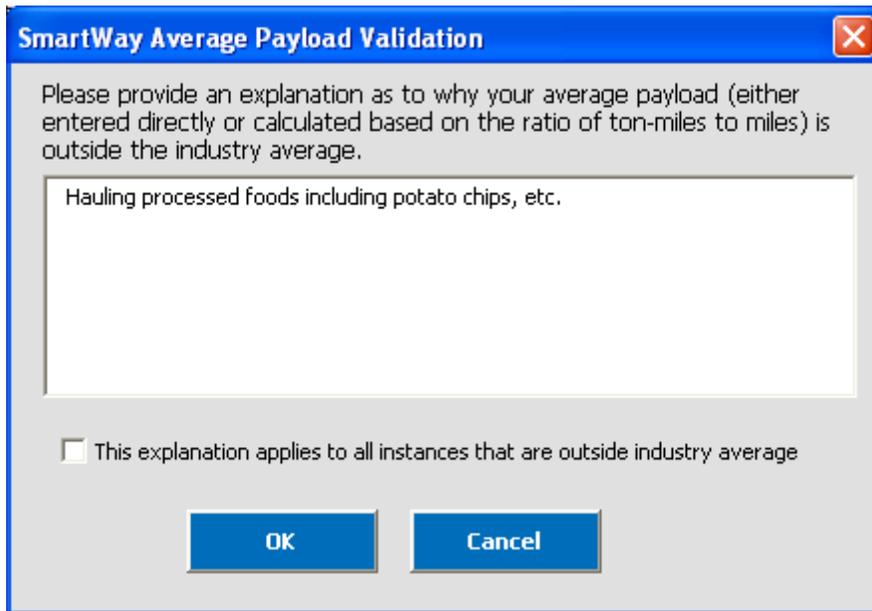


Figure 35. Example Average Payload Validation Explanation



Note: By selecting the checkbox at the bottom of the Average Payload Validation text box, the user may apply the explanation to all instances of potentially high/low payload values on the **Activity Data** screen. This function is provided primarily for shippers importing large numbers of carriers resulting in the same error/warning condition multiple times.

Other validation messages are presented for the following conditions:

- Average truck/logistics/multi-modal payloads are less than 9.4 tons (error – red)
- Average truck/logistics payloads are greater than 33.8 tons (error – red)
- Average multi-modal payloads are greater than 90 tons (error – red)
- Average railcar payloads are less than 9.4 tons or greater than 125 tons (error – red)
- Average truck/logistics/multi-modal payloads are between 9.4 and 15.5 tons (warning – yellow)
- Average truck/logistics payloads are between 27.7 and 33.7 tons (warning – yellow)
- Average multi-modal payloads are between 60 and 90 tons (warning – yellow)
- Payload is less than or equal to zero (error)

Please refer to the **Shipper Tool Technical Documentation** for further details regarding the basis for the above validation ranges.

Viewing the % SmartWay Screen

PLEASE REFER TO **WORKHEET #3C: % SmartWay** to complete this section of the Shipper Partner FLEET Tool.

Once you finish entering your data you may proceed to the **% SmartWay** screen. The **% SmartWay** screen calculates your **% SmartWay value**, reflecting the fraction of total emissions attributable to SmartWay carrier partners. The **% SmartWay value** is used to determine logo eligibility in the SmartWay program. Shippers who move the required percentage of freight on SmartWay carriers are eligible to use and display the SmartWay logo.

SmartWay Shipper Tool: AAA Shipping - Retail

Select Carrier(s) | Emissions or % SmartWay | Activity Data | **% SmartWay** | Emissions Summary | Carrier Performance | Shipper Strategies | Modal Shift

This screen calculates your % SmartWay value for determining SmartWay logo qualification. Choose the appropriate radio button to select the weighting factor you wish to use to determine your % SmartWay value. If you have completed the Activity Data screen, the associated percentages will appear in the % Ton-Miles, % Total Miles, and % CO2 columns below. If you did not enter activity data, or if you would prefer to use another factor, select the factor from the drop-down box on the far right and enter a non-zero percentage for each carrier, making sure these percentages add up to 100%.

The tool will use **only** the weighting factor specified in calculating your % SmartWay value.

If the data source is not listed, simply type it in.

Data Source:

Selected Carriers	Carrier Mode	<input checked="" type="radio"/> % Ton-Miles	<input checked="" type="radio"/> % Total Miles	<input checked="" type="radio"/> % CO2	<input type="radio"/> % Custom
ATS, INC	Truck	1.381	9,655		0
Truck Service, Inc.	Truck	36.833	36,664	41,255	0
non-SmartWay Truck Carrier	Truck	15.167	21,899	46,565	0
ABC Rapid Delivery Inc.	Truck	1.503	1,208		0
CSX Transportation	Rail	7.328	1,287		0
ABF Freight System, Inc.	Multi-modal	4.966	3,487		0
non-SmartWay Logistics Carrier	Logistics	32.822	26,800		0

Description of Custom Factor and Methodology

Carrier Mode	Rating
Truck	72%
Rail	100%
Multi-Modal	100%
Logistics	0%
Overall	52%

Buttons: BACK, NEXT, ZOOM IN, PRINT SCREEN, SAVE, HOME, VALIDATE SCREEN, VALIDATE COMPANY, ADD/VIEW COMMENTS, HELP

Figure 36. Example Average Payload Validation Explanation

Carriers identified in the **Select Carrier(s)** screen are automatically carried over to this screen. In addition, if the **Activity Data** screen has been completed, the fractional mileage, ton-mile, and CO₂ amounts attributable to each carrier are also shown here, and may be used as weighting factors across your carriers to calculate your **% SmartWay value**. If you do not have mileage-related data for all carriers used for your company, you may select other weighting factors (using the drop-down selection on the far right column) for calculating your **% SmartWay value**, including the percentage of total payments, the fraction of total weight or total packages, or an alternative “custom” factor, across the different carriers. Please enter the type of data you use for your percentage allocation estimates using the drop down menu at the top left,⁶ then enter the percent allocated to each carrier. Percentages

⁶ If you select the “% Custom” option for allocating your % SmartWay value, you must provide a detailed description of the custom factor used in the text box at the lower left of the screen.

must sum to 100. The resulting weighted average % **SmartWay value** is displayed at the bottom right of the screen.

