

Operator: Ladies and gentleman, thank you for standing by and welcome to the FHWA's new Roadway Safety Data and Analysis toolbox conference call. At this time, all participants are in a listen-only mode and later we will conduct a question-and-answer session. Should you require assistance on today's call, please press star then zero. I would now like to turn the conference over to our host Ms. Heather Richardson, please go ahead.

Heather Richardson: Hello, everyone. Thank you for joining us today. I'd like to ask you to please take a moment to fill out the poll questions that are on your screen if you haven't already done so. If you would like to provide some feedback on those who answered "other" for how did you hear about today's webinar, please feel free to enter that in the chat pod. It just helps us understand the best way of reaching out to all of you. On behalf of the Federal Highway Administration Office of Safety I want to welcome you to the third Data and Analysis Technical Assistance Program quarterly webinar. As mentioned, my name is Heather Richardson and I'm with the U.S. DOT Volpe Center in Cambridge, Massachusetts. Joining us today as presenters are Bob Pollack from Federal Highway Administration Office of Safety, Frank Gross from VHB and Geni Bahar from Navigats.

Before we begin, I just want to point out a couple of key features of our Web room. On the top left side of your screen you'll find the call-in information and also the file share information where you can download some information on the Data and Analysis Technical Assistance application. If you are having any technical difficulties with the webinar, Web room or with the phone line, please feel free to put a message in the chat pod for me. We're also going to use the chat pod to submit questions to the presenters throughout the webinar and then we'll queue up all of the questions to answer at the end. At the end of the webinar we also have a poll question to suggest future webinar topics for this series. If you have any topics that you are interested in learning more about that we can cover we're happy to hear them so that we can be serving you and your needs as best we can. Today's webinar will run until three thirty and we are recording the session so that it's going to be available for those who could not join us today or for your future reference. That will be available on the RSDP website in about a week or so. If you haven't already done so, take a moment to answer the poll questions you see. The first is how many people are participating along with you today? What part of your organization do you work in? How did you hear about today's webinar? And, again, if it's "other," feel free to post that in the chat pod. And also, what type of agency do you work for? And with that I'd like to turn the webinar over to Bob Pollack who will introduce us to the data and analysis technical assistance program and today's presenters. Bob Pollack is a transportation specialist with the FHWA Office of Safety. He's a member of the data and analysis team and currently the program manager for the Roadway Data Improvement

Program, the Model Inventory Roadway Element Assessment, as well as the Data and Analysis Technical Assistance Program. Bob.

Bob Pollack: Thank you very much, Heather. Welcome everybody to this afternoon's webinar on the Roadway Safety Data and Analysis toolbox. This is the third in our series of webinars through the data and analysis technical assistance program and we're happy to have everybody participating with us here this afternoon. Before I introduce this afternoon's program I would like to take just a moment to run through a little bit of information about our Roadway Safety Data Program and a little more specific information about the Data and Analysis Technical Assistance Program here in just a moment. But to begin with, the Roadway Safety Data Program has been established really to help state and local agencies develop and use as advanced a capability in data analysis as can be achieved by them given the resources available. And to that end, the RSDP really is kind of an umbrella that covers the development of program guidance, training, research and technical assistance. RSDP really is kind of an umbrella for us within the Office of Safety to assist state and local agencies with any type of data collection, data analysis, data integration, data management type issue that may be challenging a particular agency at this particular time.

Now, regarding the Data and Analysis Technical Assistance Program this program is set up really to support any state or local agency to really address any type of issue that they find currently confronting them. As part of the RSDP we have established the roadway data improvement program, which is kind of an overall program to come in and look at a state's total processing or practices in the collection analysis management of roadway data. But if that program which is pretty far reaching would be perhaps too large for what particular need is, we invite any state or local agency to submit a request to us for any type of specific technical assistance they may need. And through that, we would try and find or identify an individual or group of individuals that could best address that particular issue and try and meet that state's needs. At the end of this, I'll give you a Web link to our website so that you can learn more about this technical assistance request program and to show you how to apply.

Now, as part of the technical assistance program we also conduct these quarterly webinars. And today's webinar is going to be on the data and analysis toolbox which will be coming online to FHWA's RSDP website here in the very near future. But to introduce this topic the last two decades have brought about significant advancements in data driven decision making including the development and refinement of numerous safety data and analysis tools. While the new safety data and analysis tools support data driven decision making the identification and selection of an appropriate tool can be a challenging task and especially for those who are new to the quantitative safety analysis field. In response, FHWA has initiated a project to develop a roadside safety data and

analysis toolbox. The toolbox is intended to fulfill the needs for a centralized source of information about available safety data and analysis tools. The Web based user guided interface fulfills the need for a resource to help users of the toolbox identify an appropriate tool based on self-identified needs, capabilities, and resources. A primer was also developed as part of the analysis toolbox to serve as the support document for the users of the toolbox. The primer helps users understand the overall scope and functionality of the toolbox as well as the roles, responsibilities and tasks supported by the tools within the toolbox. The primer guides the novice user through a step wise process to identify an appropriate tool to support a given task based on the needs and capabilities. And that is what you will learn more about here with this afternoon's webinar.

