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TRANSCRIPT

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ITS PROGRAM ADVISORY COMMITTEE MEETING

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Thursday, July 31, 2008

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Admiral II-III Conference Room

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P R O C E E D I N G S

3 **Call to Order and Introductory Remarks**

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Dr. Joseph M. Sussman: I suggest we begin. The appointed hour has arrived, 1:00 on the 31st , and we extend until tomorrow afternoon, with a dinner intervening. I hope many of us can make.

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Given truth in advertising for the JPO, the advertisement for the light lunch was as light as they come. Nobody will fall asleep because they ate too heavily at lunch, I assure you. So, we're okay on that.

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So, let me welcome everybody to this meeting of the ITS Advisory Committee. You have your package and your agenda. I thought, to start, we might go around the room and have everybody introduce themselves. And, I will ask our guests to tell us who they are, as well.

17

18

Michael Replogle: I'm Michael Replogle, Transportation Director, Environmental Defense Fund.

19

20

Dr. Adrian Lund: I'm Adrian Lund, President of the Insurance Institute for Highway Safety.

21

22

Scott Belcher: I'm Scott Belcher, with ITS America.

Shelley Row: I'm Shelley Row.

23

Dr. Joseph M. Sussman: I'm Joe Sussman, Chair of this

1 committee, and I'm from M.I.T.

2 Paul Brubaker: I'm Paul Brubaker, RITA Administrator.

3 Robert Peter Denaro: Bob Denaro, with NAVTEQ.

4 Joseph Averkamp: Joe Averkamp, with Metro Tech
5 Partners.

6 Randell Iwasaki: Randy Iwasaki.

7 Bryan Mistele: Bryan Mistele, INRIX.

8 Tomiji Sugimoto: Tomi Sugimoto, Vice President, Honda
9 Research.

10 Dr. Joseph M. Sussman: Our guests, do you wish to
11 start.

12 Jane Lapin: Jane Lapin, ITS Joint Program Office.

13 Robert Ferlis: Bob Ferlis, Federal Highway Administration
14 Office of Operations.

15 Paul Pisano: Paul Pisano, Federal Highway Administration
16 Office of Operations.

17 Kyle Williams: Kyle Williams, Director of System
18 Integrations at Bosch.

19 Greg Davis: Greg Davis, Federal Highway
20 Administration Office of Safety R&D.

21 Dr. Joseph M. Sussman: Thank you all. We appreciate
22 your interest and your attendance. We have an agenda and a
23 rather full agenda that will extend to 5:30 today, and then

1 beginning bright and early tomorrow morning, extending to
2 1:00 tomorrow afternoon. We specifically designed this as
3 a two-day event, with an intervening opportunity for dinner
4 that will be a less formal opportunity to interact and talk
5 about these issues. As I said, I hope you are able to
6 attend.

7 Let me give sort of a first order, or sense of what we
8 hope to accomplish during this meeting, and what we hope to
9 learn about the ITS Program, preparatory to continuing to
10 provide advice to JPO.

11 First, we are going to get a good sense of the
12 progress that ITS is making in the context of the existing
13 ITS program. So, we will have a set of discussions about
14 the current program and have a responsibility to review
15 those programs, and we will do so in some detail at this
16 meeting.

17 The second thing we'll do, and not necessarily in this
18 order, is discuss new program goals. There were some sent
19 to us last March in various areas, including safety,
20 mobility, environment, and institutional change. In fact,
21 our committee recommended one additional goal having to do
22 with accessibility of information for society as an
23 additional idea that we thought was important, and we

1 discussed that, as well.

2 We're going to try to understand how the program goals
3 and objectives relate to the existing research program.
4 So, we will get some sense about the relationship between
5 the transition of the new program, and what we are
6 accomplishing during our old program.

7 We want to spend some time on the World Congress.
8 That is now only a few months off. The World of ITS is
9 coming to the United States, to the Big Apple, in New York,
10 to see what's going on. And, the Committee has voiced its
11 opinion that it is important that we put our best foot
12 forward in that media center of the world, so we'll have
13 presentations by Gary Ritter, who just introduced himself,
14 and by Scott Belcher, the CEO of ITS America, on what ITS
15 America is planning.

16 We'll have a report on UTC, the University
17 Transportation Center's Program. And, we will discuss the
18 Advice Memo that we had. It is in one of the tabs of your
19 book. It is worth commenting that the Advice Memo and the
20 way it was encouraging, it largely drove the agenda for
21 this meeting. We expressed some concerns last time, and
22 they were reflected in the Advice Memo. We expressed
23 concerns about, would we have something good to show at the

1 World Congress? So, we're going to get a chance to preview
2 that, and in a sense, kick the tires.

3 We'll talk about how UTC, the Transportation Center's
4 program, is now the recipient of a large amount of US DOT
5 research funds, and the notion here that a good partnership
6 with UTC could be a way, in a sense, of extending ITS
7 research. So that, again, is on the agenda, focused on
8 various goals and objectives. And, we'll have an ample
9 time to talk about those goals and objectives, as well.

10 So, I anticipate a very interesting meeting. There
11 are a lot of points of view that we want to get on the
12 table and have a chance to fully discuss, so that at the
13 close of this meeting, we are able to provide somewhat, we
14 hope, helpful advice for our friends at DOT.

15 The interests around this table are very broad. We
16 have academics, we have public sector people, we have
17 private sector people, with a variety of perspectives and
18 interests. So, the advisory role we can provide has, we
19 think, particular value. As we emphasized in our report,
20 and as I have emphasized in previous discussions, the
21 independence of that advisory role is what makes our view
22 of value to US DOT. So, we value that, and they value
23 that, as well. So, I think we are tracking along in the

1 same direction.

2 Are there any comments or questions from the Committee
3 before we begin launching into the discussions? If there
4 are questions or items that you don't think are adequately
5 covered on the Agenda, this would be a time that you could
6 mention that, and it may be possible, although we're jam-
7 packed, to fold in some other points of view. Are there
8 other ideas that haven't been properly reflected in what've
9 pulled together, Michael?

10 Michael Replogle: Well, I guess as I've looked at
11 this Agenda, the one thing I didn't see was a clear place
12 where we could have a focused discussion is environment and
13 ITS. It seems to me that this is an area that continues to
14 search, in terms of policy concerns, and whoever takes the
15 next White House is going to be paying more attention to
16 the environment.

17 I think the Congress is clearly looking to move on
18 this, as well. I know there was some discussion of that,
19 but I just wanted to bring that thread back to today's
20 meeting.

21 Dr. Joseph M. Sussman: That's an excellent point. We
22 will begin in just a few moments discussing the fundamental
23 program goals. Environment is one that has been on the

1 table, and this would be an early opportunity to get a
2 sense of the Committee and US DOT, and the relative
3 importance of that environmental goal. So, that is
4 certainly a positive suggestion.

5 **Crosswalk of Existing Program Initiatives to New Program**

6 **Goals and Focus Areas**

7 Okay, any other comments? Shelley, I think, at this
8 point, I will turn this over to you for you to discuss the
9 Crosswalk, which will give us the opportunity to understand
10 the relationship between the existing program goals and new
11 program goals that are going to be on the table.

12 Shelley Row: Okay, thank you, Joe. Let me first say
13 how much we appreciate all of you being here, and taking
14 your time to share your thoughts and your ideas with us.
15 It really is important to the program. I would also like
16 to say a very quick thank you for those who know what it is
17 like to arrange meetings like this; it is a lot of work.
18 So, I want to thank the staff and the ITS Joint Program
19 Office, and Citizant, specifically Marcia Pincus, who is
20 back there, who has worked very hard to get this all
21 arranged. So, a lot goes into this and it is appreciated.

22 One of the items that was in the memo, your Advice
23 Memo, that Joe and Bob and I talked about, was to help you

1 have a better understanding about the kind of activities
2 that map, or track, to the goal areas we talked about the
3 last time, and also, to understand how we see it evolving
4 in the future.

5 In you materials, under Tab 2, hopefully you have had
6 a chance to read the Vision for Safety white paper. And,
7 the administrator is here.

8 Paul Brubaker: I'm here for an hour. I have to be
9 back at 2:00, or shortly thereafter.

10 Shelley Row: So, you won't have a chance to share
11 your thoughts, feel free to jump in. So hopefully, you
12 have had chance to look at that paper, and what we will
13 discuss is how we see the program today, and how it evolves
14 over the next two Fiscal Years.

15 So, what you see in the pie charts on this slide, I
16 have FY'08 in the top box and FY'09 in the bottom box.
17 What we have done is, this is a financial allocation, so
18 what this pie depicts is how the current financial
19 resources are allocated around the goal areas that we
20 talked about.

21 So, you see "Safety 37%," the "Mobility" composed of
22 two of those slices on the pie, the one that says
23 "Mobility" and the one that says the "Congestion

1 Initiative." That is the Secretary's program for
2 congestion, and this is the ITS portion of that. So those
3 two together, actually, constitute the "Mobility" portion
4 of the existing program.

5 We currently have no resources going to "Environment."

6 SAFETEA-LU specifies the strong technology transfer
7 role for the office that is reflected Professional Capacity
8 Building Program Architecture Standard Permanent Assessment
9 Evaluation. So, that is what is rolled up into this slice
10 that says, "Technology Transfer." Yes?

11 Dr. Adrian Lund: How do you determine this
12 allocation, whether it's safety, because presumably, some
13 of the things you're doing for safety do affect the
14 environment, they do affect congestion, and congestion
15 affects the environment. How do you decide what you've
16 allotted it to?

17 Shelley Row: Andy, fast forward two slides. This is
18 in your packet, as well. This is the way the allocation
19 was determined. What we looked at was, each one of those
20 major initiatives that currently exist, this is FY'08.
21 These are the major initiatives that exist today. And we
22 said, what was the stated focus of that initiative, and in
23 many cases as you know, Adrian, there is a lot of synergy

1 between safety, congestion, and productivity. When these
2 initiatives were developed, the three goal areas were
3 safety, mobility, and productivity, so there was a lot of
4 synergy between them, but in each case there was a stated
5 primary focus, and in some cases, there was an acknowledged
6 secondary focus. And in some cases, there was kind of a
7 happy benefit, what we call an ancillary benefit. So, this
8 was the way the initiatives aligned in those goal areas.

9 Dr. Adrian Lund: And so, these are what determined—

10 Shelley Row: Correct. So, the "P" is Primary, the
11 "S" is Secondary, and "AB" is Ancillary Benefit. So if it
12 is a "P," then we allocated all of that money into that
13 slice of the pie that you saw on the previous slide. Is
14 that more clear?

15 Dr. Adrian Lund: Yes.

16 Dr. Joseph M. Sussman: I should mention that, just to
17 get the idea on the table, in the first face-to-face
18 meeting of this committee in November of 2007. That was
19 before Bob and I took on the Chair and Vice-Chair,
20 respectively, there was no environmental goal put forward
21 at all. And, the Committee pushed hard on the importance
22 of the environment, and in the March meeting, the new goals
23 did focus and did include the environment, which we were,

1 of course, as a Committee, pleased to see.

2 It's, of course, less exciting than not spending any
3 money at all on the environment, but in principal, it is
4 one of the goals.

5 Shelley Row: So, this is FY'08, and for those of you
6 not steeped in this whole federal year stuff, we are in the
7 tail end of FY'08. So, by September 30th, by and large,
8 this is said and done history for the most part, and we'll
9 talk much more about that tomorrow.

10 So, Andy, let me go back to the first one. The bottom
11 box is FY'09, and I'll show you how that one breaks out.
12 What you will notice immediately is that the two pictures
13 look strikingly the same. So, the funding allocation is
14 very similar in FY'09, and I will explain why that is. A
15 bit portion of that, again, is the Congestion Initiative,
16 and that's forty million dollars out of, basically, a
17 hundred million dollar program. FY'09 is the last year of
18 funding for the Congestion Initiative, so that is clearly
19 dominating the picture that you see in FY'09.

20 Scott Belcher: So, those funds were initially
21 allocated for other purposes?

22 Shelley Row: They were.

23 Dr. Joseph M. Sussman: Which funds?

1 Scott Belcher: The Congestion Initiative funds. They
2 would have been distributed differently back here than they
3 are currently.

4 Shelley Row: That is correct.

5 Scott Belcher: Is the Congestion Initiative with the
6 Urban Partnerships Program?

7 Shelley Row: Yes, it is. Now, Andy, let me go ahead
8 and do the same thing. Lets go back one more. It's the
9 same picture, but now it's FY'09, and there are two things
10 to note in this picture. The first thing to note is that
11 there are fewer initiatives on this slide than there were
12 in FY'08, and you will note tomorrow when we go through
13 these, several of the current initiatives end their funding
14 this fiscal year. So, there are fewer initiatives in
15 funding next Fiscal Year, but they still take up all the
16 money, largely because of the Congestion Initiative.

17 The other thing of note is that the goal areas are the
18 ones we talked about in the last committee meeting. So
19 again, there is really not much opportunity for new things
20 in FY'09 if, presumably, we work to complete the work we
21 currently have underway, including the Congestion
22 Initiative, but you can see how that tracks.

23 Dr. Joseph M. Sussman: Now, the hundred million for

1 FY'08, it's largely, as I recall, in FY'09?

2 Shelley Row: It is the same. We get a hundred and
3 ten million; however, we have what is called
4 affectionately, the lop-off. There's a certain amount of
5 money that is taken off the top, due to obligation
6 limitations, so we have roughly, a hundred million dollars
7 to work with in a given year. That changes every year.
8 We've got right at a hundred million dollars this year.

9 Dr. Joseph M. Sussman: Shelley and I picked up a
10 small typo on the ICM. It should be in another color. I
11 can't tell.

12 Shelley Row: It's gold.

13 Dr. Joseph M. Sussman: Anyway, that should be the
14 darker color.

15 Joseph Averkamp: So Shelley, with the emphasis
16 shifting to safety, maybe this is where I'm headed—

17 Shelley Row: That is where I'm headed

18 Joseph Averkamp: The mobility and congestion column
19 diminishes?

20 Shelley Row: Yes, that's in the next thing. The
21 point for you to understand is that, if we choose to
22 continue to finish the initiatives that have been going on
23 for some time, including the Congestion Initiative, which

1 is easily the biggest portion of the program, it pretty
2 doesn't leave a lot of room in FY'09 for new things.
3 However, there is an important caveat there. The VII and
4 the CICAS programs, both this year and next year, will
5 migrate to the vision that you read about in that "Vision"
6 white paper. So, even though you necessarily see that
7 shift toward what you read about in the "Vision" white
8 paper, inside these projects, the VII and the CICAS
9 programs are moving to that right away.

10 Now, let's do the last view. Let's go back one
11 before. Okay, there we are. This is 2010, and this is
12 where we now see a very noticeable shift toward the safety
13 goal. The Congestion Initiative has ended at this point.
14 I will show you the box diagram here in a minute, and you
15 will see that even more initiatives have ended, so that
16 gives us the opportunity to start new work supporting the
17 safety goal.

18 The presumption in this funding is that SAFETEA-LU
19 still holds, and obviously, that legislation will be over
20 by FY'10, but we don't have anything else to assume. At
21 this point, we're assuming that we're probably going to be
22 under a CR, so that is why you still the "Technology
23 Transfer" slice in there, because that's part of what the

1 legislation currently has us doing.

2 Joseph Averkamp: So, in this framework, what's the
3 mechanism for the other agencies identifying technologies
4 unrelated to safety? Do they do that on their own, or is
5 that still assisted through the JPO and RITA?

6 Shelley Row: Like New Starts?

7 Joseph Averkamp: New Starts.

8 Shelley Row: In terms of New Starts--

9 Joseph Averkamp: New Starts that are not safety
10 related. So, traffic monitoring and reporting, they might
11 not be safety related, but it's still an important
12 initiative. How is that technology identified and
13 incorporated under this framework?

14 Shelley Row: One of the things you'll see in the
15 "Safety" white paper that we are intending to institute, as
16 soon as we can, technology scanning capabilities. So, we
17 would be out in the community, internationally and
18 nationally, public sector, and private sector entities. We
19 are looking at new technologies that are available, and as
20 we identify the technologies that look promising, one of
21 the role that RITA serves is providing strategic direction
22 for the program.

23 So, we would put forward our best thinking on what we

1 perceived as good research that needs to be started.

2 Obviously, we don't want to do that in a vacuum. So, we
3 have two groups that exist internally, to provide input
4 into the program and on research needs that they see.

5 Now, we're still working through the internal
6 mechanisms and processes about how we want to vet that.

7 It hasn't been an issue for several years now because we've
8 had these major initiatives underway. So, we are
9 approaching a time where we will have to figure out how to
10 vet all of that, obviously. Also, we would like to get
11 input through the community.

12 Dr. Joseph M. Sussman: So, would you specify those
13 two groups, who those are, for that input?

14 Shelley Row: Sure. At Paul's level, he chairs the
15 Management Council, which is the modal administrator's
16 mostly. And, they serve the role of providing advice and
17 consent to the strategic direction, which is at the level
18 of the associate administrators, which is the group that I
19 chair, the Strategic Planning Group (SPG).

20 And that has got all the modal representation, not
21 every single mode, literally, but most of them. And, we
22 meet together, and many of them choose to do research on
23 ITS in their own research budget. Some things are funded

1 through the Joint Program Office, and some things are
2 entirely funded by them.

3 Paul Brubaker: Some things wind up being executed by
4 the ATC Program. It's not like it would entirely
5 disappear.

6 Shelley Row: Let me fast forward, Andy. Ten, here we
7 are. So, this is the same picture for FY'10. Again,
8 things to note, there are only three initiatives remaining
9 that require funding in FY'10. Two of them, VII and CICAS,
10 are already primarily focused on safety. And then, you see
11 a lot of capability for new starts in safety. We also have
12 the potential for new starts in the environment. And
13 again, the intent is to focus the resources of the program
14 most heavily on the safety goal.

15 So, that gives you a feel for how the program migrates
16 over time into the focus on safety that you see articulated
17 in the "Vision" paper.

18 Michael Replogle: I guess, one concern that I would
19 have with this pattern of migration is the expansion of the
20 mobility initiatives in 2010, growing by a third.

21 Shelley Row: Do you mean the Safety Initiative?

22 Michael Replogle: No, the mobility is growing from
23 16% in 2009 to 20% in 2010, and that that engagement

1 mobility initiative may indeed lead to the induced travel
2 impacts that increase vehicle miles traveled, which works
3 against environmental performance goals for the overall
4 system. So, I raise that as something the Committee might
5 want to talk about further, as we delve into the details of
6 what pieces these are, and to make sure we're getting good
7 performance?

8 I think a focus on safety makes sense, but perhaps the
9 sole focus on safety isn't the best targeting, and we need
10 to simultaneously to have a balancing of safety,
11 environment and mobility is sort of a three-legged stool
12 goal of the program, to make sure that we're maximizing,
13 sort of, societal welfare from the initiative.

14 Shelley Row: One piece of clarifying information we
15 would - go back Andy - the red and the white together is
16 what we would characterize as going toward the mobility
17 goal. So, in the current program, we wanted to present the
18 program going toward mobility in FY'08 and FY'09, including
19 the Congestion Initiative. So, you're actually looking at
20 going from that to a reduced focused. It's just outside of
21 the Congestion Initiative.