Viewing the Emissions Summary and Carrier Performance Screens

Once you finish entering your data you may view your performance on the **Emissions Summary** or **Carrier Performance** screens. Based on the shipper company activity data inputs and the carrier performance data downloaded from the EPA website, weighted average g/mile and g/payload ton-mile factors are calculated for CO₂, NO_x, PM10, and PM2.5 for each carrier, as well as total mass emissions (based on the preferred metric designated for each carrier). The company-specific g/mile and g/ton-mile factors, as well as total mass emissions, are shown on the **Emissions Summary** screen.⁷ A full range of summary data is displayed on the **Carrier Performance** screen.

The **Emissions Summary** screen (see **Figure 37**) displays emissions performance by carrier and for your shipper company as a whole, presented in terms of grams per mile and grams per ton-mile. Select the pollutant to display using the buttons at the top of the screen.

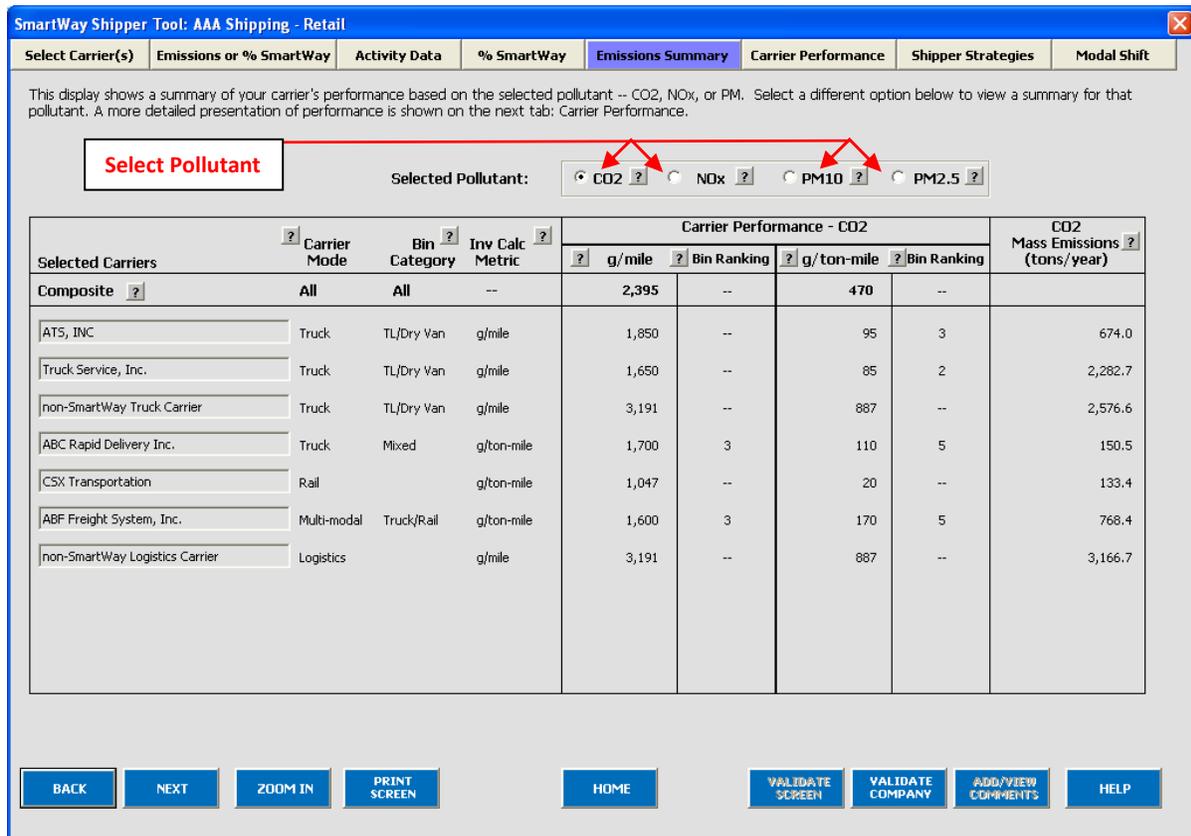


Figure 37: Emissions Summary Screen

⁷ The gram per mile and gram per ton-mile values provided for SmartWay Truck carriers actually represent “bin averages” for a given truck operating category (e.g., TL Dry Van operators), indicating bin midpoints for the ranked set of all operators in this category. In this way precise performance metrics are not attributed to any given carrier. Alternatively, performance metrics for rail are carrier-specific.

The [Emissions Summary](#) screen also displays the “bin category” ranking for any truck carriers. Truck carrier emission factors are determined by placing similar trucking companies in groups called “bin categories.” The current bin categories are:

- truckload-dry van /container;
- less than truckload-dry van;
- refrigerated;
- tanker;
- flatbed;
- package delivery;
- dray;
- specialized hauler; and
- mixed.