Now, in front of you, you should be seeing the agenda which covers the program that will be presented here this afternoon. And I'm very happy to introduce our two presenters today who will guide us through this toolbox and the primer website. The first is Geni Bahar is the president of Navigats and has been practicing for more than thirty years. Geni has provided leadership as a principle investigator for several NCHRP projects, supported the development of strategic highway safety plans for several states, the development of SafetyAnalyst™ as well as the AASHTO Highway Safety Manual and supported its implementation through training and facilitation of peer exchange meetings, supporting guide development, among other things. Geni is an active member of several TRB committees, the ITE Transportation Safety Executive Council, TAC Road Safety Standing Committee, and serves in a number of NCHRP panels. Our second presenter will be Dr. Frank Gross. Frank is a senior program manager at VHB with over ten years of diverse highway safety engineering and research experience. As a safety researcher, he's involved in the development of national management tools such as the Highway Safety Manual and at the crash modification factor's clearing house. As a safety engineer, he implements and promotes the use of these national tools supporting state and local agencies with their highway safety improvement programs. Again, we very much are looking forward to learning more about this and with that, I will turn it over to Geni.

Geni Bahar: Thank you very much, Bob. Hello, everyone. I would very much like to as Bob just said to present to you the primer that supports the toolbox that was developed for the various tools. So as said it's important to find the centralized location for all of the tools that we have available but it's just as important to provide us with a way to find the tools that best serve the purpose and the needs we have as users. So the primer has an absolute objective which is to help us to go through the toolbox. The first part of my presentation will be through the slides and you will have an overview of the primer. And after that, I would like to page through the actual product, the actual document, so you will see what the primer looks like.

First of all, what is supposed to be the primer? As I mentioned it is a support document for all of the users of the toolbox. But, in particular, for those that are novice users of this toolbox as a centralized database or centralized source of information we want to know how best to navigate through that and for that we developed the user guided interface. This is just a shot of what the homepage will look like and Frank will actually bring us through the actual website in a few minutes, but here on the right side as you can see the primer is located on the toolbox for easy access and you will be able to use it as part of the approach to the toolbox. We would like to next know how is the primer organized? So the primer is organized in four clear sections which, in fact, are going to be also the step wise process that will be followed by those that will be working with the toolbox. So the first section talks about the roles and responsibilities of the users. The second is providing us with list of tasks that we'll be facing as part of our roles and responsibilities. And the tools that are actually found in this version of the toolbox that could be helpful to accomplish the tasks. And then is supported by a tutorial which we're going to be seeing a number of scenarios to exemplify the use of the toolbox. So let's take one section at a time. What do we mean by roles and responsibilities? As each one of us in our working environments have a particular job to accomplish, we will as part of the navigation of the toolbox have to identify what would be the particular-- just a minute, I'm trying to go through the next step of the presentation and I'm, for some reason, not getting the animation that I am supposed to get at this point I wonder if Heather can help me here with the animation that I need.

Frank Gross: Geni, this is Frank. I might be able to help you advance the slides if you'd like. Let me see if this works. Maybe not.

Geni Bahar: We can try because at this point I don't find that I can. Apologies for those that are-- something did happen here that I can't go through the animation built into this. Thank you. It looks like it's working. I wonder if it is myself or Frank.

Frank Gross: I can see it now Geni and that's all you.

Geni Bahar: Okay. Thank you. As I was saying, the roles and responsibilities that we each want fulfilled in our work environments, we organize them into four primary topic areas and they are manage and at most probably what we have mind are managers that are managing the agency safety programs. The information that they're normally looking for under this primary topic area is information about the data driven decision making and planning. They're interested to know about the cost and benefits of the state of the art analysis methods as well as the data management and governance structures that are required for alternative methods to be used. Another primary topic area is though there are actually fulfilling the analysis part of our safety programs and those are looking for

information in the area related to the youth, the strengths, the limitations and the data requirements of traditional but certainly as well of the state of the art methods. The third primary topic areas that we're looking at are the ones that are looking into the identification collection, management and integration of safety databases. And those are, of course, these databases of data sets are integral to developing a robust data program. And the information that will be found under this primary topic area relates to safety data to collect, to maintain the data and to ensure quality data as well as to integrate the safety data we need to assess the safety strategies and investments. The last portion of the fourth primary topic area we have is research. And as we all know the science of safety continues to evolve and we need the research programs to be up there. And this particular topic area will include information about data sets and state of the art analysis techniques that can help to facilitate the safety research and so on.

How did we prepare this? Well, if you can move to the next one, please. Okay. The managed area will have a number of roles and responsibilities identified for the user to say yes this is what I'm looking for. For example, if you are managing a safety program, and you're interested to better understand the safety management process and how it supports the project development process, that will be a role and responsibility that you identify for which you're looking for tools. So that's the first step for a user of the toolbox and the primer will provide information to go through the motions. So as you can see there is a number of roles and responsibilities that the user will be provided through the primer to decide what best fits what you're looking for. Let's say you are a manager and you're trying to understand the value of data, so that could be a role responsibility that you're looking to fulfill and this particular toolbox will then assist you to identify the tools available for that particular role and responsibility. If you now are looking for analysis and you are now as well faced with the number of potential responsibilities that you need to fulfill in your work environment, we have here a number of those for you to select the one that best fit what you're looking for as, for example, understand current data analysis capabilities. So that will be a first step in using of the toolbox to define that particular role and responsibility. The same applies for those collecting data as well as those undertaking research. So a number of roles and responsibilities will be available through the primer for you to select what best identifies what you're looking for.

