

2016 SmartWay Shipper Tool: Using the SmartWay Shipper Tool to Calculate Your Freight Carbon Emissions and Add Value to Your Business October 19, 2016

NOTE: <> bracketing indicates explanatory text or web links not stated in the presentation.

SmartWay Webinar Welcome – Mary Walsh

Mary Walsh, EPA: For those who just joined us, I am Mary Walsh hosting this afternoon's SmartWay Shipper Tool webinar, so I'll just let you know why this might be something you'd be interested in and can really use. "Using the SmartWay Shipper Tool to Calculate Your Freight Carbon Emissions and Add Value to Your Business"—that is the Shipper Tool webinar we are showing today; it is just that we advertised it as the "2016 Shipper Tool" and then Matt gave it a much more interesting title. Matt, would you advance the slide?

Webinar Housekeeping

Just a little bit about the webinar, what we call "housekeeping." As we are going through the webinar, we will not be taking questions. However, until we can open up the lines at the end and we can talk to people, during the course of the webinar you can submit questions using the little questions box that you'll see in your "GoTo" control panel. The little picture shows what you should be looking for right now. And I'll be watching those as the webinar goes, and if there's something that we can turn around really quickly or if you are having technical difficulties you want us to know about— "I can't hear anything," "Suddenly, I couldn't see anymore"—you can use that box too. We'll also ask at the end of the webinar, after we've gone through the presentation and we are talking about questions. You'll have the opportunity to complete a little survey about your webinar experience and suggestions for us at the very end. And we do read your responses; they are important to us. After the webinar, it will take a little time, but we will get first the presentation slides within the week posted to the SmartWay webinar website at the "SmartWay Webinar & Events" page. After we get a chance to get the recording perfected and updated to the web, you can find that there as well, and a transcript will follow.

SmartWay Home Page

Matt, go to the next slide and we'll show people where to look on the SmartWay home page https://www.epa.gov/smartway/smartway. There. So it will look something like that, and if you go over to the right-hand side, you see upcoming webinars and events https://www.epa.gov/smartway/smartway-webinars-events. Well, today's webinar is showing there and the next webinar is tomorrow.

SmartWay Webinars & Events

You click on the "Webinars & Events" link and it takes you to this page. That shows "Upcoming Webinars" as the default page, but if you click the link "Past Webinars/Events" shown with the red arrow, you'll be able to access materials that we've posted from past webinars.

Presenter: Matt Payne

Alright, at this point I would like to introduce you to today's presenter, my team leader Matt Payne. He's been with EPA for the past 25 years, SmartWay. He was one of the original engineers of SmartWay way back in 2001. As I've said, he's my team lead on the SmartWay data development and management team, and there's no better person to give this webinar than Matt because this is the team that covers tool and database development, improvements, the whole program design. We do data collection, partner support, etc. His background way back in school goes back to engineering and political science degrees from Michigan State University, as well as an MBA and systems science degree from its archenemy, the University of Michigan. Matt, without further ado, I'm going to turn over the mic to you.

SmartWay Transport Partnership

Matthew Payne, EPA: Thank you, Mary. Again welcome to those in attendance on the call. We'll start with a few presentation slides and then we will try to get directly into the tool demonstration as quickly as we can.

Covered Today – Matthew Payne

We are going to cover a few things today, just a quick background case to participate, and a couple of things you see there. Some of the slides I'm just going to leave up; they will be available as Mary mentioned before, so I won't go through them point by point.

Background - Matthew Payne

Just for folks' background, SmartWay was initiated as a volunteer program in cooperation with the freight industry way back in 2001. We took a number of years to develop it, and the reason is we worked very collaboratively with industry to develop the program, and that is really one of the main reasons why it has been successful. We've continued that collaboration; it's very important if you have feedback or comments. We definitely listen to everything we hear from our partners, so please let us know of any ways we can improve. The other thing is the equation of fuel use = dollars = CO₂. From the EPA's perspective, we want to reduce CO₂ emissions, as well as NO_x and PM emissions, but for every gallon of diesel you burn, you are making 22.2 pounds of CO₂, and burning that diesel also costs you money. All of our goals were congruent in developing the program and continuing its movement as we go forward. Since we've been in operation, our current partner account has over 3,300 carriers. These represent a range of small carriers to almost all the major carriers, and at this point 260 shippers. These are major companies like Home Depot, Walmart, Lowes, and various other large companies. And over 260 affiliates who are looking to participate and be helpful.

Ultimate Goal

Our ultimate goal eventually, when we get this completely filled out, is to provide to our shippers a seamless one-stop global freight carbon accounting system. We're building a program now as we speak, and I'll talk about that a little bit more.

SmartWay Global Connections

We are working to make a lot of global connections. We understand shippers have to do a lot of reporting. So we are working actively with organizations, such as scholastic, research, Greenhouse Gas Protocol, to harmonize and make sure that you're not having to get information

from various sources. So we are cognizant of the needs that a lot of our shippers are facing in terms of reporting and we are doing our utmost to make sure that we are reducing that burden as much as possible. And you know, our SmartWay emission factors are globally used; they are accessed by academic institutions, consulting firms, as well as private transportation management software systems. Of course, those emission factors are key components of the Shipper Tool.

Why Participate

Why participate? You know, for some of those partners who have been here with us for a while, you get this. You understand why you've been partners for many years. For others who are new to the program or on the fence about joining SmartWay, just a few things to hit. Supply chain used to mean much more important part of the overall business, and it's the new arena of competition, so you really want to look at your competition in the supply chain arena. Generally, if you remove carbon from your supply chain, you are also removing costs. So that equation that I talked about in the beginning, that still holds true. There is increasing global need for CSR reporting, and that's because of a number of things: customers, market drivers, and increase in concern for these issues. The end customers are becoming increasingly aware of environmental issues and paying attention in the market. The other thing is ease of reporting. We make emission factors available; they are solid, they are peer-reviewed and accepted. We are really working at the concept of consistency of measurement and fairness of comparisons, because we are able to benchmark so many carriers and because this government, we are a government organization, the U.S. EPA, we present that information fairly and consistently. This gives you the ability to benchmark your performance when you participate. Frankly, we need a critical mass of public participation to provide all of the above benefits. It's a partnership program. You know, if you are a shipper who is just using the SmartWay data and you haven't joined the program, it would definitely benefit us and you to make that connection and formally join. Mainly to get at that global standard. The more companies we have signing up with SmartWay, the stronger we are globally and the ability to harmonize those emissions, so you're not going to end up reporting emissions to 200 different entities globally. If we can harmonize the emissions reporting and SmartWay becomes the global standard, your work will become much, much easier.