The fleets in each bin category are divided by performance into five roughly equal sets (bins.) The midpoint of performance for each bin represents the emission factor for all fleets in that bin. Thus, a fleet will have a bin number (ranging from 1 to 5) for each of the four pollutants and two performance metrics (8 bins in all.) Bin Rankings are currently used for truck, logistics, and multi-modal carriers. Rail uses actual company specific emission factors, and future air and sea modes will likely use company-specific emission factors as well.

Mass emissions in tons per year are also calculated in the right hand column of the [Emissions Summary](#) screen. The **Composite** row at the top of the table provides the activity-weighted average performance metrics across all carriers and modes. This summary, plus other detailed reports can be printed by returning to the [Home](#) screen and selecting [View Your Data Reports](#).

The [Carrier Performance](#) screen displays data at a more detailed level than the [Emissions Summary](#) screen. Emission factors, mass emissions, or bin rankings may be selected for display using the **Display Type** drop-down box (see [Figure 38](#)).

Select Emission Factors, Mass Emissions, or Bin Rankings for display

Click to Show or Hide specific carriers

SmartWay Shipper Tool: AAA Shipping - Retail

Select Carrier(s) | Emissions or % SmartWay | Activity Data | % SmartWay | Emissions Summary | **Carrier Performance** | Shipper Strategies | Modal Shift

This display allows you to look at your company's emissions-related performance by mode and internal segmentation. Use the drop-down boxes provided to filter your results. You can display carrier-specific emission factors or associated carrier rankings by choosing the appropriate option from Display Type drop-down. In addition, if you selected Emissions Footprint and completed the Activity Data screen, you can also display mass emissions in tons per year. (If you selected % SmartWay Only, this mass emissions option is not available.) In viewing your results, use the icon to the left of each mode name to hide/reveal details for that particular mode.

Display Results For: Emission Factors | All | All | All | All | All | All

Selected Carriers	Bin Category	CO2		NOx		PM10		PM2.5	
		g/mile	g/ton-mile	g/mile	g/ton-mile	g/mile	g/ton-mile	g/mile	g/ton-mile
Logistics Carriers (1)		3,191	887	38.00	7.250	2.000	0.5900	1.975	0.5900
Multi-modal Carriers (1)		1,600	170	7.00	0.700	0.200	0.0275	0.200	0.0275
Rail Carriers (1)		1,047	20	18.60	0.427	0.519	0.0120	0.503	0.0120
Truck Carriers (4)		2,082	307	16.03	2.287	0.724	0.1743	0.717	0.1731
ATS, INC	TL/Dry Van	1,850	95	3.00	0.150	0.075	0.0040	0.075	0.0040
Truck Service, Inc.	TL/Dry Van	1,650	85	7.50	0.375	0.225	0.0130	0.225	0.0130
non-SmartWay Truck Carri	TL/Dry Van	3,191	887	38.00	7.250	2.000	0.5900	1.975	0.5900
ABC Rapid Delivery Inc.	Mixed	1,700	110	15.50	1.020	0.675	0.0900	0.675	0.0450
Composite Weighted Average		2,346	470	22.98	3.701	1.102	0.2916	1.089	0.2909

Buttons: BACK, NEXT, ZOOM IN, PRINT SCREEN, HOME, VALIDATE SCREEN, VALIDATE COMPANY, ADD/VIEW COMMENTS, HELP

Figure 38: Carrier Performance Screen

You may also expand or aggregate the display rows to show carrier performance by individual carrier by clicking the icons to the left. Note that Bin Rankings can only be viewed for specific truck, logistics and multi-modal carriers, not for the mode-level summary.

This data, plus other detailed reports, can be printed out by returning to the [Home](#) screen and selecting

[Go To Reports Menu](#)

Viewing the Shipper Strategies Screen

PLEASE REFER TO [WORKHEET #4A: Shipper Strategies](#) to complete this section of the Shipper Partner FLEET Tool.

The new SmartWay Shipper Tool significantly expands upon earlier versions of the tool by calculating the emissions savings impacts for a range of activities and best practices which are known to impact the emission footprint of the transportation supply chain. Using the [Shipper Strategies](#) screen you can input specific information pertaining to your company's strategies to impact emissions that are *already being*

implemented for the reporting year. On this screen, all strategies are based on eliminating miles or weight from the system.



Note: The use of this screen is optional and not required for submitting the tool to SmartWay.

SmartWay Shipper Tool: AAA Shipping - Retail

Select Carrier(s) | Emissions or % Smartway | Activity Data | % SmartWay | Emissions Summary | Carrier Performance | **Shipper Strategies** | Modal Shift

INPUTS ON THIS SCREEN ARE OPTIONAL - NOT REQUIRED FOR EPA SUBMITTAL.
 Previously in this tool, you calculated the emissions resulting from your movement of freight using various carriers. On this screen, you can input specific information pertaining to your company's strategies to reduce emissions BEFORE freight is placed on transport. All strategies on this screen are based on eliminating miles or weight from the system. In other words, this tab calculates the emissions that would have happened had you NOT implemented your efficiency improvements. Please list all strategies that your company implemented for the reporting year to take miles or weight out of the freight system. Emissions results are calculated assuming a one-to-one reduction in miles and ton-miles. The results only provide a rough estimate of emissions impacts. SmartWay intends to improve the functionality of this tab in future tool versions.