Following that, the next section of the primer is the number of tasks and those tasks are actually aligned for each role and responsibility under each primary topic area. For example, we just talked about the managers of safety program that are trying to understand the safety managed process and how it supports the project development process. So the task that you probably wanted to attain is "what is the relationship between the safety management and the project development process." So that would be the next step in the process is to decide what is the relationship-- I mean what task you're actually looking to achieve. Again, if your role and responsibility, understand the importance of data driven decision making one of the tasks you may be looking for is how

can better data improve the cost effectiveness of our decisions. So remember, we're doing all of this in order to help the user of the toolbox to identify their own individual needs so that we can help them to find what are the tools available to support that need. The moment we got to that decision of the through the role responsibility and the task, you are now provided with the list of tools that could most probably assist you in the process of achieving and undertaking the task that you're looking for. As you notice here, for example, one of the guides not only have an application guide but also some of them are talking being information guides. Each one of the tools has been further categorized in terms of their functionality. And what we've got here is two types are potentially software, a database, or could be analytical or information source and could also be guides and those are also subdivided into two possible guides. First of all, let's talk about the database. Analytical databases typically include numeric and text values that describe the safety related characteristics of the systems and the FARS would be a good example of such a database. While the information sources are typically centralized databases of information such as system containing publications, training courses, or information of any particular specific topic. The CMF Clearinghouse is an example of a tool that is categorized as an information source.

The guides are also subdivided into two categories being the application guides and information guides. The application guide focuses on the process of applying information or methods in practice and the Highway Safety Manual is a good example of that. While the information guides provide general knowledge on the topic and Highway Safety Implementation Guide for managers will be also a very good example of that particular kind of guide. How do we use the primer? As I mentioned, there is a process and this is a step wise process. So the very first one is for you, the user, to identify your role and responsibility that you are at the moment trying to fulfill and for that purpose you were looking for tools to support you. After that, you would select the task through the list of tasks that best describe what you are needing to accomplish. Followed by the third step, which is now the list of tools presented to you. And at that point you are able to either explore, going through a detailed description of each one of those tools. Or, in fact, take that whole list and get a subset of tools that defined based on a number of filters that you will be provided to use through the toolboxes and you're going to see that being exemplified not only through the scenarios that we're going to use later on and Frank will be able to show you to do it.

At this point I would like to access the actual primer itself, how you see it on the toolbox. And then just walk you through the documents so that you are able to see what you're going to be provided with. So this is the document you will be able to access through the toolbox. And as I mentioned this is a document that it is there to support you through the navigation of the toolbox-- let's see that I can move the document. I'm sorry, I'm once, again, having a little problem here. Now, I can move it. So the first you will find, again, the introduction that I just provided to you and how it is organized. And the four different

sections that this primer is organized on is explained to you here. And just to make sure that we all get a feel for what the primer is about is that the primer is really there to help you first, to once again, understand the roles and responsibilities that are supported by the tools in the toolbox. To help you to understand the type of data and analysis related task that those tools can support. To also help you understand the range of available tools that are available in this toolbox. And remember this is version one. Identify and select an appropriate tool for a given task. Furthermore, you're also going to be able through the primer to identify how to understand how to identify the data requirements for given tool that's part of the full description of each tool. And also help you to know how to acquire the tool. So these are all of the opportunities that you have to get better help through the navigation of the toolbox using the primer. The primer guides the user, once again, through the step wise process. I want to just quickly walk you through the three processes. And as I mentioned before there is the exploration and refinement of the tools as you see it. I just want to take a moment to mention what is the refinement, what do I mean by being able to refine the long list of tools and that means by the user using filters built into the toolbox. And I would like to quickly show you the table one in the primer. As you can see, there are a number of tags and those tags have a number of options that you would be able to select and this way you would have subset of the tools subject to...

Frank Gross: Geni, sorry to interrupt. We're not seeing table one.

Geni Bahar: I'm sorry. I can see on my computer. Maybe there is a lag time there.

Heather Richardson: Geni, can you tell us what page that is and I can type it in?

Geni Bahar: It's page four. Can you see now table one?

Frank Gross: Yes.

Geni Bahar: Okay. Should I continue?

Heather Richardson: Yes, please.

Geni Bahar: Thank you, Heather. So table one, once again, shows the tags that are available for the filtering of the tools available and the user will be able to select the tools and create a subset based on your particular needs. So you have primary topic area, tool type, safety management process, and you could be, for example, interested in tools just for network screening. And you would be able to create a subset of those tools through

that kind of filtering. The same as project development process, data type, data coverage and so on. Now, I'm just going to take a minute to show you how the roles and responsibilities are provided through the steps. Now, I want to make sure that you all can see now page five.

Frank Gross: Looks good, Geni.

Geni Bahar: Okay. Thank you, Frank. Roles and responsibilities as you remember is the first section of the primer but it's also the step one of the process. And that is the user's first decision what is your role and responsibility? And when you go through those under each primary area you would be able to then go, for example, as you mentioned before your role responsibility to understand the safety management process and how it supports the project development process. You would come to the primer and this would be hyperlinked and you would potentially go directly into the next step which is step one. And that step one, going to the step two, which you then provide it with the various tasks that you could be faced with under that role and responsibility. Again, through the first one you are trying to find what is the relationship between the safety management and project development process. You would then be able to link there and you're going to step three. Before I go, I want to make sure that the screens are following me. Are you all seeing page six at the moment?

Heather Richardson: Yes, we are.

Frank Gross: Yes.

Geni Bahar: Thank you very much. So, again, through the primer you would be able to just link on the selected task that you are now trying to accomplish and that will bring you directly into the next step that you would have here, which is the number of tools that you would have to select from. For example, if you chose the relationship, you're trying to find the relationship between safety management and process development process you've now got directly on to the sub list of tools that are available to you to potentially help you to achieve that task. As I mentioned before you could go and just click here in the primer and you will see that what are the description of each and every tool so you could explore them. Or you could go and do a filtering of your tools and we're going to have that exemplified earlier-- later in the toolbox but I just wanted to mention to you that, of course, there is, as I mentioned, the number of tags that you could use. And in the primer they're all found in the Appendix B and I will just briefly show to you what it looks like. And let's hope it will come up. There we go. I can see it. I hope you all can see page 66. I will stop here for a minute and give time if there is any lag of time here. And you will see page Appendix B.

