DEPARTMENT OF TRANSPORTATION

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Communications Report

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MEETING

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THURSDAY, AUGUST 11, 2016

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The Advisory Committee met in the Crystal Gateway Marriott, Salon 6, 1700 Jefferson Davis Highway, Arlington, VA, at 8:25 a.m., Sheryl Wilkerson, Chair, presiding.

PRESENT:

SHERYL WILKERSON, Chair

STEVE ALBERT, Director, Western Transportation Institute, Montana State University

SCOTT BELCHER, Chief Executive Officer,
Telecommunications Industry Association

ROGER BERG, Vice President, North America R&D, DENSO International America, Inc.

JOSEPH CALABRESE, Chief Executive Officer and General Manager, Greater Cleveland Regional Transit Authority

JOHN CAPP, Director, Electric and Control
Systems Research and Active Safety
Strategic Lead, General Motors Corporation

ROBERT DENARO, Consultant, Intelligent Transportation

GINGER GOODIN, Director, Policy Research Center, Texas A&M Transportation Institute

DEBRA JOHNSON, Deputy Chief Executive Officer, Long Beach Transit

- J. PETER KISSINGER, Consultant
- SCOTT MCCORMICK, President, Connected Vehicle Trade Association
- JOE MCKINNEY, Executive Director, National Association of Development Organizations
- RAJ RAJKUMAR, Co-Director, General Motors-Carnegie Mellon Collaborative Research Labs, Carnegie Mellon University
- BRYAN SCHROMSKY, Director of Technology, Verizon Wireless
- SUSAN SHAHEEN, PhD, Adjunct Professor, Civil and Environmental Engineering and Co-Director, Transportation Sustainability Center, University of California, Berkeley
- KIRK STEUDLE, P.E., Director, Michigan Department of Transportation

ALSO PRESENT:

KEN LEONARD, Director, ITS JPO
AUSTIN BONNER, ESQ., Harris, Wiltshire & Grannis
STEPHEN GLASSCOCK, Designated Federal Officer
BRIAN HOEFT, Regional Transportation Commission
of Southern Nevada

- DAVID KIDD, Insurance Institute for Highway Safety
- SENECA SOH, Office of the Assistant Secretary for Research and Technology, DOT

AL STERN, Citizant

CRAIG UPDYKE, National Electrical Manufacturers
Association

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(8:26 a.m.)

MR. GLASSCOCK: Good morning, everyone. I'll go ahead and officially call the meeting open. And glad everyone could make it. First, let me apologize for Ken. He had a conflict, and so will be here after lunch.

And he will give you an update on our strategic plan, and our organization, and the office. We've had four vacancies, and we're slowly filling them. So he will give you an update on that.

Greg Winfree is going to try to come by after lunch also to say hello. So, I think for the next meeting I may see if we can make this table three wide, so that you guys aren't sitting so far out. I apologize.

CHAIR WILKERSON: Or a square.

MR. GLASSCOCK: Now that we --

CHAIR WILKERSON: Oh, we can't do a square here.

MR. GLASSCOCK: We can do the wider room. So I don't want you too far out there. You can't participate. So, I'm going to turn it over to Sheryl. And I'm over here if anybody needs anything. Please, just let me know.

CHAIR WILKERSON: Great.

MEMBER ALBERT: What Wi-Fi connection do we use?

BG GRAHAM: Oh, it's on here.

MR. GLASSCOCK: Oh, yes. The Wi-Fi connections --

CHAIR WILKERSON: The Wi-Fi connections are on the table. I need to redo that too. So, first of all, thanks to everyone for being here. And I think we have all but two folks.

And for the record, I think we can, should probably point out who's not here at this moment. I think Tina. Bryan, however, is representing Tina here, on the side there. Tina Quigley, and then also George Webb. Those are the two who are unable to be here.

So we have a really, really great turnout. So, thanks to all of you. I hope you've all had a great summer so far. Oh, yes. One more?

MR. GLASSCOCK: Yes.

CHAIR WILKERSON: Sure.

MR. GLASSCOCK: An update on your appointment.

CHAIR WILKERSON: I was going --

MR. GLASSCOCK: You were going to tell them?

CHAIR WILKERSON: I was going to ask you --

MR. GLASSCOCK: Great. Okay.

CHAIR WILKERSON: -- to speak to that.

MR. GLASSCOCK: I've turned the mics on. It's gone

through all the vetting. And it is on the Secretary's desk to be signed.

From what I understand, for whatever reason, those appointments are not happening very fast. And there's some still up there from December. So, don't think that it's anything with this committee. It just seems that they have slowed down the process.

But again, it's been vetted by everyone. And it's just sitting there waiting for him to sign. And as soon as that happens I will let you know.

CHAIR WILKERSON: Thank you.