Add Activity
 Select a category: Miles removed from system
 Pick an activity: Cube optimization **Add Activity**

Use the link below to access information on quantification and documentation of your activities:
[Basic Quantification and Documentation of Shipper Strategies](#)

Selected Activities	Carrier Mode	Percent Improvement	Results (Tons/Year)				Data Source / Methodology
			CO2	NDx	PM 10	PM 2.5	
1. Packaging reconfiguration	Rail		0	0.0	0.00	0.00	Reconfigured containers from cylinders to rectangular packaging.
Cube optimization	Truck	3.5	206	1.6	0.08	0.07	
	Multi-Modal		0	0.0	0.00	0.00	
Miles removed from system	Logistics	2.2	71	0.8	0.04	0.04	

Remove Activity

Total Results (Tons/Year) 277 2.4 0.12 0.12

BACK NEXT ZOOM IN PRINT SCREEN SAVE HOME VALIDATE SCREEN VALIDATE COMPANY ADD/VIEW COMMENTS HELP

Figure 39: Shipper Strategies Screen

First, select an activity category from the drop-down menu at the upper left, and then chose a specific activity from the options provided. You may select from the following options:

- Miles Removed from the System
 - Distribution center relocation
 - Retail sales relocation
 - Routing optimization
 - Cube optimization
 - Larger vehicles and/or trailers
- Weight Removed from System
 - Product weight reduction
 - Package weight reduction
 - Vehicle weight reduction

For each strategy selected, you must provide an estimate of the percentage impact (in terms of miles or ton-miles, as appropriate), for each mode of interest, along with a text description of the strategy itself and details regarding the methods and assumptions used to estimate the changes. Based on actual data from your current carriers, the tool will calculate the quantity of emissions changed for each pollutant. You can repeat this process for each strategy that your company has implemented.

The tool assumes that total mass emissions are changed in direct proportion with the specified mileage or weight reductions. This assumption should be accurate for weight reduction strategies when applied to truck-load shipments that weigh out. Additional uncertainty arises though in the case of LTL and package delivery shipments, where such reductions may not result in one-to-one impact in miles hauled. Uncertainties are even greater for non-truck modes, where the shipper commonly does not control the entire content of the container.



Please carefully document the procedure used to estimate the percentage impacts associated with your different measures, including how you established your baseline performance levels. Use the blue link on the upper right of the screen to obtain additional information regarding how shipper strategies should be quantified and documented. If you have questions regarding calculations and/or documentation, please contact your SmartWay PAM.

Viewing the Modal Shift Screen

PLEASE REFER TO [WORKHEET #4B: Modal Shift](#) to complete this section of the Shipper Partner FLEET Tool.

The **Modal Shift** screen is intended for scoping purposes and scenario evaluations only. Shippers should develop carrier emissions inventories (and associated average emissions factors for their company) by inputting activity data in the **Activity Data** screen.



Note: The use of this screen is optional and not required for submitting the tool to SmartWay.

The **Modal Shift** screen allows you to estimate the emissions impact of shifting modes by selecting one or more modal shifts between air, marine, truck, logistics, multi-modal and rail operations. The resulting estimates of emissions impacts are for partner information only and are not used in determining SmartWay Ratings or Logo Scores.

On the **Modal Shift** screen you can specify the mode from which you have shifted freight or are considering shifting freight (“From Mode”), as well as the target mode (“To Mode”). You have several options for selecting an emissions factor for both the “From Mode” and “To Mode”:

Shipper’s Carrier Average – This option will utilize the weighted average gram per mile or grams per ton-mile metric from your carriers, for a specified mode (e.g., rail or truck), based on data you provided in the **Activity Data** screen. If this option is selected for the “From” mode, filters can also be applied to evaluate a subset of your current operations (e.g., inbound/domestic only). Note that in most cases performance metrics represent midpoints for the given bin category, rather than the precise value for a

given carrier. If you have data specific to your carriers, please select the **User Input** option (see below). Note that the **Shipper Carrier Average** option is not available for air and marine modes at this time.

Modal Average – This option will use an industry-average performance metric for the mode in question. Metric options include g/ton-mile and g/mile (or g/railcar-mile, as appropriate). The data sources and assumptions used to derive these values are discussed in the **Shipper Tool Technical Documentation**. You may want to use this option to investigate shifting freight to a transportation mode that you have not used previously, although we recommend that you use a more representative emission factor to analyze scenarios whenever possible. The **Modal Average** option is not available for air and marine modes at this time.

User Input – This option allows you to input performance metric estimates for any carrier mode, using alternative data sources. This is the only option available for Air and Marine modes at this time. If you select this option, you MUST provide a description of the data sources that you used to develop these estimates (by clicking the **User Input Data Source** button.) This option may prove particularly useful in those cases when you have access to carrier-specific performance estimates. We also encourage you to use this option when you have access to an emissions factor that reflects the full emissions impact (e.g., including likely drayage emissions) and/or that best represents the fleet equipment and operational type that you are most likely to work with for your unique freight movement.

SmartWay Shipper Tool: AAA Shipping - Retail

Select Carrier(s) | Emissions or % SmartWay | Activity Data | % SmartWay | Emissions Summary | Carrier Performance | Shipper Strategies | **Modal Shift**

INPUTS ON THIS SCREEN ARE OPTIONAL - NOT REQUIRED FOR EPA SUBMITTAL.
 This tab allows you to estimate emission results from modal shifts. Different sources of emission factors will be available based on the carrier modes selected. In some cases, the emission factor can be based on your own carrier fleet mix, for others, only a modal default will be available, for others, the user will have to supply their own emission factors. Refer to the User Guide for more detailed information. Significant improvements and enhancements are planned for this tab in future versions.