Frank Gross: It looks good, Geni.

Geni Bahar: Thank you very much. As you can see each tool now has been provided with the particular tags and that is how the user will be able to select the tags and then the various tools are going to be provided to you as a subset of all tools through the filtering of the potential tools that you have. With that, I'm going to come back to where we were before in the primer. And as you remember, we were on step three and I'm hoping yes, that you all see the tools, the step three in the primer where you are, again, having the opportunity to go through the process of exploring or refining the list of tools. And as you go through that you will be able to get that list of tools. And as I mentioned before, there are various types of tools available to us and that's how the primer is organized. The last section of the primer is a tutorial and the tutorial provides a number of scenarios that will help the users to see how to best navigate and use the toolbox to identify tools that will support the task identified to fit that particular activity or role and responsibility. And with that, I would like to transfer it to Frank who is actually going to get on the Web-based toolbox and demonstrate to us how to navigate it through it, the real website and tutorials. Thank you. Frank, to you.

Frank Gross: Thank you, Geni. Heather, can we bring up the share pod? Thank you. And bear with me for just a moment and I'll try to share a couple of applications on my screen. And Heather, could you let me know when you can see the toolbox?

Heather Richardson: Yes, I will. It's not-- there we go.

Frank Gross: Alright, thank you. And thank you everyone for joining today. I was looking down through the attendee list and we have quite a few folks on the line and I noticed several folks that were involved in reviewing and providing comments on the development of the toolbox. Thank you all for your comments and hopefully others of you have that joined and are seeing this for the first time will be able to provide the comments in the future and I'll explain how to do that a little bit later. Just to provide a little bit of background and please interrupt me if at any time we stop sharing or if something goes haywire, but just to give a little bit of background, as Bob mentioned earlier the RSDP toolbox is part of the overall RSDP FHWA Roadway Safety Data Program. So you can see on this screen that this is going to be kind of the new look and feel of the RSDP website and the toolbox that I'm pointing to now this kind of center area is really just a component of the Roadway Safety Data Program. Basically, the current site if you're familiar with the current Federal Highway RSDP website it looks a little different than this and it's getting a facelift and really it's going to be updated shortly with some new functionality, new features including the toolbox and some new links along the bottom. I'm going to scroll down for a moment. Below the toolbox there will be several icons

where you can learn about kind of featured tools. And along the very bottom there will be areas to request technical assistance, find training, review ongoing activities or join a community of practice. I'm not going to touch on any of those today. That's going to be an updated component of the RSDP website. Really, what I want to do is focus on this middle area, which is the toolbox. If you bear with me for just a moment, I'd like to zoom in to that area. So I'll give that a moment for everybody's screen to catch up. But really as Geni mentioned the primary function of the toolbox is to help you search for roadway safety data and analysis tools. And the primary search function includes the four large icons along the upper right. So that would be the managed, analyze, collect, and research, as well as the advanced search icon in the lower left. So I'm going to demonstrate each of these functions but just note, again as Geni mentioned that they are explained in the tutorial section of the primer. You can certainly refer back to that document if you need a refresher on how to use these or further clarification on how to use those. I'll transition over to the primer briefly and skip ahead to the tutorial section. Hopefully, this is all showing up.

Heather Richardson: Yes, we can see it.

Frank Gross: Terrific. Alright. From the primer you can see in the tutorial section that this first kind of section details the overview or details how to use the primary search. I'm going to go to the next page and it walks through the explanation of manage, analyze, collect and research. And on to the next page it details how to use the advanced search function. So those are the two primary searching opportunities within the toolbox and I'll demonstrate both of those in just a moment. Switching back to the toolbox layout itself, there's also secondary functions of the toolbox and those are going to allow you to share tools, identify existing gaps, provide feedback and identify related links. And those secondary functions are the four smaller icons along the bottom. I'm going to explain those briefly towards the end of today's demonstration but, again, they're detailed in the tutorial of the primer if you need additional information.

So at this point, I want to start talking about effective searching and how to conduct and effective search using either the toolbox or the primer or some combination of both. So bear with me for just a moment, switching back to the primer. I'm going to scroll down to page nineteen and this is where we start talking about effective searching and I'll zoom in so that you have a little better view of the three effective search methods. So the first is a high level search. The second is a detail level task-based search and the third is a quick search which is really focused on a specific tool if you have one in mind. And which one of these you select really depends on your understanding of your overall role and

responsibility as well as your understanding of available tools to help you accomplish the task at hand. So let's start with the high level search and this is going to be used to identify all tools related to a specific role. For example, if you know that you have an overall role and responsibility but not necessarily familiar with the available tools that might be available to support that role and responsibility then this is going to be a good search method that's going to allow you to browse at a very high level, what's out there, what's available to support your roles. This is very similar to online shopping if you've been doing any online Christmas shopping recently you might have a child or grandchild or niece or nephew. You know what age they are. You know their gender. You're just really trying to find something that pertains to them. You don't know exactly what they want. There are some websites that will allow you to say hey, here are some neat gift ideas for a specific child, the five year-old-boy or a ten-year-old girl they give you a general range of what's available and what you might want to think about. So that's similar to what the high level role based search would be.