22 Michael Replogle: Well, I think to the degree the
23 Congestion Initiative is focused on the congestion

1 reduction pilot, which is laying the foundation for
2 effective growth pricing, to managed travel, and to fund
3 better transit, which has been a key and a goal for the
4 Congestion - that whole pilot program.

5 I guess I wouldn't necessarily characterize the
6 Congestion Initiative as solely focused on mobility, but
7 rather, I'm trying to balance those things. And, the
8 biggest chunk of money was to go to New York to reduce DMT
9 by 60%. Some of this is labeling and categorization.

10 Robert Peter Denaro: Shelley, on the 2010 at 20%,
11 we're nowhere near 2010 yet. Does this indicate that
12 you're making an assumption that the environment is going
13 to be allocated a 1% piece of that pie?

14 Shelley Row: It means that we expect there would be
15 some investment in environmental research.

16 Robert Peter Denaro: There is a new start, though, to
17 what we've seen here?

18 Shelley Row: Right.

19 Robert Peter Denaro: Are you literally predicting
20 what that decision would be, and what your preference would
21 be?

22 Shelley Row: And again, if federal budgeting, we are
23 thinking about the FY'10 budget now. So, you do it very

1 early on. Two years out is when you start thinking about
2 budgets. What we would envision is a small investment to
3 the environment, again, with a very heavy strategic focus
4 on safety.

5 Robert Peter Denaro: So, that total pile is still a
6 hundred million dollars?

7 Shelley Row: A hundred million dollars.

8 Dr. Joseph M. Sussman: That is the assumption, of
9 course, that of course there would be new legislation.

10 Paul Brubaker: There is a huge assumption here, and
11 I'm not sure it's quite right.

12 Bryan Mistele: My sense is we shouldn't get too hung
13 up on the labeling. A lot of the work you're doing in
14 congestion and mobility is going to help reduce congestion,
15 which helps improve the environment. So, whether you label
16 something primary or secondary, I would focus more on what
17 the programs actually are than how you label them.

18 Randell Iwasaki: How does Sharp II figure into this?
19 It just got an increase.

20 Paul Brubaker: We try to leverage everything.

21 Randell Iwasaki: The other thing, to address your
22 concern, we're going away from the three-legged stool
23 moniker to the fourth leg, and that's to get the

1 environmental behavior to change. And so, we have a
2 permanent switch to other modes of transportation, as your
3 systems become more efficient.

4 Michael Replogle: Another way of describing that is
5 the fourth leg, which is increasing the greenhouse gas
6 efficiency of the traffic that is on the networks by
7 ensuring that it doesn't get congested and degrade its
8 performance. But, the only way that that actually works
9 with the other three legs to give the environmental
10 performance is if you're managing demand that otherwise
11 would be released in congested corridors, by adding
12 capacity off the network. Because, studies show,
13 basically, if you add new road capacity, you tend to get
14 more traffic.

15 Randell Iwasaki: I think that's based on when gas was
16 \$2.00 a gallon, not \$4.50 a gallon. As gas rises, there
17 may be some permanent shifts in other modes of
18 transportation, just from a financial perspective.

19 Voice: I think the evidence from that, from the
20 previous gas prices, is what we have is a short-term effect
21 which has a long-term effect of the downsizing of vehicles.
22 So, you still have the same number of vehicles on the road,
23 but they're burning less gas. So, you actually get

1 environmental gain from that. The knee-jerk reaction is
2 achieved because smaller cars are becoming available.

3 Randell Iwasaki: From an environmental perspective,
4 even with ITS America with what we're working on, it's not
5 just a mitigation piece. It's also adaptation that we have
6 very little information on. All of your infrastructure is
7 based on historical information, on the weather. So, all
8 of your culverts are sized based on hundred year storms.
9 The Midwest had two five hundred year storms within months,
10 so what happened? You had flooding, right?

11 So, you have all these other issues that we're talking
12 about, a permanent switching. But we also have to work
13 because the earth is getting warmer. We're all agreed with
14 that, right?

15 Voice: No, it's absolutely correct, there are shifts
16 in the environment, but they're all based upon projections
17 of the fuel consumption which is going to go down as prices
18 rise. The scientific modeling is very good. The one
19 before last, for example, had the implicit assumption that
20 by the year 2050, the average income, even in North Korea,
21 will be higher than in the United States. If you have to
22 look at the economic models, you have to be wary until they
23 prove themselves.

1 Dr. Joseph M. Sussman: I would comment, Randy. You
2 are noting issues of demand management, or reflected in the
3 Advice Memo we talked about, and there was demand
4 management and behavioral change. So, what you're
5 commenting on is something we laid on the table.

6 Dr. Adrian Lund: If I could just add, one of the
7 things that seems to be coming out here in some of this is
8 semantic, but maybe not all of it. I think what we are
9 hearing is that, whatever you think that the program is
10 focused on, one of its primary goals should be evaluated
11 for all aspects. And that's a very important aspect. So,
12 it's aimed at safety, then it should be evaluated for what
13 the environmental consequences are. Or, it's the same
14 thing with mobility. What are the environmental
15 consequences? If these different focus areas are real to
16 us, it means that everything we do is being evaluated on
17 all of them for the interactive effects.

18 Randell Iwasaki: One other comment. Administrative
19 grouping came out and did presentations to the science and
20 technology subcommittee. And the idea is, you're seeing
21 that there's not enough money to do research. That's the
22 real problem. We have more needs than we have funding.

23 So, it's very difficult for our publications to

1 everything they can and we have to make these switches.
2 But we program based upon today's problems and connect
3 those out in the future, and if you're still stuck with the
4 program when things change. That's what we're seeing is a
5 reflection on that.

6 Dr. Joseph M. Sussman: I was just going to comment to
7 both of you that we have a 2:00 deadline, but we want to be
8 sure you have a chance to chime in with your perspective.
9 I think that's among the most important parts of these
10 meetings.

11 So perhaps, Shelley, if that's okay, we can just turn
12 it over to Paul.

13 **RITA Administrator's Remarks**

14 Paul Brubaker: I want to quote the great philosopher,
15 Randy Iwasaki, who once said that government performs best
16 where it has a clear goal and a clear deadline. So, what
17 I've done is, I've tried to challenge our organization,
18 recognizing that there are a ton of needs, and limited
19 resources. And if you'll excuse the pun, you we can't boil
20 the oceans here at ITS, with a hundred and ten million
21 dollars a year. We've tried that, and I don't think it's
22 worked very well.

23 So, we've challenged JPO to, basically, kudos to

1 Shelley and the staff, they've really rolled up their
2 sleeves and worked their tail off responding to this
3 challenge. We have challenged the staff to really kind of
4 design a program that would have a very clear, measurable
5 goal of a 90% reduction in crashes by 2030.

6 Why is that important? Well, for obvious reasons, it
7 saves lives. We spent in the year 2000 estimate, and it's
8 a two hundred, thirty one billion dollars a year on
9 hospital bills, and pain and suffering, and crash repairs,
10 insurance pay outs, and all kinds of stuff. There's a
11 social cost. Every year there are six million crashes.
12 So, obviously, we want to address that.

13 We see a ready made business case coming up on
14 reauthorization, and can say, "This program is primarily
15 focused on safety, to achieve these very specific and
16 measurable benefits." We want to hit on that trajectory.
17 "Oh, by the way, you do realize that 25% of congestion is
18 the result of crashes. Oh, by the way, you do realize what
19 causes environmental problems, and that's congestion." If
20 we can reduce congestion by 25% by 2030, what kind of
21 environmental benefit do we have?

22 "And, oh by the way, do you realize we're going to
23 create a communications infrastructure that is going to

1 enable all kinds of collection of data, and the ability to
2 push and pull, finally, the mobile internet as a result of
3 this particular activity?"

4 Wow, that's pretty heavy duty focus. If we're focused
5 on that, then that is going to create some sustained
6 societal benefit that is measurable. And I view that as
7 good news, rather than trying to figure out how we can
8 scratch everybody's itches and, sort of, butter the money,
9 as the Secretary likes to say, across a bunch of different
10 programs.

11 We can achieve our mobility goals, our environmental
12 goals, we can help our private sector partners and enable
13 their mobility goals and their convenience goals by
14 creating an environment where one of the active duties is
15 to create opportunity, where they can test their
16 technologies.

17 What you probably saw in the white paper was pretty
18 in-depth technology. There are already solutions out there
19 that the private sector has built. We just need to
20 integrate them, and do a much better job of integrating
21 them, but we haven't do it, because that hasn't been the
22 focus.

23 So, these guys are going to go out there and do some

1 in-depth technology searching, and shake some bushes to see
2 what's really going on out there, and see if we can really
3 integrate some of these technologies in a way that
4 measurably improves mobility.

5 At the same time, we're looking at the activities
6 we've been engaged in Michigan, and activities that have
7 gone on elsewhere. We thought that a common denominator
8 across mobility could be its safety application. And, the
9 data issue is the communications layer.

10 And we've convened a communications round table, where
11 we're really trying to figure out what is the best way for
12 us to go forward with an open platform to enable internet
13 protocol based communications for safety. Our primary
14 concern is that we want to build a platform that is open to
15 the private sector, open to academia, open to the OEMs, so
16 they can come in and test their technologies in this open
17 platform.

18 And hopefully, on the commercial side, derive some
19 major business benefits, as well as looking at having our
20 state and local partners look at this environment and
21 figure out how to meet their data needs. To go to the car
22 companies and figure out how we can pull diagnostic
23 information out of the bus and get it communicated so we

1 understand how the cars under our brand are operating.

2 And, by the way, significantly improve situational
3 awareness so that the traffic management centers know the
4 condition of their roads. So that cars are discoverable to
5 one another, vehicles are discoverable to one another so
6 that they don't run into each other, so that we can
7 actually achieve that particular goal.

8 But I think that what we're trying to do here is get
9 back to the program, so that we're building a very strong
10 foundation that will enable safety applications. Because
11 we're a safety regulatory organization, so our goal, first
12 and foremost, the Secretary always says, "Safety, first and
13 foremost."

14 And if you look at the reform proposal that she
15 proffered, a lot of it is contingent on enabling tolling
16 technology, which is ITS technology is, but the private
17 sector has already done a lot in that area. So, we don't
18 see, necessarily, a big push to invest in those type of
19 tolling applications, but we want to keep an open aperture,
20 an open mind, to say, "We do want to integrate them. We
21 want to see them integrated. We'd like to have some
22 integrated electronics in a vehicle."

23 And, I think the car companies share this point of

1 view, integrated technology probably being some device that
2 uses multiple communications capability that will reduce
3 crashes, give folks information that they need, and help
4 improve mobility.

5 Another thing it can do is monitor output from the
6 vehicle, so we can get a sense as to what the emissions
7 are, on an individual vehicle basis and then on an
8 aggregate basis. And, we realize we're getting data that
9 heretofore we haven't had.

10 And I look at safety as a great enabler. I'm looking
11 at this a little differently, and I'd appreciate your
12 thoughts on this. I see the safety aspect of this, if we
13 can lick this safety problem, not only do we solve the key
14 goals, but we knock down a lot of the pins that we've been
15 trying to knock down for years in the areas of mobility and
16 environmental stewardship.

17 And, the private sector is very interested in the open
18 communications platforms that enable a wave of convenience.
19 They want their customers to be able to download movies on
20 the move.

21 We're also looking at leveraging the experience of
22 other organizations, predominantly the U.S. Defense
23 Department and the defense community, and see what they're

1 doing in terms of enabling communications on the move, for
2 situational awareness reasons. I mean, they've got to know
3 where their vehicles are, they've got to know where their
4 supplies are, they've got to know what's going on with
5 their supply chain, and in their operational environment.
6 And, they're able to do this through communications on the
7 move.

8 I don't know if you've seen these pictures, or not,
9 but you have Special Ops. Officers and troops in
10 Afghanistan, sitting on mules with PDAs, and they're
11 getting real live video feeds back about what's around the
12 corner. That stuff is enabling. We just have to make sure
13 that we take advantage of those lessons and apply them to
14 the transportation field. That's where we're coming from.

15 So with that, I'll shut up. I took a little longer
16 than I wanted to. I think there's a ton of potential here,
17 and we can't do everything. But, if we stay focused and
18 stay on message, I think we'll fund this in the next few
19 authorization bills, because they will see a very clear
20 plan, with some very measurable objectives.

21 And maybe we don't have all of it here, but I think by
22 the Department emphasizing the safety, and having the
23 private sector, and our state partners, and other folks,

1 emphasizing the mobility and convenience, I think it's a
2 nice match. It's a nice balance.

3 Joseph Averkamp: So, the question I would have is,
4 I'm trying to understand how it gets operationalized with
5 emphasis on safety, which I think is a good emphasis. And
6 you can justify that better than what we're currently
7 using, just a cost-benefit analysis. But, when you talk
8 about open architecture and standards, even though tolling
9 doesn't fit directly into a safety agenda, or even traffic
10 collection, are you looking to create a framework for open
11 architecture, for those applications, as well?

12 Paul Brubaker: Yes, I say "Build it and they will
13 come." What I envision happening is, if we build this out
14 to enable safety applications, we're going to be able to do
15 that. I deeply believe that we're going to be able to do
16 that. But at the same time, that same open platform can
17 enable interoperable tolling solutions.

18 That's going to freak out Easy Pass a little bit, but
19 if they're smart, they'll come to the game, and we'll get
20 on that platform, and test those technologies. And they
21 can do open source application development, or they can do
22 proprietary. It's up to them. As long as it rides on the
23 open platform and provides interoperability across the

1 suite of applications. The other thing we want to do is
2 make sure that they are sharing data.

3 Dr. Joseph M. Sussman: Let me make a comment or two,
4 or questions. It's only forty five minutes into the
5 meeting, and in a sense, we've identified what is perhaps
6 the single, most vital issue that we're facing, which is
7 the switch in emphasis from '08, to '09, to '10, is
8 certainly by the standards of the federal government,
9 revolutionary.

10 I'm not aware of too many other programs where the
11 shift in research focus has been as dramatic as this, with
12 almost three quarters of the research devoted to safety,
13 and less to other activities. It may be a good idea, and
14 it may not. But certainly, RITA deserves our best thinking
15 on that question, so the floor is open for anyone who would
16 like to comment.

17 Michael Replogle: Well, I just want to compliment
18 you, Paul, on a well-articulated vision. I did read the
19 white paper in the pre-reading materials, and I think it's
20 well stated. I think, as a way of framing this and selling
21 it, a focus on safety does make a lot of sense.

22 At the same time, I'm hearing from some folks out in
23 the field, for example, Jim Witty, who is head of the

1 tolling project out in Oregon, looked at the electronic GPS
2 stuff. I've heard he gave a briefing a week or two ago, in
3 which he was saying that Homeland Security is raising
4 issues about use of GPS for tolling.

5 And that, to me, seems like the kind of issue that
6 this program very much needs to be engaging at the highest
7 levels of the Department, to make sure that we're not just
8 focused on safety, but we're focused on, how do we make
9 sure that issues across other parts of government don't get
10 in our way to facilitate applications like real time GPS-
11 based tolling collection, or real time, GPS-based pay as
12 you drive insurance? I mean, pay as you drive insurance,
13 maybe you would bundle that under the safety bundle of this
14 program. I didn't quite see pay as you drive insurance
15 highlighted here.

16 But to me, the Brookings Institution Hamilton Program
17 just released a report a couple of days ago, and they did a
18 very nice analysis of pay as you drive insurance, show that
19 if insurance across the U.S. were switched to a mileage-
20 based premium plan uniformly, we'd reduce DMT by 8% in the
21 nation. And, two thirds of households would save money on
22 their car insurance. And for those households saving
23 money, the average savings would be \$270.00 per vehicle.

1 At a time of \$4.00 gas, that is a significant benefit for
2 public welfare and for equity, that are derived potentially
3 from an ITS application.

4 So, I guess, I want to make sure that your vision -
5 I'd like to see your vision broadened a little bit, too, to
6 be more encompassing and supportive of these kinds of
7 things that may not have a direct safety thing. Certainly
8 pay as you drive insurance, by reducing miles driven, is
9 also reducing accidents. So, you could say that's a safety
10 thing.

11 Maybe some of this is packaging, but I also think from
12 an atmospheric and framing perspective, given the role of
13 the growing importance of climate change as a topic, that
14 for you to frame your budget, and part of this is just about
15 telling a story, I would feel a lot more comfortable
16 saying, "Yes, go, you're making just the right change," if
17 we took a bit out of that safety and mobility wedge, and
18 put it into the environment, so we have more like 10% or
19 15% on the environment? We would say, this is a balanced
20 program. We're looking at making sure all of these things
21 work to help each other along.

22 Paul Brubaker: Those are great points, and I think
23 you are spot-on, in terms of so much of this being

1 packaged, and how we communicate this, because those very
2 issues you raised are the exact issues - everybody is
3 worried about GPS and privacy. They're interested in
4 enabling things like BMT-related toll and BMT-related
5 insurance. So, that, in and of itself, is one of the main
6 reasons why we wanted to build this, because it will enable
7 us to be able to develop applications and tests, and answer
8 a lot of those questions that are being raised.

9 So, those are in the framework of what we had in mind.
10 However, what I'm worried about is a communications
11 activity as a re-authorization, where we seem to have a
12 scattered message that is very similar to the message that
13 we have had for a long time. We haven't necessarily had
14 goals or deadlines, and I'm trying to figure out, when
15 we're speaking to our stakeholders on the Hill, how do you
16 develop a goal or a deadline around some of the testing?

17 Dr. Joseph M. Sussman: I'd like to get some other
18 comments. We only have a few more minutes of Paul's time.

19 Voice: If I could make a couple of comments. I think
20 the congestion problem has basically been solved. There
21 are plenty of demonstrations around the world where a
22 technology has worked, and America doesn't have to re-
23 invent the wheel. There are plenty of technologies out

1 there. I was advised of the House of Commons Transport
2 Commission ten years ago, and these technologies were
3 there. I think it has been rather thorough.

4 I think on the environmental issue, it's true, but
5 really, the environmental issue is not an NTS issue. Just
6 bump up the price of oil. We see the price of oil has gone
7 up and mileage has gone down, and you start to reduce CO2
8 emissions. It's not rocket science. It's not really an
9 ITS issue in that sense. With these small issues that are
10 really on the sideline for ITS, I think safety is a very
11 good angle to narrow in on. I like the idea of assessing
12 projects.

13 My question is a rather small one. You picked vehicle
14 crash rate as the criteria. Now, there's a difference
15 between mobility and mortality, and you can actually have a
16 reduction in crash rate, but you may have an increase in
17 mortality because faster traffic is more dangerous. I'm
18 just wondering why you picked that criteria?

19 Paul Brubaker: I picked a lot of criteria, but that
20 is one of them. The crash rate is there. You know, we'll
21 monitor other things, too, like mortality rates and deaths
22 per DMT, and some of the other metrics we traditionally
23 use. Part of the reason that's a metric, and the cost

1 issue is a metric, is because that's what tends to resonate
2 pretty well. I hate to be blunt about this, but this is an
3 area that we could put together a really good elevator
4 speech, and it would sell.

