UNITED STATES DEPARTMENT OF TRANSPORTATION

RESEARCH AND INNOVATION TECHNOLOGY ADMINISTRATION

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INTELLIGENT TRANSPORTATION SYSTEMS PROGRAM ADVISORY COMMITTEE (ITS PAC)

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MEETING

WEDNESDAY MAY 2, 2011

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The Advisory Committee met by teleconference, at 1:00 p.m. Eastern Daylight Time, Bob Denaro, Chair, presiding.

PRESENT

ROBERT P. DENARO, Vice President, Nokia
TERESA ADAMS, Chair, Transportation
Management and Policy Program and
Director, National Center for Freight
and Infrastructure Research and
Education, University of
Wisconsin-Madison

- STEPHEN ALBERT, Director, Western
 Transportation Institute, Montana
 State University
- ROGER BERG, Vice President, Wireless Technologies, DENSO North America Research Laboratory
- JOHN CAPP, Director of Global Active Safety Electronics, General Motors Corporation
- PAULA HAMMOND, P.E., Secretary, Washington State Department of Transportation
- SONNY HOLTZMAN, Principal, The Holtzman Group

- STEVE KENNER, Global Director of Automotive Safety, Ford Motor Company
- HANS KLEIN, Associate Professor, School of Public Policy, Georgia Institute of Technology
- SAM LaMAGNA, Product Line Manager, Intel SCOTT J. MCCORMICK, President, Connected Vehicle Trade Association
- RAJ RAJKUMAR, Professor, Department of Electrical and Computer Engineering, Carnegie Mellon University
- BRYAN WAYNE SCHROMSKY, Director, Federal Government and Public Safety, Verizon Wireless
- TON STEENMAN, Vice President/General
 Manager, Intelligent Systems Group,
 Intel Corporation
- GEORGE T. WEBB, County Engineer, Palm Beach County, Florida

ALSO PRESENT

GREG WINFREE, RITA Acting Administrator
SHELLEY ROW, Director, Intelligent
Transportation System Joint Program
Office

SHEILA ANDREWS, American Motorcyclists
Association

VALERIE BRIGGS, ITS JPO, Policy

BRIAN CRONIN, ITS JPO

LINDA DODGE, ITS JPO, Next Generation 9-1-1; Public Safety; Emergency Transportation Operations; Rural Safety

STEVE GLASSCOCK, ITS JPO

BOB LEONARD, Metropolitan Washington Council of Governments

BOB MONNIERE, RITA Office of the Chief Counsel

IMRE SZAUTER, American Motorcyclists
Association

CHARLIE VELEZ, Citizant

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P-R-O-C-E-E-D-I-N-G-S

(1:06 p.m.)

MS. ROW: Okay, so this is Shelley
Row at the ITS Joint Program Office in D.C.
Again, we apologize for being a few minutes late.
We had some phone difficulties on our end.

Now do we have someone monitoring email if there are technical difficulties with any of the participants?

Okay. All right, so if you have any issues let us know, with the connection. Everyone okay so far? You can either connect in with the instructions that we provided before, or you can follow along with your read-ahead materials that we sent out. Any technical issues we need to resolve before we get started?

MR. WEBB: Shelley, George Webb.

I had the same problem. When you clicked on

it, it didn't come up. We needed to cut and

paste, I mean as the new weblink that you guys

sent out.

MR. GLASSCOCK: We apologize for

1	that. Just before we get started, for the FACA
2	rules we have to record anything that is said
3	in the meetings. So when you speak, please
4	identify yourself, and if we could do a quick
5	roll call that would be appreciated.
6	MS. ROW: Bob, would you start?
7	And then we will go around. If everyone would
8	again, as Steven suggested, state your name and
9	your affiliation so we can capture that for the
10	record.
11	MR. DENARO: Sure. Yes, this is
12	Bob Denaro with Nokia.
13	MR. STEENMAN: Ton Steenman of
14	Intel Corporation.
15	MR. ALBERT: Stephen Albert of
16	Western Transportation Institute, Montana.
17	MR. MCCORMICK: Scott McCormick,
18	Connected Vehicle Trade Association.
19	MR. KENNER: Steve Kenner with Ford
20	Motor Company.
21	DR. KLEIN: This is Hans Klein at
22	Georgia Tech.

MR. BERG: Roger Berg at DENSO.