As you move to the detailed level search, that's really a task based search; and this is going to be used to identify all tools that are related to a specific task and that's really following the three step process that Geni discussed. Again, going back to the shopping reference, if you knew that you were looking for clothing or a toy then you could go into those specific categories and browse toys or clothes related to a specific child. The quick search method is the last one that we'll talk about and that's if you really know exactly what you're looking for, so if you're looking for that specific toy and just trying to find who has the best price you can type that in and kind of compare various websites but this is a little bit different. You would get very specific information on a given tool.

So, again, the primer discusses these three techniques in detail and also provides an example of each. I'll walk through some of the examples as a way to demonstrate the functionality of the toolbox. Switching back to the toolbox quickly; and we'll start with the high level role based search. This is going to really involve just step one and step three of the three step process. Basically, what you're going to do is identify an applicable primary area, either manage, analyze, collect or research. Browse all of the tools related to that area. And then you could explore or refine the list of tools further.

Let's set up a quick example. Let's pretend you've just been hired by a transportation agency. You're told that you're going to be supporting the safety division as a junior analyst and you're relatively new to safety so you're not quite familiar with all of the tools that may be available but you really want to make a good impression. You want to learn more about what's out there and what might be able to help you do your job better. In this case, you could use the toolbox to conduct a role based search for related tools. And, again, step one is just identify that applicable primary topic area. In this case, I'm going to select the analyze category. You're told that you're a junior analyst. Analyze seems to

fit well with that. Clicking on analyze the toolbox would return a specific list of tools that relate to that topic area. I'm going to scroll down slightly and you can see that the toolbox returned 77 tools that are related to the analyze topic area. If you're interested in learning more about all of these available tools and methods then there's no need to refine this list any further. Basically, you can scroll down to the list of tools and start clicking on the name of each tool to explore what the tool is all about and get a more detailed summary.

Just as kind of an aside, you can click on the headings if you'd like to sort by the type of tool or to sort by the owner or sponsor. So there's various ways to kind of sort this list of tools but I'll go back and click on the tool name to sort by the tool name. But really 77 tools is kind of overwhelming. What we want to do is perhaps is to narrow down that list and get something that's more specific to our needs. In this example, let's assume that you're only interested in reading about available guides at this time. You're not really interested in the related databases and software. We could use the first tool type filter. By clicking on that we could select which types of tools we would be interested in and in this case let's say that we're interested in application guides and that returned sixteen tools and information guides which returned an additional ten, so we have twenty-six tools total. And it's not 77 tools but it's not a handful of tools either. It's still a significant list, but at least you have a starting point where you can look to for further information and to browse the available tools that might be of interest to you. To learn more about any specific tool, basically just click on the tool name for more information and I'll do that with the first one, which is a guide to developing quality crash modification factors. So by clicking on that link, that's going to get us into a detailed summary page. I'll scroll down just a little bit. And really what this provides is a summary of the tool but it's going to give you the tool name. It's going to talk about the applicability which notes the related primary topic areas. And, again, these tools aren't specific necessarily-- many of the tools aren't specific to a given topic area. There is some degree of overlap but some are specific to a specific primary topic area so that the applicability would tell you which topic area they apply to. The overview is going to provide a bulleted list of capabilities, really what the tool can help you to accomplish. The next section details the requirements. So this is going to identify the data and system requirements for full use of the tool. The next section is a high level description of the tool, so just a very general summary. Coming in here, you can read quickly about what the tool is all about, what it can help you to do and what it's going to require to implement that tool. And once you determine whether or not you want to use the tool, if you do, the last category here is availability and that's going to tell you whether or not it's available free of charge or whether there may be a fee to kind of acquire and use the tool. And lastly, there should be some type of citation for additional information and in most cases a hyperlink either to the website for the tool or in this case to the PDF document of the CMF guidebook.

At this point, really we've talked about the process of going from a role and responsibility down to a list of specific tools and on to a summary page of what the tool can help you to

accomplish. Basically, now that we've got here and we decide whether or not we want to make forward with this tool, how do we get back or how do we get out of here? Really, there's multiple options for navigation from this point. I'll just point out a few of those options. There is a back button on many of the internal pages where you can go back to the previous page basically from any point within the toolbox. You could also click on the Roadway Safety Data Program title, the RSDP home link, or the RSDP icon or logo on the upper right to get back to the homepage.

I'll just click on the RSDP home link and that's going to bring us back to the homepage and from here I'd like to start talking about the second search option. That's going to be the task based searching. This is more of a detailed level search for any tools that are related to a specific task and this is going to follow along with that three step process that Geni described and demonstrated. Again, I just want to set up kind of an example and then we'll walk through first the primer to identify potential tools and then we'll go into the toolbox to refine that list. Imagine that you're working for an agency and basically, they'd like to upgrade their roadway inventory data to comply with the new MIRE FDE. And as Bob noted early on, MIRE is the model inventory roadway elements. And for those of you who are not familiar with the FDE those are the fundamental data elements within MIRE so the most basic roadway elements that you would need for safety analysis. Really, what the agency is trying to do is update their roadway data capabilities to improve their analysis and decision making capabilities. You've been assigned the task to explore the options and relative costs for collecting this additional data. Let's first use the primer and figure out which tools may be able to support us in a given task. I'm going to go back to step one. You should be seeing the primer, please let me know if you're not, but step one is to identify the general role and responsibility. In this case you're asked to explore data collection and the cost of collecting additional data so that very clearly relates to collection. I'm going to scroll down not under manage or analyze, but look under the collect topic area and review the four roles and responsibilities. The first would be to understand the needs of safety analysts. That doesn't really fit. The second one, number 18, does seem to apply. The role might be to collect data through existing programs. And number 19 may apply as well in terms of identifying opportunities to collect additional data. So by clicking on either of those you would hyperlink to a list of specific tasks and I'll start with number 18 as an example. So just clicking on that role and responsibility we jump down to another location within the primer to review specific tasks. I'm not going to read through each of these but basically the first one seems to apply under number 18. Eighteen A, what are the options for collecting additional data elements? That seems to apply to our scenario. We want to explore options and we also want to identify the costs. If we were to click on 18A and you can similarly do that for any of the tasks under 19. There's a couple under 19 that might apply 19C and D relate to the tools and equipment required for effective data collection and 19D what human resources would be needed to support the data collection and management. I'm not going to go through all of those in detail but I'll click on 18A just to demonstrate.