(Off microphone comments.)

MR. GLASSCOCK: Yes you are, yes. In the chart it says you can continue to serve until an interim's in place.

CHAIR WILKERSON: Great. So, Ken is not here.

Steve and I would like to just thank you for, and your team, for all the support you've provided over the past few months, especially the support you provided with our online survey.

And thanks to all of you for participating, and putting in your potential subcommittee topics, and your willingness to volunteer potentially to -- Thank you. To possibly chair some of those committees.

We've noted who is not here today. Are there any

comments on the Agenda? We did send them around. We did not get a lot of feedback for this committee agenda.

We had one oral request. But that has been taken off the agenda. I think that was something that was submitted for the Federal Register at one point. But that's no longer on the agenda.

So, I don't know if anyone has any comments about the schedule today. It's going to be pretty fluid. Our primary goal was to get an update from the Strategic and to start the process of thinking about what the next advice memorandum might look like.

So, we have some time broken out, quite a bit of time, for subcommittee briefings, subcommittee meetings. However, it's pretty fluid.

So, if along the way you'd like to make some other recommendations, after we start to discuss, the floor is open. And we can potentially think about how best to tackle some those issues.

At our last meeting, which was held March 31st, correct, we had a presentation on Connected Vehicle Pilot Update. We talked about the FAST Act, and 2016 ITS research project budget.

We discussed the pro has posed 2016 advice

memorandum topics. And during that time we talked about the potential to raise or discuss automation scenario planning, traffic safety culture, and vehicle hacking, among others.

We agreed that we would circulate a list of proposed topics for consideration. And that was circulated. And we will go through that shortly.

Does anyone else have any questions for that? I think we're still waiting for just one person to weigh in on the subcommittee change that was solicited.

MEMBER MCCORMICK: There is one topic that I would like to get raised.

CHAIR WILKERSON: Can you, is there a microphone there? No? Okay. Just speak up a little.

MEMBER MCCORMICK: Oh, sorry. I did have one topic that I'd like to refresh, that I brought up I think at our March meeting. The U.S. Postal Service is buying several hundred thousand new vehicles. I've read the specifications. There's no provision to include vehicle safety measures.

These are vehicles that travel every road in the country, six days a week. And the opportunity to harvest a tremendous amount of road, weather, and traffic information, at least there ought to be a provision for,

even if they don't include that in the actual capability of the vehicle when delivered.

And I'm not sure what our role is with respect to that. But I think it ought to take five minutes of discussion at some point.

CHAIR WILKERSON: Does it fit with one of the topics? Did you...that we had. We can go through that in a second. But would you hold that, and give that when we start to go through the subcommittee topics?

MEMBER MCCORMICK: Well, technology and active transportation.

CHAIR WILKERSON: Okay. I'll make a note of that. Any other thoughts or comments before we get going?

MEMBER BELCHER: One thing to note. Scott has got a meeting coming up in October. I don't know if you want to mention that. And I've got a meeting coming up in November that I wanted to at least mention.

CHAIR WILKERSON: Sure.

MEMBER MCCORMICK: Scott wanted to go first. We have the seventh summit on the state of the connected vehicle. It's a very unique format. It's an invitation only affair. We keep it to less than 200 people. And everyone here would certainly be on the invite list.

The format is we have 28 speakers. And Kirk's,

with the exception of Kirk, everyone gets 15 minutes to say where they see the opportunity or the risk in the next 18 to 24 months. So, there's no "death by PowerPoint." There's no advertorials. That all can get sent out after.

But it's trying to get what the takeaway is from each of the different, 20 different industry sectors that we represent to the audience. And I'll certainly make sure everyone has an invitation to that.

CHAIR WILKERSON: Okay.

MEMBER MCCORMICK: It's also relatively cheap. I mean, public entity is like \$400 dollars.

CHAIR WILKERSON: Could you send an email to the committee?

MEMBER MCCORMICK: I will.

CHAIR WILKERSON: That would be great.

MEMBER MCCORMICK: I will.

MEMBER BELCHER: And then --

MEMBER MCCORMICK: By the way, it's sponsored by MDOT also.

CHAIR WILKERSON: Okay. Great

MEMBER MCCORMICK: Kirk is a primary sponsor.

CHAIR WILKERSON: Thank you.

MEMBER BELCHER: TIA is hosting its second conference on the future, how communications will impact

the future of transportation. We did this a year ago.

It's the second time.

So we talk about 5G, where 5G is going, how that's going to Interface the transition between 5.9 and 5G. The debate about 5.9, which is a very real debate, even more so these days. So it's not, it's a little bit of a different conference.

We've got the carriers talking about what they're doing. We've got, you know, so -- And right now we're partnering with Global Automakers, Michigan DOT, University of Michigan, and the ITU as partners to it.