Indicate the mode being displaced (From) and the new mode (To) using the drop-down boxes provided. Enter the amounts along with the appropriate units, and the system will calculate the results. Add new records by clicking the Insert Additional Modal Shift button near the bottom of the screen. You can delete a record by clicking its Delete Modal Shift button.

Emission Factor Source		Amounts		Efficiency Before	Efficiency After	Total Results (tons/yr)
Modal Shift 1						
From Carrier Mode:	Truck	From:	Shipper's Carrier Average	Units: Ton-Miles	CO2	307.43
To Carrier Mode:	Rail	To:	Modal Average	From:	NDx	2.29
				To:	PM 10	0.174
					PM 2.5	0.173
						1.23711340
						1.769
						1.760
Modal Shift 2						
From Carrier Mode:	Multi-modal	From:	Shipper's Carrier Average	Units: Miles	CO2	1,600
To Carrier Mode:	Marine/OGV	To:	User Input (Efficiency After)	From:	NDx	7.00
				To:	PM 10	0.200
					PM 2.5	0.200
						950
						12.5
						-0.265
						-0.247

Insert Additional Mode Shift

Total Results By Pollutant (tons/yr) CO2: 3,352 NDx: 13.55 PM 10: 1.504 PM 2.5: 1.513

BACK NEXT ZOOM IN PRINT SCREEN SAVE HOME VALIDATE SCREEN VALIDATE COMPANY ADD/VIEW COMMENTS HELP

Figure 40: Shipper Strategies Screen

Note that emissions factors that automatically appear in the **Modal Shift** screen do not include all potential emissions impacts; for example the factors do not include emissions associated with drayage (i.e., short-distance trips often required to move freight from one mode to another) or the operation of intermodal facilities.

You may select to perform the emission impact calculation based on miles or ton-miles inputs, by specifying the **Units** in the drop-down menu under the **Amounts** column. Miles for truck, logistics, and multi-modal modes corresponds to truckload miles, and railcar-miles for rail modes. Once the **Units** are selected for the calculation, the screen will present the “Before” and “After” efficiency factors for the “From” and “To” modes for each of the four pollutants, in the table on the right. (**User Input** selections will result in empty white cells which require manual entry of the required values.) Next, the actual amount of freight to be shifted must be specified for both the “From” and “To” modes, in terms of miles or ton-miles, as appropriate. (Note that these two values can be different, since the point to point distance travelled is likely to be different across modes.) The corresponding emissions impact is then presented in tons per year for each pollutant. Emissions increases are shown as negative values.

Note the **Shipper Carrier Average** and **Modal Average** values for railcar gram per mile values are adjusted to reflect truckload-equivalents (on a volume basis). Please refer to the **Shipper Tool Technical Documentation** for details.

Finalize Data Entry and View Reports

Once back at the **Home** screen, notice that the company data that you entered and validated now identifies its status as “Complete”. You may now highlight the next company if you have another one to complete. Fill out unfinished company data in the same manner as before. If all companies are marked as “Complete,” you can move on to the next step, **View Your Data Reports**.⁸ If one or more companies are not marked as “Complete”, review the data you entered for errors or omissions (see **Figure 41**).

The screenshot shows the 'Home' screen of the Shipper software. At the top, there is a logo for SmartWay and the text 'Shipper United States Version: 2.0.10 Released on: 01/03/2012'. Below this, there are instructions: 'Use the blue buttons below to navigate the tool. For more information select the Help button'. The main content area is divided into seven numbered steps:

- 1. Enter Partner Name** (Exactly as it should appear on the SmartWay website)
Input: AAA Shipping, Inc. Report Year: 2010
- 2. Enter Contact Information**
Button: Go To Contact Information Screen
- 3. Characterize Your Companies**
Button: Go To Company Characterization Screen
- 4. Download SmartWay Carrier Data File**
Button: Download Latest SmartWay Carrier Data File Date of Current Carrier File: 12/30/2011
- 5. Select Company for Data Entry (Double-click the company name or select and hit Enter):**
List:
 - AAA Shipping - Retail - Complete (with Warnings)
 - AAA Shipping - Wholesale - Not Checked
- 6. View Your Data Reports**
Button: Go To Reports Menu
- 7. Create Final Version** ?
Button: Generate File to Send to EPA*

* Be sure to read carefully the directions that appear when you select this option.

At the bottom, there are navigation buttons: BACK, ZOOM IN, PRINT SCREEN, SAVE, EXIT, and HELP.

Red callout boxes provide additional instructions:

- 'Select after all companies are "Complete" to view reports' points to the 'Go To Reports Menu' button.
- 'Status of first Shipper Company "Complete"' points to the first company's status.
- 'Select next company for data entry' points to the second company's name.

Figure 41: Home Screen - After Completing the Data Entry/Modification Process for First Shipper Company

⁸ Company Characterization and Input Summary reports may be viewed before completing data entry for all fleets if needed.

Once you have completed data entry for all shipper companies, and the company status indicates “Complete” or “Complete with Warnings”, you may select [Go To Reports Menu](#) to see the various reports (see **Figure 42**).