In this case, there are nine tools identified that would help you in reviewing options for collecting additional data elements. And as Geni mentioned by clicking on any one of those tool names you would be taken to the toolbox, to the detailed summary page. Let's take the second one as an example. This is the development of a structure for model inventory of roadway elements, MIS, the management information system. By clicking on that title, hopefully this shows everybody the RSDP toolbox and it would get you directly into a summary of that tool. And you can continue with that process reviewing each tool in the list as you see fit or you might want to refine that list potentially. So to refine the list you could go to the advanced search from the toolbox. And first, you would need to generate a list of related tools and Geni mentioned that you could start applying some key words and maybe some of the filters and tags associated with those tools from the primer and that would help you to generate a similar list of tools. I'm going to exit out of this and go back to the toolbox briefly. To demonstrate how to do this, to generate a similar list, I'll use the advanced search function. Clicking on the advanced search this is going to take me to a page where I can enter a keyword. If I leave the keyword blank and click search, that's going to return all of the tools in the toolbox. There's just a little bit of text here at the top of the screen to explain how to you use the advanced search. But in this case I want to type in collect since we want to learn more about collecting data. I'll just type in the keyword collect, hit search. And that's going to return 65 related tools. That's way too many to review in detail for what I want to do. I'm going to use the filters. There's a button here to show or hide the filters. Clicking on that that's going to allow me to get into the filters, again. I'm first going to use the tool type filter similar as we did before to narrow this down to only application and information guides. I'm not really interested in software, databases or information sources at this point. But that only gets us down to 40 tools. The other filter that I want to show is data type. And in this case we were talking about upgrading the roadway data. We're not really interested in crash data, hospital or injury data or operations data at this point. Let's focus on the roadway data and by selecting that option that gets us down to 24 tools. So that's still a good bit of reading but at least you have a starting point and a list of relevant tools.

Now, backing up a moment we said we want to upgrade to the MIRE FDE. Well, if you came in and weren't familiar with MIRE or the fundamental data elements, that might be a good first place to start. So to identify tools related to the MIRE FDE you could go through the detailed search that we just did to look for tools related to a specific task. You could also use the quick search. In this case, you have some key words in mind MIRE or FDE and that could really help you narrow down your search. I'm going to go back up and bypass the primer at this point and just say we're interested in learning about tools that have to do with MIRE. I'll type in the MIRE keyword, hit search and the toolbox returns eight tools related to MIRE. And I'll scroll down and just show briefly what those are. So there's eight tools seven of which are information guides, one of which is an application guide and many of those have MIRE right in the title. It seems like we're in the right direction and you could look at the titles or click on these for a more detailed

summary of what each of those guides provide. Again, maybe you're familiar with MIRE but not familiar with the fundamental data elements. If I type in fundamental data element that's going to return five tools, some of which were similar to those returned in the previous search. But that's just a real quick demonstration of the toolbox, the various searching capabilities, so you can have this high level role based search, a more detailed task based search or a very quick search using the various search capabilities.

Before we turn this over for questions, I do want to talk about a few other related items. I'm going to go back to the homepage. I mentioned that I'll demonstrate the secondary functions of the toolbox. And first I just want to say that there were a lot of folks involved in the development of this toolbox and they've put in a lot of hard work to develop the functionality and the summaries of all of these tools. There was a lot of work involved reviewing. There are over 100 tools in the toolbox so there were a lot of hours that went into reviewing and summarizing those tools and figuring out where they all applied and what they were applicable to. But I'm sure there's more tools out there. There may be tools that you have in house. There are tools currently under development and I just want to say that if you have tools to share with the rest of the community please help us to identify those using the shared tools function of the toolbox. The first link along the bottom is a link to share tools. I'm going to click on that. And basically, this provides you with an opportunity to submit information to share or add a new tool to the toolbox. So this won't go live. It's not like you're going to fill in information and it's going to directly or automatically upload on to the toolbox. Basically, this goes into a database and then there will be some folks that are responsible for administering and maintaining the toolbox and those folks would review your request and maybe be in contact with you for additional information but eventually summarize that information and get it into the toolbox. There's just a few required fields, the title, a brief description of what the tool can do and your contact information in case there's a need to follow up with you for additional details. But there were several other fields that I kind of bypassed but really those are the fields that would go into the detailed summary of the tool. If you'd like to help identify what the capabilities are or what the data and system requirements are for the specific tool you're certainly welcome to fill in that information as well. At the bottom of the screen there's a button to submit your information and that, like I said, goes into an underlying database that will be reviewed regularly.