SmartWay Continuous Improvement

Overall, SmartWay's continuous improvement of both the environment and efficiency. This is a standard, kaizen, continuous improvement circle, and we definitely operate that way—SmartWay internally, as well as externally with our partners.

SmartWay System

We the SmartWay System, very briefly, consists of a fair number of data collection tools that we get from carriers. That information goes into our database and is peer-reviewed by individual live people who look at that data. There is also a lot of electronic checking that happens to QA/QC the data. Once that's done, there are some metrics that go into what we call our carrier data file, and this is our public emission factors. Those are available to pull into your SmartWay Shipper Tool, and from that you can develop your carbon footprint, look at comparing different carriers that you may want to select, or various ways of looking at your emissions. This looks like a fairly complex system, and internally it is, but we designed it for ease of use and simplicity at each individual partner's level. You may think SmartWay is complicated, and it's maybe good

for you to think it's complicated, but really when you boil it down, it's a very simple system. And one you, people should not hesitate or be afraid of engaging with.

SmartWay's Current 6 Emission Metrics

We are currently producing six emission metrics for pollutants of CO₂, NO_x, and PM. We report it in gram per mile and then in gram per ton-mile. This allows you to look at your freight efficiency in various ways. We are looking at having future metrics. We are working with Business for Social Responsibility and cargo working groups to hopefully incorporate their emission factors into SmartWay, and we are looking at the issue of black carbon. We expect to have some emission factors for you on that next year.

Public Carrier Performance Data

This slide shows an example of our public carrier performance data. This is the sort of information that is public and that shippers have access to. You can see where all the companies are listed—this will scroll on for quite a while because we have so many carriers—but it shows you the performance of those carriers in terms of a relative ranking number, then actual gram per mile of CO₂ or in gram per ton-mile metrics as well. This is public on our webpage.

Getting the Most Out of Your SmartWay Experience

Truly, you want to get the most out of your SmartWay experience. There are a lot of things you can do, from calculating your carbon footprint to marketing, using the SmartWay logo. There is a great opportunity in publicity in the very prestigious now SmartWay annual award. It is also good to talk internally with your employees, because they want to feel that they work for a good organization that is respected in the environment, and your participation in SmartWay can definitely help you in that regard. And of course, asking your carriers to join SmartWay so they can become more efficient will not only help them, but help your efficiency as well.

Example Carrier Selection Criteria

In more detail, we have some selection criteria for carriers. I'm not going to go through this slide, in the interest of time, but I wanted to put it up there. The short story on this is there's lots of ways you can select your carriers. SmartWay gives you a lot of opportunity to look at very different ways of ranking or scoring or looking at your carrier performance. We do hope you take advantage of that opportunity.

What's New This Year?

As to what's new this year, some pretty exciting changes. The first is for those who aren't partners, we have an easier shipper joining process. My colleague Patrice Thornton is going to be doing a webinar on October 20, as Mary Walsh indicated, you can look at the upcoming webinars on our website and make sure you check that out, because it is going to show you how to very easily join the partnership with a lot of hand-holding. The other thing is that we are hoping to get out some shipper performance reports. These are essentially benchmarking reports that will be available hopefully at the end of the year. We have some new default emission factors for non-SmartWay carriers. And we have really tried to change the screens to make them flow better and get you into the important parts of the tool quicker.

Key Points to Remember

These are a few key points to remember. I'll just leave this up here. If you download the slides, you can get that. These are some things as the person who fills out the SmartWay Shipper Tool, that will make your life easier.

Shipper Tool Demonstration

With that, I'll move into the shipper tool demonstration.

<on screen pulls up "2016 SmartWay Shipper Tool">

So a few things different for the tool. When you first start the tool, because Microsoft has changed some security settings, you will see some security things to go through. We've included some instructions about how to deal with that at the beginning of the tool. It's pretty straightforward, but that will be new this year. *<on screen Matt resolves Microsoft warning dialogue box by clicking "okay">* This is our welcome page.

Assistance for New Users

<on screen Matt navigates to "Assistance for New Users" by clicking "next">

All of our systems for new users that you previously had to go through page by page. We've just put it all on a single page so if you know exactly what you're doing, you are going to be able to click "next" and skip all of this. But we do have a lot of help/assistance for new users. There are resources that will help you figure out what data you need together, help with navigation, we have a schedule with tool due dates, there is a link to the SmartWay website, you'll also see what is essentially a welcome introductory video to SmartWay as well on this page.

Partnership Agreement for Shippers

<on screen Matt clicks "next" to move to the "Partnership Agreement for Shippers">
Clicking "next" comes to our "Partnership Agreement." This is the entire agreement. It's fairly simple; you submit your data annually. We post that you have, that you are a SmartWay partner on our website. Unlike our software agreement, which scrolls on for pages and pages, what you see here is what you get. We've really kept it simple. To proceed in the tool through and participate in the program, you do need to click and agree to the terms of the agreement. So just click the little box and then move "next."

<on screen Matt marks the agreement box and then clicks the "next" button>

Auto-populate Option

Now if you are a partner who has filled out a SmartWay Shipper Tool before, we've introduced a little shortcut for you. You will have a SmartWay ID, and if you don't know your SmartWay ID, you can ask to have it emailed to you via the link on this page or you can directly ask your SmartWay partner account manager. But if you have that ID, you would type it in the box and then you would click "Auto-populate initial steps." And that's going to fill out your contact information for you, which I'll show on the next page.