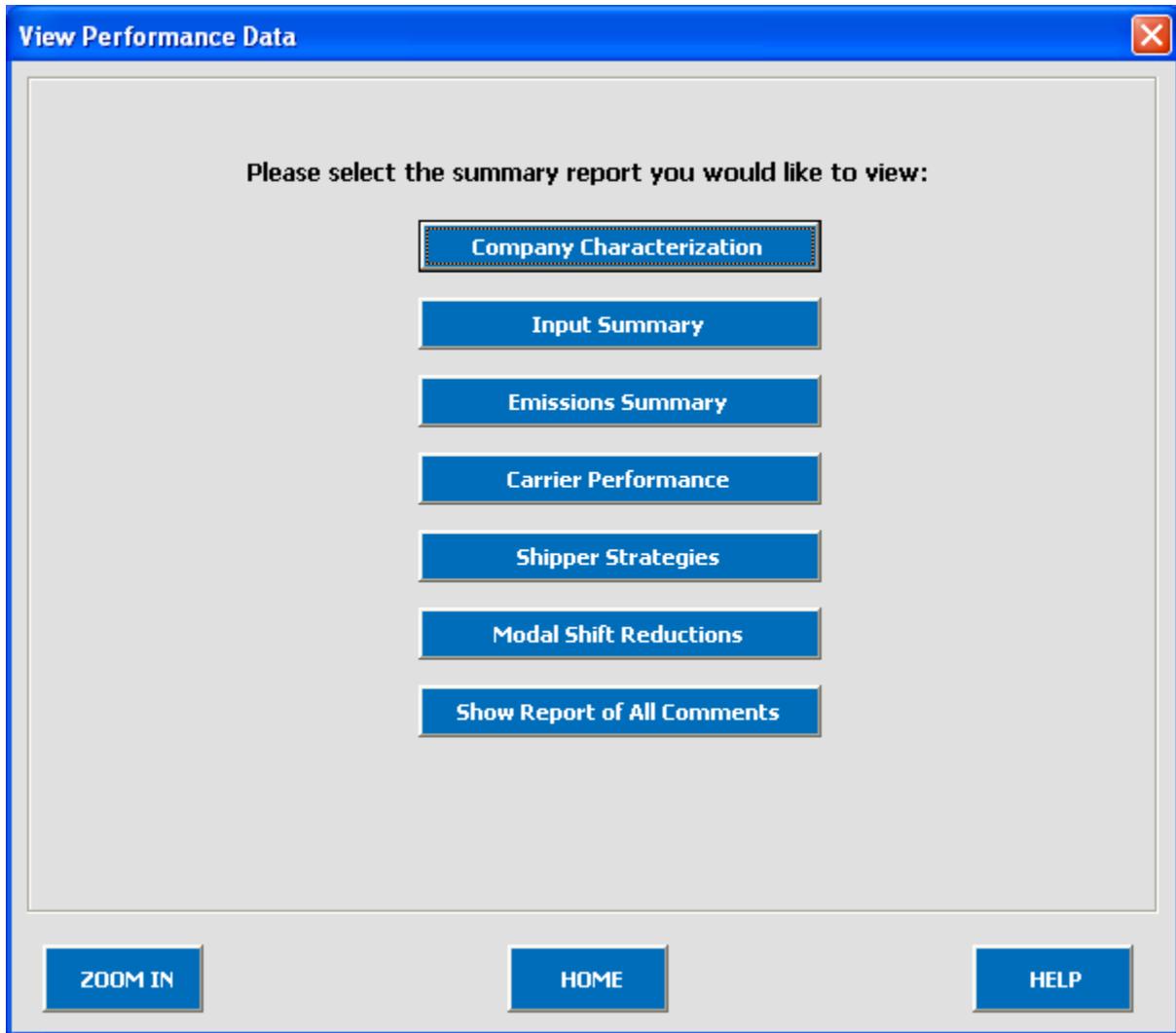


Figure 42: View Performance Data Screen

Selecting any of the buttons will display the indicated report type. The reports provide a recap of your data inputs as well as the emissions calculation results presented on the different **Data Entry** screens. Selecting on any of the summary report types will take you to a screen allowing you to preview and print your reports. The **Emissions Summary** and **Carrier Performance** reports also provide composite performance metrics and mass emissions summed across all shipper companies. These reports will prove useful for your diagnostic and improvement efforts.

Submitting Data to SmartWay

Congratulations! You are now ready to send your data to EPA.

From the **Home** screen select **Generate File to Send to EPA***, which will create a file with the following naming convention:

PartnerName_Year_Shipper_V0.xls

For example, ABCompany_2010_Shipper_V0.xls

where **PartnerName** is your partner name as entered for **Step 1** on the **Home** screen, and **Year** indicates the year for which you are submitting your data.

The system will display a message indicating that an Excel file will be created with your company's name as part of the file name. The file will be saved to the same folder where the tool itself is currently saved. You will need to locate the file and attach it in an e-mail to your Partner Account Manager (PAM).

NOTE: DO NOT ZIP the File. Send it to EPA as a normal file attached in an e-mail. EPA security will not allow zipped files through the EPA firewall.

The system will first display a message asking you to confirm your decision to save a copy of your tool on your hard drive (**Figure 43**).



Figure 43: Data Saving Confirmation

Upon selecting **OK** the file will be saved, and additional instructions will appear (see **Figure 44**). Follow these instructions for submitting your Shipper Partner Tool to SmartWay. Upon selecting

CLOSE a screen will appear allowing you to close the Shipper Partner FLEET tool or return to the **Home** screen.