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MR.
                     HOLTZMAN:
                                  Sonny Holtzman,
     Holtzman Group, Coral Gables.
                MS.
                      HAMMOND:
                                  Paula Hammond,
     Washington DOT.
                DR.
                      ADAMS:
                                            Adams,
                                   Teresa
     University of Wisconsin, Madison.
                MR. CAPP:
                              John Capp, General
     Motors.
                                    Bob
                MR.
                      LEONARD:
                                          Leonard,
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     Metropolitan Washington Council of Governments.
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                MR. WEBB: George Webb, Palm Beach
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     County.
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                MS. ROW: Is that everybody?
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                DR.
                      RAJKUMAR:
                                    Raj
                                         Rajkumar,
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     Carnegie Mellon University.
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                MS. ROW: Okay.
                MR.
                      SZAUTER:
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                                    Imre
                                          Szauter,
     American Motorcyclists Association.
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                MS. ROW: Okay, good. Thank you.
                MS. ANDREWS: I'm Sheila Andrews,
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     American Motorcyclists Association.
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                MS. ROW: Any other guests?
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                MR. LAMAGNA: Sam LaMagna, Intel.
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MS. ROW: Anybody else?

MR. GLASSCOCK: Okay. Go ahead, Shelley.

MS. ROW: Okay, thank you so much.

So we're going to go ahead and get started,

and again, I'm Shelley Row. I'm the director

of the ITS Joint Program Office.

The other person you've been hearing speak is Steven Glasscock. Steven is part of our staff here, and he is our Federal Advisory Committee chief smart person here in our office, so he's the one who makes sure that we follow all the rules and the regulations about FACA.

You will be hearing from Bob Monniere who is one of our chief smart legal people in RITA. And so he will be making sure that you all are aware of some of the legal ramifications of your role as part of a FACA committee.

Before we get into all of that, however, it is my pleasure to introduce Greg Winfree who is the RITA Acting Administrator, and we're very fortunate to have a few minutes

of Greg's time here today. But he was very clear that he wanted to personally say a few words and welcome you all into our ITS Advisory Committee.

So Greg, I'm going to turn it over to you.

MR. WINFREE: Sure. And perhaps before I carry on I'll just ask, who was the last person to join so that we have a full record of phone attendees?

MR. SCHROMSKY: This is Bryan Schromsky, Verizon Wireless.

MR. WINFREE: Oh, wonderful. Welcome, Bryan.

MR. CRONIN: Hey, Greg. This is Brian Cronin from ITS Joint Program Office. I'm on the phone as well.

MR. WINFREE: Great. Well, again
I'm Greg Winfree, Acting Administrator of the
Research and Innovative Technology
Administration. I'd like to welcome you all
to the ITS Advisory Committee. It's an
important committee on one of our most important

initiatives here at the Department. So certainly want to thank you all for taking time out of your busy personal and professional schedules to lend your time and talents to, you know, what is going to be a game-changing technology going forward. I think we all recognize the importance of the initiatives for which we are working so diligently. We've got many newcomers on the phone, and we are appreciative of those folks who have been able to join the Advisory Committee and again help us move forward. So welcome again.

We are at a critical juncture with respect to our research activities looking at the connected vehicle environment. As most of us are aware, we are at the doorstep of a 2013 Agency decision from the National Highway Traffic Safety Administration, where they'll be looking at all of the full sum results from all of the research that's been done across the connected vehicle spectrum, and determining how best to move forward with what they've been provided. So again, thanks to all of you for

providing your expertise. We will certainly be reaching out. You are a valuable resource, not just collectively but individually for all of the rich experience and expertise that you bring.

So I won't belabor it any longer, otherwise just to repeat that we're very grateful for your participation and look forward to working with you hand in glove going forward.

So with that I'll turn it back over to Shelley and Bob Monniere.

MS. ROW: Thank you, Greg. And I'm going to actually turn it over to Bob Denaro. So as you have probably ascertained, Bob is the chair of your committee, so I do want to emphasize that while today, and perhaps even at your first in-person meeting in May, you will see probably a very active role for the USDOT staff, I do think it's important to emphasize that this is your committee. And so Bob is the chair, we will be appointing a vice chair as well, and he will be working with you to lead your group in providing recommendations to the

Department. So with that, Bob, would you like to say a few opening words as well?

MR. DENARO: Sure. Thanks, Shelley, and welcome, everybody, and thanks for volunteering your time in this important endeavor.

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It's from the as you saw documentation, people were selected specifically for their background of expertise and to create a balanced committee that spans all the disciplines that we feel are important. So we have, in my opinion, a very substantial opportunity to influence the direction that JPO goes, and help them to succeed basically, which is what it's all about.

And I hope you will take some time to read some of the previous reports that we've generated. They're all on a website. You've got that link and we've got quite a book full of read-ahead material. I'm going to make a wild assumption that not everyone read everything ahead. But I do request that as you

have time, please take some time to scan a lot of it, especially the strategic plan that's in here, some of the background. Because the more that we can come up to speed individually, I think the more value we have. First of all, the more efficient meetings we'll have and the more value that we'll be able to provide. And as Shelley said, you know, this is our committee. We come up with our independent recommendations which we will summarize at the end of this process in two years.