Scroll back to the top. And click on the back button just to get back to the homepage. And the next thing I want to talk about are limitations. We know that there's limitations to the existing tools. You may not find a tool for a specific task and you may have other ideas for gaps that need to be filled. So if you come to a dead end in the primer and/or the toolbox, please help us to identify those gaps or if you have other gaps that you would like to share you can use the identify gaps function at the bottom similar to share tools, but instead of sharing a tool you can share a need. Clicking on that it has some similar categories basically provide your contact information so that we can ask you

about specific details, if needed. And just a brief description of what you would like the tool to provide what need do you have to be filled. Those are the only two required fields, but again, if you would like you could certainly elaborate on the capabilities that you would like to see the tool provide as well as the applicability. Would you like the tool to be a software, a database, some type of guide? Is there a specific step in the safety management process that you're looking for this tool to support? Or is there a specific step in the project development process that you're looking to support? That's just a real quick overview of how you can help to identify gaps. And finally, basically if you want to provide feedback on the toolbox itself I want to let you know that this is version 1.0 of the toolbox. We're going to be upgrading to version 2.0 probably sometime around this time next year. And for version 2.0, of course, we plan to add any new tools that come out between the time that we've added the tools for version 1 and the time of version 2. But we'd also like to enhance the capabilities and usability of the toolbox. As you have time to use the toolbox please help us to improve the user experience. You can suggest potential enhancements. You can identify functionality issues, such as broken links, and you can do all of that through the provide feedback link here. This is a very short form. But basically, first, identify whether it's a functionality issue or a suggestion for improvement. If it is a functionality issue that will likely be addressed very quickly. Suggestions for improvement those are going to be integrated in future versions. Version 2.0 might include an enhancement based on a suggestion for improvement. Those aren't things that would typically be addressed overnight. But, again, just providing a brief description of the issue or suggestion and if you please, for this one, you could provide your contact information as well.

With that, I just want to kind of recap three key points from the demonstration. One, the toolbox can really help you to wade through that sea of safety data and analysis resources that are out there to identify an applicable tool to support your role, responsibility or your specific task. Two, if you're new to the toolbox or new to safety in general the primer that Geni walked through can really help you to better understand the roles and responsibilities and the tasks that are supported by tools in the toolbox. And third, last, if you have the tools, gaps or feedback to share, certainly, you can use these secondary functions of the toolbox to share tools, identify gaps and provide feedback. I'm going to go back into the Web room now, so you'll probably see a blank screen for a moment but I want to leave you with the link to the test site. Again, this is currently residing on the VHB server so I'm going to type the test site into the chat pod. And know, again, that many of the components, other than the toolbox have been disabled. So that top area of the RSDP webpage and those bottom areas have been disabled on the test site. But, again, this is migrating to FHWA's server as we speak and the link will hopefully change at some point early in 2015. For the next few weeks, feel free to access the test site, provide feedback, share tools, do whatever you may do through that test site. And at some point, you'll probably go to access it and we'll be redirecting you to FHWA's

website at that time. That concludes my portion of the presentation and I guess I'll turn it back to Heather and we can open it up for questions and discussion.

Heather Richardson: Great. Thank you, Frank. We're going to, Frank mentioned, take a few minutes to answer some Q&A. There are a couple that have already come in through the chat pod and just a reminder to please enter any questions you have into the chat pod and we will address them. We have about 20 minutes left so that's a good amount of time for some Q&A and discussion. And also, if you notice at the bottom of your screen right now there is a poll question to suggest topics for future technical webinars in this series. If you have any ideas for what we might be able to present in upcoming webinars, please feel free to suggest them. Question number one that came in is how often will this toolbox be updated? I open it up to Bob, Geni or Frank to respond or Stuart as well, I'm sorry.

Frank Gross: This is Frank. I'll take the first shot at this and that will cover, I guess, the first iteration and then Bob or Stuart if you have ideas for the future, please chime in. Really, like I said, the next version will be coming out in about this time next year. So the hope is that we'll collect a good bit of feedback over the next three to six months, identify any new tools that are out there and then update the toolbox to version 2.0 in December of 2015 and that will be the first iteration. Beyond that point, that's beyond our contract so I can't answer that but maybe Bob or Stuart have an answer.

Stuart Thompson: I'll take that one. This is Stuart Thompson. We are expecting that most of the changes will come in the first year and so we planned out for the first update in the coming year. After that we'll have to develop a process for updating it. I imagine it will be something like a CMF clearing house on that kind of schedule.

Heather Richardson: Okay. The next question that came in was will there be a most wanted list based on user request?

Frank Gross: This is Frank, again. That's another good question and we have discussed having some type of web analytics to see what may be the most commonly searched for tools that aren't being found. That's one way to generate the most wanted list. But also the function to identify gaps is going to be something that's monitored regularly to see what types of requests that are coming in. And certainly, those that are receiving multiple requests from different users will likely get priority for the future. I know on the CMF clearing house there is a list of most wanted CMS posted on there. I'm not sure if that's something that we have planned for the future but for Stuart or Bob, that's certainly something that we could think about and maybe post to others so they can see what other folks are looking for.

Stuart Thompson: I would say that would be a good enhancement to adopt that also.

Heather Richardson: The next question that came in is will instructions be provided on how to obtain the toolbox? And Frank has put up the beta version of the website. Frank, can you respond to that in terms of how long it will be in beta and then approximately when it will be through the RSDP website?

Frank Gross: Yeah. It's currently migrating to FHWA's website and hopefully early 2015 we'll have that up and running within FHWA server. We're just working through that kind of security and IT process right now to make sure everything goes smoothly. I would recommend start using the test site as the toolbox. And at some point you'll go there and we'll redirect you and let you know that that FHWA site is up and running. I imagine there will be some type of other announcement through FHWA that the toolbox is live and will provide that final web link.