5 And I don't mean to be mercenary, but I want to see a
6 future in this program that will enable us to build out
7 this communication layer that will enable all kinds of
8 different ITS capabilities. But zero balance safety
9 focusing, focusing in on safety, will enable us to build
10 that platform for the safety apps.

11 It might be a really interesting convergence of the
12 U.S. Federal Government supporting and facilitating this
13 platform, but having the private sector come in, and having
14 universities come in, and having states come in on these
15 demonstrations, and pulling out their technology that is
16 consistent with the open platform architecture, and
17 building stuff, and enabling stuff, and going out in the
18 commercial market and selling it. And I see no appetite to
19 go out and invest in very expensive hardware and
20 infrastructure to enable anything ITS related. I just
21 don't see it happening.

22 So, the beauty of this model is, from my perspective,
23 you get the private sector and others helping you to

1 generate consumer demand for convenience of mobility
2 applications, and you have OEMs, and others, and us testing
3 the safety elements of the communications capability. And
4 to the extent that you do need hardware investment to
5 enable this stuff, I actually see the private sector,
6 because in this case it would make sense, or working with
7 the states or locals to get this infrastructure deployed.

8 I mean, you've done with the private sector. And,
9 there's a business reason why these companies agree to do
10 that, and it's because they're selling time on the network
11 and they're selling communications. And, I think that's a
12 strong element of the business.

13 Dr. Joseph M. Sussman: I'd be interested in other
14 members who have opinions one way or the other. Brian, and
15 then Tony.

16 Bryan Mistele: Let me just make two comments. I
17 think you're actually doing the right thing, in terms of
18 focusing. If the challenge has always been twelve projects
19 and five different criteria, what is this program about?
20 So, I wouldn't shy away from saying, "This is what we're
21 focusing on. Yes there are other things that are nice, but
22 quite frankly, we're going to have much more bang for the
23 buck by focusing on one thing, rather than ten things."

1 So, I congratulate you on taking that stand. I certainly
2 think it's welcome.

3 The second thing, I think the private sector is doing
4 an enormous amount of investment today. Four of the top
5 six OEMs I know of are investing. Within two years, we'll
6 have devices with two-way connectivity. So the key, I
7 think, in terms of what you're trying to do, obviously, is
8 look at what's happened over here and align what research
9 areas that have complimented. I think it was Gandhi who
10 said, "The best way to lead is figure out where the crowd
11 is going."

12 Like you said, it's not so much building the
13 architecture from scratch. It's more, figuring out what's
14 happening already, bringing them together, and adding the
15 safety applications that may not ordinarily have been
16 brought together.

17 Dr. Joseph M. Sussman: Tomi?

18 Tomiji Sugimoto: My understanding is that ITS is the
19 one with the technology to make transportation more
20 efficient. Then, we should define, what is efficiency?
21 So, it contributes to the public. And when we break down
22 how much we should reduce the accident rate, or how much we
23 reduce the traffic congestion, and the result of that on

1 the environment, the consumption of gas can be reduced
2 subsequently, I mean increased more.

3 So, the most important thing is how to define
4 efficiency for transportation? So, my understanding that
5 government would like to focus on this, the year 2010, and
6 how to say the investment of the budget fit into the
7 research. That is my understanding.

8 Dr. Joseph M. Sussman: I wonder, Paul, how this
9 substantial emphasis on safety aligns with the broader
10 policies of DOT? Just a few days ago, Barry Peters came
11 out with a major policy discussion. There was first an
12 email that was widely distributed, and some of us, I'm
13 sure, have had a chance to read that. I read that report
14 that you have to drill down fairly deeply before you get
15 to, safety. It talks about, first, mobility and
16 congestion, and economic development and environment, and
17 it eventually does get to safety. But I worry about how a
18 program in a major research area is focused quite
19 distinctly from the Secretary's view of how things ought to
20 be.

21 Paul Brubaker: I'm glad you brought that up, because
22 I was in Crofton, Maryland for the announcement. All the
23 administrators went to different areas in the country, to

1 talk about this. And in Crofton, ATS has got a facility
2 there that tests, more or less, what I call existing
3 technologies. Existing tolling technologies, existing
4 enforcement technologies, which is the point we talked
5 about earlier, and said a lot of those technologies already
6 exist in a way that will enable them to perform most of the
7 way it has been described.

8 We're relying heavily on congestion pricing and
9 tolling, and we want to see a lot more private
10 partnerships, and we're going to rely heavily on the
11 private sector to enable the existing solutions out there
12 to make these things happen.

13 Now, having said that, they can certainly get on this
14 open platform that we want to come up with, and test new
15 technologies and new ways of enabling tolling technologies
16 and improving stuff, but we don't have to invent it.

17 I think the important thing is to understand that the
18 reform proposal that she put on the table is really about
19 making data driven decisions, involving more ability to
20 state and local governments, to allocate resources based on
21 their understanding of their local needs. Because that is
22 where all the trouble points are, that's where a lot of the
23 congestion is, and they're in a better position from a

1 multi-modal perspective, to decide whether or not they want
2 to modernize a highway, or whether or not they want to put
3 more money into mass transit, depending on their local
4 needs.

5 So, that is sort of the basic fundamental theme in the
6 proposal. It's about more data-driven decision making.
7 Also, with our ability, she wants to be sure the Feds
8 reserve the right to take that interstate focus along the
9 corridors, and fund projects across multiple states, and
10 address long standing choke points that are in the national
11 interest.

12 So, it was less ITS. There's certainly an element
13 associated with it, particularly in terms of tolling and
14 fee collection. In fact, she and I have talked extensively
15 about the need to make sure that the technology is in sync
16 with our ability to have to come up with some alternatives
17 to the gas tax. Because let's face it, you're moving to
18 more alternative fuel vehicles, which is a good thing. I
19 love that. We're going to see more plug-in hybrids, more
20 electric cars. You going to see driving, hopefully, go
21 down. We're already going to see a hit with the \$4.00 a
22 gallon gas.

23 Dr. Joseph M. Sussman: I guess, just to follow up,

1 you mentioned, and others have mentioned, that, "Gee, we
2 have the technological solutions to the congestion. It's
3 just a question in implementing it." That's a big "just,"
4 as we've learned. And, there's a lot of work that can be
5 done that can be reasonably characterized as research, as
6 to how to implement these technologies in an effective way.

7 Simply the fact that we know how to take pictures of
8 license plates or sense transponders in real time, that's a
9 necessary condition, but often a sufficient condition to
10 make these things happen. I, at least, would argue it's a
11 target for a research activity.

12 Of course, you're quite right. The goals of safety,
13 congestion relief, and environmental relief are connected.
14 These are not individual pillars. But the question of
15 emphasis troubles me, in terms of that dramatic a shift,
16 but I'm only one person speaking. Bob?

17 Robert Peter Denaro: One comment on this, and Shelley
18 will get back to you, but I noticed these pie charts really
19 only score the piece. They don't score the secondary
20 pieces.

21 Shelley Row: That's right.

22 Robert Peter Denaro: So, maybe we're doing ourselves
23 a disservice because we've all said now that there are a

1 lot of things about safety which will contribute to
2 mobility, and to the environment, and so forth. Maybe we
3 needed a metric in the scores methodology so we can look
4 at, "Okay, given that we do these things, what are the
5 collateral benefits for mobility and the environment?"

6 And, after we take that picture, let's take a look and
7 say, "Okay then, in an environment now, given that we've
8 got these benefits from the safety, what is missing?" And,
9 it maybe identifies the investment that must be made,
10 specifically, in those areas, to improve it.

11 And, this comment comes from I looked at it and said,
12 "Well, a million dollars in environment. Is that enough?"
13 If it's not enough, then I don't know, because of what I
14 just said. And so, I think we have to get to that point,
15 somehow.

16 Dr. Kenneth Button: If I could add a couple of
17 things. One thing in safety, as you point out here, with a
18 40% congestion in cities due to accidents and things, once
19 you start getting that stuff and looking at that, that's
20 really a secondary benefit, in terms of mobility.

21 I'm interested in the previous charts. We had that
22 information about inputs. I'm just wondering if you had
23 any insights about what you consider your big successes

1 have been recently, over the last few years in these areas,
2 because, that may be insightful of where we should move
3 forward.

4 Paul Brubaker: I'm going to let Shelley answer that.
5 I'm going to get going, but that is a great question. But
6 if I could just leave you with one thing, and then Shelley
7 can answer the question when I leave, just to be clear, the
8 most important thing here in my mind isn't necessarily so
9 much the absolute of the safety goal. The safety goal is
10 important for all of the reasons I have cited.

11 But having said that, I think the most important thing
12 is being able to build out this interoperable platform for
13 ITS applications, because that will scratch tons of itches.
14 It will finally enable what I call the mobile internet to
15 be used to enable safety applications, and that is a
16 legitimate goal of the U.S. Department of Transportation,
17 is to really zero in on that.

18 But it's also going to enable what the private sector
19 is looking for, what the OEMs are looking for, and meet the
20 data needs of the folks in the state and local areas. So,
21 that's where I'm coming from.

22 Dr. Joseph M. Sussman: Paul, we appreciate your time.
23 Thank you for your comments. So, we are on break now,

1 according to the Agenda. After our first intense hour, I
2 guess if we thought the lunch was light, the break looks
3 even lighter. There is coffee downstairs in the lobby for
4 those who would like that. There are soft drinks back
5 here. So, enjoy your Pepsi Light, and we'll see you back
6 here at twenty five past two.

7 (Recessed.)

8 Dr. Joseph M. Sussman: We will reconvene and turn it
9 back to Shelley, who will operate through the next piece of
10 the agenda. I think she has some introductory comments, as
11 well.

12 Shelley Row: Thank you, Joe. Before we move on to
13 the next piece of the agenda, I feel like Ken brought up a
14 really important point with his last comment. So Ken, if
15 it's okay with you, we're going to talk specifically about
16 some of the programs tomorrow. So, if that's alright,
17 we'll talk about some of the outcomes then.

18 Dr. Kenneth J. Button: I was thinking in terms of a
19 graphic like that, in terms of the outcomes.

20 Shelley Row: I'm not sure I understand that, but
21 let's talk about it and we'll see what we can do, okay?
22 Anyway, that's a good question.

1 **ITS World Congress Activity Update**

2 Okay, I believe the next thing on the agenda is a
3 discussion about the World Congress. Andy, let's go fast
4 forward. Obviously, we will need Scott here.

5 What I thought we would do is we wanted to take this
6 opportunity as a part of your Advice Memo, to follow up and
7 give you insights on what you can expect to see at World
8 Congress.

9 Now, Gary Ritter is here from Volpe, to talk
10 specifically about SAFETRIP and about the demonstration.
11 Of course, Randy is here, as well and can certainly chime
12 in about that, too.

13 To just give you a little bit of an overview, we're
14 actually going to flip the order and I'm going to talk
15 about US DOT activity. So, Andy, let's go to the next
16 slide. I know that Scott brought quite a lot of materials.
17 I will let him talk about that, about World Congress.

18 In terms of the US DOT presence though, we will have a
19 pretty good sized booth space there, and the theme that
20 we're trying to focus on, actually Ken, kind of goes to
21 some of your points on research results. Each of the major
22 initiatives that we'll be talking about tomorrow - this
23 year has gotten to a point where we've done some kind of

1 field demonstration and some kind of research results that
2 have come about.

3 So, we want to really highlight that and try to put a
4 spotlight on what we've learned through all of these
5 research programs that have been going on now for several
6 years. So, we're developing some very short, but we hope
7 will be very readable, papers on each one of the major
8 initiatives that, again, focus on research results.

9 Additionally, we are planning to allocate the time in
10 the booth, and focus on specific research programs during
11 different slots of time. So, for example, there might be a
12 certain part of the time during World Congress, in our
13 booth, that we'll focus on the integrated management
14 program. We will have the staff there. We're developing
15 posters. They will be very graphic in nature, I think, to
16 convey what we've learned to date, and they will be
17 available to have conversations with people in the booth.
18 We will allocate space.

19 The booth will have five stations that will be able to
20 have video or some kind of demonstrations at them. Three
21 of those stations will be allocated to Safe Trip-21. We will
22 have the other two for the other parts of the program, and
23 we will, again, cycle through different types of

1 demonstrations, or videos, or different things for the
2 various programs at different times of the day. So, at a
3 very high level, that's how we're expecting to showcase the
4 US DOT program.

5 Now, we're also going to have a document there that
6 will show where others in the exhibit booth who are our
7 partners, will be exhibiting, as well. So, for example,
8 NCAR, the National Center for Atmospheric Research, will
9 have a booth, and will have a much more extensive
10 demonstration about the maintenance decisions and support
11 systems.

12 So, we'll have a document that will show, "Go see
13 UMTRE or NCAR and you can learn more," because it will
14 actually be a very distributed demonstration. The
15 Secretary has been invited to speak. We are optimistic
16 that we will be able to get her there, although it's not
17 confirmed. Obviously, the administrator will be there, as
18 well as quite a number of JPO staff.

19 So, at a very high level, that is the plan, kind of
20 the focus, of the US DOT presence.

21 Dr. Joseph M. Sussman: So, this has no moving parts?
22 This is simply—

23 Shelley Row: It's static. Now, the one moving part

1 that I was just talking to Scott about, the CICAS Program,
2 which is the Collision Avoidance Research, is expecting to
3 do an on-street demonstration as a part of the 11th Avenue
4 Theater, and I'm sure Scott can talk to that. So, other
5 than SAFETRIP, that's the only moving demonstration that we
6 expect to have.

7 There is one other, I almost forgot. Sorry, Steve, if
8 you're still there. The IVBSS Program that we do in
9 coordination with UMTRE is planning to have the IVBSS car
10 there, because to experience the research, you have to go
11 for a rather extensive drive in a car.

12 So, it's not going to be open or widely advertised.
13 It will be a much more constrained opportunity to
14 demonstrate it. The vehicle will be there, you will be
15 able to see the interfaces, you'll be able to see what they
16 did with the vehicle, and there will be a few opportunities
17 for people to ride in the car.

18 Those are the two, again, other than SAFETRIP, that
19 will have physical demonstrations.

20 Dr. Joseph M. Sussman: Any question for Shelley?

21 Shelley Row: I'm going to ask Gary.

22 Dr. Joseph M. Sussman: We have Gary Ritter.

23 Gary Ritter: We will have some of the moving parts.

1 Most of our moving parts are going to be electrons, though
2 some things on wheels. But, what I want to do is bring you
3 up to speed, or up to date on the Safe Trip-21 Program, and
4 then, what we're planning to do at the ITS World Congress.

5 Since you have this in the package, I'm going to go
6 very quickly. Just a reminder, the Safe Trip-21 Program does
7 incorporate a few of the operational test components.
8 We're trying to look at near-term applications of VII
9 concepts, and how to bring this to reality, to expose it to
10 the public in the near term, with a view toward widespread,
11 deployable concepts while other research continues.

12 Next.

13 Basically, we're focused on safety, mobility, and
14 electronic payment. And I would just add, based on the
15 comment before, one of the things that we do in electronic
16 payments is, it is a safety-related activity because,
17 particularly, if you go to open gate tolling where you
18 don't have to stop traffic to collect payment, whether
19 you're doing it for public policy purposes.

20 The other one is to enable hot lanes and congestion
21 pricing options, and we'll talk a little more about those,
22 and to use electronic payment technologies to provide more
23 convenient transfers from automobile travel to other forms

1 of transportation.

2 Next, our Milestones. We're developing our
3 operational capability right now, and we will have that
4 determination in the next couple of weeks as to what we
5 will be able to have up and running for the World Congress.

6 The people out in California have been working hard
7 since the first of May to develop these applications, and
8 we will make a decision very shortly, as to what we're
9 going to have. And then, whatever we're launching, as
10 Shelley said, whatever is going to be at the World Congress
11 from DOT is a culmination of research.

12 Safe Trip-21, conversely, is the launch of the
13 operational test that will be conducted during 2009, so it
14 sort of the birth of the research activity.

15 Next.

16 Just the Concepts. We have a couple of private
17 commitments to test and evaluations, so we're looking to do
18 this very openly. We're trying to do it on a national
19 basis so the results are available, not only to California
20 partners, but to anyone who is interested. And, we want
21 those results to be objective.

22 And, we're also going to be looking for, as I said
23 before, things that can be sustained. How do we look

1 forward to the concept, even if we haven't come to the
2 latest, greatest version of technology used to implement
3 the concepts?

4 Next.

5 For those of you who are interested, the Bay area is
6 our test field site. We are very pleased with it. We are
7 building an awful lot of investment by means of Caltrans,
8 in terms of their test pads for Sky High, which is
9 basically this corridor and this little piece over here.
10 They have the I-80 Corridor, which is integrated corridor
11 management site. And so, we've got the size of the bay
12 covered.

13 And as many of you may know, the there is a UBA
14 agreement, still being implemented with San Francisco, so
15 we may actually, ultimately, tie in with that, as well.

16 These are the basic parts of the test pad. The one
17 other, I mentioned, that has come up, sort of, as an
18 outgrowth. One of our partners, Nokia, is interested in
19 taking this from the Bay area up to Lake Tahoe, to
20 demonstrate their abilities to, or test their abilities to
21 monitor traffic over an extended route, and cover roads
22 that otherwise are not covered to the same degree that they
23 might have been in the urbanized area.

1 So, we will be looking at that, as well. Initially,
2 some of you will recall from last time, the Nokia portion
3 of this test is getting to have at least a thousand
4 vehicles up and running in the Bay area, to be assigned to
5 people in the Bay area, and they're going to do it by
6 targeting people who also travel to Lake Tahoe.

7 So, they're going to try to partner with the ski areas
8 and find people who have annual ski passes, so that they'll
9 be able to track - get data from those phones while they're
10 in the Bay area during the week, and then track them as
11 they leave the Bay area on the weekends.

12 We have electronic tolling on the Dunbar Bridge. We
13 also have at least one of four possible HOV lanes that are
14 authorized by the California legislature to convert to HOT
15 lanes, which are the High Occupancy Tolling lanes. The one
16 in the closest proximity is down here in 237.

17 And additionally, we will have a lot of public transit
18 involvement. We're continuing to talk with BART, as well,
19 primarily with IAD, and we have recently gotten some
20 initial indications from the Stanford University folks,
21 that they will put some of our equipment on their shuttles,
22 and we will be able to integrate them to the whole mix of
23 transit in the south Bay area.

1 Next.

2 Those are the partners. As we mentioned before, we're
3 very happy with the mix of people involved, and also with
4 the balance of payments. We're pleased to be the minority
5 partner. It's about three to one, US DOT to California.

6 And the other partners? Okay. We are going to try to
7 target safety. This is going to be a challenge. We are
8 committed to doing data-driven decision making on safety,
9 which means we're very pleased with Caltrans, which has one
10 of the better databases on crashes and the consequences of
11 crashes and the consequences of crashes.

12 This is just a first approximation of some of the
13 places where it gave us an initial read-out of where they
14 have a lot of collisions. Now, just because they have a
15 lot of collisions, it doesn't mean that it's going to
16 automatically be a good site. We're going to try to match
17 the type of collision with the type of solution to see if
18 we can find those places where providing situational
19 awareness - where building a heightened situational
20 awareness for drivers would make a difference, And trying
21 to estimate what that difference might be.