It will be in Detroit as well. And it is on November the 29th. And I'll send information around -CHAIR WILKERSON: Great to know. I'll make sure that we'll send you an invite.

MEMBER BELCHER: -- about that. And if anybody wants to participate in it, in setting the program, we welcome that as well.

CHAIR WILKERSON: Great. Any other comments? Let's see. This is the -- Oops.

(Off microphone comments.)

MEMBER STEUDLE: There's another, an invitation only session. It's going to be at the Westin, the Detroit Metro Airport. It's called the Rural Mobility Summit.

It's put on by the, it's a group called Business Leaders for Michigan, which is the, think of them as the Chamber of Commerce. But they're actually much larger than the Chamber of Commerce. And it is the 28th and 29th of September. And the two primary speakers are the, the two biggest speakers are Bill Ford and Mary Barra. And the third one I'm drawing a blank on at the moment.

So, anybody that's interested in that, let me. There is a registration fee for it. It's not huge. It's a one-day event in Detroit.

CHAIR WILKERSON: Thank you.

MEMBER STEUDLE: I'll send you that as well.

CHAIR WILKERSON: Thank you. Appreciate that.

Okay. So some great things have happened. One other thing

I thought I'd point out is our, just to remind folks about

the timeline that we have before us for the advice memo and

the report to Congress.

Just thought I'd share this, and see if anyone has any thoughts or comments, particularly when we start to think about what our next, when our next meeting will take place.

The advice memo is due to the ITS JPO in January, January 1. I think that's really the only thing we have to worry about. The rest are pretty far away. In

May we have the ITS PAC report. That will be due to Congress. So, that's the current timeline.

Does anyone have any comments or questions about what's required of us? No? You look like you're about to say something. No. Okay.

The other thing that I had on my to-do list was just to, I asked if we, the ITS JPO staff to provide a copy of the program advisory committee report to Congress, and the responses. Has everyone had an opportunity to review that, and look at their responses?

I think there was only one partial concurrence on Recommendation 6. And the rest, there was a constant theme of concurrences, which is great. But it's very clear that most will depend on the availability of funding.

Almost every single one of them said yes, provided there's sufficient funding, which we understand, given the update that we had from Ken and Stephen at our last meeting.

Does anyone have any comments or questions? Or would you like to talk about any of the particular topics that were raised in their particular subcommittees that they worked on? No? Should we, do we need to give people a few moments to think about it, or look at them?

MEMBER STEUDLE: Look at them.

CHAIR WILKERSON: Look at them? Was that helpful? Okay. So why don't we take a few minutes to review them. I think it would helpful to be able to say we did do that.

And point out any thoughts or comments, particularly as we start, before we start up subcommittee discussion, in case there are topics that need to be followed up. So, why don't we take about five minutes to do that? Is that okay?

(Whereupon, the above-entitled matter went off the record at 8:38 a.m. and resumed at 8:46 a.m.)

CHAIR WILKERSON: Okay. Has everyone had an opportunity to at least peruse them? Does anyone have any comments on the first section?

First of all, I commend everybody. I know it was a lot of hard work to get this done. And it was really a team effort. So, I really commend the committee for this submission, and the success, particularly in the concurrences.

Does anyone have any comments on the first section data?

MEMBER BELCHER: Yes, I do.

CHAIR WILKERSON: Okay.

MEMBER BELCHER: So, first of all, I agree. I think it's an excellent document. So, we can go with that. And this is not necessarily in the document.

But it wasn't in our recommendations explicitly. And it may be a topic for today. It may be, it may warrant something out of cycle. And that's, we don't explicitly endorse the adoption of 5.9. Or we don't explicitly endorse, you know, the protection of the spectrum.

And I don't know that this committee doesn't, feels that way. And so, we should find that out. But if it does there is the tension over 5.9, and protecting it for transportation is getting increasingly tenuous.

And it's not clear it's going to get out of the White House before this administration's gone. It's not clear we're going to get a rule. And it's certainly not clear that this is going to be protected for transportation.

And I don't know whether this advisory committee has an opinion about that. But if we do have an opinion about it, we may want to go out of cycle and opine to Congress and the White House.

Because they're under tremendous pressure from the FCC, and tremendous pressure from the cable industry to open this space up. And right now it doesn't look like

they're going to be able to protect it.

I'm very, I mean, I'm concerned about that. Again, I don't know that this committee, whether we have an opinion. I think we do. But if we do, we should act on it.

CHAIR WILKERSON: Okay.

MEMBER BELCHER: That's my opinion.

CHAIR WILKERSON: Any comments, thoughts?

MEMBER ALBERT: Did we hear back from USDOT on anything that they concurred with and they did have money for?