And just real quickly, I mean the purpose we'll get into in a minute, we'll cover that in the slides that are there. The process we use pretty much is our meetings, okay, and most of the work is going to go on there. Our face meetings are very important because that's where we have a lot of interaction with each other and extensively with the staff.

But then we also will have some interim phone conferences like this one to do some things. We may decide, as we did in the previous committee, to break into subcommittees

and handle certain topics that we agree are the key topics we're going to focus on. But, you know, I think we have to be realistic and realize that, frankly, most of the time that we're going to be able to commit to this endeavor are going to be in the meetings and phone conferences that we have. So we'll do our best with that. So I think that's all and that's good enough for now.

out?

I think if maybe we get into the presentation then, the real purpose of this meeting today is to have a first overview. And I know the JPO has worked very hard on putting a succinct story together for us in a limited number of charts so we can get a good feel for the program and maybe answer your questions and so forth. Any questions of me at this point?

DR. KLEIN: Bob, this is Hans Klein.

Will there be a list -- sorry, am I cutting

MR. DENARO: Yes.

DR. KLEIN: Will there be a list, sir, of an email discussion group for our

committee?

MR. DENARO: That's open to us. I think that's a great suggestion and I think that's something we should discuss at our May 24th meeting. But finding efficient ways for us to communicate I think is very important, so we're definitely open to those kinds of suggestions.

MS. ROW: Bob, this is Shelley, and Hans, a great idea. The only thing we will research between now and your May meeting is how we can do that within the FACA guidelines. Everything that you all discuss is open and public, in fact, we're recording you right now, so you'll see transcripts of all of our meetings. So we will do everything we can to find ways to make sure that we can do something like that, but we will just double check it to make sure that we do it in a way that is responsive to FACA requirements.

MR. DENARO: Great point, Shelley.

MR. MCCORMICK: This is Scott

McCormick. I have a question.

MR. DENARO: Go ahead, Scott.

MR. MCCORMICK: Is this committee
-- if there's an administration change, not that
I'm forecasting one, but (telephonic interference)?

MR. DENARO: Was your question about surviving an administration change, Scott?

MR. MCCORMICK: Yes.

MR. DENARO: You're breaking up a little bit but I think we got the gist. Shelley, do you want to take that?

MS. ROW: Certainly. Scott, the answer is yes. The Advisory Committee is established by our legislation, so it is not dependent upon the administration. And it would, in the event that there would be an administration change then our committee goes on just as it would have previously. The only thing that changes the committee is if the legislation changes.

MR. MCCORMICK: Thank you very much.

MR. DENARO: If there are no other questions, I think we can turn it over to Shelley.

MS. ROW: Okay. And were there some other people who signed on since we started?

MS. DODGE: This is Linda Dodge, ITS

Joint Program Office.

MS. ROW: Great. Thanks, Linda.
Okay, I'm going to turn it over to Bob Monniere.
This is important for you to understand some
of the ethics issues in your role as a FACA
committee member. So Bob, it's over to you.

MR. MONNIERE: Thank you, Shelley. Good afternoon, for those folks that are on east coast time, and for those that aren't, good morning, or whatever other greetings are appropriate.

I just wanted to take a few moments to explain some of the ethics that applies to the committee. First off, once again, and I'm sure it has been emphasized prior to this point that no one who is a registered lobbyist can serve on the committee. Hence, and I'm not

saying this will happen but if it should, if a committee member was to, for whatever reason, become a registered lobbyist, by OMB regulations that individual would have to resign. Enough said on that. I think the rules are quite clear.

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The other area that I wanted to emphasize was conflicts of interest, and the not necessarily just actual conflicts of interest but also the appearance of a conflict of interest. You are obviously appointed to this committee to present your views on certain ITS issues, and anything that would jeopardize that must be examined. And by that I mean if a committee member was to enter into a business relationship with the Agency that can be problematic. From the appearance from the outside obviously a member of the public could view that situation and say, well, is the committee member actually giving honest, candid feedback given that they are in a business relationship with the Agency?

Thus, we have had this issue in the past and basically where we have come down in

the past is that the committee member has to make a decision as to whether they want to continue to serve on the committee or enter into a business relationship with the Agency but not doing both.

Again, I just want to give you my point of contact information. The name is Robert. The last spelled, name is M-O-N-N-T-E-R-E. You reach can me 202-366-5498 for any questions concerning the committee, how the GSA regulations apply to committee activities.

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And we'll take a look concerning the one premise that I do have to emphasize to committee members is as Shelley indicated, there is a requirement under the GSA regulations that committee business be conducted in the open, and it is quite an effort to have the committee have a "closed door" or what they might call an executive session.