22 We will also be doing some things down in California,
23 via the test bed, looking at the associated technology. We

1 will be able to do more advanced safety applications, but
2 this will probably be minimal, to the extent that some of
3 these other things are going forward under CICAS. We're
4 not going to duplicate efforts, but we will be able to look
5 at some of those kinds of things.

6 Next.

7 Okay, we talked a little bit about the roads. These
8 are the major roads in the area. But those were probes
9 back there. Most of the arterial roadways are not very
10 well-instrumented freeways. In particular, the I-80
11 Corridor is one of the best instrumented roads in the
12 country. So, we will be able to compare data, from probe
13 data to well-instrumented roadway data, but we'll also be
14 able to see how much data we can get from roads that aren't
15 heavily instrumented.

16 As we did down into this area, which is the VII Test
17 Bed, we will be looking at how busses would be used as
18 probes, as well, because busses are, like any commercial
19 vehicles, I guess they ply the roadways more frequently
20 than automobiles, individually, do. And, they also are
21 trying to maintain a schedule. So, if they know how close
22 they are able to adhere to the schedule, you can make some
23 assumptions about whether the road is behaving well, or

1 not.

2 Again, we will be having the probes all the way up to
3 Lake Tahoe, and will be able to see whether we can detect
4 some of those major movements, because the movement out of
5 the Bay area to Lake Tahoe area on the weekends is
6 significant. It really is one of these urban exoduses of
7 people going to the mountains to recreate, and they're all
8 going at the same time, and coming back at the same time.

9 Dr. Adrian Lund: Can you tell me what you mean when
10 you said you said we want to see if we can detect the
11 movement?

12 Gary Ritter: We're only going to have a thousand
13 vehicles, and we're hopeful that they will be compressed in
14 time, and we will be able to use them as probes to detect
15 traffic conditions, such as congestion.

16 Dr. Adrian Lund: Basically, to detect congestion,
17 right?

18 Gary Ritter: We would like to see if we can detect
19 incidents, whether traffic may have stopped.

20 Randell Iwasaki: We did this over a twelve hour
21 period on I-80 Friday, and the cell phones that we ran,
22 there were 150 students, and we ran this thing on I-80, the
23 loop. They had a five car accident, and those cell phones

1 picked it up just like that. So statistically, you're
2 going to reach a point where you have enough penetration to
3 calculate what the speeds are on roadway and, in theory,
4 your volumes.

5 What we're trying to do is figure out what those
6 algorithms are. That's one of the things we're testing
7 with the thousand probes in California. I can throw a
8 pebble in the ocean and what's the ripple? Not much. But,
9 as you get up to ten thousand concentrated in the Bay area,
10 you might be able to make some calculations on lane by lane
11 overall speed, maybe those kinds of things.

12 Dr. Kenneth J. Button: You mentioned using busses and
13 cars. What about other vehicles? You have a limited
14 number of clients you can approach.

15 Gary Ritter: Most commercial firms actually rely more
16 heavily on those. We did not get enough solicitations of
17 commercial vehicles. We would be happy to.

18 Bryan Mistele: I don't know if it's a dumb question,
19 but I can't understand. My company already has 30,000+
20 probes in this area, with the operational systems providing
21 it to more than fifty customers, so I guess I don't
22 understand the point of the test is. What we're trying to
23 trying to figure is, can probes work to track traffic?

1 Dozens and dozens of people are using this data.

2 Randell Iwasaki: In your case, your technology isn't
3 specific enough. You get a gross speed along Interstate
4 80, which is great for selling it to traffic people for
5 value-added resale. What we're trying to do is go the next
6 step, where these probes with GPS technology is so refined
7 that you know approximately where the lane is where that is
8 driving. So you can get occupancy using your data, not
9 seeing the people in the car, but seeing in terms of
10 volume.

11 Bryan Mistele: Where's the volume with the thousand
12 probes?

13 Randell Iwasaki: We're going to go up to 10,000.
14 Nokia's a company that makes 1.7 cell phones per second.
15 Eventually, you're going to have GPS cell phones
16 everywhere, so the business model right now is phone-to-
17 phone, phone-to-server. And, hopefully, we'll get to
18 eavesdrop on what's happening with that server, and get
19 that kind of information. That's the difference between
20 your data and this data.

21 Gary Ritter: Even though we will be able to do a lot
22 of the same things that are done now, this particular
23 approach is creating the ability to layer on the roadway

1 what they're calling a virtual trip detector.

2 Randell Iwasaki: It's like a virtual loop.

3 Gary Ritter: So, they can drop that on there and
4 start getting the data at the point. It also has a
5 cloaking feature ability built into it so that data can
6 flow pretty easily, while maintaining anonymity. We won't
7 know which vehicles are providing the data. Ultimately,
8 they do know, but it can be masked. They can eventually
9 figure that out. You can go forward, but you can't go
10 backwards. So, there are some differences, but again, we
11 are interested in the technology and this was one that came
12 with California.

13 Dr. Adrian Lund: One other general kind of question -
14 in these programs, what does the federal government bring
15 to the table? Are you bringing some enabling access or
16 something like that, or is it mainly money?

17 Gary Ritter: Mainly money, some oversight, and we're
18 still talking with Caltrans and the partners we have from
19 other applications that we might bring into the arena to
20 help build the test bed and evaluation.

21 Next.

22 This is the VII California test bed. This just shows
23 one of the things we're looking at is how to segment the

1 architecture so that we have a data user, and then the
2 actual field equivalent out here. It will be testing some
3 middleware applications that would allow devices to be
4 added or changed over time, that don't require you to
5 completely redevelop the whole system. You can change it a
6 piece at a time.

7 Next.

8 Moving on to what we're hoping to be able to bring to
9 the World Congress, our theme is to talk the travelers, and
10 it's the connectedness of the traveler and the
11 connectedness of the vehicles with the infrastructure.
12 There are both in the exhibit hall. We have booth space
13 within the DOT booth, Nokia will have a booth, and NAVTEQ
14 will have a booth.

15 And, as Shelley said, we're going to try to do things
16 with people who want to know more about the technology,
17 they can go to our partners and find out about it. But,
18 we're going to be focused on the concepts and benefits
19 associated with these kinds of technologies in terms of
20 demonstration issues.

21 There's the 11th Avenue Theater, which is the safety
22 application, and the Manhattan Loop, which is the traffic
23 of the future. Most of our activity is going to be

1 concentrated on the Manhattan Loop. We're still working
2 with ITS America to see whether there are possibilities at
3 the 11th Avenue Theatre.

4 Dr. Joseph M. Sussman: What is the radius of the
5 Manhattan Loop?

6 Gary Ritter: I will get to that. I don't have the
7 radius. Scott, maybe you'll be able to help me out on that
8 one. It's several blocks around the Javitz Center. I
9 don't know, I'm guessing half a mile, or something.

10 Scott Belcher: It's a thirty minute loop. It's about
11 four miles.

12 Dr. Joseph M. Sussman: The 11th Avenue Theater, is
13 that contiguous with the conference that is right in the
14 Javitz Center?

15 Gary Ritter: It's right adjacent to it.

16 Scott Belcher: It's 11th Avenue, directly in front of
17 the Javitz Center. We're blocking off eight rows of
18 traffic for the entire 11th Avenue for, I think, it is eight
19 blocks, between 10:00 and 3:00.

20 Dr. Joseph M. Sussman: So, it is a street there?

21 Gary Ritter: Yes.

22 Scott Belcher: Actually, it's both. It's a street
23 theater, but it would be a very large screen, and there

1 will also be stadium seating so that it will be the
2 equivalent of being in a theater. The problem with
3 demonstrating the safety applications is they're only
4 interesting when they don't work, so somehow we had to
5 overcome our challenge, to make it interesting. And, that
6 is why we are talking about it in terms of a theater, in
7 terms of a production and a show.

8 We'll be showing what the driver is experiencing, with
9 the narration being projected onto a forty foot screen.
10 And then there will be, as I said, stadium seating for a
11 couple of hundred people to watch.

12 Gary Ritter: As I go forward, these things will be in
13 one of the booths, and then I'll also talk about whether we
14 have it in one of the vendors. In terms of our
15 communications connectivity, one of the things we want to
16 demonstrate is how to integrate, or how to connect consumer
17 devices, which would be personal navigation devices, cell
18 phones, mobile internet devices, and have them function as
19 VII or VSRC onboard equipment.

20 So basically, we will have a wireless connection to,
21 either Bluetooth or USB connection, into what is called the
22 Safari Onboard Unit. But basically, it's a router that
23 connects via Bluetooth any of the wireless devices to a

1 DSRC transceiver that can connect to other vehicles on the
2 roadside. You can also connect to Wi-Fi.

3 The roadside equipment will be both VSRC and Wi-Fi
4 capable, so we'll be able to demonstrate going either way,
5 and then from the wayside, the internet connectivity or
6 direct from the device out to the Wi-Fi hotspot. We've got
7 more pathways to information than people may know what to
8 do with, but we will be able to show some of that. And
9 this kind of thing we will use on the Manhattan Loop, to
10 show you how you connect the various services from your
11 devices.

12 Next.

13 In terms of intersection safety, we think we will be
14 able to do a couple of things. One is, we're working on a
15 pedestrian and non-mobilized safety application, where
16 someone with a cell phone would be able to be visible
17 through the DSRC heartbeat functions to someone who is
18 driving. They would actually appear as a moving platform,
19 and vice-versa, the pedestrians would be able to know that
20 there is a vehicle in the vicinity.

21 So, we're hopeful on that, and we hope that we would
22 also be able to show a stop sign violation. And, this may
23 be able to be done without using DSRC. We haven't quite

1 determined that, but we're working very hard on trying to
2 figure out whether that can be done, independent of that
3 kind of connectivity.

4 Randell Iwasaki: The Safari box is about this big.
5 And, the computers that used to be in the trunks of the
6 General Motors cars in the mid-nineties, that is the
7 replacement for the computer. It's gotten that small. So,
8 it's going to get even smaller. It is not patented, and it
9 is open architecture for anybody to pile on any other
10 things that they want to look at. It's called an in and
11 out box. It goes in DSRC and goes out Bluetooth, or in
12 Bluetooth and out whatever, but you can do whatever you
13 want with that box. It's open architecture.

14 Gary Ritter: It's not only open architecture, it's
15 public domain, thanks to Caltrans. And, if we're able to
16 do this, this is the kind of thing we might be able to
17 bring into the 11th Avenue Theater. If not, it will be
18 here.

19 The other thing we're talking about, in large part, is
20 how to improve situational safety by, basically, providing
21 information that will help travelers be aware of
22 situations. And, these are NAVTEQ interfaces, but
23 basically being able to feed information into the vehicle,

1 that is situational and appropriate to drivers, so that
2 we're not giving them a lot of nuisance information, but
3 that if there is something that they should be aware of,
4 and we can detect, that maybe they're not paying attention.
5 Maybe they're traveling too fast, or they're coming upon
6 slower, stopped traffic too quickly, we'll be trying to
7 alert them to that so they can take the appropriate action.

8 Next.

9 Another interesting thing that we'll probably have on
10 the Manhattan Loop and in the booth is, we're working on a
11 new set of routing protocols that will allow people to get
12 information the way they want it. So they can choose how
13 to travel based on what the consequences of their travel
14 would be, in terms of the shortest paths, the most
15 predictable travel times, the lowest cost, perhaps the
16 least risky, in terms of what harm may come in their way,
17 energy efficient, or if they prefer motorized routing, one
18 that would favor a non-motorized trip.

19 And, we're also looking at the possibility of looking
20 at a greenhouse gas or low carbon footprint option. So, we
21 are trying to be responsive to what the market might be
22 looking for in the future, in terms of environmental or
23 energy conservation, and those kinds of options.

1 Next.

2 Voice: Which partner is working on that software?

3 Gary Ritter: That software is actually being
4 developed. The routing algorithm is University of Utah, is
5 a sub-partner, which wasn't on the list, but is under the
6 Caltrans' piece of the partnership. But, that will be
7 available to the other partners. That would be a public
8 domain thing, as well.

9 Michael Replogle: So, this inter-modal trip plan, for
10 example, for pedestrian bicycles, can this be demonstrated
11 as a part of the Congress?

12 Gary Ritter: We don't know yet whether we'll be able
13 to do that. In California, at the Bay area, we have a very
14 good database on bicycle routes, and they have plenty of
15 them. In New York, I don't know if we will be able to get
16 that over, just because the data may not be available.

17 Michael Replogle: I was going to suggest, if you do,
18 I can suggest some partner groups in New York for you to
19 work with to, basically, you show that this is relevant to
20 the things they care about.

21 Gary Ritter: We're trying to get the transit piece
22 done and this may have to come later. That doesn't reflect
23 priorities, just easier, how to get more stuff done fast.

1 Next.

2 In terms of the transit planning, we'll have people
3 have the ability to sort and point, here's where I want to
4 start, here's where I want to go, a very simple interface.
5 It will then compute based, not on schedule, but on where
6 the vehicles actually are, and whether they're ahead of
7 schedule or behind schedule. And, I'll give you how to get
8 to the vehicle.

9 Next one.

10 This goes back to what Randy was talking about, in
11 terms of the cell phone traffic data. We're going to look
12 and see if it can detect incidents, speed, the ability to
13 feed this data back into users locked into the program, to
14 give them dynamic routing. And we may...we may talk about
15 possibly having some New York City probes. This number has
16 gone down from a hundred to, maybe, twenty, but we're still
17 working with them to see if they can do that.

18 As Randy mentioned, this is the speed profile. You
19 can see where that incident happened on the route there.
20 It just drops out. And these small dots in the hand-out, I
21 think are the loop detectors or the roadway detectors, and
22 the others are the phones. And the computed loop detector
23 with the virtual loop data follows the phone line.

1 Randell Iwasaki: Those are those green lines there.
2 You can spread those green lines out as far as you want,
3 but those are the reporting stations by latitude and
4 longitude as each phone reaches out and gets to a certain
5 point. You can get those closer together and actually
6 track the phone through the system. So, we spread them out
7 further, so you kind of lose the application.

8 Gary Ritter: Next.

9 This is one we're still working on, with BART.
10 They're interested. We haven't gotten an agreement on
11 that, yet. They have done some interesting work, just
12 recently, on using cell phones for payment of BART fares,
13 and if we can, we'll build off what they've done. They've
14 also, earlier with Caltrans, have done payment and
15 reservation for parking.

16 We can start to put this whole thing together, so that
17 a user, through their cell phone, can - well first, if
18 they're driving down the road, they can be told, "Hey,
19 there's a lot of congestion ahead. You may want to
20 consider another route. It's going to be fifteen minutes
21 quicker to get you to your destination. By the way, you
22 can pull over at the next exit, and the parking is there.
23 Do you want to reserve a space? Do you want to pay for

1 it?" It will tell you the transit fare, and when you get
2 there, you will see here, he's got his NFC-enabled phone,
3 touch it on the BART reader, which they have in their
4 stations already, it will collect the payment through the
5 phone.

6 So again, this is to show how we start bringing these
7 things together and lowering, sort of, the transaction
8 barrier and information barrier. And, while people say,
9 "Oh, that's too complex. I can't figure out how to do
10 transit. I would do it if I could." Well, we don't know
11 if this is going to lower the bar or not, but it should
12 help some people make that decision, and find that it is
13 actually not as bad as they may think it is.

14 Next.

15 To wrap up, we are still looking at the possibility of
16 having some additional awards under our solicitation. We
17 may do some additional activities and be able to come into
18 the test environment. It's doubtful how much we can do at
19 this point to bring other things to the World Congress, but
20 if there are opportunities, we don't want to foreclose
21 those.

22 Next.

23 We are looking to be at the World Congress with what

1 we believe are world-class partners, and meeting world-
2 class expectations in a world-class exhibit.

3 Dr. Joseph M. Sussman: Gary, thank you. Are there
4 questions for Gary?

5 Dr. Kenneth J. Button: I'm intrigued by the use of
6 the cell phone. I was in Portugal the other day, which is
7 one of the poorer members of the European Union, one of my
8 colleagues booked his ticket on the train by cell phone.
9 And of course, it charged on his card, which gets him down
10 the toll road, and pays his parking if he wants to. Do we
11 have anything like that at all in this country?

12 Randell Iwasaki: You're referring to cell phones for
13 payment? They didn't do it in Portugal.

14 Gary Ritter: Possible in Singapore.

15 Dr. Kenneth J. Button: The question isn't the
16 technology. The question is, why haven't you used it?

17 Gary Ritter: I could go for hours on this topic,
18 alone.

19 Randell Iwasaki: You could use a Metro card like
20 this, instead of a credit card. Credit cards work all over
21 the world. The technology has been there. I think it's
22 institutional. What we're trying to do is show that you
23 can couple these technologies off the shelf, and utilize

1 them in transportation.

2 Dr. Kenneth J. Button: It also would be useful to
3 show countries which are normally considered somewhat more
4 backward than the United States, have actually adapted some
5 of these technologies.

6 Shelley Row: That's back to our previous meeting.
7 One of our goals is to aim at the paper system, for that
8 very reason.

9 Gary Ritter: You're absolutely right with the
10 comparison. The U.S. cannot claim leadership in a lot of
11 these things.

12 Dr. Joseph M. Sussman: Gary, one of the motivations
13 for having the World Congress discussions on the table with
14 you and Scott, was to get some comfort about what, in fact,
15 was going to be there on the ground on November the 14th , or
16 whatever the magic date is. And you had a few asides that
17 suggested there was still some variance of what might be on
18 the ground. So, I'm trying to understand if what we just
19 heard is a wish list of what you hope for?

20 Gary Ritter: Let me put it. We're probably at an 80%
21 confidence level on what we'll be able to bring. And in
22 another two weeks, probably, we're going to have a real
23 sit-down with our partners and decide what is going to make

1 it. And what may vary is the level of functionality we're
2 able to showcase at the World Congress, but we will
3 probably hit these areas.

4 Robert Peter Denaro: One thing I don't understand, on
5 all of your data activities, are you going to have results
6 of any of that available?

7 Gary Ritter: No, the actual test period for the Bay
8 area doesn't begin until December, so we're using the World
9 Congress as kind of a launching point for the test, and we
10 will be feeding those results out throughout 2009, and the
11 final report in 2010.

12 Dr. Joseph M. Sussman: The other thing I wondered
13 about is, given the discussion we had before the break, and
14 shifting the focus to safety. If that is how it comes to
15 be, what happens to this program in 2010?

16 Gary Ritter: That's another question I'll turn over
17 to Shelley. Right now, Safe Trip-21 is programmed through
18 January 2010. Decisions have not been made beyond that, as
19 far as I know.

20 Scott Belcher: One answer is, there are, obviously,
21 partners besides the federal government, and there is a two
22 to one cost share. So if the private sector partners, if
23 Caltrans decides to address, this because congestion is a

1 significant issue in addition to safety, it's one we will
2 continue to work on.

3 Gary Ritter: I was speaking specifically to the
4 SAFETRIP part of the program. We solicited and selected,
5 based upon people bringing technology and concepts that had
6 a strong likelihood and possibility, up to describing, how
7 could this move forward in the absence of federal
8 involvement?