CHAIR WILKERSON: There --

MEMBER ALBERT: Or is there anything that we should be delving into deeper that would aid them? Because basically it says, oh, yes, I like everything you said. But we have no money. So, thank you very much.

CHAIR WILKERSON: Well, there are a few where they said, we're already, no, we have some things underway.

MEMBER ALBERT: I'm not trying to be negative.

CHAIR WILKERSON: No. I know that.

MEMBER ALBERT: I'm just trying to say, is there an opportunity that maybe they thought that we could serve in some capacity?

MEMBER BERG: Everybody has a limited budget. I mean, I don't care if you're public, private, whatever,

non-profit. You have a limited budget. So you have to make decisions on what you want to prioritize.

So, I agree with you. Everything here is a good thing to do. And so you do it if you get enough money. And I talk about that in my budget meetings every year. However, you don't have enough money. So I think high recommendations like these are something you should think about.

Instead of just making, you know, a laundry list of recommendations, maybe you should say, we need more priority in shared mobility. You need more priority in rural. You need more priority in urban automation. Whatever we choose. But I think that might be a more general --

CHAIR WILKERSON: And we can ask Ken would he -MR. GLASSCOCK: I'll offer one insight that this
was worse than normal because of the Smart City and the
grant program that came out of the FAST Act. So each of
those, both, Smart City was \$20 plus million each year.
And the grants was about the same. So our normally \$100
million dollar budget --

MR. GLASSCOCK: Yes. Forty was whacked off here. So, I think that played heavily into this cycle this year, you know, unfortunately.

MEMBER BERG: But I still think it's, you know, good stuff. There's always going to be --

MR. GLASSCOCK: Oh, yes.

MEMBER BERG: -- stuff we --

MR. GLASSCOCK: Right.

CHAIR WILKERSON: Some crisis or --

MR. GLASSCOCK: Right. And I mean, both of those carryovers are '17 also. So in '16 it's the same thing for '17.

CHAIR WILKERSON: So, is the recommendation that when we talk about these issues, that we help them prioritize? Or that you're asking, you would like DOT to -

MEMBER BERG: If we give some information that they don't give outside the Beltway that we live every day. I think that's what they're looking for.

CHAIR WILKERSON: Okay. So, go forth.

(Off microphone comments.)

CHAIR WILKERSON: Perfect.

(Off microphone comments.)

CHAIR WILKERSON: Okay. Thank you, Stephen and Roger. Any other comments on the data section?

MEMBER DENARO: Yes. I had a comment on the -- CHAIR WILKERSON: Bob.

MEMBER DENARO: -- item that I was involved in, which is the GPS vulnerability and liability. The answer to me was a little dissatisfying.

Because the basis of this question, this recommendation was Nat Beuse of NHTSA telling this committee that they had big concerns about the adequacy of GPS to support Connected Vehicle. And then, we're not even talking automated yet.

And what I'm looking for is an answer that says, this is a path to where we will no longer have to say we're concerned about GPS. In other words, we're working through the problem, coming up with solutions. The response in here was more about --

CHAIR WILKERSON: Part of Recommendation 4?

MEMBER DENARO: I'm sorry.

CHAIR WILKERSON: Recommendation 4?

MEMBER DENARO: Four. I'm sorry.

CHAIR WILKERSON: Okay.

MEMBER DENARO: Recommendation 4. The response was more about let's invite various companies to participate in the Connected Vehicle pilots. Okay. That's good. But I'm not sure that's a path to NHTSA, for example, saying we believe that this is on the right track, and we have a solution.

So, I was looking for a little more substance there of a more directed effort to attack this. And I know that CAMP and others have done analysis. But we still have NHTSA still saying they're concerned about GPS.

So obviously whatever we've done so far is not adequate. And I don't want that to become an Achilles heel for Connected Vehicle sometime later.

CHAIR WILKERSON: Other comments. Thank you. Okay. What about funding? Any comments on funding, besides the prioritization, which we talked about just a few minutes ago. That was under B on -- I don't think, we didn't have page numbers on this final one. But it was under Section B.

MEMBER GOODIN: Yes. So, I have a question about research funding in other areas of DOT besides just the JPO budget. And to what degree these recommendations make their way to, for example, Federal Highways?

You know, they have a research program. And I'm speaking specifically to this recommendation on P3s. I think for those of us who were involved in the Smart City Initiative, from the local level, the amount of interest by the private sector, and partnering with the cities was overwhelming.

But just this week in Austin we had kind of a

regroup meetings.

What are we going to do going forward? And we still had this question about how do we partner? What's the best way to engage within our legal framework and our procurement requirements?

And I think this is a really important topic. But the recommendation here in the response, specifically responses related to FHWA, what they're doing, to what degree can FHWA help move this forward within their research program?