Home Page of Shipper Tool

<on screen Matt clicks on "next" to advance to "Tool" data home page>

So it will populate your name, contact information, and then your company description. So this example tool, we are just using something very generic this year. We didn't have time to get too creative in our naming, so we are just going with a bland "ABC Shipping, Inc." You want to

make sure that you put your name if you are a new partner or even if you are a continuing partner, exactly as you want it to show on the SmartWay website, because this does get translated. Whatever you type is how you are going to show publicly on our website.

Contact Information

<on screen Matt selects the "Contact Information" button; the tool opens to the "Partner Information" tab>

Your contact information. This is all basic.

<on screen Matt selects the "Working Contact" tab>

As for your address and working contact, this is your person who is actually filling out the tool.

<on screen Matt navigates to "Executive Contact" tab>

Contact information, executive contact, this is likely maybe a sustainability manager or someone else with some level of executive authority.

<on screen Matt navigates to "Other Contacts" tab>

And if you want to add other contacts, you can add those as well. This may be people that you get information from within your organization, internally, that you just want to keep their contact information in the tool. So if you fill this out next year, you can open up your last year's tool and review that information.

Downloading the Latest SmartWay Carrier Data File

<on screen Matt navigates back to the Shipper Tool home by selecting the "Home" button at the bottom of the page>

Navigate back to home and go to the home page. Step four is to download the latest carrier data file. That was the example I showed you before, that had all the information about our carriers and their identification information, as well as those six public emission factors. So just click that; it downloads.

<on screen Matt clicks the "Download Latest SmartWay Carrier Data" button. The Shipper Tool initiates an automatic download of the data and displays a dialogue box with the download progress>

You will see that it will download the current carrier data file, and that will populate the tool.

<Shipper Tool screen flashes and displays a dialogue box indicating the download has been completed. Matt clicks "OK" to return to Shipper Tool home>

You just saw it flash. You'll get a message that says the latest carrier data has been downloaded.

Data Entry

Getting into the meat of the tool-- that's the data entry. I'm going to click on this particular description; you can also do your company description.

<on screen Matt clicks on the "SmartWay Company Description" button>

This example has two components of the company: a retail versus wholesale. Most shippers will just simply have one component. However, if you are a conglomerate and you want to do separate tools or data entry for your different company components, you can do that as well. I'll go back to home.

<on screen Matt navigates back to the Shipper Tool home, by clicking on the "Home" button> We'll open the form for data entry.

<on screen Matt clicks on "ABC Shipping, Inc.: ABC Shipping – Retail Complete" in the text box for data entry. The Shipper Tool opens to the "Awards/Data Entry Selection">
First, there is a bit of a choice which is labeled: are you interested in the SmartWay Award and do you want to do a basic or comprehensive version of the tool? To be eligible for the SmartWay Award you do need to do the comprehensive version, which involves inputting things like your miles and ton-miles with particular carriers.

<on screen Matt clicks on the "Basic or Comprehensive" subtab >

If you look at basic or comprehensive, you have the choice currently of doing an "emissions footprint and percent SmartWay" or "percent SmartWay only". The "percent SmartWay only" means you don't have to have information on how many miles or ton-miles you ship with a particular carrier. You can input something like a percent spend metric or number of shipments, etc. That will give you an estimate of how many of your carriers are SmartWay versus not. But it really doesn't give you a carbon footprint. It doesn't give metrics on efficiency or a whole host of other very important information that is good to have as a company. The percent SmartWay is available for those companies who just simply don't have that data and want to start looking at their carrier base and hopefully move into collecting that emissions information in the future. So we definitely recommend to do the emissions footprint and percent SmartWay, and of course that is necessary to even begin to qualify for the SmartWay Awards. The next step is to input your carriers.

<on screen Matt clicks on the "Input Carriers" tab>

The screen looks a bit complicated, but it's made for ease of data entry. We have allowed a number of different ways of adding or getting your data into the Shipper Tool. If you look on this page *<on screen Matt clicks on the "Instructions" subtab>* we do have some instructions. You will have to click that and say you've understood those instructions, *<on screen Matt clicks on the box to mark understanding of the instructions and then selects the "Manual Input SmartWay Carriers" subtab>* and then you'll be able to proceed to input your carriers.

Now, for the vast, vast majority of shippers, a manual input of your SmartWay Carriers is going to be the simplest way to go forward. I will talk in a bit about some other options which involve importing data, but it only really makes sense to go to the trouble of doing the data input if you have a huge number, like 400 or 500 carriers. Frankly, most shippers do not have that many carriers. So to do the manual input—which we are recommending for our shippers, unless you are a pro at data import—we have a number of filters up here to find carriers. Now there is no filter at present, so if you look at the available SmartWay Carriers, there are 3,472 that you have to choose from. You can scroll through this *on screen Matt scrolls through the "Available SmartWay Carriers" list>* and see every carrier in the program that has submitted data listed

here. You could sort through it in various ways. You can start typing in a carrier name like "A" and hit apply filter; that's going to show you the ones that start with "A." Or you could actually type in three or four letters and it's going to find carriers that start with those three or four letters. You can also look by carrier mode; you could look at say only truck companies. *<on screen Matt opens the dropdown menu for "Carrier Mode">* Or you could look at a SmartWay category for trucks. *<on screen Matt opens the dropdown menu for "SmartWay Category">* Maybe you do predominantly flatbed hauling, then you could essentially click "flatbed," apply the filter, and that would mean that only flatbed companies would be shown. You can also search by SCAC code, MCN, DOT number, or—if you are in Canada—by the NSC code.

If you are asking what are these particular codes, as a help function we have little gray boxes with question marks. *<on screen Matt clicks on the gray question mark next to "SCAC," then dismisses the help box>* You can click on that and it will give you additional information about any specific data element that appears next to that little gray question mark box. *<on screen Matt clicks on the gray question mark next to "MCN," then dismisses the help box>* For help to fill out the page in general, we have a help button down here; you can click that and you'll get some more information. Then the little thing down in the right-hand corner labeled "Screen Demo" that looks like a film strip, it's actually a video that if you click that it will show you a video that will play from our website. It will open up a browser window and will play a little video that will take you in screenshots step by step through how to fill out this tool. So if it's your first time filling out this tool, there is lots of help available to you. And of course, we have actual live professionals who you can call and get additional help from. You will be assigned, if you go through our new joining process from our website, someone who will help walk you through all these steps. So not to fear; just get started and we will help you through this.