9 Randell Iwasaki: It was scalable. That was the whole
10 idea.

11 Gary Ritter: If this goes, Nokia has said, "If we can
12 make this work, we will scale it up. We'll take it across
13 the country."

14 Randell Iwasaki: One of the other aspects of the
15 Safe Trip-21 is focused on safety, but there are some
16 mobility complements. So, you have an N-95 phone that
17 buzzes and that tells you you'd better leave right now if
18 you want to make your meeting across town, and it has all
19 the routing information in that phone.

20 These phones are getting smarter and smarter. It's
21 amazing, these phones. There are a lot of things going on
22 here.

23 Voice: This is a two-part question. What will this

1 complement, and what will it bring?

2 Randell Iwasaki: That's the only reason NTC is
3 involved in this is because of Fiber 1. They're not
4 putting any money in it. It's just the interconnection
5 between the data.

6 Voice: I'm just asking a straight-up 511 question.

7 Randell Iwasaki: And, that's my straight-up 511
8 answer. Absolutely, this data's going into 511, and
9 whether 511 can go back to the cell phone, into transfer of
10 data of data through 511. It's a business model issue.
11 What I would like to do is sign an agreement with Nokia,
12 saying that, forever into the future, that California gets
13 this data for free, and can sell it to other people.

14 Dr. Joseph M. Sussman: I would like to suggest,
15 perhaps we move on to Scott, then we can have an open-
16 question period on the whole package after Scott finishes
17 speaking. Thanks, Gary.

18 Shelley Row: Joe, if I could make a quick comment, as
19 Scott is getting ready. I just wanted to say to this group
20 that Scott and the whole ITC America team have been most
21 patient and understanding with the US DOT. This has not
22 been an easy situation. It's kind of a moving target for
23 us, and they've bent over backwards in order to try to be

1 helpful and accommodating, and meet the deadlines. So,
2 thanks Scott and all his staff. It continues to be a
3 challenge.

4 Joseph Averkamp: Is there still an opportunity to
5 introduce elements into the World Congress off of the
6 solicitation? I'm just trying to understand timelines.

7 Shelley Row: For this one, or for more?

8 Joseph Averkamp: Things that are not yet designated,
9 or identified.

10 Shelley Row: Gary mentioned that. I think it's
11 unlikely, but not known until those final ones are selected
12 and negotiated.

13 Joseph Averkamp: I guess the other question that does
14 arise, is there a timetable to close out the BAA
15 solicitation process?

16 Shelley Row: That is a "Gary" question.

17 Dr. Joseph M. Sussman: We can come back. Scott, why
18 don't you get into your ideas?

19 Scott Belcher: First of all, I work for a trade
20 association that represents most of the people here, and I
21 can't go to a meeting like this without doing my marketing.

22 So, you've got three documents there. The first is
23 a program called World Congress, and you will see it's

1 incredibly substantive. We've got almost all of these
2 substantive and scientific programs mapped out there. This
3 will go -- will be published. I apologize for the copying,
4 but it is still at the printer's. But, be forewarned, you
5 will get at least one copy in the mail. We're printing
6 75,000 of them, so I guarantee you'll get at least one.
7 And it will be nicer.

8 The other thing that I just passed around is a second
9 announcement for World Congress, as well as the ITS America
10 strategic plan. I know that's not on-topic, but it is on-
11 topic for this meeting, so I thought you might find it
12 interesting.

13 Thank you, Shelley, for the very kind remarks. It is
14 an interesting process, and being the newest kid on the
15 block, it's been a fascinating process for me. I had no
16 idea what a big deal what World Congress was. I had no
17 idea what it took to put on a program for 10,000 people, so
18 it will be fascinating.

19 I'm going to go through this quickly. Most of this
20 you know, or have seen, so I will stop at the important
21 places. I think the important thing about World Congress
22 is, it happens every year, but it's only in the United
23 States every three years. And, it is a place where the

1 rest of the world comes. We will have over 45 countries
2 there, and it will be the largest event for ITS that we've
3 ever had. And, it will probably be the largest until 2013,
4 when we're in Orlando.

5 Next.

6 The other thing that makes this unique is that it is a
7 culmination of our annual meeting, as well as the World
8 Congress. And so, there are going to be a lot of -
9 typically, what happens at World Congress is, the three
10 regions, for those of you who took the same geography class
11 that I did, and realized the world was divided into three,
12 but it is. There is the Americas, there is Europe, and
13 there is Asia, at least in the ITS world, that what I've
14 learned.

15 And so, in World Congress, at the events that occur,
16 what happens is, you typically have a speaker from each
17 region. Well, we are going to have all of those sessions,
18 but we're also going to have over a hundred America-
19 specific sessions.

20 So, it's unique for a number of important reasons.
21 One is, just what I've talked about. Two is, we will have
22 the largest actual demonstration of VII infrastructure that
23 has ever occurred. And, it's really a phenomenal thing,

1 because when I looked at the budget for World Congress,
2 it's pretty big. But more importantly, when I looked at
3 amount of resources that our partners and our volunteers
4 have invested, it really is phenomenal.

5 When you look at what the private sector has invested,
6 what the State DOTs and our different partners have
7 invested, we've invested over twenty million dollars in
8 putting this thing together, in volunteer time.

9 We've now expanded the exhibition hall. It's now over
10 300,000 square feet, which is double what we had in San
11 Francisco. And, we're shooting for 10,000 people. And
12 that's - doing it in New York City is really going to be
13 exciting with the ability to tag onto the whole advertising
14 opportunities that are there, the media opportunities. It
15 will be a great showcase for all of us.

16 Then, we think - knock on wood - we will be able to
17 launch Safe Trip-21 in a way that really showcases it, as
18 well.

19 Go ahead.

20 Special Events: I know you are all coming, so what I
21 would recommend, and this is kind of a - I'm the biggest
22 skeptic, but I would make sure you get a ticket for the
23 ESPN Zone Gala. The ESPN Zone in New York is on Times

1 Square. It's all glass. It's really cool. You can see
2 Australia rules football. You can see real football. You
3 don't just have to see baseball. So, anyway, we've got
4 some exciting things that are going to be happening.

5 Keep going.

6 I know I'm not here to market ancillary events. We're
7 doing IBEC events, which we always do, and that's
8 important. We have our ASHTO CEO Day, which is on Sunday.
9 We get directors of the State DOTs together with their
10 international counterparts. And then, we have, in World
11 Congress parlance we've got plenary sessions, executive
12 sessions, and other sessions.

13 Plenary sessions are the ones that everybody comes to,
14 and you get 1,000, 2,000, 3,000 people there. And so, it's
15 usually the big hitters. And so, I think one of the
16 highlights for me with respect to this World Congress, and
17 I guess, based on the conversation for you, too, will be
18 our closing plenary, which is on sustainability.

19 And as Michael knows - Michael's been very helpful -
20 we've been able to get Fred Krupp to talk about what is
21 happening with the interface between technology and
22 sustainability. And that's really pretty exciting. And it
23 is different from the way we typically do these events.

1 So, you can see - you've seen the preliminary program.

2 There is a lot going on.

3 The other thing is, we will be having a whole session
4 on Latin America, because we do work very closely with our
5 Latin American counterparts. We have what's called the Pan
6 American ITS Organization. We are supposed to be
7 representing all of the Americas. We don't do a very good
8 job of it. We're trying to get better, and so that will be
9 interesting.

10 Again, as I mentioned, we have the annual meeting, we
11 have a series of DOT-specific events, and we have just been
12 told that we're going to have a Safe Trip-21-specific big
13 event, and we will. And, we'll find a place in the agenda
14 for that.

15 The other thing, and I'm going to mention this just
16 for the people who belong to ITS America, because it is
17 important. One of the things we're really trying to do is
18 to recognize the leaders, recognize our members, and
19 recognize things that are happening. So, you going to see
20 in the annual meeting component, we're going to have a lot
21 of awards, because we haven't said "Thank you" enough.
22 And, we plan to say "Thank you" over and over again.

23 Go ahead.

1 Exhibition: You don't care how many times over 250
2 organizations exhibiting in the exhibition hall. That's a
3 lot. We have a State Chapters Pavilion. We have a number
4 of state chapters exhibiting and a number of local
5 governments exhibiting.

6 And the importance there is, the value of these
7 meetings is to give the public sector an opportunity to see
8 what technology is out there. Who is a potential partner?
9 What solutions are happening? And it only works for the
10 private guys if they are there.

11 And so, we are going out of our way to make sure we
12 get as many folks who are implementing these systems there,
13 so that they can talk to potential partners. And, that is
14 why we're so happy to see so many of the state chapters and
15 so many local governments participating.

16 World Congress has always had technical tours, and we
17 have a bunch of great ones. You can imagine. New York
18 probably has the worst transportation operations in the
19 country, so they have some of the most creative solutions.
20 And so, it will be interesting to see some of these.

21 The one I'm disappointed got taken off is a tour of
22 the FedEx Terminal. The reason it got taken off is, you
23 can only do it between 12:00 and 2:00 in the morning, but

1 if you ever get a chance to go on one of those tours, it's
2 phenomenal, and we can all learn a lot. FedEx, UPS,
3 Wal-Mart - those companies really are living and breathing
4 ITS, they just don't say it.

5 And then, the integrated technology demos - I get a
6 little uncomfortable when we start talking about integrated
7 expensive, infrastructure-laden - I've forgotten what the
8 anecdotes are, that were describing it, but it sounds like
9 we're describing VII. And our demonstration is about VII.
10 I mean, it is a VII-centric demonstration, and we have
11 built out two test beds, and we have back-hauled to the
12 Transportation Management Center. We've built programs
13 that do all the things we have been talking about, that we
14 have seen in Asia, and that we've seen in California.

15 So, it's all going to be there, and it's going to pose
16 a really interesting question. What poses a really
17 interesting question for me is, as we start to think about
18 these other ways of communicating, these other ways of
19 accomplishing some of our goals, what is the long-term role
20 for VII, as we had initially envisioned. But, it's okay.
21 It's good to have these discussions and it's good to have
22 these debates. And, it's a debate that this group ought to
23 be having.

1 So, why don't we go ahead?

2 So, two test beds that are outfitted, and they are
3 already out there. One is a forty mile loop on the Long
4 Island Expressway, the other is the Manhattan Loop, so, an
5 urban loop. It's based on the VII architecture that has
6 been approved and established by the JPO. We've back-
7 hauled all the lines already, all of the radios are
8 installed, we've tested it, it's working. It will remain
9 in place after we're done. And, we're hoping that New York
10 State and New York City will find a way to convert into an
11 operational test bed.

12 My aside is that we need test beds. We need more than
13 one test bed. We need them in different parts. We need
14 one in California, we need one in Michigan. New York is an
15 opportunity. Because they all highlight different
16 applications and we have different companies placed around
17 the country. But, that is just me, okay?

18 Dr. Joseph M. Sussman: Scott, on the top bullet, the
19 Long Island Expressway, are you expecting to take
20 conference attendees out to the Long Island Expressway to
21 see something out there?

22 Scott Belcher: Yes, why don't you go ahead?

23 What we will do is, we've gotten a number of high-end

1 busses that we have outfitted with large monitors. And,
2 the monitors will display what the driver sees, so that as
3 we're demonstrating the applications - they are real time
4 applications, they are what is really happening - they are
5 seeing that on the screen, and then we will have a narrator
6 explaining what is happening, and how it is happening.

7 So, this is kind of similar what you may have seen in
8 Japan, and you may have seen at Nissan and Honda, and some
9 of the things that they are doing. The difference is, we
10 are doing it all - well first, the difference is, it is in
11 the United States. Second, we are doing it all real time.
12 Some of those demonstrations still were not based on real
13 data. They were computer generated. This is going to be
14 all real data driven.

15 And, these are the applications. Many of the same
16 applications that Gary was describing were the test beds,
17 anyways, but again, we are trying to get kind of range.
18 Half of them are safety based, and then half of them are
19 mobility or convenience based.

20 So, this is the Long Island Expressway. And so, you
21 get in a bus, you travel the expressway, and you end up at
22 the TMC. You can do a tour at the TMC if you want, or you
23 can turn around half way through.

1 Go ahead.

2 Dr. Joseph M. Sussman: Where is the TMC?

3 Scott Belcher: It's about forty miles out, on the
4 Long Island Expressway. It's a brand new TMC that New York
5 State has built that they want to showcase. And, it's also
6 where we are actually back-hauling the data to. We're
7 back-hauling it there and processing it there. We will be
8 showcasing it at the Javitz Center, but that is we are
9 doing the processing.

10 Dr. Joseph M. Sussman: I don't want to be a wise-guy,
11 but people are going to spend a lot of time going forty
12 miles out to Long Island.

13 Scott Belcher: It's a two-hour tour.

14 Dr. Joseph M. Sussman: Well, I don't know if you are
15 going to get people to hang for two hours.

16 Scott Belcher: That will be an interesting challenge.
17 You're right. But if you want to show - these things all
18 take some time. Part of this is distance between radios,
19 latency ability, all of those things you want to be able to
20 talk about and demonstrate, you can't do, necessarily, in a
21 hundred yards.

22 Joseph Averkamp: You're going to be doing
23 demonstrations while you're riding on the bus, right?

1 Scott Belcher: Oh no, I'm sorry. I thought I said
2 that. So, you are in a bus, you have got screens situated,
3 and they're showing the different applications, and there
4 are like fourteen or eighteen different applications along
5 this. You've got someone explaining what is happening,
6 telling you what the driver interface is. I mean, that's
7 really what you're seeing, is the driver interface.

8 Dr. Joseph M. Sussman: I'm just thinking
9 logistically. People are going to have to take a big hunk
10 of a day to do this.

11 Scott Belcher: They are. That's why it's four days.

12 Dr. Joseph M. Sussman: If you stop at Belmont and
13 park that might make it more attractive.

14 (Laughter)

15 Scott Belcher: It's funny you say that, because on
16 the Manhattan Loop, one of the things we're trying to do is
17 the ability to order Starbuck's or McDonalds at the
18 beginning, and pick it up when you come through. Maybe we
19 should have drinks. Maybe we should do it with a bar, as
20 well.

21 So, this is the Manhattan Loop. It's about a half an
22 hour. This is a half an hour tour, so it's much shorter.

23 Dr. Joseph M. Sussman: Can you read the streets to

1 us? I can't see that.

2 Scott Belcher: It looks like 23rd , 42nd , and this is
3 Park Avenue. And then, that's along the Lincoln Tunnel
4 Expressway.

5 Dr. Joseph M. Sussman: To the west is 12th Avenue, the
6 West Side Highway?

7 Scott Belcher: It's 23rd , 42nd , I think this is 6th
8 Avenue.

9 Go ahead.

10 So, there was a fair amount of discussion about the
11 11th Avenue Theater. The 11th Avenue Theater, as I
12 mentioned, we blocked off the whole eight blocks of 11th
13 Avenue. When we did New York, everybody said, "You're
14 crazy to go into New York. It's a zoo, everybody knows how
15 obnoxious New Yorkers are, you're not going to get any
16 help."

17 We couldn't have asked for better partners. New York
18 City and New York State have gone out of their way to
19 really help us. I mean, imagine, we went to the New York
20 City Police, and they shut down 11th Avenue for five hours a
21 day for us, for four days. It's remarkable.

22 So, what we're doing in the 11th Avenue, really, is to
23 showcase the Active Safety Applications. To showcase the

1 things that are not quite ready for prime time. And yet,
2 we don't want to be doing on real live roads where somebody
3 can get hurt. We'll be showcasing DARBA, and you all know
4 DARBA better than I do, but we've got the winner, plus
5 three other DARBA vehicles there. And then, it's sounding
6 like we may some Safe Trip-21 up there, too.

7 So, we hope that works. So, what this will be - can
8 you go to the next slide? Here we go. You probably can't
9 read this, but this is - these are - so, I mean, imagine,
10 we're putting busses down the Long Island Expressway, we're
11 putting people in busses in Manhattan, we're shutting off,
12 doing ongoing exhibitions on 11th Avenue. So each of the
13 OEMs, Honda, Nissan, Toyota, GM, Ford, Chrysler, are all
14 taking a period of time on 11th Avenue to demonstrate where
15 they are on technology, and to demonstrate their
16 applications.

17 And then, there will be a program, as I mentioned
18 before, to kind of put it all together, because you don't
19 want to watch cars not hitting each other. And so, the
20 program -- we're working with a production company to try to
21 make it interesting, to make it safety based, and to make
22 people want to sit there for an hour and listen to it.
23 And, it's surprising how much that costs. New York is not

1 an inexpensive place.

2 So, we have got an area where we have stadium seating,
3 an area here is where we will have a large forty foot
4 screen where we will be projecting what is happening. I
5 can just see you're chomping at the bit.

6 Dr. Kenneth Button: No, I'm just amused. If I was in
7 New York and I suddenly had all these ITS people coming
8 along, claiming to solve congestion, I wouldn't want my
9 main roads closed down to do it.

10 Seriously. I was talking earlier about getting
11 technology accepted. I seriously asked the question, "How
12 is this going to convince the general public really, that
13 this is a good idea?" How many people in the general
14 public are going to get information on this, rather than
15 people talking to themselves?

16 Scott Belcher: That's a good point.

17 Dr. Kenneth Button: I mean that's a generic question
18 which bothers me, because I'm interested in the policy
19 side, not the technology side.

20 Michael Replogle: If you talk to Janette Sadik-Khan,
21 who is the New York City Transportation Commissioner, she would
22 tell you that closing streets for something that focuses on
23 how to make the city's traffic work better and safer, is

1 part of what the mission of the New York City DOT is.
2 She's all about, right now, converting street space more
3 effectively for pedestrian, cycling, public transportation,
4 you know, managing demand, and recognizing just giving it
5 over to cars isn't the way to solve congestion.

6 Scott Belcher: Actually, one of the interesting
7 things, so, ITS America has got some new partners, among
8 them, AARP and a couple of other, kind of, broader groups.
9 And, we're talking to them about making the exhibition hall
10 available to members of their organization, for one day
11 passes, to try to get people in that wouldn't normally
12 come.

13 Dr. Joseph M. Sussman: Ken just briefly mentioned the
14 media. It's something worth talking about, how one is
15 going to handle the voracious media of New York. This
16 could be something. If you go back to the 1996 Olympics,
17 they got some very bad press, because they made the media
18 ride on some plain old busses, with everybody else. They
19 didn't think that was such a great idea, and they hammered
20 us. And, I'm hoping we have a better plan in shape for
21 dealing with the New York Post, the New York Times, the
22 Daily News, reporters, and what have you.

23 Scott Belcher: I hope so, too. We have a media and

1 marketing committee that have representatives that are
2 members, and that have represented the City and State of
3 New York. And then, we have a consultant - a New York
4 based consultant that is going to help us with the media.

5 And we have a number of events leading up to World
6 Congress, to kind of set the stage and give the media
7 different access to what we are doing than the general
8 folks that will be there. And, we're hoping to get on the
9 morning shows, hoping to do things that really do generate
10 a lot of enthusiasm and excitement.

11 Our media day that will occur in October, we're still
12 working with the city about the best place to do that. It
13 may be - we talked about doing it in Times Square, we
14 talked about doing it on Wall Street. We're trying to
15 figure out the best place to position it, to get the most
16 bang for the buck. So, we're thinking about that,
17 definitely.