And I guess that's a broader question to all these responses related to lack of funding. Where is funding within FTA, Federal Highways, IBTTA, others, to tackle some of these issues?

CHAIR WILKERSON: Good point.

MEMBER MCCORMICK: Wouldn't that just be a recommendation? Just for them to identify and solicit the funding needed to execute on these priorities?

CHAIR WILKERSON: But I think you're saying that where there are vulnerabilities in the funding, are there opportunities to collaborate, to make --

MEMBER GOODIN: To leverage research to actually -- Right.

CHAIR WILKERSON: Okay. Great comment. Any other

comments on funding? The other topic was I think C, Public Transport.

MEMBER SHAHEEN: Yes. I'd like to just add something to Ginger's comment. Because I was also involved in the Smart City Challenge, and worked really closely with the Mayor's Office in San Francisco.

And what we found really, you know, hard about the challenge was, you know, we had millions of dollars thrown at us for San Francisco, right. But that puts the Mayor in a very challenging position about preferences to one company or another company.

But there is this huge opportunity to leverage these funds. So, I do echo Ginger's remark that I think a little bit of thinking about how to provide some kind of cover to the locals, people who are receiving these funds, is probably something we should look at.

Because it's like, yes, beat the drum and get the money in. But it's got to be handled in a way that can be leveraged, give these people cover. It's challenging for elected officials to accept funds without matching funds, or leveraging opportunities.

I'm not sure that this is clear. But I think if you had gone through this process you would understand. What Ginger and I are getting at is that the grant came

out. And that was lovely. RFP came out. But there really wasn't any structure for how --

CHAIR WILKERSON: To facilitate.

MEMBER SHAHEEN: -- we're supposed to do this, right. And we're just probably in peril of doing similar things. But not really knowing exactly how to handle it.

But what I think Austin and San Francisco, and I think a number of other cities, including Columbus witnessed was a massive amount of public, or private sector dollars that could potentially be leveraged.

But if you didn't get the grant, then what do you do? Because there is no political cover, and there's no match. So then, what do the cities do? Does that, does it --

(Off microphone comments.)

MEMBER SHAHEEN: I'm really tired. So I'm not sure I'm making sense.

(Simultaneous speaking.)

MEMBER SCHROMSKY: It does.

MEMBER SHAHEEN: Okay.

MEMBER SCHROMSKY: It does in the case of more individuals, committee or task force, whatever it may be. It also puts in issues for private corporations. Because if I participate in this, this is precluding me from

bidding on the contract, or actually be awarded. Because I have an unfair advantage, because I have inside --

CHAIR WILKERSON: Right.

MEMBER SCHROMSKY: -- know how, right. So you kind of, this quagmire that you got into, it's like, hey, I want to do it, but at what cost, right. Because somebody could, you know.

MEMBER SHAHEEN: Right.

MEMBER SCHROMSKY: If you live inside the Beltway, contractual law and RFPs, and there's capture management. It is a huge apparatus. And, you know, with FOIA, and everything else, blended submissions.

MEMBER SHAHEEN: But there was, but what we saw, right, was that there was this demand for the private sector to want to partner. But again, not a lot of them have the infrastructure, you know, for the cities to have in place, or best practices or know how, and how to handle that.

But just, yes, in the context of there being funding issues, whoa, I mean, our grant was, you know, leveraged three times over. Application was leveraged that much. And so, that much money would have been brought, potentially.

MEMBER CALABRESE: And if companies partnering

with several competing agencies or cities on the project as well.

CHAIR WILKERSON: Yes, that's true. So do you have, are there any recommendations that you're thinking? I mean, best practices or tools that you think that could have been provided to help support that, or lessons learned from that experience that we should make note of for the record?

MEMBER SHAHEEN: Well, my understanding is that the Smart Cities team at DOT is trying to work with the seven finalists to try to sort through things.

But it's, there was so much emphasis, as a lot of people know, on this effort, and that I think just pushing that grant through the process took herculean efforts, I think, of the cities and of DOT. And now what, right?

And I think DOT's trying to deal with it. But we have an administration change occurring as well. And I think a lot of those people that were put in place to implement that grant are going to wait for, are in the process of waiting.

So, I don't know what happened. You know, honestly, Sheryl, I don't know. Because I was so involved in helping to support development of that grant in San

Francisco, that I don't know this bigger picture.

And, you know, we haven't even, you know, Ginger and I haven't even really debriefed or talked, as people that were involved in helping to support those processes. So, I guess the answer is, I don't really know.

MEMBER GOODIN: Well, I mean, I would say that the response here, and the fact that FHWA has within it an office that focuses on P3s for the infrastructure. Well, on the hard side, can we leverage that expertise to do research on how P3s could be used for ITS?