So going through all these different filters, including address, you would click a carrier and then you would simply add or click the button, "Add selected carrier to list below," and then it will show up. For the example tool, I have already populated this with a number of carriers that you see here. *<on screen Matt scrolls through the "Selected SmartWay Carriers" list>* What it does is it pulls all their information and puts it into this screen. You do that for however many carriers that you have. It's literally find the carrier, click it, and boom it will show up. It shouldn't be that hard. The other thing that you are going to have to do is, you may not have all SmartWay Carriers, especially if you are starting out. Now a lot of our existing partners have moved to use only SmartWay Carriers, because they know that they are benchmarking their performance and they can see how they are doing, and their very participation means that they are working with our people to improve their fuel economy and enhance their overall efficiency.

<on screen Matt clicks "Manual Input Non-SmartWay Carriers" subtab>
But there are some carriers that are not SmartWay, so you will need to add this in. We are going to ask for the number of non-SmartWay carriers that you have. If you have 10 SmartWay, 10 non-SmartWay—it all depends, but you put the number in here and then you type in the available non-SmartWay carrier type. Now if you know specifically the type of truck that you want to input, you can do that or you can put the generic truck.

<on screen Matt scrolls through "Carrier Type" list>

For existing partners, this is new. Before, we just had a general truck number, right here. However, to improve the accuracy of the reporting, obviously different truck categories or truck types have different default emission factors if you look at their overall performance. So if you know that you are dealing with a refrigerated truck or you know you are dealing with a truckload/dryvan, you can actually use a specific default emission factor for those non-SmartWay carriers. This will help tighten up the accuracy of your carbon accounting in your Shipper Tool. Of course the best way is to use the SmartWay Partners, because they have submitted their actual data to us, but this step allows us to get a little bit closer in terms of the non-SmartWay carriers emission factors. This was done as a means of helping shippers get to that more accurate carbon footprint. So again, you'll add them just like you did with the manual input of SmartWay Carriers. You'll click on one, and then just "Add selected carrier type to list below." What you'll see is when we get to the activity data, all of these things that you've essentially clicked on and added will show up for you to input your operations data into the activity data.

<on screen Matt clicks "Other Input Options" subtab>

Briefly, I will talk about some other input options. And it's tough to go through this in an hourlong webinar, but we have the opportunity for people to do outside data import of carriers, so you don't have to manually add it. You can upload a data file. If you are not familiar with working with data files, the manual input might be a little bit quicker for you. You can also export carrier list, and we have ways of matching carriers, if you have a huge number of carriers. This function was essentially designed for our logistics companies, so it's unlikely you as a shipper will need to do a carrier match function. The next box, however, is called "Optional Carrier Differentiation." We have provided this for those who want to go beyond a basic carbon footprint; I will click on this and just talk about it briefly.

<on screen Matt clicks on "Optional Carrier Differentiation" sub-subtab>
It will show in this top area, the selected carriers. These are the ones that you've already input.
You will then be able to add additional differentiation for those carriers. So if I want to add, for example, A&R Global Logistics, I can highlight it, add the row for the selected carrier, and you'll see that it now shows up in two, an additional row, so you can split its activity amongst different business units. <on screen Matt highlights A&R Global Logistics in "All Selected Carriers" list and then clicks "Add Row for Selected Carrier" box> You can even split it between product lines. You can look at splitting it between inbound, outbound, or internal freight. <on screen Matt displays the dropdown menu for "Inbound/Outbound"> You can look at splitting it between domestic or international, and you can create your own custom internal customer differentiators that you can come up with. <on screen Matt clicks on the "Apply Descriptive Data to Selected Carrier" box and then clicks "Delete the Selected Carrier Row" box> We've programmed a lot of flexibility to do additional work. I'm going to actually just take this out and move to activity data.

<on screen Matt navigates to "Activity Data" by clicking the "Activity Data" tab>
This is the example tool; it has been filled out. And by the way, this is available on our website, so if you want to look at an example tool while you're filling out your actual tool, that is perfectly fine. Do not, however, take an example tool and overwrite it, because that will not, that will just simply not work. There are some safeguards that prevent people from just updating the

example tool. We actually, sadly to say, had some folks who just changed some names in the example tool and tried to submit that, and of course our data QA/QC folks caught that and rejected that tool. That wasn't a shipper; it was a carrier that had tried that.

Getting into the activity data, you really have four choices in terms of deciding what type of data you are going to input and focus around. You have data on total miles or ton-miles with your carrier. If you look at line one, you see A&R Global Logistics, and you can choose the data availability that you have. In this case, the example, I know both my ton-miles and total miles I've shipped with this carrier, so I have a total number of miles and I have the total ton-miles in my data system. It may be in a financial data system, it could be in your data shipping system, but a lot of companies have this. If you don't, there are some other options that you can choose. But if you choose A, that you do both, the two spaces next to it are going to go white, and the white cells mean that you can do a data input. You'll just input your data information there for that particular carrier, and you are done with inputting the information for that carrier. It's as simple as that: two data points.

Then you are going to do that for each of your different carriers, and sometimes, you might not know both pieces of information. So in the second example, you have information on ton-miles; you don't have information on miles, but you do know your average payload. So it shows ton-miles as an entry, and then it allows you to input your average payload. Based on that information, it will go and back-calculate your total miles.

Since there are different permutations of data entry, we have the ability to choose based on your level of information. Option C, you may know only your total miles and average payload, and not know your ton-miles. Option C, you can see ton-miles is blued out, and you've got the ability to input your information for total miles and your average payload. Some shippers may, depending on who's assigned to it, may need to ask some other people in your organization to get this information. But this is the type of information that a shipper should have, if they are keeping a close eye on their freight, their freight bill, and really optimizing their supply chain.