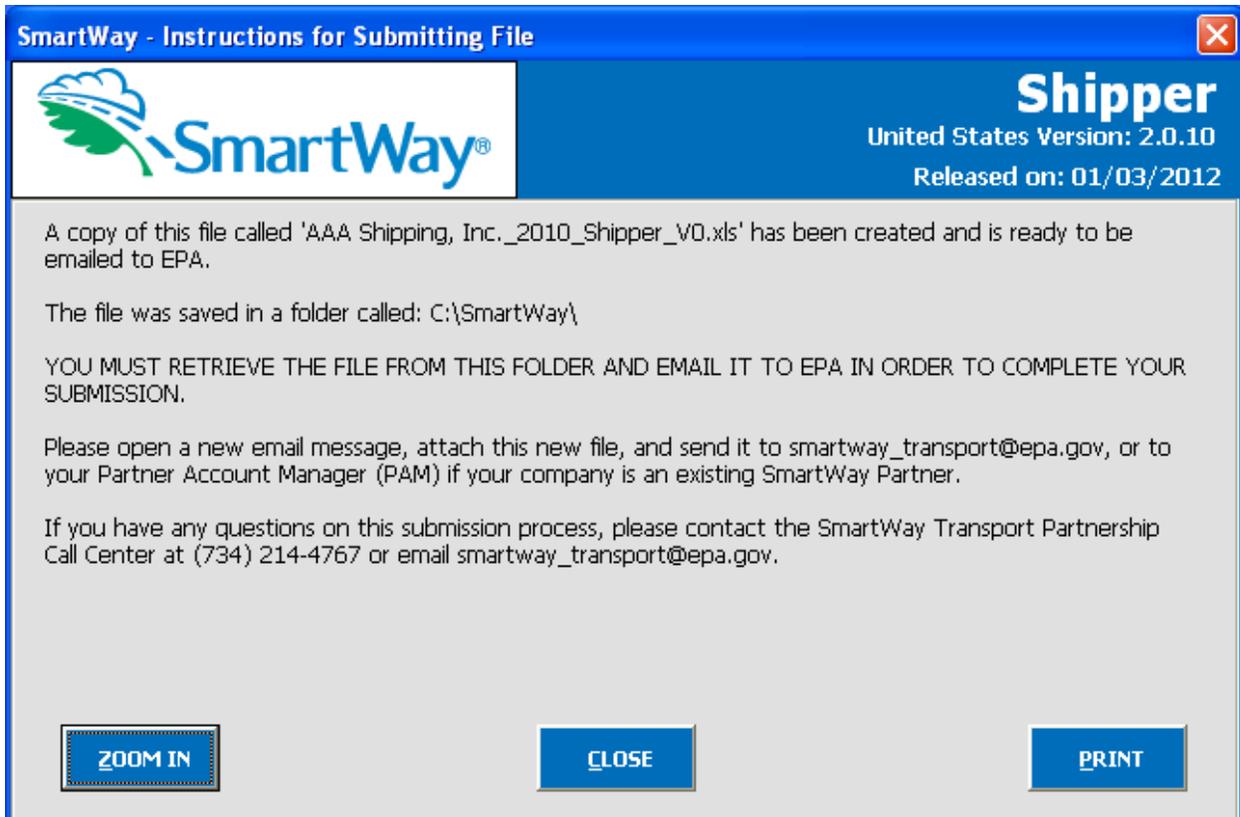


Figure 44: Data Submission Instructions

If you have any comments about the Tool and/or User Guide, please submit these with your Tool in a separate document.

Troubleshooting the Tool

Although the revised SmartWay Tools have been tested extensively, you may encounter errors. Intermittent errors have been encountered when opening the tools directly from an e-mail or from the SmartWay website rather than from a drive, or when multiple Excel files are open simultaneously. If you encounter an error during use of the tool, please try restarting it directly from a disk drive, with all other Excel files closed. In addition, make sure that your computer is using a system and application version validated for use with the SmartWay 2011 Tools (XP and Vista operating systems, and Excel Office 2003 and 2007.)

Note that some users have experienced problems when re-opening the tool without closing Excel. It is recommended that you close Excel before re-opening this tool, which could result in a loss of data in other open Excel workbooks.

If you continue to encounter problems, please make a screen capture of the error message, and save the data at that point. (You can make a screen capture by pressing **Alt-Prt Scr**, and then pasting the image into a document such as MS Word.) Then send the screenshot, along with the saved data to your Partner Account Manager for further assistance.

Appendix A – Data Field Details for Carrier File Export/Import Option

The following provides additional definitions and information to assist in the preparation and import of Carrier CSV files.

Bin Category: The operation type category used for ranking carriers (e.g., TL Dry Van, Dray, etc.). Carriers are grouped by these categories to ensure an "apples to apples" comparison. The emissions factors associated with truck carriers are the midpoint value for their bin, while factors associated with rail carriers are partner-specific, based on publicly available information.

Emission Factors: Emissions factors have long been the fundamental tool in developing national, regional, state, and local emissions inventories for air quality management decisions and in developing emissions control strategies. More recently, emissions factors have been applied in determining site-specific applicability and emissions limitations in operating permits by federal, state, local, and tribal agencies, consultants, and industry.

EPA's SmartWay Database: EPA maintains a database containing key SmartWay partner information. This database is used to create the SmartWay Carrier Data file.

MCN: This is a truck carrier's Motor Carrier Number (MCN) number. This is an optional field you can use to visually determine if a SmartWay carrier is one of the carriers you use. This field is not currently used to merge SmartWay data with your carrier data. If you created your CSV file using one of the two Export buttons on the Select Carriers screen, you should not change these values.

SCAC: The Standard Carrier Alpha Code (SCAC) is a unique two-to-four-letter code used to identify transportation companies. SCACs are assigned by the National Motor Freight Traffic Association, Inc., (NMFTA). If you cannot remember your SCAC(s), please contact NMFTA before proceeding. You can find NMFTA contact information at <http://www.nmfta.org/Pages/ContactUs.aspx>.

CSV Fields:

Carrier ID: This is an internal identifier that can be used to identify your carriers. This number originates from the SmartWay Database. A negative number identifies the carrier as a non-SmartWay carrier. If you created your CSV file using one of the two Export buttons on the Select Carriers screen, you should not change these values. If you are merging your carrier data with the SmartWay carrier data using the carrier name, carrier mode, and carrier bin category, you do not need to specify this internal ID field.