18 Dr. Joseph M. Sussman: I think it is vital. You
19 don't want some acerbic New York Post headline. They have
20 one everyday. You don't want it to be about you.

21 Scott Belcher: You're right. Go ahead.

22 The other big component of the demonstration is the
23 traffic management center of the future. So, if you have

1 all this data, and you've got vehicles talking to each
2 other, and vehicles talking to the roadside, what does this
3 mean to state DOTs, and cities, and regional authorities
4 that are trying to manage congestion, and trying to manage
5 safety, and trying to manage traffic? What does this
6 create for them?

7 And so, what we've done is, we'll go to the next
8 slide. We've created a series of applications. It's a
9 little bit specific to, I guess, to the ITS junkies, but
10 this whole thing is -- go to the next one.

11 We built this big space in the Javitz Center. We will
12 be projecting it on a large screen, as well as on a series
13 of screens, but we'll have a series of places for people to
14 actually play with it, but also have a place where it will
15 be narrated and explained. We'll be able to explain what
16 is actually happening, what the applications are, what it
17 means, how it is different from what we currently have.

18 And, we will be doing this in Spanish, English,
19 Japanese, and Chinese. You know, that's also one of the
20 things, you do a World Congress, and how many languages do
21 you do things in? And, the interesting thing is that for
22 each event, the decision is different. So, I can already
23 tell you I'm going to have some very frustrated

1 international partners, because they're not going to get
2 all of the translation that they would like.

3 Go ahead.

4 We have got great partners, great sponsors. These are
5 the ones we've got as of today. We have other ones, other
6 folks, who are sponsoring and partnering.

7 If you are not speaking, and I think actually, most of
8 the people here are speaking, but if you are not speaking,
9 I would recommend registering before September, because
10 there is a significant cost difference. It goes from,
11 roughly, \$1,400.00 to, roughly, \$900.00, and if you
12 haven't, I would recommend trying to get a hotel. You'll
13 see on our website, we've got hotels all over, in all kinds
14 of different price ranges. But, as you can imagine, the
15 cheaper they get, the less close they are, and maybe the
16 less nice.

17 With that, let me answer any other questions. That's
18 the end of the presentation.

19 Voice: We've talked about this a couple of times.
20 I know some of my elected officials in San Francisco, they
21 absolutely love going to this World Congress. Besides
22 having to take them out to dinner, is there going to be any
23 political track here?

1 Scott Belcher: Thanks, Tom, that's a good question.
2 We'll be bringing a lot of staffers, and we're also
3 bringing out a number of members. We're talking to Rep.
4 James Oberstar. Actually, Secretary Peters has said, "I think
5 so," but that's a long way away. But, we will have
6 somebody on our staff working with elected officials and
7 political officials, because the message is a little bit
8 different. So, yes, and just coordinate with us, and we're
9 happy to do that.

10 And, I think one thing I really want to mention here,
11 because I think it's for me it's the most important, we're
12 going into re-authorization. It's not going to be next
13 year, but the skirmish has already begun. And so, the next
14 couple of years are going to be very interesting. World
15 Congress is a great place to showcase what is feasible with
16 technology, what is feasible with deployment.

17 World Congress has been followed in June, in
18 Washington D.C., by our annual meeting, and things aren't
19 being done separately. They're really being done with the
20 idea that we're building momentum to try to influence
21 Congress, to get more money for ITS research.

22 But, for us to get more money for ITS deployment, to
23 get money so state and local governments can get this

1 technology demonstrated, and that the private sector has
2 opportunities to really help influence. And, it is safety,
3 it is mobility, and it is the environment. And, this is
4 all happening, again, at the same time. We're having the
5 climate change debates, which is why we have our closing
6 session on sustainability, which is what we'll be doing in
7 June, as well as having a large focus on sustainability.

8 Dr. Joseph M. Sussman: We're all among friends here.
9 I guess one thing that I wonder about is the partnership
10 between the ITS America crowd doing their demonstrations,
11 and the DOT people doing theirs. Are you comfortable with
12 the way that is coming together, and can this committee
13 have some confidence that's going to work out fine?

14 Scott Belcher: It will work out fine. It is a
15 challenge. We have been planning this World Congress for
16 three years, and our partners have been invested in it for
17 years. Safe Trip-21, they issued the contract in May. Randy
18 talks about how the way to get government to do something
19 is to give them a deadline. Well, they've got a deadline.

20 And so, Safe Trip-21 will be showcased at World
21 Congress. We still are wrestling with what it is we're
22 showcasing. As Gary started out, they're still wrestling
23 with what they're showcasing, and we're wrestling with how

1 much does it cost? That will work out. Those are business
2 issues.

3 And, with the JPO, they're all about demonstrating
4 research results, and that's the important part there.
5 And, we've got a wonderful working relationship with
6 Shelley and her staff. You know, they have their own
7 challenges, but I think they are challenges we can work
8 through.

9 I think the Joint Program Office will be able to
10 showcase the stuff they are doing in a way that benefits
11 them, and benefits us all. It is not easy, but it will
12 happen.

13 Shelley Row: Let me take a little bit of the pressure
14 off Scott on this one, too. ITS America has been most
15 cooperative and most generous with their time and their
16 staff, to help us. They have been most patient.

17 We are the ones with the challenge, trying to figure
18 out what we're going to have ready, when and how much? We
19 are trying to meet the deadlines. We are working really
20 hard to do it. And, again, it is all about us figuring out
21 what we're going to be able to showcase, and what we're
22 going to have ready.

23 So, Scott and his staff have been most gracious.

1 We're trying. We're working together. If it can be done,
2 we'll get it done. It is just that we don't have all the
3 answers right now.

4 Scott Belcher: It really is a matter of time, Joe. I
5 don't think this committee saying, "You should do more of
6 this, or less of this, or you should do this," is going to
7 make any difference.

8 Dr. Joseph M. Sussman: I understand. It's not my
9 intention to do that. What I hope would happen is, I walk
10 out of here, and everyone else would walk out of here, more
11 comfortable than we were, say, in March. That there's
12 going to be something that the U.S. can be proud of,
13 whether it's ITS America or the US DOT is not terribly
14 important to me.

15 Scott Belcher: And, I hope you are. This is going to
16 be -- I mean, it will be the premier event we've seen in ITS
17 history. Without a doubt, it will be - it's fifty percent
18 bigger than San Francisco. San Francisco really set the
19 stage, but then, San Francisco changed the way we thought
20 about World Congress. San Francisco had real time
21 demonstrations. San Francisco upped the number of folks
22 that were there.

23 So, this is taking what happened in San Francisco, and

1 growing it by, roughly, fifty percent, and that's a big -
2 that's a big change.

3 Randell Iwasaki: The other thing in San Francisco, we
4 had the legislative hearings, where we talked about ITS,
5 because the whole idea was, going to Japan. The Japanese
6 had a day where all the public could come out and touch,
7 and look at ITS. What does it really mean?

8 So, we brought that idea back and said, "Oh my gosh,
9 let's hold something out in the parking lot, and some
10 people can touch the cars, and see it, drive in it,
11 actually experience it."

12 But, the other piece is, you have to be able to sell
13 ITS, so we had a legislative hearing, Steve Heminger and I,
14 and others, got up and spoke about what it means to deploy,
15 and what it means for safety, what it means for mobility.
16 And, it really was an education process. And I don't think
17 they're holding that at the World Congress in New York.

18 Scott Belcher: We're still working on the state. We
19 talked about it, and talked about it.

20 Shelley Row: On that note, too, you've got ITS
21 America in June, in D.C. So, the World Congress will be
22 fabulous, but for that, too, we've got another opportunity
23 just six months away.

1 Scott Belcher: Yes.

2 Dr. Joseph M. Sussman: So, you folks will have two
3 annual meetings within six months of each other?

4 Scott Belcher: That is not our normal course. But
5 again, I really view it as an opportunity, given where we
6 are in the time frame. We're going to bring as many people
7 as we can out to New York, but if you're doing an event in
8 Washington on transportation next year, you're golden.
9 People care. We're not going to have, I mean, we're using
10 whatever chits we can do to get Oberstar out there. To get
11 Boxer out to New York, to get the important leaders out to
12 New York, we're not going to have to expend a whole lot of
13 chits. I mean, we're going to have to turn people away in
14 Washington. So, I think it is okay. I don't want to do it
15 again, but this time I think it works.

16 Dr. Joseph M. Sussman: You ought to get Mayor
17 Bloomberg involved.

18 Scott Belcher: Mayor Bloomberg is involved.

19 Dr. Joseph M. Sussman: He's still fuming about the
20 fact Albany killed the congestion charge in Manhattan. You
21 might get some fiery stuff. That would be a front page New
22 York Times.

23 Scott Belcher: He's our opening speaker, and as I

1 said, Janette Sadik-Khan, who is the New York Transportation
2 Commissioner, is kind of the most aggressive and, kind of, big
3 city commissioners, and she's pretty pissed off, too. And so, I
4 think both of them will be pretty interesting to hear from.
5 And again, they're happy to have this showcased in New York. I
6 don't think they'll let that go by the wayside.

7 Dr. Joseph M. Sussman: I hope not.

8 Robert Peter Denaro: For the demo side, where you
9 have to ride on something, how do people sign up?

10 Scott Belcher: You get tickets. You can get tickets
11 in advance, and there will be a ticket booth. And so, all
12 of these things will be, kind of, first come, first served,
13 and a lot of times.

14 Again, that is where New York State and New York City
15 have been great partners, as they're going to give us three
16 hundred people to manage security, to manage logistics, and
17 manage lines. So, yeah, it's not going to be, kind of, a
18 scrum. You sign up for which tours you want to do, you
19 sign up for which exhibits you want to do.

20 Robert Peter Denaro: Do you do that at some central
21 location?

22 Scott Belcher: Yes, when you check in, then there's
23 an opportunity to go sign up for all of these events. And

1 the other thing that we've added to this World Congress is,
2 a schedule planner, so if you go onto our website, you can
3 actually look at the preliminary program, and start to
4 schedule your day. You've probably seen those at other
5 events.

6 Robert Peter Denaro: You can sign up for tickets
7 online?

8 Scott Belcher: I don't know the answer to that. I
9 can check it out.

10 Dr. Kenneth Button: All this high technology and you
11 have to buy tickets at a ticket booth? I have a quick
12 question about the international participation. If you
13 talk about the ministerial plenary, can you say a little
14 bit more about what you think, in doing that? And also,
15 how much international input you have in this, in terms of
16 exhibitions or participants? If you can say, perhaps, a
17 bit about that?

18 Scott Belcher: It's actually very interesting.
19 Americans don't really support World Congress nearly as
20 well as the rest of the world, and I fully suspect that we
21 will have more Europeans there than we will have Americans
22 there.

23 Dr. Kenneth Button: That's because it's cheaper to

1 fly from Europe.

2 (Laughter)

3 Scott Belcher: We'll have a very large contingent of
4 Japanese and Chinese, as well. All of the sessions, the
5 World Congress sessions, are developed jointly. So,
6 there's a World Congress Board of Directors. The Program
7 Committee is divided, has representation, from all other
8 regions.

9 Dr. Kenneth Button: How about demonstrations? Will
10 they be entirely American?

11 Scott Belcher: No, I mean, the demonstrations among
12 the OEMs, we've got probably, we've got more Asian OEMs
13 than we have American OEMs participating, and similarly,
14 with the number of the first year providers, and some of
15 the other folks. Nokia is participating, CAPS, which used
16 to be Tecnicom - there are a bunch of folks.

17 Dr. Kenneth Button: For the media side, the
18 ministerial is going to attract attention.

19 Scott Belcher: We're doing very well. We've got the
20 ministers of transportation from Chile, a number of Latin
21 American ministers, and then we have a number of folks,
22 from various directors general in the European Union.

23 So yeah, the funny thing is, is it's a competition, so

1 when we can say that Mary Peters is going to be there for
2 sure, then I've got the equivalent from some of these other
3 countries. So, we're a little bit in that dance, but we
4 anticipate very heavy international cooperation.

5 Voice: They honor you by thinking you have the answer
6 to every question at your fingertips. The tickets can be
7 ordered online. They can be sent in via snail-mail, and if
8 slots are available on site, and haven't been completely
9 filled out, you can go to the virtual ticket booth and get
10 it that way.

11 Scott Belcher: So, we're not as dumb as we sound
12 sometimes? Other questions or comments?

13 Dr. Joseph M. Sussman: Is this the material, that you
14 gave out today, is that the program of both the World
15 Congress and the ITS America portion of it?

16 Scott Belcher: Yes, everything is in there. And, you
17 can imagine that putting together a seventy five page
18 program in four months, in advance, was a little bit of a
19 task. But, the purpose is, we want attendants. We want as
20 many people as we can get there, and if we sent this out
21 again as our preliminary program, we're not going to get a
22 whole lot more people. But if you look at that, you would
23 be hard pressed to realize - there's not a lot of substance

1 in there. And, if you care about this, you ought to be
2 there. Great, thanks.

3 **University Transportation Centers (UTC) Activity Update**

4 Dr. Joseph M. Sussman: Okay, next on the agenda is
5 something that came out of the previous meeting, which is
6 the coordination of the ITS program with the University
7 Transportation Center's program, and Shelley, I would turn
8 it back to you.

9 Shelley Row: Sure. This was in the Advice Memo that
10 you got back to us. It was a discussion we had at the last
11 meeting. It is an item we wholeheartedly agree with. As
12 some of you may know, the University Transportation
13 Center's program is administered through RITA, so we have
14 peers in our organization that work with the UTCs.

15 Having said that, we're in the early stages of
16 wrapping up our coordination with the UTC Program. We had
17 a member on my staff who was not able attend the meeting
18 this summer, but someone on Volpe's staff who works with
19 her was able to attend. So, we talked specifically on
20 that.

21 That is just the tip of the iceberg. We expect to
22 accelerate our work with the UTCs. We met with the UTC
23 director and RITA on a couple of occasions. I think one of

1 the specific recommendations this committee had was about
2 leveraging research opportunities with the UTCs, and
3 actually floating ideas to them about research we were
4 interested in, and to see if they were interested.

5 If you don't remember from the presentation, we don't
6 direct their research. We, however, can offer them ideas
7 about research we think is needed, and they can choose to
8 accept our ideas or not. We do have one activity that Jane
9 Lapin has been involved with, where we tried that approach.
10 It was in the traveler information area, working with VTIC,
11 where we actually developed an idea for some research. We,
12 Jane actually, and then we floated it to the UTCs that
13 would be interested. Jane, do you want to say just a
14 couple of quick words about how that has worked, and where
15 we are on that, and if you think that's a good idea?

16 Jane Lapin: It's been a very interesting and
17 productive exercise. We have had a long exploration of the
18 value in vehicle travel information. And, in response to a
19 request from VTIC that there members could be more involved
20 in promoting the researched agenda of the Vehicle Traveler
21 Information Center, we wrote a research paper that
22 summarized more or less, where we were, what we knew, and
23 what we felt were the problems, going forward.

1 The staff of VTIC then organized a series of meetings
2 with their members, circulated it among them, and then if
3 any of them were interested in coming forward and being
4 involved on the UTC side, it was circulated among the UTC
5 representatives, same question. And VTIC and UTC reps are
6 now moving along, pursuing the development of mutually
7 agreeable research.

8 Shelley Row: So, we think that is a nice example of
9 an early try at floating some ideas out to the UTCs. We
10 think there's a lot of opportunity there, so we
11 wholeheartedly agree with the committee's recommendation
12 there. And, we definitely want to follow up.

13 Dr. Joseph M. Sussman: Just a background for the non-
14 academics, the UTC program changed dramatically with
15 SAFETEA-LU, in terms of size and number of schools
16 involved. Now, I think there are something like sixty plus
17 centers, all of which virtually are multi-school in nature.
18 There have been a number of earmark centers, in some case
19 universities, with, how shall I politely say it, modest
20 strengths, in transportation.

21 Normally, as an academic, I would guard jealously the
22 right of the academics to choose what they do with their
23 research funds, but in this instance, given the major needs

1 of ITS, and given further the fact that many of these
2 centers, it's my sense, are looking for some help and some
3 direction about how they most profitably spend those
4 resources in an intellectually sound way.

5 So, we tried at the ITS and UTC annual meeting out in
6 San Jose, as I recall, to get some presence from JPO, to
7 start to make some of those marriages. But, I guess that's
8 a little slower than we had hoped.

9 Shelley Row: We tried that, but as it turns out, by
10 the time we tried it, the agenda was so packed that they
11 weren't able to give us any time on the agenda, so we
12 promised to follow up.

13 We did have, as I say, Suzanne Sloan from the Volpe
14 Center, who was there, but I'm hoping that in the next
15 meetings, we're able to do that. And, we've also had a
16 staff member from JPO attend some of the specific UTCs to
17 make some connections. I think it is a ripe area.

18 Dr. Joseph M. Sussman: There are good things that can
19 be done, both for the ITS and for the universities. I hope
20 that we will attack that with some vigor. Any questions or
21 comments on the UTC linkage? I guess we would encourage
22 you to use the expression of this morning, "Redouble your
23 efforts to work with the universities." I think that would

1 be very positive.

2 Michael Replogle: I guess I have one question, in
3 terms of how this process of development happens. I know,
4 in developing more effective institutional capacity in
5 transportation, some of the work I've been involved in with
6 promoting busses, rapid transit, non-motorized
7 transportation, it's often been effective to try to partner
8 with university centers that are doing what is often an
9 overly academic research with real world applications that
10 are trying to implement a real project. And, I'm wondering
11 to what degree that kind of a model is being applied here?

12 You know, if these are - if the theory research is
13 disconnected from the real practical realities with
14 implementation, it's really useless. And the best way to
15 train students to develop both an intellectual capacity,
16 and to implement things, is to ground it.

17 Shelley Row: The answer to your question is, we just
18 started this. We haven't done much, other than look at the
19 example where we've actually tried to go out and partner
20 with the private sector in that case. But, I think that is
21 a very good point that we need to keep in mind as we work
22 through that.

23 Dr. Joseph M. Sussman: Am I going to show myself as

1 extraordinarily ignorant if I ask what VTIC is?

2 Jane Lapin: Vehicle Traffic Information Consortium.

3 Dr. Joseph M. Sussman: How could I not know that?

4 Shelley Row: It's an organization of companies that
5 are interested in traveler information -- real time
6 information.

7 Dr. Kenneth Button: An observation of this, these
8 organizations get funding from state authorities, and you
9 maybe have a state match with government money between
10 different agencies, or whatever. I think with a lot of
11 universities, basically, the way we take a look at the
12 money is, we get a chunk of money with a match, and about
13 eighty percent of this is applied to particular problems,
14 for instance, emergency call boxes and things on the Dulles
15 Toll Road. And, I sure it's true at MIT and so on. But we
16 also try to keep a little bit back, maybe fifteen or twenty
17 percent for the research side, because you need that, as
18 well.

19 So, that's the way we look at it. I don't know, Joe,
20 if you agree with this, or not.

21 Dr. Joseph M. Sussman: Certainly, some combination of
22 applied and pure research is the best strategy.

23 Dr. Adrian Lund: I would like to raise a question.

1 I'm basically a researcher, that's my background. That is
2 what I do. I think a lot of what we're talking about here,
3 I think, comes down more to the organizational boxes and
4 how much money is in each box, as opposed to what we're
5 finding. And, I'm hearing a lot of angst about how there
6 is research that is not getting done, and we talked about
7 getting to the UTCs, and giving them some advice as to what
8 they could focus on.