So prior to any effort to close one of our Advisory Committee meetings there has to be a number of steps taken and, in fact, there

has to be authorization for that. So the GSA regulations are quite detailed and I'm sure Shelley is going to research that issue and see what we can do to make the communication process work efficiently.

Shelley, that's all I've got.

MS. ROW: Okay, any questions for Bob before we let him go? Okay, we're going to go ahead then and dive into some of the briefing materials, and I'm going to turn it over to Bob Denaro in just a minute.

I do have to say that I appreciate you all persevering with us for this phone call. It is a little awkward, we understand. It's not very participatory. It's a little bit difficult for you. We promise that we will do better in future meetings, but we felt like that we could get some of the at least preliminaries out of the way through a phone call and have a more efficient use of your time when you're actually here together at the end of May. So I do ask your indulgence, but do feel free to ask questions as we go along so that we can be

responsive to your needs. So Bob, I'm going to turn it back over to you.

MR. DENARO: All right. Thank you, Shelley. So if you're following in your book or online or whatever, online chart -- well, let's look at the agenda first, Chart 2.

And what we're going to do is talk about that. I'll talk briefly about our committee charter, and then the rest of the deck really is about the background on the ITS Joint Program Office and the program, and Shelley will cover that for you. And then we'll end right on time.

So I'm on Chart 3 which is an overview of our charter. This committee was established as Shelley said, by legislation, the SAFETEA-LU of 2005. And as we just heard from Bob, we do follow the FACA rules regarding these kind of meetings. And our committee is commissioned for two years starting on January 23rd, so that kind of gives us our timeline, if you will, and our deadline by which we want to accomplish our end product.

And as I said earlier, the end product is really an advice memorandum that goes to the JPO and then on to the Secretary and also members of Congress, and this is something that we'll talk about in our meeting at the end of May a little more in detail about how we all feel we're going to get to that angle and so forth. I've been putting some thought into that and I'll have some strawman recommendations there.

The membership as I've said is we've got 20 members and they were, you've all been chosen specifically for your background and expertise, and in order to have a balanced committee, and as you see we've got metropolitan and rural interests and an organization representing minorities and so forth, so that's all specified actually in the legislation if you did read it in the document there. And as I said we serve two years.

I'm on Chart 4 then. Our charter is really pretty open. We're dealing with, you know, ground transportation and we have a number

οf ways that we can accomplish deliberations. Typically, the bulk of our work, as I said earlier, will be in our meetings very interactive with JPO. We'll additional briefings doing deep dives into certain issues that we think are of interest. We can bring in outside experts as well if we want additional help that way. We can have workshops and other meetings also there to being open and public, as we said earlier, but we're pretty free in terms of the methodologies that we can use to do our work. And again, we'll talk more about that at the meeting at the end of May.

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Our role then is to provide input for the development of ITS for surface transportation. And these three questions that are listed under the bottom bullet there are really within our guidelines in the committee.

First of all, the activities that the ITS JPO is engaged in, are they likely to advance the state-of-the-art or state-of-practice of ITS? Secondly, are these

technologies likely to deploy, and if not or even as being deployed, what are the barriers and what does that mean about that deployment?

And then finally, the appropriate roles for government and private sector which is always a concern, always an issue that we wrestle with in terms of what should be done there.

And I'll point out, and we'll get more into detail and Shelley will get more into detail on this also, this also implies issues between the levels of government. So we've got federal government, we've got state and local who really do the implementation. And you'll find us discussing that quite a bit, because as we loop back to, are they likely to be deployed, a lot of the barriers on there are just how we're structured and what's the domain of responsibility and authority of, for example, the federal program, the ITS JPO versus the implementation that goes on in state and local.

So we'll have a lot of that discussion. And I'll say it's really a personal

goal of mine to make sure that what we're talking about really does see the light of day that this stuff does get deployed. So I really want to encourage all of us to ask the tough questions, come from different directions, and let's really look at this and understand that we believe it's going in a direction that will be deployed, or if not, what are our recommendations to help steer that even better?

So on Chart 5 then, just in the past, you can see that these committees started back in, well, it was authorized in 2005, but in 2007 we had a couple of meetings and you can see the number of meetings we had in each of the years. We got a little bit more intense in 2011, having four meetings.

I would envision us, right now I'm kind of thinking that what we should aim for is three meetings a year, three face meetings, perhaps interim phone meetings for each one of those to get prepared. But again that's something that we'll discuss as a committee, and I'm open to your suggestions on what will

be most effective for us and, you know, our ability to commit our time and how many meetings we want.

And then we have the four advisory memoranda. Again I do strongly recommend that you do take a look at those, place most of the emphasis on the most recent ones obviously. We've been growing as a committee and as an organization understanding how we can provide value, but also the entire program and for that matter the entire industry has been evolving dramatically as we all know since let's say 2007 or 2008. So we've had to adapt ourselves to that evolution.