Carrier Name: This is the name of the carrier. If you are using the internal Carrier ID field to merge your data with the SmartWay data, you do not need to specify this field. If you are using this field to merge the data together, the names must be an exact match, but the names are not case sensitive. If you created your CSV file using one of the two Export buttons on the Select Carriers screen, you should not change these values.

Mode: This is the mode of the carrier. This field is required and must be an exact match if you are using carrier name, carrier mode, and bin category to merge the SmartWay data with your carrier data. Valid values are “Truck”, “Rail”, “Multi-modal”, and “Logistics”. If you created your CSV file using one of the two Export buttons on the Select Carriers screen, you should not change these values.

Bin Category: This is the SmartWay bin category for the carrier. For more information on Bin Categories, please see the Glossary above. If you created your CSV file using one of the two Export buttons on the Select Carriers screen, you should not change these values. Valid values for Truck carriers are TL/Dry Van, LTL/Dry Van, Reefer, Flatbed, Tanker, Dray, and Package. The only valid value for Multi-modal carriers is Truck/Rail. Rail carriers and Logistics carriers do not have bin categories.

SCAC: This is a truck carrier’s SCAC code. This is an optional field you can use to visually determine if a SmartWay carrier is one of the carriers you use. This field is not currently used to merge SmartWay data with your carrier data. If you created your CSV file using one of the two Export buttons on the Select Carriers screen, you should not change these values.

MCN: This is a truck carrier’s MCN Motor Carrier Number. This is an optional field you can use to visually determine if a SmartWay carrier is one of the carriers you use. This field is not currently used to merge SmartWay data with your carrier data. If you created your CSV file using one of the two Export buttons on the Select Carriers screen, you should not change these values.

Non-SmartWay Carriers: This is a required field for non-SmartWay carriers. You can either enter the number in the CSV file or enter it later on in the tool user interface. If you enter the number in the CSV file, it must be an integer between 1 and 99,999. If you have selected more than one entry for "Non-SmartWay Carrier" for a given mode, make sure to avoid double-counting these carriers. Also, only enter carriers used during the current reporting year.

Data Availability: This is a required integer field whose valid values are 1 to 7. The Data Availability Option entered/selected for a carrier identifies which carrier activity data you have available. The data you enter in your CSV file for Ton Miles, Total Miles, Average Density, Average Load pct, and Average Payload should be consistent with the carrier’s Data Availability. If you do not specify a Data Availability Option, the tool will insert a default value of 1 for the carrier entry.

The seven Data Availability Options are:

- 1 = (Preferred) I know both Ton-miles and Total Miles.
- 2 = I know Ton-miles and Average Payload.
- 3 = I know Ton-miles and have general information about number of loads and cargo density.
- 4 = I know Ton-miles only.
- 5 = I know Total Miles and Average Payload.
- 6 = I know Total Miles and have general information about number of loads and cargo density.
- 7 = I know Total Miles only.

Calc Metric: This is a required field. In general, there are three valid values, but some of these values are only available for certain Mode and Data Availability combinations. The three valid values are g/mile, g/ton-mile, and g/railcar-mile. This field specifies the method for calculating each carrier's emission footprint. In making your selection, consider the most appropriate measure for the carrier's operation type. In general, ton-miles are good for rail, multi-modal and logistics companies as well as heavier truck loads (roughly above 10 tons), while g/mile is better for trucks with lighter payloads. Railcar-miles are also an available option for the rail mode, although ton-miles are preferred. Also, g/mile may be a more reliable metric for tracking TL operations, while g/ton-mile is probably more appropriate for LTL operations. The tool will default a valid Calc Metric if one is not supplied in the CSV file.

Ton-Miles: Depending on your Data Availability option, this field may be required or ignored. The Ton-Miles field is an integer that must not exceed 9.99×10^{18} .

Total Miles: Depending on your Data Availability option, this field may be required or ignored. When entered, this field will contain the total miles per year attributed to each truck and rail carrier. The tool assumes that miles entered for truck carriers correspond to (full) truckload-equivalent miles. Rail-miles correspond to truckload equivalent railcar miles. Please see the Shipper Tool Technical Documentation for details regarding the calculation of truckload-equivalents for railcars. The Total Miles field is an integer that must not exceed 9.99×10^{18} .

Average Density: Depending on your Data Availability Option, this field may be required or ignored. This field is used to calculate ton-miles and/or total miles, accounting for shipper-specific freight densities. Average Density is required for Data Availability Options 3 and 6. The Average Density field must be a numeric field greater than 0.1 with up to one decimal place.

Average Load Pct: Depending on your Data Availability Option, this field may be required or ignored. Use the Average Load Percent calculator to determine what fraction of your truck and rail carrier's cargo space is used to ship your freight. Load percentage estimates can be weight-based, with full truckloads (or railcar loads) corresponding to weighing out, or volume-based, with full loads corresponding to cubing out. The Average Load Percent field is required for Data Availability Options 3 and 6. Enter the load information as requested. The resulting fractions (shown on the Activity Data screen) are multiplied directly by Total Miles to scale carrier mileage. The Average Load Pct field must be an integer field between 1 and 100.

Average Payload: Depending on your Data Availability Option, this field may be required or ignored. Enter payload (in short tons) representing the average cargo weight per loaded trip. The Average Payload field is a numeric field that must be greater than 0.0001. The total number of digits, including the decimal point, must not exceed 5 digits.