Stuart Thompson: Yeah, our goal is to at least have it up and running by TRB. And if you're interested in visiting the booth and talking to us about that we'd be glad to talk to you about it.

Heather Richardson: Frank, I think you mentioned that in terms of providing feedback on the beta site that that functionality is up and will be running so that people can, as they get themselves familiar with it provide you information on how it went?

Frank Gross: That's correct. We wanted to make sure those were certainly up and running. There are a few functions on that page that aren't working like the identify related links but those are available from the current RSDP site on FHWA server. But certainly, sharing tools, identifying gaps and providing feedback are all fully functional. Feel free to start submitting those comments today.

Heather Richardson: We haven't gotten any other questions in. I'll leave it up for a few more minutes and also remind everyone you can submit questions via the chat pod or you can also submit topics for future webinars using the poll question below. And I'll put up, in a moment, also the contact information for the relevant-- the presenters, the Federal Highway Office of Safety staff and Volpe staff so that you can reach out to any of us as well as follow up questions come up or if you have any suggestions for the future webinar topics. It looks like we might have one more coming in, right now. We'll give it a second before I switch to the contact slide.

Stuart Thompson: While that's coming up, Frank, did you get a chance to mention the three projects that are in process now associated with the toolbox?

Frank Gross: I didn't. I was curious of how long I would run with the demonstration so that was something I had cut out but it is certainly something I can talk about. Along with the development of the toolbox we were tasked with identifying and developing some additional tools one of which is the primer itself. The other is on kind of an SPF calibration tool. So it's going to be a software tool that builds on some of the information and application guides that are out there. Federal Highway has recently published two SPF guides, one on whether or not you should calibrate an existing SPF or develop new SPFs for your jurisdiction. And then if you did decide to develop new SPFs the second guide talks about how to develop an SPF. And then there's also an SPF user guide that actually Geni developed. So kind of building on that work, we're developing a software tool that would allow you to specify a safety performance function and really analyze it to determine whether or not that fits properly with your local data, or whether or not you should consider developing a jurisdiction specific SPF. So that's one tool that's under development. And the second tool is more on that decision making process, that very high level trying to convince managers of the value of investing in enhanced data capabilities and enhanced analysis capabilities. So it's trying to go through and demonstrate what you might have got for an answer if you used one method of analysis, say network screening using crash frequency. That's a very rudimentary and basic method of screening your entire network for locations for safety improvement. So compared to that very basic method if you were to implement a more enhanced or rigorous method using enhanced data capabilities, now what would the answer look like? And how different is it? Is it better or worse? And what's really the value of investing in additional data and analysis capabilities. So that's the second tool. And it goes through various portions of the safety management process and talks about the different options that you have and the value added by implementing the more advanced and rigorous methods compared to the old way of doing business.

Stuart Thompson: And those tools were identified through the capabilities assessment as something that were the top most requested by the states. And so those are being developed in conjunction with the toolbox in response to those requests.

Frank Gross: That's correct. Thank you.

Heather Richardson: We've had another question in and is there going to be a mobile device version of this toolbox?

Frank Gross: We did discuss that during the development and we wanted to make sure that the toolbox was fully functional for all applications and trying to figure out if we needed to reduce any functionality for the mobile version. And at this point, it should be fully functional on mobile devices. We'll have to see how that works through the beta testing and through this version one. But as far as I know everything should be set up currently for a mobile device, as well.

Heather Richardson: Okay. Thank you, Frank. We don't seem to have any more questions coming in and I do want to thank those who have suggested topics for future webinars. We've received suggestions for GIS and safety, developing calibration factors, as well as calibrating, developing safety performance functions. We will take those into account and see if we can establish a good time for-- and identify presenters to do those topics for a future webinar. With that, I'm going to switch over-- I'm going to switch back a moment to give you the contact information for the presenters today. Ray Krammes is the RSDP team lead. Here is his information. Stuart Thompson who is on the line with us; he is the toolbox program manager. Bob Pollack is the director of the data and analysis goal assistance program. And then a contact for Volpe is Sharon Chan Edmiston. With that, I'm going to turn it back over to Bob for some final comments and a few reminders.

Bob Pollack: Thank you very much, Heather. And, again, our thanks to everybody who joined us today and also to our presenters, Frank and Geni. You guys did an excellent job. We appreciate that. If you do have any questions, further questions about the toolbox, again, you have had our contact information on there, please feel free to contact any of us. We'll try to make sure that you get answers to any questions you may have. On your screen, right now, as I mentioned at the beginning of this program, the technical assistance program is out there and it's available to address any type of issue, challenge, problem you may be having. And if you go to the website that you see listed there under the technical assistance program, that will guide you through an application process to submit an application for technical assistance to deal with whatever issue you may be confronting. Now, also a copy of this webinar will be available fairly shortly after today. And a copy of this webinar can be obtained at the website you see listed there. And then finally, I mentioned that as part of the Data and Analysis Technical Assistance Program we conduct these webinars quarterly. And our next topic for presentation at a webinar will be kind of an overview and some of the nuances of the ISATe and IHSDM. The ISATe is interchange safety analysis tool enhanced. And the IHSDM is the Interactive Highway Safety Design Model. And that presentation will actually take place in March of 2015. If you want to kind of put that on your calendar that will be our next topic. And then beyond that we will certainly take your suggestions into account and see if we can identify other programs for future webinars. With that, that will, in fact, conclude our program today. And, again, I'd like to thank everybody and everybody have a good day. Thanks everybody.

Operator: That does conclude our conference for today. Thank you for your participation and choosing A&T executive teleconference. You may now disconnect.