But you'll get a feel, I think, by looking at these past memos, and in particular the most recent one, you'll get a feel for perhaps what we're aiming at in terms of the substance that we want to provide as a committee at the end of our two-year piece here.

So with that I think I'll turn it back over to Shelley then to walk through the rest of the deck.

MS. ROW: Thanks, Bob. Before I do that, any questions for Bob on the introductory material? Okay, you guys are really easy on us today. I'll chock that up to kind of the awkwardness of just a telephone conference call.

So I'm going to move on to some of the other slides that are in the deck, and as Bob said, we will be very conscious of your time and make sure that we finish promptly at no later than 2:00.

My role today is to give you a sense of the breadth of the existing ITS program. I don't intend to go into any details necessarily, but I also want to give you a sense of how the program is organized within DOT so that you just have that context as you begin your deliberations about the program. I'm not going to go into anything in any great detail.

So I'm on Chart 6, and we've provided for you here and as well as in Tab E, some of the legislative history of the program.

So Tab E is our current legislation.

So if you really love that you can read all

the legislation you want. The important thing to know is that we've had a history of legislation, now three pieces of legislation that has kind of evolved the program.

The very first ones start out with an operational test sort of a bent as well as deployment. And in this context it was primarily highway system, transit system type deployment being discussed here, and it started the architecture standards program as well as commercial vehicles.

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moved into the When we TEA-21 legislation the program began to evolve and you begin to see more of an emphasis on the research and the development. And we also had a deployment program and that program was fully earmarked. Our current legislation that we're still in effect eliminated the ITS deployment and that again, deployment program, primarily focused on the highway, transit, commercial vehicle, those of sorts applications.

The program now is a \$110 million

annually as it has been through all of its history. It is focused by choice on connected vehicle technology, and we'll talk more about that. But that was a conscious choice some number of years ago in a strategic planning activity.

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As you all probably are aware, we're in a legislative cycle right now. There has been some proposed legislation on the Hill. Nothing of course has been enacted. We're all patiently waiting still, and so we can talk more about that in the future as well. ITS is in the proposed legislation, however, there are with it some issues that would rather dramatically impact the future of the program. I'm not going to go into that here. talk further about that later if we need to.

So just a couple more words about the existing legislation. On Slide 7, we've given you an excerpt for those who don't want to read the whole thing that shows the scope of the legislation. And the noteworthy things is that we are about research, development and

operationally testing ITS and providing technical assistance for the nationwide application of those systems. And so I'll try to be more explicit about how we have enacted that or tried to follow that legislation.

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Our legislation does make some specific requirements of us. You see those listed at the bottom of Page 7. We make you aware of that so that you understand when you see those elements in our program why those are explicitly in the program, and that is because Congress explicitly told us that we should have advisory committee, information an an clearinghouse, we should do research. to support the national ITS architecture and We have a set-aside for a road standards. We're required to have weather program. operational test guidelines, and we have a set-aside for a multi-state corridor operations and management program.

So that's a very quick legislative background to give you a sense of the breadth of the legislative underpinning.

On Slide 8, this is the organization of my office, the ITS Joint Program Office. All you need to understand here is that we are a part of the Research and Innovative Technology Administration which Greg leads. I am the director of the ITS Joint Program Office. The deputy director, John Augustine, you will meet. He's not able to be here today. You see Steven Glasscock over on the right. You just spoke with Steven earlier this morning. You'll be hearing from him as your primary point of contact for any questions and anything about FACA.

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We have three teams. Brian Cronin is on the phone right now with us and he's the all technical coordinator across of the research. We have a policy team. That's Valerie Briggs, and she leads the policy work, the professional capacity building and all of our outreach activities. And then we have a program management and evaluation team that's led by James Pol. In addition, we have a chief of staff, Linda Dodge, and Linda is also on the phone with us today.

MS. BRIGGS: Shelley, this is Valerie. I'm here too.

MS. ROW: Oh Valerie, excellent. Thank you.

So you all have access to these folks and more. Any time you need more detailed information we are at your disposal and we will do our best to be responsive to your needs so that you can do the job that you were engaged to do as a part of the Advisory Committee.

The other thing that you need to understand, we are a very small office. That's by intention because we work by definition with the many modal administrations within USDOT. They are our full partners, so we leverage that relationship and their staff, their interests. So while we have a small staff, it's actually much bigger than it appears because we're working so closely with the modal administrations.

So if you see on Page 9, the role that the ITS Joint Program Office serves is to be the strategic coordinator and the strategic

direction setter for the program as a whole. We then coordinate that role across the USDOT with our modal partners.

Our office, the ITS Joint Program Office, maintains the fiscal accountability and the responsibility for overall departmental coordination and to serve as the USDOT's voice for ITS when we're not all speaking together.