That's kind of my recommendation is, can we leverage the expertise within Federal Highways, and see how some of those practices may apply? It may not. But that's, I think with the lack of funding in JPO, how can we leverage that?

MR. GLASSCOCK: So, I'm going to first, until Ken, when he gets here. We share, we coordinate this report with everyone else that we work with, Turner-Fairbank, FHWA research, FTA. And so, they had input into this. And so, they saw it and coordinated the answers. But, and Smart City thing is really --

CHAIR WILKERSON: Yes.

(Off microphone comments.)

MR. GLASSCOCK: Well, let's just go to Ken.

MEMBER SHAHEEN: Yes.

MR. GLASSCOCK: But I think he might be able to provide some --

CHAIR WILKERSON: That would be great.

MR. GLASSCOCK: at least a little bit of insight on it.

MEMBER BERG: We should really --

MEMBER BERG: -- talk about, all we have to do is say, there ought to be some mechanism for dealing with this. This is something, this phenomenon that we saw, which is so much private monies there. How can you follow up to what you see?

MEMBER SHAHEEN: Yes. How do we do that?

MEMBER BERG: Yes.

MEMBER SHAHEEN: Maybe it comes up with requirements on certain grounds, and they --

CHAIR WILKERSON: Right. And accountability afterwards.

MEMBER SHAHEEN: And that big you heavily leverage. Or that's part of the deciding criteria, or something. So that we can start to institutionalize more -

CHAIR WILKERSON: Right.

MEMBER SHAHEEN: -- of that. I don't know.

CHAIR WILKERSON: Steve, you had a comment?

MEMBER ALBERT: Yes. You know, I'm sure, looking around the room, all of us have been involved in ITS-related stuff for 30-plus years.

And it happens so often, where in Washington, DC someone does a bunch of arm waving, and partnership development. And you get back home, and you talk to procurement. And they say, I don't care what they want up there.

I mean, it's a very real barrier, a very real challenge about procurement, and state process, and legal process. And regardless of what they're saying here in Washington, DC. And I wonder if maybe even part of the makeup of this group might help having someone from the procurement side involved in it.

Just a short comment. But, you know, I've come home all pumped up, and ready to do things. And, you know, talking to your partners, and someone said, you what? Been there, done that.

CHAIR WILKERSON: Well, one of our, and Scott was next. One of our descriptions of duty is whether ITS technology might be deployed by the users. And if not, to determine those barriers that could potentially impact. And that's part of our charter, part of our duties.

So, it could be that that could be one of the topics that we raise following having Ken come, and maybe address that, or give us some, share some thoughts on that.

Now, Scott, and then --

MEMBER BELCHER: So I have two comments. I mean, I think part of what we're talking about is the fact that these things happen, especially in the Smart Cities is a perfect example. It happens in a non-cyclical, non-traditional way.

I mean, it was on such a short timeframe that even if you have the infrastructure a Government agency couldn't be responsible for it.

And so, it strikes me that in those instances we might advise the DOT to have, to recognize that, and to reduce some of the administrative burden that comes with that. Because it becomes very difficult to get partners in 30 days, even if you can get them.

I mean, I can't even imagine. I mean, I know Verizon gets these requests all the time. And trying to sort through them, because you're supposed to, you know, be invested in this stuff. But to sort through them internally, they can't even do that, let along having to negotiate with the cities. So, I guess, I think some flexibility might be in order.

The other thing I would raise, and it's not really, it's kind of on topic. There is another Smart Cities Challenge that's going to be coming up. Verizon and TIA are partners with the National Science Foundation, and the White House, on a new initiative called the Advanced Wireless Initiative.

And they're going to be putting out \$400 million worth of Government funds over the next, what, four years or so. And, to create four test beds in, throughout the country in cities that have research universities, you know, associated with them or near them.

And they will create private sector test beds for both the public and the private sector, to test next generation wireless technology.

And it strikes me that, you know, how you use connected, how you use 5.9, how you use 5G, how you use all this stuff in everything that we do around the table is ripe for that.

I know Verizon is in a leadership position. We're in a leadership position. And we'll be working with our members to help develop the RFPs for that. And then potentially to support both selection and --

But there will be many opportunities for partnerships. Because I, at any of these things the

winning entity is the one who leverages the money the best.

I mean, even if they don't say that, it's clear. And so,
it's another opportunity with even more money than we've
seen before.

CHAIR WILKERSON: And this is the National, who are the initiatives? National Science Foundation?

MEMBER BELCHER: National Science Foundation and OSTP.

CHAIR WILKERSON: Okay.

MEMBER BELCHER: Do you have any other information?

(Off microphone comments.)

MEMBER BELCHER: It's called the Next Generation Wireless Initiative. It was launched three weeks ago here in Washington, DC. You had the head of OSTP and the head of the National Science Foundation.