9 But as a researcher, I'm sitting here saying, "What is
10 exactly the research that isn't being done, that the
11 federal government, or any government agency, could
12 promote?" OEMs are rapidly working on vehicle-to-vehicle
13 technology, to see if they can give their individual
14 customers some added value when they buy their product.
15 So, that is happening.

16 Nokia and NAVTEQ are rapidly trying to figure out how
17 they can add value to this regime that they have some play
18 in, and some control in.

19 And so, what I'm struggling with is, what is the
20 research that we think these university transportation
21 centers should be doing, that somehow doesn't get done?
22 And, maybe what we're talking about is OEMs are doing a lot
23 of research on vehicle-to-vehicle technology, and maybe the

1 question is, how do we hijack some of that technology so
2 they can do other things, like protect the environment?
3 Like, do these other things? Is that what we're talking
4 about? I just don't have a feel for the missing - what is
5 the research that is missing?

6 Dr. Joseph M. Sussman: There are a variety of
7 responses to that that one could talk about in a macro
8 world at a micro level. But just as an example, I would
9 argue, and be interested in Michael's response to this as
10 well, that we don't really understand the relationship
11 between ITS and the environment. That it's decidedly a
12 mixed bag, that ITS has the ability, simply, to generate
13 more tailpipes, rather than enhance the environment.

14 On the other hand, by making traffic flows more
15 uniform, and so on, it has the ability to reduce
16 environmental impact. I would argue that's an important
17 researchable area that we don't know a whole lot about, and
18 that universities could be very good in pursuing.

19 There are a variety of network flow algorithms, in
20 terms of managing urban networks. There's work that is
21 going on at MIT. There's an awful lot of still basic stuff
22 that could be done in the ITS area. And, I don't focus
23 myself on the hardware side of things, but I'm guessing

1 someone like Bob, or some of the other hardware folks,
2 could talk about fundamental work related to hardware
3 development that would be of value. I don't think there's
4 any dearth of potential topics.

5 Dr. Adrian Lund: I'm suggesting that especially on
6 the hardware side, by the time the federal government can
7 figure out where things ought to be going, that means these
8 guys have been there, and they've been doing it. And, it's
9 just finding out, I agree with you, that working out, and
10 that is what I was saying earlier, figuring out when you
11 apply these technologies and do a thorough analysis of what
12 all the ramifications are, not just for safety, but for the
13 environment and so on, that is the important thing. And,
14 maybe that is the role. But I hear, or feel that I hear,
15 that these things have some role in promoting the
16 technology, as well as to just trying to understand, what
17 is it that our geniuses have created, that we're going to
18 have to live with.

19 Dr. Joseph M. Sussman: There is some promotional
20 stuff, and I think, some basics. Let me ask Michael to say
21 something, and then Ken, and then anyone else who wants to
22 speak up.

23 Michael Replogle: I agree with you, Joe, there's a

1 vast multiplicity of things to which research can be
2 devoted in this arena, across the hardware, the software,
3 the planning, and system and public policy implications of
4 all of this stuff.

5 I think to place, to my own mind, one of the things
6 that has been most neglected and that could be quickly
7 pursued, is to put more of the research in university
8 programs, into beefing up the capacity on developing system
9 analysis and appraisal tools, to evaluate what are the
10 implications of different system management strategies, in
11 terms of being able to measure the greenhouse gas
12 efficiency of traffic networks, linking, essentially,
13 micro-simulation or mezzo-scopic traffic models with
14 regional travel demand models, and understanding the
15 directions of those, and linking those more effectively to
16 emerging modal emission analysis models, like the new MOVES
17 model. And linking that, in turn, to even looking at
18 health exposure, and how those are affected.

19 By better managing traffic, you can reduce the air
20 pollution, help exposures of traffic, coming in and out of
21 ports, for example. That's a real, practical problem.
22 Most MPOs or State DOTs don't have any clue about how to go
23 about evaluating it, and they bootstrap their way into it.

1 But chances are, if we got some research focused on
2 that, to develop sort of an integrated suite of tools that
3 could be given to people, and to train students in how to
4 use those, and those who go to work for the agencies would
5 be doing themselves a world of good.

6 Dr. Joseph M. Sussman: That's right. You asked a
7 question of the general possible responses. What the
8 committee said last time was that a systems approach to ITS
9 is that understanding the interactions of all these
10 components is still largely poorly understood, in my view.
11 So, that is what I think both Michael and I were saying.

12 Dr. Kenneth Button: I was going to, sort of pull all
13 of these things together. I'm an economist, but I think,
14 fundamentally, there's a way the UTCs work. They get a lot
15 of graduate students, PHD level students, and they get
16 working on these projects, often as a part of their work,
17 as well as doing their PHD. Sometimes not necessarily ITS,
18 but they link to an environment that you could well have
19 someone doing a PHD ITS technology transfer.

20 For example, we had a PHD recently, and part of that
21 was doing ITS transfer, but it was also doing technology
22 transfer. But, he was looking, in particular, about the
23 adoption of hybrid vehicles, which sort of fits together,

1 and it's a training function.

2 You forget when it comes to UTCs, because normally you
3 don't get specific money for doing a Masters program, or
4 something. But, the labor used gets at some significant
5 upgrading in the system, and I think that is one of the
6 functions.

7 We also provide assistance to the private sector, and
8 when you talk about the private sector doing research,
9 these guys can get highly-qualified chief university staff
10 to help them, and can exploit them. That's the way it
11 works. So, there are a whole lot of functions, and in the
12 notion of research, I think it has to be taken, really,
13 quite broadly.

14 Dr. Joseph M. Sussman: I think that's right. Shelly,
15 and anyone else, get your hand in the air?

16 Shelley Row: I think that's an excellent comment,
17 Adrian. What I hear you speak to is, what is the federal
18 role in the research that we do? And then, once we
19 understand that, then what of that might the UTCs do?

20 You all may recall, in your last meeting, and I know
21 it was riveting, when we talked about those goals and focus
22 areas. One of the things we specifically talked about was
23 what is the federal role in each of those areas? And, some

1 of the things, I think it is very relevant to you all
2 providing advice to us, is that some of the things we see
3 is that there is a federal role in being a convener.

4 In many of the areas that we work, the markets are
5 dispersed, the stakeholders are dispersed, and it is very
6 difficult for them, by themselves, to bring themselves
7 together. So, a lot of times we can serve, if nothing
8 else, the convener function.

9 We do not, and I think it's important to know what we
10 don't do, and I don't see us doing hardware development, I
11 don't see us doing the things that you see Nokia and N-
12 Works doing. We couldn't even possibly keep up.

13 Dr. Adrian Lund: Technology forcing is not your
14 function?

15 Shelley Row: We have an example on the I-95 Corridor.
16 They are doing research from the public sector perspective.
17 What are they going to do with that data? And that market
18 for the public sector is so small that it's very difficult
19 for an individual company to come in and spend the resource
20 dollars on their own, to take that data and do the research
21 for use by the state DOT, or a city government. So, we can
22 help see where the markets are so small that they couldn't
23 do it on their own.

1 And, another example of the small market is in
2 algorithm development. We have several examples where
3 we've done research in fundamental algorithm development,
4 and G-Sym is an example, the core system is an example
5 where the market for those algorithms is not big enough to
6 sustain the research dollars needed to do the basic
7 algorithm development. We developed it. It's open. We've
8 put it out there and hope a niche company will take it and
9 run with it.

10 So, those are areas where we can do a reasonable job
11 of the federal role, but it takes a lot of thought to make
12 sure that we're in the right niches, and leveraging it
13 correctly.

14 Dr. Joseph M. Sussman: I have Bob, and then I have
15 Michael.

16 Robert Peter Denaro: I think - this is kind of a pet
17 area of mine, of what should be the role of DOT and so
18 forth. And, I like what you say about convener, I like
19 that. But, I think the over-arching role is leadership.
20 And, if I can be a little bit critical, I think that has
21 been somewhat lacking. And, what I mean by that is, you
22 take a leadership role, and it doesn't matter who is doing
23 what, you're the leader, okay?

1 And, if private industry is doing that good, you need
2 to be aware of that. You need to make sure it's meeting
3 the goals, and so forth. It's something, in fact, you
4 should do as little as possible. You should outsource
5 everything, and that would be an ideal world. Failing
6 that, what's left is what you need to do.

7 Now, VII is a good example, because there is an
8 infrastructure that has had investment. It's probably
9 something that industry is not going to see a business
10 model for, initially. It's not going to see the payback.

11 We see the government starting and getting it going,
12 and so forth, but what I see a little bit is DOT focusing
13 on those things, like VII, that need to be done, and are
14 best done by the government, but kind of ignoring some of
15 the other things.

16 I think you need to still provide the leadership of
17 other things that are going on and, if we really could get
18 to a state where the DOT and RITA, in particular, were
19 acknowledged as leaders for the nation in these
20 technologies, and we were there.

21 Now, I do like Paul's audacious goal, I will call it,
22 of 90% reduction in technologies, and I think that provides
23 a vision and a talk-down start to this, how do you

1 establish leadership?

2 And, I would throw in a corollary, and I was going to
3 mention it at another time, but I will say it now, a
4 corollary to that from my parochial interest is what would
5 be something I would call, "Let's envision a crash-proof
6 car." What would that look like and how would you do that?

7 Well, if you start working that problem of a crash-
8 proof car, and start thinking about all of the pieces
9 there, then there are a lot of gaps. There are things
10 Honda is not doing. There are things others are not doing.
11 There are missing pieces.

12 So, once you have an overall goal like that, then I
13 think you can start defining the missing pieces and start
14 putting the program together to say, "How do we get there?"
15 It doesn't if ever get through to it 100%, or if we ever
16 get to the crash-proof car. It's that we've set this goal,
17 and we start identifying pieces to get there. That
18 provides some direction.

19 Dr. Joseph M. Sussman: I have Michael next.

20 Michael Replogle: Just to follow, I think the whole
21 idea of leadership is a good role. And the other area in
22 which I think leadership is helpful is in having the Joint
23 Program Office also provide the leadership within US DOT,

1 to help other parts of DOT, such as the Federal Highway
2 Administration and the Federal Transit Administration,
3 recognize the role that ITS technologies can play as
4 enabling better system management.

5 For example, through the shaping of DOT regulations
6 and guidance that are given to states and metropolitan
7 planning organizations, in preparing transportation plans
8 and programs so there's a richer repertoire of options
9 considered in those plans and programs, when considering,
10 you know, what should states and regions be investing in,
11 or considering, as investments for their long-range
12 transportation plans. And how should they think about
13 trying to meet their own performance goals, which may well
14 be clarified and further established as we go through this
15 next authorization process?

16 Dr. Joseph M. Sussman: One thing that Bryan said
17 awhile back, we haven't really gotten back to it. You
18 wondered when Gary Ritter was going to be presenting the
19 test bed out on the west coast, talking about probes,
20 specifically, as I recall.

21 And, your comment was, "Gee, we're doing all of that?"
22 And, we're doing it at a much more substantial level. That
23 gets to the question of the whole interface between the

1 public and the private sector. Who is doing the
2 innovation, who is doing the leadership, and so on?

3 I wonder, Bryan, if you felt you got a satisfactory
4 response on that question?

5 Bryan Mistele: Well, I'm wondering if this is one of
6 the cases where the private sector has passed by the public
7 sector. We're already a million probes out there that
8 NAVTEQ aggregates, and those others that other companies
9 are using - all sorts of technologies to produce nationwide
10 traffic data.

11 So, what I responded to is, I saw a pilot project
12 around probes, and I said, "Gee, we don't need a pilot
13 project. There are, literally, fifty customers around the
14 world using this data today." Certainly, internationally,
15 it's throughout Japan and Europe, and things like that.

16 That was really the source of my question, and is that
17 sort of an area that really needs to be researched if it's
18 already something that's in the commercial market, being
19 used today? And yet, but really, and this may really be to
20 my own naiveté, what really is the focus of VII? What is
21 really trying to achieve? I saw a couple of different
22 things there, safety and tolling, and probe and tracking.
23 What is really the core?

1 To your point, what is the white space that isn't
2 being addressed already today? That is what I don't
3 understand at this point.

4 Shelley Row: I would be curious in your thoughts on
5 this. The way I would answer that is to say, the private
6 sector is just all over getting the data - all over it.
7 What's less clear to me is the part, for example, the I-95
8 study, and I think I heard Randy talking about the work
9 they're doing, as well.

10 Is it the nature of data is different than the kind of
11 data we've had in the past? Is it sent to our database?
12 So, it's not always clear to me that we, as a data-mobile
13 governments know, what that implication is to use that data
14 for managing the network.

15 So for me, I keep thinking, that's an area we're not
16 clear on, that we do need to spend more time on.

17 Bryan Mistele: I would agree. So, again, where are
18 the white spaces? The vehicle-to-vehicle communication, IP
19 two-way to the car, they're already happening. They'll be
20 there, probably, pretty pervasively, in the next couple of
21 years. That is one example.

22 Like I said, this congestion-based pricing and
23 tolling, to me, that is not something being invested in,

1 obviously, in the private sector. That' good for the
2 public sector. How do we use the data, ultimately, to get
3 to pricing?

4 The VII, to me, has always been this big thing, and
5 what I'm trying to understand is, what should the federal
6 role be, versus what should the private role be? I
7 understand why you paint the huge picture, but what I'm
8 trying to understand is, what are you looking for private
9 companies to do, versus what the public government is going
10 to fund and invest?

11 Dr. Joseph M. Sussman: Shelley's response is, I
12 think, along the lines of saying that having the technology
13 is just a piece of the answer. You need to know how to
14 effectively use the data collected to make good strategic
15 and tactical goal decisions on public transportation. To
16 me, that's still an article of research. At least, that's
17 my opinion on it.

18 Robert Peter Denaro: One of the things you've said in
19 your white paper, which I think was excellent, is that
20 you're doing an environmental scan first, and it ought to
21 be scanned. And, that is not effective if you don't know
22 what you're looking for.

23 But, if we had the top-down, you know, idea of where

1 we're going, then that scan would uncover just what is
2 being done and where those white spaces are. And, it is
3 hard work to figure out all the things that need to be
4 done, to figure out that scan. And you're absolutely the
5 smartest people, and walking away for awhile to really,
6 really think that through, that is just a difficult job.

7 But, we can't do it adequately in industry. There are
8 things about stabilization that has to happen, about
9 infrastructure that has to be put in place, just a lot of
10 things.

11 And the whole human factor side of things is something
12 that I don't think has been adequately addressed. In fact,
13 I didn't see it in here, and I think it needs some more
14 work.

15 A lot of these technologies are coming along, and we
16 all blindly say, "Oh, technology is here." Many times,
17 technology has unintended consequences. In some of these
18 safety technologies on, I've heard some horror stories,
19 with strange things happening, even today, with some of
20 these new systems coming out. Like kids playing games, and
21 see if they can set it off, and that's great sport.

22 So, there are just a lot of pieces here that need to
23 be solved until we can declare victory, and say we've got

1 cars out there that do not crash.

2 Dr. Joseph M. Sussman: I had a comment from behind
3 me. I don't know who it was.

4 Gary Ritter: I would offer a clarification. Shelley
5 had said that those on the government side are not trying
6 to develop. There are different technologies out there
7 that we did work with to explore for what you could do with
8 the data. One of the partners that came with Caltrans is
9 interested in creating adding those characteristics and to
10 look at the VII policy objectives. We're interested in
11 exploring that, but the government side is, how you use
12 that data to effect better systems?

13 **Discussion of ITSPAC Advisory Memorandum No. 1**

14 Dr. Joseph M. Sussman: Okay, I think we have been
15 around this bush for awhile. We should move on to the next
16 agenda item, which Shelly will take the lead on again, and
17 that is the Advice Memorandum that this committee prepared,
18 and the way on which the process will play out.

19 Shelley Row: And, it is a copy of your memo in Tab 5.
20 This is just to give you a brief update on what has
21 happened to it. And, I feel like I'm constantly
22 apologizing to Joe, because this has gone so slowly.

23 This was the first memo we've gotten since this

1 committee was established, and so in large measure, it was
2 breaking the ground, and it has taken us quite a lengthy
3 time to figure out what to do, so here's what we did.

4 The first thing we did is, we distributed
5 electronically to our internal groups, that strategic
6 planning group (SPG) I mentioned earlier, and the management
7 council. The SPG are my peers across the modes. The
8 management council are the modal administrators. So, they
9 received it electronically.

10 We have also transmitted, formally, to the Secretary,
11 for her information, as well. We're not going to wait back
12 for word from the Secretary. We're going to distribute it
13 to the community, via some of the electronic newsletters
14 that may be publicly received already.

15 We have already posted it to the JPO website, on the
16 Advisory Committee page. That page, in case you are
17 wondering, I had to find it myself. It turns out, it was
18 more obvious, and I was just remedial. It's under the ITS
19 Overview, and then there's a whole tab for the Advisory
20 Committee. It is posted there now.

21 We had prepared a draft response to it. And, frankly,
22 we felt like it was in everyone's best interest that we
23 curb the discussion today, because we're following up with

1 the Items. Again, it was kind of a moving target at the
2 time we got the memo, with the Safety white paper being
3 written, and some of those things.

4 We thought it was better to get a little bit more
5 information, and we intend to provide a formal response
6 back to the committee on how we want to address the
7 comments that you have provided to us.

8 Formally, we are require by the legislation to provide
9 a report to Congress every February on a summary of advice
10 we have received from you, and how we have addressed it,
11 whether we've taken that advice, and if not, why not? So,
12 that occurs in February of every year. So, that is the
13 current situation.

14 Dr. Joseph M. Sussman: So, in terms of the response,
15 is this something from the Secretary, or something from the
16 administrator, or something from you, as Director of JPO,
17 that sends us the letter?

18 Shelley Row: That is half of the issue in the
19 bureaucracy. Who do we send it to? Who do we respond back
20 to?

21 Dr. Joseph M. Sussman: Can't we make this all go
22 away?

23 (Laughter)

1 Shelley Row: Never say that! We are expecting that
2 the response will come back from the Administrator.

3 Frankly, I don't think we need to go through the hoops from
4 the Secretary, it will be this time next year before we get
5 it out, so we want it to come back from the Administrator,
6 and that is what we're intending at this point. We're just
7 double checking with the Secretary's office.

8 Dr. Joseph M. Sussman: So, the notion is there will
9 be some sort of a memo sent to Bob and me?

10 Shelley Row: That's correct.

11 Robert Peter Denaro: How do we send advice?

12 Dr. Joseph M. Sussman: The theory has been, at least
13 a working model has been, that we do it after each meeting.
14 There's nothing magical about that. That is not in the
15 legislation.

16 Shelley Row: It's not in the legislation. You can
17 choose.

18 Dr. Joseph M. Sussman: That seems to be a reasonable
19 way forward.

20 Dr. Adrian Lund: We should only send it if we have
21 it.

22 Dr. Joseph M. Sussman: We're getting ahead of
23 ourselves. We'll discuss it more tomorrow, but it strikes

1 me that the need for advice coming out of this meeting is
2 probably more substantial than it was the first one. It
3 was kind of feeling our way.