At the bottom of Page 9 you'll see some of the major partners that we work with very closely. This is something that we take very seriously and we have a very strong working relationship with modal staff in all these administrations. And I think you'll get a sense for that when you are working together with us.

MR. WEBB: Shelley, George Webb.

MS. ROW: Yes, George?

MR. WEBB: Just in order of magnitude, the number of individuals from these various other partners, are you talking about an average of two per or ten per? I know it may change from Federal Highway versus Maritime, but just to get a sense of how many more staff

people might be heavily involved in connected vehicles at this time.

MS. ROW: Yes, George, it's a good question. And as you indicated, it's different for each administration. I'm going to take a guess, and I know Brian and Valerie on the phone who work very closely with them, if I'm way off please shout out. I would guess in FHWA we probably work closely with I'm going to say about eight people, actually more than that if you go all the way up to the leadership. Greg has had meetings with the Federal administrator, the NHTSA administrator, on connective vehicle issues. So at the working level I'd say probably eight and then up when you add up the senior leadership. FMCSA, I'm going to guess four-ish. FRA, probably, that's an emerging relationship. going to say a couple people there. probably in the three to four range. MARAD is a couple. NHTSA is the other major player along with FHWA. NHTSA is, I don't know, ten, twelve or more. And again we have regular meetings

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with their senior political leadership as well.

So Greg is very involved with David Strickland,
the administrator for NHTSA.

MR. WEBB: Thank you.

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MS. ROW: So that's a ballpark for the numbers.

MR. WEBB: Perfect. Thanks.

MS. ROW: Other questions? Okay, I'm just going to continue this theme Slide 10. again so that you understand. We are the ITS Joint Program Office. We're the core nucleus. We have a strategic planning group within the Department that are leaders that are my peers across all those administrations. We sit together, discuss issues, discuss budgets, funding, programs and strategic direction. At least yearly we meet with the administrator level of all those administrations, and they are the ones who give us the final concurrence on our annual budget and spend plan.

We just completed that activity in,

I think it was January of this year with the
administrators.

The Advisory Committee is you all, and that's where we're able to get some formal external input in addition to some of the informal external input we get through some of our other stakeholder involvement activities that are on the outer ring of that circle.

I go into any of the program activities. Any questions about sort of how we are organized and work internally to the Department? Okay, you guys are being so nice to me today.

Okay, I'm going to proceed on then on Slide 11. This is the vision statement that we have. A couple of words that I would point out, multimodal, surface transportation system, a connected transportation environment for all vehicle types. And again, we take that seriously as well, and I think you'll see that reflected in some of our other program work.

If you move on to Slide 12 -- oh, you know what, and there was one thing I meant to point out to you, I apologize. I wanted you to be aware in the book that we sent you, for

more information about the ITS Joint Program Office staff we've included a staff listing in Tab I. And also there's a listing of all of you under Tab H.

Now I'm going to go into a little bit about the program. Our current strategic plan that is about to be updated next month is under Tab F, and short fact sheets about the major parts of our program are under Tab G. Those fact sheets are probably the easiest way to get a handle on the current program scope without having to read too many pages. And they're by topic so you can actually pick and choose the ones of most interest to you personally.

Okay, moving on, I'm actually going to go to Slide 13. You'll see images like this a lot from us. This reflects our connected vehicle environment and the focus of our research right now in connected vehicles. I do not know how many of you are familiar with the terminology of connected vehicles. In short it's basically, at its most fundamental

level, putting a radio receiver and transmitter on vehicles and other devices like a traffic signal, for example, to enable wireless communication for safety warnings or for mobility, environmental or weather applications.

You will hear us talk about V2V, vehicle-to-vehicle, V2I, vehicle-to-infrastructure, V2X, meaning vehicle to anything else, like a pedestrian, other types of roadside equipment or whatever.

So on Slide 14, here is one of the reasons that we chose to focus so much energy on connected vehicles. This slide pertains specifically to the safety benefits of vehicle-to-vehicle technology. Early in the program, NHTSA did a study to determine the potential of that technology. That study just uncovered that up to 80 percent of non-impaired crash types may be impacted by connected vehicle technology. There's a lot of caveats in that sentence, but nonetheless an 80 percent number is enough to get all of our attention.

And Bob Denaro alluded to the NHTSA agency decision. Let just, since he me mentioned that let me just make you aware of it because it is such an important thing. of the potential for lifesaving Because capabilities, in fact, we all in the Department believe this technology is a true game changer for safety, very significant potential here. Because of that NHTSA has been very public in stating that they intend to make an Agency decision at the end of 2013 on the future of this technology in the new vehicle fleet. Specifically what that means is that between now and then, and we'll say much more about this when we see you in May, we are working as a Department to understand research and collect the data necessary to understand the potential safety benefits of this technology.