If you don't have this information right now, you probably should as a shipper. It really goes to your bottom line. And again if you don't have that information, you can join, you can still join the program with the percent only option, and then we will help you become more familiar with how to get this information out of your organization. We have case studies, we have a lot of help that we can give you so that you can start regularly collecting that type of information, because it really does get at how much business you are doing with each particular carrier. How efficient is that carrier; what's your payload, your average payload; are you overloading; are you under loading some trucks; etc.? Good information to have. If you don't have it, we will help you. What this does is, I'll just scroll down here to the bottom. <on screen Matt scrolls through the list of "Selected Carriers"> I've input this information for all of the different carriers that I have, and you get a total number of ton-miles, total miles, and a mileage weighted average payload as well.

Now, as you are going through the tool, you may notice that these buttons down here, back in the course navigation I talked about the screen demo. You can save your information any time; we actually recommend that you save occasionally so you don't lose your work. If you have vision issues, you can zoom in and see things in a bit larger font. You can actually click the print screen

and it's going to print what you have on the screen. And then there is a validate screen, which if you do this on every screen you input data on, what it's going to do is to tell you if you have any errors. *<on screen Matt clicks the "Validate Screen" button located at the bottom of the screen>* If I were to make an error, it would be displayed. You would see it. There are currently warnings for this form. *<on screen Matt clicks "Yes" on the "Warning" box, which opens the "SmartWay Validation" dialogue box>* You can click "Yes," and it will tell you exactly where the trouble spot is and what you need to do about this. You can see these in a spreadsheet, etc. So I'll just click "Close."

You'll note that if you have some of those warnings, that some of your information may show up in a yellow background or a red background. Those are just alerts that let you know that the data that you've input you may have made a typo or the data is a bit unusual. We've essentially looked at distribution curves of what folks have sent in, and we developed a yellow alert if it is outside a certain standard deviation from the norm, or a red alert if it is really outside, you know, way out on the tails of the distribution. If it is red, you'll just, you would need to basically say why that is and it could be that you have unusual payload. Maybe you have some carrier that ships packing peanuts, or something for some reason. Don't know if that's the best practice, but you may have some odd data that will show up. It's okay; the yellow and red doesn't necessarily mean it's wrong, it just means that you need to check out those particular cells. So, you know, looks like there is a lot to the tool, but you are really inputting total miles, ton-miles, or average payload for each carrier, and it could be as simple as that. Then, once you are done filing out this, you'll also need to click "Describe Data Sources" and say where your data is coming from so we can get a sense of that.

<on screen Matt clicks on "Describe Data Sources" button and opens the "SmartWay Activity Data Source" text box and then closes it>

% SmartWay

<on screen Matt clicks "% SmartWay" tab and then clicks "No" on the warning dialogue>
And potentially help improve that. When you are done you can click "% SmartWay," and it will show you a split out of operations based on either ton-miles or total miles, or you could pick a custom metric to see how much of your freight is being moved by SmartWay Carriers versus non-SmartWay carriers. This is something that we look at in terms of the SmartWay Awards and many of our award winners are literally at 100-percent SmartWay. They have made that commitment to ship their freight only with SmartWay Carriers, because they know that those carriers are solid carriers who are working to improve their environmental footprint. And you can get a breakout by the carrier mode: truck, rail, multimodal, logistics, barge, or air. And then get an overall percent.

Data Display

<on screen Matt clicks "Data Display" tab and opens to the "Emissions Summary" subtab>
You've input those essentially three pieces of data for all of your carriers, the question is what to do with it. Well, in the tool itself we have a number of ways of actually displaying this data. We have an emissions summary, where you can look at—depending on what pollutant you want to look at: CO₂, NO_x, PM₁₀, PM_{2.5}—display short tons or metric tons. <on screen Matt selects</p>

"short tons" from the dropdown menu> You can look at the selected carriers and then get not only their relative ranking, but their gram per mile for miles and ton-miles, and then their mass emissions of CO₂ per year. This is done for all of those carriers, so if you want to look at NO_x, you just click on NO_x or PM, etc. If you want to look specifically at carrier performance...

<on screen Matt selects the "Carrier Performance" subtab>

...this is a great tool to look at the relative performance of different modes that you've used. You can look at logistics versus rail versus barge or truck. You can see a composite waited average, and if you click the button next to the mode, *<on screen Matt clicks on the gray plus button located next to the specific mode of carrier, then scrolls through the listed carriers>* you will actually see that all of your carriers will then be listed.

You can compare all of your truck carriers, one truck carrier against all of your other truck carriers. If you look at that performance, you may see that for one reason or another, one particular carrier seems to be doing much better. That may be an indication that it's a better run company, maybe more solid, and you want to potentially ship some freight to that particular company. You'll note that the emission number for CO₂ gram per mile, if you note the SmartWay Carriers, are listed below. The non-SmartWay truck carrier numbers are going to be worse than any of the SmartWay Carrier numbers. We don't know what their information is, because they haven't submitted data, so we have to assume a lower baseline, or lower performing baseline, for the non-SmartWay truck numbers. The more SmartWay Carriers you have, the better your emission factors are actually going to look from a numerical basis and also from a confidence in the data basis. Like I mentioned, we do QA/QC data very thoroughly, so you can trust the SmartWay data. If you've done that internal carrier differentiation, you can also look at. <on screen Matt selects the "Mass Emissions" and then "Category Rankings" from the "Display Type" dropdown menu> Well, let me just say that before that, you can look at your emission factors or mass emissions, or you can look at category rankings for the different SmartWay Partners, so we give you a lot of different ways of slicing and dicing your carrier base. If you differentiated between inbound and outbound, you can actually say, "I only want to look at my inbound on this particular display or my outbound." Or you could say, "I only want to look at domestic versus international." It may make sense to have that differentiation so that you can do some relative comparisons to see if maybe one part of your supply chain is dirtier than another or potentially less efficient than another.