Right now there are 15 private sector partners, including Verizon and AT&T. But also some of the other usual suspects. And then also TIA. TIA is a private sector partner, as is NCTA, the Wireless Trade Association

CHAIR WILKERSON: Great.

MEMBER BELCHER: -- are right now the --

CHAIR WILKERSON: That's good as well.

MEMBER BELCHER: -- main players.

CHAIR WILKERSON: Perfect.

MEMBER STEUDLE: So, it strikes me that there is a recommendation here about procurement. Because, excuse me, this, while the two of you just went through this just now, this has been an issue for many, many, many, many, many, wany years.

We've wrestled with it for probably the last ten. Different grants that come out, we put together proposals. And we'll have, you know, this company, that company. And here's what we're going to do.

But we can't say that. Because when we get the grant, then we have to go through a procurement process to bring them in. And they were the partners. So what you're experiencing, it's not new. It's new for you. It's been there for a long time.

So, I think a recommendation that focuses on the procurement process for grants and partnerships that -- But it still doesn't take away the political dilemma for whoever signs it originally that says, hey, I decided to partner with DENSO and General Motors. Well, why did you do that? Why didn't you take, you know, Ford and somebody else?

So that political problem will never go away

alone. Unless you do some kind of a procurement up front that says, hey, who wants to come partner with me? And then, if you have to do all that in three months, that's really hard to do.

We actually did that on one grant. We had a little longer time. And said, you know, send us what you'll do, and we'll include parts of it in there. So we could turn around on the back end and award, because we already had a procurement process. So, there probably is something in there about --

CHAIR WILKERSON: That's right.

MEMBER STEUDLE: -- the procurement process, methods, what we learn --

CHAIR WILKERSON: For grants.

MEMBER STEUDLE: How do we do this better?

MEMBER GOODIN: Probably model state legislation. I mean, state law was something that came up this week, and got us, how can we take what we already have, and use it in different situations?

CHAIR WILKERSON: That's good.

MEMBER GOODIN: Enhance it.

CHAIR WILKERSON: Right. Good points. Good comments.

MEMBER SCHROMSKY: Just a question on funding or

lack thereof. I'm curious, I don't know, it wouldn't be yesterday you mentioned general DOT.

They look at incidents where privatized roads or thruways actually use more intelligent stat communications, intelligence, whatever it may, compared to publicly funded, or roads that been acquired by private entities. Like, for instance, the Georgia Turnpike. It just got thrown away, putting it on the budget, big takeover.

Did we see, you know, we talk about this partnership? And, I mean, what you're talking about is, right, okay, if I, if we need a partner to I include myself from being, getting those monies? I would suspect in the business, you know, world, if I can do, generate revenues with less overhead, whatever, or less, you know, outlays, if you will, it's better for me.

I'm curious to know, is DOT looking at that? I don't know what the part where you look at that is. Can they run it, I wouldn't say much more efficiently. But are they incorporating more technology? Say, for instance, cities, states, or counties might have?

MEMBER STEUDLE: So, if I can have one piece that, and there is one fundamental difference, is the amount of investment a toll facility puts into a toll road is about ten cents a mile. The amount of money that states

can put in is about two cents a mile. That's the difference.

If states had five times as much, we could do more of this. The challenge right now is, do you spend money on technology? Or do you spend money making sure the bridge stands up?

That's the fundamental issue that states are faced with right now. So, I can say that there's probably not a state out there that wouldn't say, hey, I want to do more of the communications. I want to do more, but I can't. I can't pay for it.

Toll roads are completely different. When you look at the financing structure of a toll road it is significantly more. That's the difference.

MEMBER MCCORMICK: When the Belgium Consortium a few years acquired the lease rights to the Pennsylvania Turnpike for \$12.5 billion, we sent a small team to talk to them in Brussels.

We said, look, I mean, your accountants figured out that \$12.5 billion dollars could be recouped with profit over the 30 year period, just based on how much you maintain the road, and how much tolls that you're going to get.

And so, we laid out a variety of technologies

that were V2I technologies, so that they could understand what road weather traffic information, and how they might go forward.

And it would have only cost them about half a billion dollars to outfit every, you know, frequent truck that goes through there, and the infrastructure itself. And they weren't able to carry it forward any more than the bridge was, in terms of capabilities.

So, I don't know that the problems are any different. I think the problem is one of understanding what the value proposition is, being able to articulate that well so that it drives someone's understanding that this isn't just cost avoidance. It isn't just potentially lifesaving.

You know, that's historically been the thing everyone does poorest in this space, is communicating what the true value of it is.

CHAIR WILKERSON: Thank you. The last topic was shared mobility.