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Depending on how that analysis comes out by NHTSA, they have roughly three choices for their Agency decision. They could say that there's not enough information to move forward. They could say that they intend to incorporate

the technology into their new car assessment program which is a voluntary program by automakers. Or they could start down a regulatory path that would mandate that technology in new vehicles in the future. I'm sure you appreciate that is a very significant issue for the automotive industry and for all of us in transportation. So we're working very diligently to support that activity.

There is also a parallel activity for vehicle-to-infrastructure work, and also parallel activities for how do we use this same technology to enhance mobility and environmental impacts in transportation. So that's just a little bit of background and we'll talk more about that in May.

But let me just give you a sense of the organization of the program so you're able to kind of follow along with this when you hear about all the different things that we're doing. Slide 15. Slide 15 is a simplistic block diagram of how our work is organized. So as you can appreciate, if there is technology on

a vehicle or in a traffic signal on the roadside that's communicating, that communication is an enabler.

And there's many things that we can do with that type of technology and those would be the applications that would make use of the underlying technology. Hence, you see a body of our research on applications in safety, mobility and the environment. They're underpinned by the technology issues such as standards, architecture, human factors, systems engineering, test environments, all of that forms the technology layer of our work. finally that too is underpinned by the policy issues which are significant, and we'll talk more about that in May as well. But that's the basic structure of our work.

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Now on Slide 16, you also need to just be aware that that is not all of our work.

We also have technology transfer activities.

PCB is professional capacity building. It's largely a training education program. We do evaluation and we do deployment tracking, and

we'll share some material with you about that in your read-aheads next time.

We do have a small exploratory research program because we feel like one of our jobs is to continually look out for what's coming next in technology. And then we have a small portion of the program that is targeted for the very specific modal administrations. That's because our connected vehicle work is inherently multimodal, and everything works together and everyone's involved together, everything that we do has a multimodal team involved. So that's at the very high level sense of what we have in our research program.

Let me just finish off and then I'm going to turn it back to Bob and let him say some words as well. We have done a little bit of thinking about your May meeting and talked with Bob Denaro about that as well. Again it is your committee.

Frankly, at DOT there are several complex, vexing issues that we are facing in the connected vehicle program because we intend

to be able to implement this technology. We're at a point where we've got to find some solutions to some of the difficult deployment challenges. We would be very interested in your all's input into and thoughts about how to overcome some of those challenges.

So that's why you see some thoughts about sharing with you at your May meeting more details about the vehicle-to-vehicle, vehicle-to-infrastructure programs and some of our policy and security challenges that are our major issues right now.

However, this is your committee. So if you choose to focus in another area that is totally your prerogative. These are things that we, frankly, could use your help on, but if you see some areas that you think that we are not being responsive to or we're not doing our jobs around, then that is completely your call on how you want to spend your time. So we're going to be working in the weeks to come with Bob to focus your May meeting so it is very productive for you. And so these are just our

ideas about some of the topics that we would suggest be on your radar screen.

So let me just pause there and see if there are any questions or comments for me.

DR. KLEIN: Shelley, this is Hans Klein. One question, you said the annual budget is \$110 million. If you add the effort from other agencies, do you feel that the budget is significantly larger?

MS. ROW: No. This program is by far and away the largest funding source for anything related to ITS in the Department. There is a little bit of ITS funding that goes on in some of the other modal administrations, but it is small in comparison to this program.

DR. KLEIN: Okay. And let me ask another question. Deployment is an important challenge that you're facing. I understand that in the grand sense. Will you be more specific about exactly what that means and the kind of specifics you're getting into?

MS. ROW: Now are you talking about connected vehicle deployment, Hans?

DR. KLEIN: You said sort of that the Department right now, one of its interests, I guess, is the challenges of deployment.

MS. ROW: Okay, yes.

DR. KLEIN: And actually, that's my question. What exactly would that --

MS. ROW: Okay, thank you for pointing that out. That was not clear what I said. In that context I'm talking about the connected vehicle implementation of that technology. That's what I specifically referred to there.

Now to be clear, generally when we talk about ITS deployment we traditionally mean more of the highway, the transit and electronic tolls, some of those sorts of deployments. We're going to provide you with a short white paper next time that shows how that part of ITS deployment is going.

And just the short story there is that the best that we can analyze, it looks like we're seeing about a billion dollars a year being spent by state and local agencies to deploy

traditional ITS systems. That money is coming through the regular federal aid program or through their other financial resources like state funds or local funds.

Other questions?

MR. WEBB: Shelley, George Webb again.

MS. ROW: Yes, George?

MR. WEBB: The Secretary has had a position on distracted driving. Some of the issues that the connected vehicle is going to be on delivery is information to the driver. I know you guys have been involved. There's got to be some research going on.