4 This one, we have a rather dramatic shift in the
5 program being recommended by Paul Brubaker and RITA, and it
6 strikes me, we ought to try to craft some sort of consensus
7 response to this. We will require some sort of a consensus
8 on this, that is, it's not simply the Chair, or the Vice
9 Chair saying what they think, but the Committee is supposed
10 to vet this.

11 In this particular case, there is a sharply drawn
12 issue that one can opine on, in whatever direction seems to
13 be our consensus. It is different than the last time
14 around.

15 Okay, anything further on the Memorandum?

16 Scott Belcher: Just a quick question, Shelley. The
17 process of getting the Process Advice and Memorandum and
18 Response, is challenging. Do you really want advice in a
19 memorandum from us after every meeting, or are we better
20 doing it semi-annually or -- what I don't want is you to
21 have a list of four memoranda that you're working through
22 the process, and we're waiting for the first one.

23 Shelley Row: That's a very good question. I think it

1 is your choice on when you wish to send us advice. That is
2 totally your prerogative. The length of time it has taken
3 on this one was primarily because it is the first one, and
4 we had to say, "Gee, who does it go to? Can it stop with
5 the Administrator? What are the processes?"

6 And so, I think next time it won't be nearly so
7 complicated. It's never quick, but I don't think it will
8 be nearly so complicated, and particularly, if we can
9 transmit it to the Secretary, but don't have to get a
10 response back that way, then I don't think it is going to
11 be nearly so time consuming.

12 Dr. Joseph M. Sussman: The model I had in my mind
13 with the substantial experience I had with TRB. I served,
14 for example, on the RTCC, which is the group that
15 oversights the FHWA research program and the TRB committee.
16 And that way that has worked is we meet a couple of times a
17 year, and we write the report after each meeting, saying,
18 "This is what we think." And they tell us what they think,
19 and they just move on.

20 So, it was that behavioral model that drove the one
21 letter per meeting, and, since we're meeting only two or
22 three times, tops, a year, that doesn't seem overly onerous
23 on us, or you. But, I'm certainly interested in hearing

1 people's views.

2 My own sense is, it's sort of staying ahead of these
3 things, and documenting as you go is a good way forward.

4 Robert Peter Denaro: I completely support having it
5 after every meeting as volunteers. If we don't do it that
6 way, we're lost. If we go away for a few months and come
7 back five months later, no one here really remembers it.
8 And so, we've got to get on this right away.

9 Dr. Joseph M. Sussman: I think that's right. Okay,
10 anything further on our advice as an advisory committee?
11 Okay, well if not, we have one more item, which is, well
12 actually, I'm pleased to announce we're about twenty five
13 minutes ahead of schedule.

14 **Review of Context for ITS Program Major Initiatives Updates**

15 What Shelley wants to do in this remaining block is,
16 in a sense, lay the groundwork for tomorrow. And, tomorrow
17 is the day we review each of the, however many of them
18 there are, research items.

19 Shelley and I talked about her queuing that up today,
20 so we can move quickly through it tomorrow. This is a lot
21 to get done tomorrow.

22 Shelley Row: In Tab 6, there is excerpt from the
23 legislation about your role. You are supposed to, at least

1 annually, provide us with direction on our strategic plan
2 and review. We talked extensively about strategic
3 direction the last time. Obviously, there's been a shift
4 this time.

5 Mr. Chair, I don't know if you want to use your time
6 to talk about that, if you're pressed for time tomorrow, if
7 you want to revisit any of that?

8 Dr. Joseph M. Sussman: Well, why don't you say what
9 you need to say, and then we'll see where we are.

10 Shelley Row: That's the Strategic Planning piece. In
11 addition to that, there are three bullets on that first
12 tab. You were asked to consider whether the activities
13 that we are funding are likely to advance the state of the
14 practice, or the state of the art, whether the technologies
15 are likely to be deployed, and if not, what are the
16 barriers, and what are the appropriate roles for government
17 and the private sector in investing in that research and
18 those technologies? You have not tackled those issues.

19 You also, I think there's a mention in there too, of
20 being aware of our budget. One of the items you noted in
21 your Advice Memo, which you did not feel like you had
22 sufficient visibility yet, into that. And that is
23 certainly a piece of it.

1 So tomorrow, in order for you to fulfill that role, we
2 are going to give you a fire hose full of information on
3 the current funded activities. The way it's going to be
4 structured is, we will have a thirty minute block, at best,
5 for each one of those major activities. The Program
6 Manager for the program will be here, and they're going to
7 brief you on this. They're going to tell you what was
8 accomplished in FY 08, which is almost complete. You will
9 see on the slide how much money we spent in FY08. They
10 will also tell you what are the planned accomplishments in
11 FY'09, and the proposed budget of FY'09.

12 Now, in addition, in Tab 6, we also have given you the
13 most recent Status Summary Report. This report is a report
14 that I get every month for each one of the major programs.
15 It looks at cost schedule and performance for each one of
16 them. It has more information that you're going to hear
17 tomorrow. But, it is to give you more insight into how the
18 program is progressing.

19 So, you have that as a supplement to what you will see
20 tomorrow, which is literally like two slides on every
21 program area. They're going to keep their remarks to no
22 more than fifteen minutes, and it's to allow you time to
23 ask some questions, to give you some sense of answering

1 those questions posed by the legislation. We will give you
2 some paper with those questions on them, to help you keep
3 track of any thoughts you want to share with us. We are
4 happy to take your individual input on that piece of paper,
5 as well as what you aggregate as a committee, to report
6 back to us.

7 Dr. Joseph M. Sussman: So, on those individual
8 presentations, on however many there are, what are there,
9 eight or so?

10 Shelley Row: Eleven. Some of them are ended, so
11 there really isn't much to talk about.

12 Dr. Joseph M. Sussman: I think the Committee, I'm
13 assuming, doesn't want to simply hear the nuts and bolts of
14 the budget, although we need to know that, but some sense
15 of the substance of the research. What you're actually
16 doing and what you're learning?

17 Going back to Ken's comments earlier today, as having
18 some ideas of what the output of all this is. Are we going
19 to get some input into that?

20 Shelley Row: That is the intent. We'll ask them to
21 focus on the milestones they've accomplished, and what they
22 intend to accomplish next time. Now, I will just give you
23 a heads up. That sounds easy. It is not easy, because what

1 you will hear in terms of accomplishments are the
2 activities that have been accomplished. It's much more
3 difficult to, at this juncture, to tease out the results
4 that have been achieved, the research results that have
5 been learned. We're doing that right now to be able to
6 present that to World Congress. So, they should be able to
7 articulate some of that. And, I'll give them a heads up
8 tonight, as well.

9 Dr. Joseph M. Sussman: That would be helpful.

10 Shelley Row: Now, we're also going to provide you a
11 handout that is an aggregation of the budget, because what
12 you will see tomorrow is a bit here, a bit there, but it
13 is, in fact, not the entirety of the program. There's not
14 time to give you the entirety of the program.

15 We will share with you, however, the budget document
16 that was prepared for the Management Council a number of
17 months ago. So it's very high level FY'08 AND FY'09, so
18 you can see the big picture of how the finances are
19 allocated, because that is one of your roles. So, we will
20 give that to you, as well, so you will have that to work
21 with, and that will give you a little bit of context.

22 Dr. Joseph M. Sussman: Someone made the suggestion, I
23 think it was Bob, earlier today, that the idea of taking

1 only the primary area, be it safety, be it congestion, be
2 it environment, then scoring all of the dollars in that may
3 be misleading. And, I wonder if we'll be able to tease out
4 in these discussions how much of it is congestion and how
5 much of it is safety?

6 Shelley Row: In terms of dollars, I think that's
7 unlikely because, for example, you take a couple of notable
8 examples, the Integrated Corridor Management Program. The
9 focus of that has been on mobility; however, it's got a
10 very strong travel information component. If you can
11 integrate freeways and arterials, then you get a lot
12 clearer safety and environmental impact, but it is not
13 structured that way at all, and it's not to the point yet,
14 where you can evaluate those things.

15 They're looking at it though, frankly, because of the
16 input of this committee, and we do an evaluation on the
17 environmental piece of it, which was not originally part of
18 the intent. The same with the Congestion Initiative, can
19 we add in some evaluation on the environmental side, which
20 had not originally been a part of what was the evaluation
21 scope?

22 Robert Peter Denaro: I did make that comment, and
23 what occurred to me while I was making the comment, and I

1 think I said it, was that we need new metrics because it
2 doesn't work. It breaks down. If you're going to invest
3 thirty million dollars in some particular project, and it
4 benefits in several areas, you can't divide up this many
5 dollars going to here and this many dollars going there.
6 It's almost like thirty million is going to all three of
7 them. So, it's almost like you need a different kind of
8 exploring.

9 Shelley Row: Money is probably not the best metric.
10 It is insightful to use money to see where you're investing
11 heavily, but investing in energy is a different thing.

12 Robert Peter Denaro: What we're talking about here
13 is, what is the result of investing that money? We are
14 improving safety and improving mobility, and showing
15 technology will improve those. But, it's also like we're
16 measuring something different than the input.

17 Shelley Row: And most of them are not complete yet.
18 So, I think it's a very good recommendation of this
19 committee, and I forget who mentioned it early on, to
20 evaluate across all the goal areas, even though the focus
21 may be primarily in one. And then, that will be a better,
22 I think, measure of the program.

23 Michael Replogle: This is where I think, even if it

1 is not fully quantitative, having a good, in depth,
2 qualitative presentation about how these initiatives are
3 being put together in a way that balances these different
4 goals, and takes into account both the positive and
5 negative implications, for example, of increasing the
6 mobility on the environment.

7 I mean, you can, by reducing congestion, improve or
8 reduce the rate of air pollution emitted per mile of
9 travel, to then induce more travel and counteract that
10 effect. So, if all you are doing is boosting the mobility
11 by boosting the congestion, you're probably hurting the
12 environment.

13 But if, in designing the program, you're investing for
14 mobility and congestion reduction, and simultaneously
15 introducing different kinds of demand management and
16 enhances travel choice options into that corridor, with the
17 recognition that to get the environmental side benefits you
18 have to do that balancing act, then you can come out with
19 positive mobility and environmental benefits.

20 So, it's a question of, are these things being
21 integrated? As these projects are going forward, where are
22 they kind of leaving off some of these side pieces? Those
23 are the kind of questions I'll be raising.

1 Dr. Kenneth Button: I think it's important for a
2 slightly different reason. The question is, why are these
3 technologies not being adopted? And, the tendency is to
4 forget the holistic impact, and in particular, the groups
5 that are affected. And any policies adopted in the area at
6 all, basically has nothing to do with democracy. It comes
7 down to coalition groups, whereas a coalitions form for
8 different objectives and different purposes.

9 But if you get this sort of information you're talking
10 about, I would take it further. It's not simply
11 information which is just of interest, and it's not
12 something we say we like or dislike. There's actually a
13 way in which the politicians and outside people can assess
14 these and mainly, to more or less, have different adoptions
15 of technology.

16 Tomiji Sugimoto: Also, can we also have a chance to
17 hear, how are you going to deal with the kind of results of
18 the research, and the timing, and how to use those kinds of
19 results of the research in the future?

20 Shelley Row: That is a good question. We can
21 certainly try to talk. It is a timeliness issue.

22 Tomiji Sugimoto: Actually, my question is, there are
23 many interesting research, and I don't know how much the

1 government has to spend the money, but finally, it is
2 interesting. And, those kind of results, and then go
3 forth. My question is, how to deal with, how to contribute
4 it to the public, with the kinds of results. And the OEMs
5 are looking for the technology or the results, and the
6 private sector, also.

7 Dr. Joseph M. Sussman: Don't be shy. Speak up and
8 question the presenters.

9 Joseph Averkamp: I think it would be useful to
10 discuss the programs in the context of the proposed fiscal
11 year 2010 plan, with the new strategic and budgetary
12 constraints. You don't have the fiscal year 2010 pro forma
13 budget yet?

14 Shelley Row: No. The basis for the slide you saw was
15 assuming it's the same as 2008. The situation is, with the
16 exception of three of the programs we'll hear about
17 tomorrow, they all will be done by 2010.

18 Joseph Averkamp: So, we should be looking at how much
19 is left, how much is obviated, if I have a hundred million
20 dollars, or ninety million dollars free?

21 Shelley Row: Yes, we can talk about that. It is the
22 vast majority of the program.

23 Joseph Averkamp: I just want to come at it from the

1 broader framework to look at the priorities.

2 Shelley Row: The majority of the program would be
3 over by 2010.

4 Dr. Joseph M. Sussman: We will have to feel our way
5 as we move through these presentations.

6 Michael Replogle: So, this question the other Joe
7 just raised, does this lead us to the place where after we
8 go through all of, perhaps it would be fruitful to have a
9 discussion about what is missing in the 2010 budget?

10 Should we, as an advisory committee, for example, be
11 recommending that the Department and the Congress work
12 together to create in the next transportation bill, a new
13 innovations program, for example, that helps to advance new
14 approaches for intelligent transportation development, and
15 recommend some ways in which that might be framed to be
16 more effective than the past programs, and to address
17 issues that haven't been properly advanced?

18 Dr. Joseph M. Sussman: If we're able to move people
19 through these discussions with relative speed, we have an
20 hour at the end for further discussion, and we have the
21 informal lunch from 1:00 to 2:00. For those who can stay,
22 we can continue the discussion there.

23 So, we ought to have an hour or two at the end to,

1 kind of, put a cherry on top of this whole thing and see
2 where we are. We're still absorbing a lot of information,
3 and a lot of revolutionary proposals that we still have to
4 get our arms around.

5 Shelley Row: And if I might just add, from my
6 perspective, if I'm going to be selfish about it, we could
7 use your help in finding the federal role. I have come to
8 understand the pros you're going to hear about tomorrow.
9 Each one of them has a pretty clear federal role. These
10 were all in place when I got here, so I don't have any
11 allegiance to them, particularly, but they all have been
12 pretty thoughtful about understanding the federal role.

13 It's evident that -- out of the box, but it's
14 there. But as we move forward, I think we need to be
15 particularly cautious about choosing carefully, what is the
16 federal role, so that we don't inhibit private sector
17 investment and we just let it go full steam ahead, and then
18 do the pieces that need to be done to get the public
19 benefit out of it.

20 Dr. Joseph M. Sussman: I think we've done enough
21 damage for one day. Well, I guess we haven't.

22 Robert Peter Denaro: One point of confusion, or at
23 least since we're preparing for it tomorrow, I would like

1 to clarify this. We've got some big questions. Well,
2 let's talk about our performance here, if we're going to
3 have advice coming out of this meeting and we've just
4 reviewed all of these programs. I suspect we'd need to be
5 answering all of these questions, so I'm a little bit
6 worried that in eleven programs, it's with a half hour
7 each, we're going to do in four hours, I did that math.

8 (Laughter)

9 Robert Peter Denaro: And then, with fifteen minutes
10 of each, these are pretty meted questions. I think they're
11 great questions, but in fifteen minutes to address that?
12 Now, one thing you mentioned, Shelley, we'll all have a
13 piece of paper, so that's one thing. We can just kind of
14 randomly jot down things, and then Joe and I can collect
15 them, and try to figure out to put that in a memo, and vet
16 that in a memo. Or, we can attempt to get some closure
17 while we're talking tomorrow. I just want to throw that
18 out.

19 Shelley Row: Let me help you, real briefly, as you
20 think about that. Let me help you a little bit with the
21 timing. I'm looking at your Agenda. They are listed on
22 the last page in your Agenda, in the order you're going to
23 see them tomorrow. They're organized by the safety

1 activities first. The ones that are square in the middle
2 and the ones that tend more on the mobility side. So,
3 that's the order you get them in.

4 Of these, NG911 is almost complete.

5 ETO, that's Emergency Transportation Operations is
6 complete, wrapped up with a bow around it.

7 Rural Safety has not been announced yet. It's being
8 briefed to the administrators on Monday. So, there's
9 nothing to talk about on that one, other than it exists and
10 you should just know.

11 IVBSS very relevant, VII very relevant, CICAS
12 relevant, Clarus relevant on it's own track, I'll leave it
13 at that, ICM relevant, MSAA has one year left, and FDMM is
14 done.

15 Dr. Joseph M. Sussman: So, some of these will be
16 brief?

17 Shelley Row: You should be aware of them, but it will
18 say on those handouts that you got on the presentation,
19 Joe. You'll see many of them and no funding in FY'09,
20 because they're, literally, wrapping up.

21 Dr. Kenneth J. Button: So, the presenters will be
22 tolerant, and they will not be given equal time?

23 Shelley Row: No, and we can move through them as fast

1 as you all are comfortable. The only caveat to that, Mr.
2 Chairman, is that's the good news. The bad news is, even
3 the ones that are finished, those are very relevant as to
4 how you get the information out, and how you make it usable
5 for somebody.

6 And so, we're working that side of it right now on
7 many of these to say, "Great, we got great results, it's
8 exciting. Now what?" And so, that can be about very
9 relevant conversation, even though the actual research
10 study is complete.

11 Dr. Joseph M. Sussman: We're going to have to run
12 this with an iron hand, and that is why I've delegated
13 tomorrow's moderatorship. I suspect you people are pretty
14 tired of hearing my voice for the last four hours.
15 Students have to do it for fifteen hours a week, and pay
16 \$40,000.00 for the privilege.

17 But Bob, I will kick it off by just making some
18 introductory remarks, and then Bob will have the
19 responsibility for moving us through the program updates
20 with alacrity.

21 Robert Peter Denaro: That's part of why I brought up
22 the question of what's the best process for us to use here.
23 If we've got suggestions on how we can best adopt and use

1 these questions.

2 Dr. Joseph M. Sussman: Well, Shelley had proposed
3 each of us making individual notes. That's helpful in some
4 cases. I think it will be obvious in some cases, less so.

5 Shelley Row: Once we do the short presentations, you
6 can literally go through the three questions as a group.

7 Dr. Joseph M. Sussman: Now, do you want to say
8 something about the attitude adjustment hour?

9 Shelley Row: Yes, after the light lunch, we've got
10 dinner. Who is planning to join us for dinner, by a show
11 of hands? I've got directions to the restaurant. It's
12 Metro accessible. You can also take a cab. I'm going to
13 be leaving from here about 6:00 to go. The reservations
14 are at 6:30. They're in my name, so if you want to go as a
15 group, I'll be leaving from here about 6:00 by Metro, to
16 head over, or you're welcome to just meet us there.

17 Robert Peter Denaro: You're in the hotel?

18 Shelley Row: Yes, in the lobby of the hotel.

19 Dr. Joseph M. Sussman: Did you get a count? The
20 hands went up and down.

21 Shelley Row: It's the Specci Restaurant, 1736 L.
22 I'll have directions to hand out.

23 Dr. Joseph M. Sussman: Well, we hope as many of you

1 can make dinner as possible. We'll have some informal
2 discussion.

3 Shelley Row: We have an early start tomorrow. We'll
4 have breakfast at 7:30.

5 **Adjournment**

6 (Meeting adjourned at 5:00 p.m.)

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