<on screen Matt clicks on the "Truck Carrier Performance (SmartWay Category Detail)"
subtab>

Next, is the truck carrier performance, and this is a category detail. I can see that we are looking at emission factors and we are looking at "Auto Carriers" only. *<on screen Matt selects* "*Emissions Factors*" from the "Display Type" dropdown menu> So you see "Wheeler Trucking" show up. If we go and maybe click "Truckload/Dryvan" ...

<on screen Matt selects "TL/DryVan" from "SmartWay Category" dropdown menu>
...then you'll be able to see all of your truckload dryvan information showing up. This one has been differentiated. So there is a couple, it shows up as, that's why it shows up as the two lines.

<on screen Matt selects "Specialized" from "SmartWay Category" dropdown menu>

Or specialized. So again it's just based on those three pieces of data that you have to input. And it's as simple as that for the Shipper Tool. For shippers, you get a lot of different ways of analyzing and comparing your carrier base.

Shipper Strategies

<on screen Matt clicks on the "Shipper Strategies" tab and opens to the "System Activity" subtab>

The last tab is called shipper strategies, up here at the top. And this is actually an optional thing for you to do. You don't need to do this to be a partner or to submit your tool. We do give points in the SmartWay Award system if you do these things. So if you are interested in getting a SmartWay Award, you probably want to look into this tab. And really what we do is we give you the opportunity to do kind of "what if" scenarios or to account for emissions that you took, things that you took out of your system. Maybe you changed a distribution center location, and therefore you are not shipping your goods as many miles. And you may ask, "Well what, how many emissions did that save me?" This particular page is designed to do exactly that. You can click a category as shown here: "Miles removed from system."

<on screen Matt selects "Miles removed from system" in the dropdown menu of the "Select a category" under "Add Activity">

It could be from a distribution center location, routing optimization, cube optimization, or others. You add that activity; you can name it. This example is you've implemented a policy to your trucks to do right turns only. This is more for a carrier, but you may have something more appropriate, like a container redesign or you maybe would say you did a routing change. *<on screen Matt highlights "right turns only" and replaces the text with "routing">* And you're going to be able to look at the category and that before and after scenario, to look at what happens. So what was the percent improvement, and what does that mean for you in terms of CO₂, NO_x, and PM results in terms of tons per year. It's really looking at what would my emissions have been had I not done that particular strategy. This is useful if you need to do corporate social responsibility reporting or even if you want to brag about it as results to upper management, or to really show, you know, the benefits that your company is giving to the environment. The other item that you can do is you can look at some "what ifs" for modal shift.

<on screen Matt selects the "Modal Shift" subtab>

In this case, you may move from say, for example, rail to truck or truck to rail. You may move from having a logistics to a dedicated route. Let's just say we are going from truck to say, we will put in rail.

<on screen Matt selects "Truck" in the "From" dropdown menu and "Rail" in the "To" dropdown menu on the first "Modal Shift" input location, while dismissing the SmartWay "Help" dialogue box>

And you can pick your emissions source. It could be your particular average. You'll see here shipper carrier average. Essentially what that does is it goes back to what you filled out earlier in the tool and it picks out your actual emission factors weighted based on the carriers you are using and uses that number. Or you could have a specific user input or you could use a modal average in terms of comparison. Then that will tell you your emissions benefits; you see a before and after. You can see the CO₂ has gone down based on your data input here, and you will see the

reduction. So if you are looking at changing modal shifts, something you have done in the past, or it could be something that you are thinking of doing in the future, this particular page of the tool will help you do that. If you have questions, as I mentioned before, each shipper who joins as a partner is assigned a partner account manager. This is someone, people who have been doing this for many years, and they can assist you and help walk you step by step through the tool.

<on screen Matt clicks on the "Home" button>

It looks like there is a lot to the tool, because we have made a lot of things available in terms of slicing and dicing and displaying the data, but to get back to the core, you are going to need two or three data inputs for each shipper. The contact information, that sort of thing, that's pretty basic. Really the data entry is, in terms of what you need to collect, is fairly minimal, and the main thing may be just finding where that is in your organization. That's something good to know anyway. Hopefully, I've showed a general overview of the Shipper Tool and it makes sense and folks don't think it is overly hard. There's a lot of programming that goes into behind the scenes on this, but again for the shippers it's two or three data points per carrier. I personally feel you get a lot of information out of it for the effort that you put into it. If you've been enjoying the program, I really hope you do. I will now move to questions and turn it over to Mary to moderate. Thank you.

Question and Answer and Matthew Payne

<the Shipper Tool home remains on screen and Mary Walsh begins the question and answer session>

Mary Walsh, EPA: Okay, turned my mic back on. Can you hear me?

Matthew Payne, EPA: We can hear you.

Mary Walsh, EPA: Great. Well thanks, Matt, we have a little time to address some questions. We received some really good questions. I am going to ask you if it would be possible, until you have to go back to the tool and show people things, to go back to the contact information screen.

<on screen Matt clicks on the "Contact Information" box>

Mary Walsh, EPA: Someone just asked me about contact information for the program. So we'll put that up again. And then I'll move to some questions, and I know you'll probably want to go back to the tool for a little show and tell. One person was asking about what happens when you select "Download latest SmartWay Carrier data." And they wanted to know, where does that file come from? And how current is that? I answered that, but I think that is a question that other people would like to hear.

<on screen Matt clicks on "Home" button>

Matthew Payne, EPA: The carrier data file, again is essentially that information that is publicly available on all of our carriers. That is uploaded to a website. When you click that, what the tool does is it reaches out to that website and essentially pulls that data into the tool. We update this, on a regular basis, once a week, so if a carrier has joined within the past week, they will be up

and current in terms of their data. The reason why you have to download the data, is to make sure you have the very latest carrier file, because we have partners joining at all times, and one day we may have 3,400 carriers, the next day we may have 3,410 carriers. It's just to get the latest and greatest data that we have in the program.

Mary Walsh, EPA: Thanks, Matt. Someone sent me a question that began when they were looking at the screen where you are showing various ways to upload carrier data. First the person asked, "What's the best way to not have to upload manually?" The person asking had 75 plus carriers and choosing manually, she says, would not be the most effective way on their end. She followed up with, "Is there a way to export an Excel file with carrier data, ton-miles, total miles, and have it all populate the tool?"