Can we get a small update for five minutes or whatever as necessary at the 24th as far as how those two play out?

MS. ROW: Certainly, George, because you are correct on both counts. The Secretary has been very clear about his concern about distracted driving, appropriately so. This program has a lot of research going on in the human factors area that's dealing with how we

use this connected vehicle technology in a way that maximizes its safety potential without causing distraction problems.

NHTSA has been very forward-leaning in this area. They have, in fact, recently released preliminary driver distraction guidelines that help guide the work we're doing right now with connected vehicles. They expect to update that based on the results of some of the research we're doing in connected vehicles. So that's the two. Second version, we'll be happy to provide more information in May.

MR. WEBB: Thanks.

MS. ROW: And Bob, just in the interest of time I'm going to turn it back to you for any other thoughts that you have for the committee.

MR. DENARO: All right. Thanks, Shelley. Actually I don't have a lot to add. Thanks for that overview by the way. I think that was a great start, and appropriately it was a wide span of topics that I know you could spend two days covering, but it was a good

introduction over that span of activities. I think that helps a lot.

The only thing I want to say is that again, I want to really request that everyone spends some time with the materials that we have and the materials that we will yet receive for the May 24th meeting in terms of being prepared for that so that we're really kind of up to speed and literally on the same page, and can really get into some questions.

And then as far as how, you know, yes, I'm the chair of this committee and we will have a vice chair, but I'm really more of a facilitator. Now those of you who know me, I will not be shy in expressing my opinions, but they're merely that, okay? We are a committee and, you know, I enjoy pushback. I will pushback on some of you and so forth. But I think the strength and the robustness of our end product will be a product of the individual inputs we get from everybody. So I really ask each of you to really think about this direction.

As far as what Shelley just said,

somewhat apologetically, that there's some key issues they're wrestling with and, you know, the apology being that it's our committee, we can do what we want, but these are some issues that they're facing that may be a source of some of our focus.

and I want to reiterate that I very much encouraged Shelley to share that with us because, frankly, they're the ones spending ten hours a day, five days a week on this subject.

We're kind of doing a drive-by view of this whole thing. So likely as not, some of the really knotty issues are the ones that they've uncovered, and I think that's a great place to start.

Having said that I will go back to our charter which says that, you know, we're to worry about this entire program, its probability of being deployed, whether it's advancing the state-of-the-art and so forth, and the appropriate role of private sector and the government. And we're going to have to look at the program through both of those lenses,

okay. One that's really focused on a few issues that are in front of us, one that steps back and say, what else is here, what are we missing, you know, what's going to be the barriers for this? And I think that's what we'll wrestle with through our meetings through our term here.

You know, I'm providing a little experience basically, since I've been on it a couple of terms already on this from the past.

These are some of the issues we've wrestled with. I know that this committee will wrestle with it also. I just wanted to give you a feel for where we're going, and really ask your help as your chair. You know, please give me suggestions on how we can organize better, how we can get to some meaningful results for our committee.

MR. ALBERT: Hey Bob, this is Steve Albert. Just a suggestion. Given the breadth and the depth of the representatives on the committee, it seems like one of things that we should be trying to tackle, but which probably there are some white papers on, are the whole

institutional roles and responsibilities in terms of roll out.

That may change, you know, as technology evolves, and maybe that's something to look at or even have a subcommittee on. Because I think that's one of those things that seems always to be like a juggling act, are we doing it right or are we not doing it right, and how that might change over time.

MR. DENARO: Yes, I think that's a good suggestion, Steve, and I've captured that.

We'll definitely plan to talk about that at our May 24th meeting. Thanks for that suggestion.

Any other comments or questions at this point? We're within a minute of closing here. All right, again, thank you for your time today and for listening and participating. And we'll look forward to seeing you in May.

Shelley, do you have anything to close with?

MS. ROW: All I would just say is that if you have any needs or questions about

the May meeting, don't hesitate to contact me or Steven. As we move forward together, never hesitate to contact us, and once you get to know the staff you're free to contact them as well.

And we really look forward to working with you.

And I guess my last thought I should have said earlier. If the past committees are any judge, we have gotten significant benefit from the advice that has come from the previous committees. So please understand that the work that you're about to do is useful and will be valued and will be taken very seriously by the Department, and we really do look forward to working with you and hearing your thoughts about the program.

MR. DENARO: Thanks for that comment, Shelley. All right, thank you, everyone. I think we're adjourned, and we will see you in May right after the ITS annual meeting.

MS. ROW: Great. Thank you, Bob.

MR. DENARO: Thank you.

MS. ROW: Thanks, everyone.

(Whereupon, the above-entitled matter went off the record at 2:00 p.m.)