<on screen Matt clicks on the first ABC Shipping profile listed under "Data Entry" then selects "Input Carriers" tab>

Matthew Payne, EPA: Yes, yes, yes there is. I would say generally going through and making sure data files are in the correct form and having all that. It may take longer to do that for some people, then just putting in 75 lines of data. But if this particular person has an IT department, or they are very good at using those data files. *<on Screen Matt navigates to "Other Input Options" subtab and then to "Outside Data Import" sub-subtab>* We do have a way to, if you look here at "Outside Data Import," you can create a csv file, a comma separated value file, and we have detailed instructions in the tools and user guides, which are all online, that tell how to do that. You would be able to essentially populate, not only your carrier name, but also your miles, ton-miles, or average payload, if you needed to. If you're good with uploading data files, that's exactly what we designed the tool to do. We just found that for many people who are filling out the tool, they are maybe corporate social responsibility people or some other folks who are not overly comfortable with working with data files. It often takes inexperienced people longer to do it for upload versus just the straightforward manual entry, but whichever works best for you, we have ways to support that in the tool.

Mary Walsh, EPA: I have a question that seems to sort of follow on there, and scroll back to it. Nope, got to find it, sorry for the delay.

<on screen Matt navigates back to the Shipper Tool home by clicking "Home">

Have you seen any shipper simply export data from a TMS platform that integrates directly into the Shipper Tool?

Matthew Payne, EPA: Not exactly. I'm not saying that couldn't be done, but generally that there is that intermediary step. Now, we have seen where you essentially take it from your TMS system, and a number of companies have actually programmed their TMS systems to create essentially SmartWay reports, or SmartWay data upload files. You could program your system to essentially, you know, match the format that we specify for uploading to the tool and then it's, you do that export through your TMS, you get the file, and then you upload it in that, in essentially a very quick way, directly into our Shipper Tool. I'd be very interested in working with someone who would like to investigate how to get that directly into a tool, but it does have

to link to our current carrier data file. So, it is a little bit three-way communication involved. But yes, that would be slightly more efficient once it was programmed than that two-step method that I mentioned before. Doing the upload, if you know how to upload a carrier data file and you have it in the format that is specified for the tool, it's a matter of minutes. Then you go back and just check your data to make sure that it's all right. But again this is for people who know how to work with data systems.

Mary Walsh, EPA: We sort of have an additional follow up to that: "Do the instructions have the exact headers that are needed for the file upload without any errors?"

Matthew Payne, EPA: Yes. Yes, it's specified. As long as people can follow the instructions, then it should not be a problem. But I know a lot of us, who maybe you know, you get that new furniture from IKEA and the first thing you do is throw the instructions to the other end of the room and just start putting things together. The instructions are there; we have a link to user guide support, we have a shorter user guide, there is all the help within the tool, and there are some additional things for helping you do the working with data files. Those resources are available.

Mary Walsh, EPA: Okay, thank you. I have a question: "If you have entered emissions data in the past, but have not collected the data for 2015, are we still able to complete the tool as percent SmartWay only?"

Matthew Payne, EPA: Go through that one more time Mary.

<on screen Matt clicks on the first ABC Shipping profile listed under "Data Entry" then selects
"Activity Data" tab>

Mary Walsh, EPA: The question is, "If you have entered emissions data, but have not collected the data for 2015, are we still able to complete the tool as a percent SmartWay only?"

Matthew Payne, EPA: Yes, you are still able. It's kind of going back a grade instead of going forward a grade, but that is allowed. You can still remain in the program as a partner if you have to, if you absolutely have to do that. Of course, we are looking for companies to progress to having that data available and then to move to be able to differentiate that data. Maybe between inbound and outbound, and then to also progress and being able to fill out those shipper strategies where you can do those "what if" scenarios and really unlock the full power of our Shipper Tool. We'll be sad, but it's okay.

Mary Walsh, EPA: Okay, it is now 3:00. And we do have a few more questions. We want to respect the folks who need to move on at this time. But for those who have the time and are interested in continuing, we'll invite you to stay on the line for a few more minutes while we try to address the questions that have continued to come in. So to those who are leaving now, thank you for your attendance. We hope that you'll fill out the survey to give us your feedback on the webinar. And we hope that you'll find that this is valuable to you. Alright, for those who can stay, we will move on through some of the other questions we have received. Here is one: "Are

there types of carriers that you can't only use item D, total miles for? Last year that choice was grayed out for several carriers. What's the criteria for having to have both miles and weight?"

Matthew Payne, EPA: Yes, so the reason why we essentially restricted the use of data availability option D for total miles was, when you are dealing with carrier types of less than truck load or package delivery, a lot of shippers would essentially put the total miles that they were doing with LTL and it really didn't take into account that all the loads were on that truck. Or they would put in all the miles that they had done with say, for example, UPS or FedEx, and essentially if you do it that way it ascribes all of, for example, you have a package delivery truck that has a hundred packages on it. You ship a package with them—maybe you have one package that is on that truck. Just assume for sake of conversation those packages are the same dimension and same weight, you would be responsible for one-one hundredth of the carbon emissions from that truck. But if you put in the mileage, then essentially you would be assigned the mileage for moving all 100 of those packages. And we had ways of dealing with that in our instructions for the tool, but we found enough people had issues with that, that it really just made better sense to restrict it to a ton-miles and average payload, because that way with ton-miles, it takes out the impact of only being a partial load. That's why we implemented that in the previous year, and that is carried over to this current year as well.

Mary Walsh, EPA: Thank you, Matt. Here is a little different flavor of question: "Steamship line data, how do you calculate miles?"

Matthew Payne, EPA: We are actually working with Business for Social Responsibility and Cargo Working Group to incorporate their emission factors into SmartWay. *<on screen Matt clicks on the "Shipper Strategies" tab and dismisses the warning dialogue box>* The metrics of their using are a gram per PEU kilometer. And there are various ways that they report that, but in SmartWay we currently have a gram per mile and a gram per ton-mile. We will be adding a form of a gram per volume-mile, because that is much more appropriate for something like container shipping or even railroad or bulk shipping, because in a sense, mileage is really not a good way of characterizing ocean freight. Even ton-mile has got some issues with it, because if you have a vessel, there are things like ballast water and various other things that negate the ton-mile efficiency. The preferred metric, I believe for ocean-going vessels, will be a gram per volume-mile or gram per volume-kilometer sort of a metric. We will be incorporating that here shortly, to achieve that vision of having that one-world global freight carbon accounting system.

Mary Walsh, EPA: Thanks, Matt. I've got a quick and easy one: "If we have carrier SCACs or MCN, are DOT numbers still required for non-SmartWay carriers?"

Matthew Payne, EPA: No, so for non-SmartWay you are not going to input those individually. As I go up to input carriers here, shortly, *<on screen matt clicks on the "Input Carriers" tab and dismisses the dialogue box>* I'll give you an example of that. You will indicate the number of non-SmartWay carriers that you have. But if you have, if you are only using say, for example, truckload/dry van, then you will input truckload/dry van. Then you will put all of your miles from your non-SmartWay into that one data line. If you are using 20 SmartWay and 20 non-SmartWay, you'll have the 20 SmartWay entries, and the one for non-SmartWay truck. If you just want to use a general truck number, but you don't need MCN stacks or anything for the non-

SmartWay, you just need to specify the non-SmartWay, and then offline just to calculate your miles or ton-miles for those particular carriers.

Mary Walsh, EPA: Thanks. I have a question about "What is a ton-mile? How is it defined?"

Matthew Payne, EPA: So it is literally moving 1 ton, 1 mile.

Mary Walsh, EPA: Alright, define multimodal and logistics companies, please.

Matthew Payne, EPA: So, logistics companies are generally what are referred to in the industry as 3PLs or third-party logistics. It also includes if you are a 4PL or any variant. These are types of companies that essentially act as intermediaries. They may hire thousands of carriers, but a shipper may only deal with one logistics company. They may hire a 3PL to move all of their freight in various things; they may deal with their scheduling or not, or routing. There is a lot of different variation. Essentially, for logistics, it is hiring other carriers to move the freight. And that ranges from huge companies like Ryder and CH Robinson down to smaller local logistics companies. Multimodal are companies that ship a significant amount of freight through more than one mode. It could be, for example, JB Hunt, who has a multimodal fleet that splits between rail freight and then their own trucking fleet. So multimodal could be any combination of air, barge, truck, rail, etc. But we do have a certain threshold to be classified as multimodal. I believe I recall correctly, that that's got to be at least 10 percent of your freight to be a different mode to get you into a multimodal category.

Mary Walsh, EPA: Looks like a follow-on here: "If a shipper utilizes 3PL warehouse organizations that also route their products on their behalf, does that data also have to be included while submitting the annual data? Or do we input that simply as if that 3PL warehouse was a carrier?"

Matthew Payne, EPA: Essentially, if they have control over moving your freight and they are a SmartWay Partner, you can input them and they are in our partner list, you can input them directly. If they are a non-SmartWay partner entity, you can either put them in as non-SmartWay or if they have a list of the carriers they are utilizing, they could provide that to you, and you could differentiate between SmartWay and non-SmartWay as well. There's a lot of different permutations that can occur, so if you do have a question about how to do that, your partner account manager would definitely be able to find some resources to help you with that type of question.

Mary Walsh, EPA: Great, thank you. I'm just scanning down to see whether we have received any additional questions that I have somehow missed. "Are we able to work on completing the SmartWay tool over several days? Can the data be saved? Does it all have to be done at once?"

Matthew Payne, EPA: No it does not; it does not have to be done at once. All the work in the SmartWay tool is an Excel file. You can go up to file, save, save as, save it, and then come back the next day, open it, and then just start working again. There is no need to get it all done at once.

Mary Walsh, EPA: You should save the tool to a file where you know you can find it again, whenever you need to use it or to consult with other people. It is a good thing for other people who might be taking over from you or helping you out with it. It is a good thing to have that file saved to a location that you and others can find. I'm going to ask Amanda now if she noticed any questions that came in that we have not yet addressed. We will be reviewing the entire list of questions received today and if we see that there are any areas where may have missed something, we can follow up with you offline.

<on screen Matt selects "Home" button>

Amanda Peters, ERG: Thank you, Mary. I didn't notice anything that you missed that we would need to address right now.

<Shipper Tool is closed out of and the webinar PowerPoint is reset to the opening welcome slide>

Mary Walsh, EPA: Thank you again for those who did stay on. Really appreciate your interest in staying on the line. I hope you found it to be worth your time. The attending of this webinar will be valuable for you. Just want to draw your attention to the SmartWay website where it lists upcoming SmartWay webinars and events. *<slideshow is advanced to SmartWay home page slide>* It's a busy time for us with the Shipper Tool having come out. Next week on Tuesday there is a webinar, that is kind of like a SmartWay advanced webinar for getting the most out of your tool, and the theme of this one is "Showcasing Your Pollution Reductions by Using the Shippers Strategies Tab in the Shipper Tool," so that one is coming up. Tomorrow there is a SmartWay—thank you, Matt, for putting that up there—educational webinar, "Shippers: There's a SmartWay for You." Various ways you can participate as a shipper in the SmartWay program, depending on the kind of data you have at your disposal and at what level you want to participate. Check it out. Our webinars are usually at 2:00 eastern time.

In November, we have a series of webinars called "Freight Matters," and we have an upcoming webinar on November the 16th; watch for it. *<slideshow is advanced to "SmartWay Webinars & Events" slide>* It's about working with other members of your supply chain. If you are a shipper, your logistics companies, your carriers share information and find ways to improve your efficiency by working together. So just wanted to highlight those for you. Again, thanks for joining us today, you know how to contact us if you have any questions. The SmartWay website also provides contact information if you forget the information we showed on our last slide that Matt is bringing up. *<on screen Matt displays contact information slide for SmartWay>*

Thanks again and have a great afternoon.