MEMBER SHAHEEN: So yes. So --

CHAIR WILKERSON: Sorry. Any other comments?

MEMBER SHAHEEN: Yes. So, similar comment to Ginger's on looking at resources outside JPO. So the key response here was the Federal Transit Administration's

development of the Mobility on Demand program. I know a fair amount about that, which probably doesn't surprise you, given my expertise in the field.

You know, Vince Valdes was very entrepreneurial. He initially identified \$2 million, and grew it to \$8 million. And I think he has a motivation to continue this program for multiple years.

But I'm aware of the fact that FHWA has also expressed a lot of interest in this, particularly from best practices policy side. So, can we try to be perhaps more inclusive of this, not just from an FTA standpoint?

Because I think looking at shared mobility purely from the perspective of transit operator perspective is probably missing the nuances of what shared mobility actually is. It does involve roads, highways. It's not just transit.

And in fact, you know, there's mixed feelings I think in the transit industry about shared mobility. Is it a complement? Is it a competitor? You know, how this affects labor, unions, and all sorts of very sticky difficult issues.

So, I think this goes well beyond FTA, is my response. And what I'm not sure of is, how does that work with ITS JPO? So, it seems like the response is, FTA's got

this.

CHAIR WILKERSON: Okay.

MEMBER SHAHEEN: But it's a grant. It's a small grants program, right. Eight million is not a lot of money. And there's a lot of extremely serious policy issues that need to be addressed.

And my understanding of the initial program, which I applaud FTA for doing, is that it's going to be pilots. But I will say, interestingly, similar to the Smart Cities challenge, I believe they received on the order, 80 to 90 proposals in response to \$8 million dollars.

Also highly leveraged by the private sector. So, yet again, here's I think an example of a tremendous amount of private sector interest, a tremendous amount of interest across the United States in this, that will not be fulfilled.

Because you can only spread \$8 million dollars out so much. So again, opportunities to look at public/private partnerships further. The role of FHWA, not just FTA. And one of the questions I have is, where, how does JPO factor into all this?

CHAIR WILKERSON: Great. Those are great topics. And thanks so much for taking the time to reflect

on those. So, in summary, I think there were three things that came up out of that. I know there are a number of questions we have for Ken when he comes. But separate and apart for those, and I'm just thinking about this in terms of when we started to talk about, was the short of shared mobility, inclusivity, policy issues, and labor, that might, we might want to reflect further on, and not --

And then, the other was procurement for grants and partnerships. And I know that we had one other issue about the Postal Service issue, which we can possibly talk about. Any other thoughts or comments? Well, Raj, we'd like to welcome you. Thank you for being here. And then also, for the record, is it possible to go around the room and have the folks in the room announce who's here?

MR. HOEFT: Brian Hoeft from the Regional Transportation Commission of Southern Nevada, sitting in for Tina Quigley.

MS. SOH: Hi, I'm Seneca Soh. I work at the U.S. Department of Transportation, in the Office of the Assistant Secretary for Research and Technology.

MR. KIDD: Hi. I'm David Kidd. I'm a senior research scientist at the Insurance Institute for Highway Safety.

MS. BONNER: I'm Austin Bonner. I'm an attorney

with Harris, Wiltshire and Grannis.

CHAIR WILKERSON: Great. Thank you. So, any other comments? Okay. Did you have a question? Okay. So, we are in the, what time is it now? It's 9:17 on my computer clock.

We were going to spend this first hour and a half just talking about the subcommittee topics. And I think the prior report to Congress, and the recommendations was a good opportunity to reflect on those prior to us delving into that.

We had everyone -- I think this is in, is this in one of the tabs? It is.

(Off microphone comment)

CHAIR WILKERSON: In the first, tab 2, tab B?

Right. Under tab B you'll see this chart. It might be easier for some of us to see.

MEMBER ALBERT: It's on Page 4.

CHAIR WILKERSON: Page 4. Yes, it is. And, Raj, I think we did not get your -- we did not get to insert your comments or thoughts about topics or subjects you might want to -- I don't know if you have given some thought --

(Off microphone comment)

CHAIR WILKERSON: Okay.

MEMBER MCCORMICK: If you did it on the server here-

CHAIR WILKERSON: Do you want to share the --

MEMBER MCCORMICK: -- it would only show IP addresses. So, they mailed out another one.

CHAIR WILKERSON: Do you, could you take a minute and maybe share your thoughts? And we can insert that into our discussion.

MEMBER RAKJUMAR: And if you -- right now looks like we have them.

CHAIR WILKERSON: Or just, if you just tell us what your first, second, third or fourth --

(Simultaneous speaking)

CHAIR WILKERSON: If you just, that way when we take it on we can make sure that we have everyone's input. You can just tell us out loud if you want. Okay.

(Off microphone comment)

CHAIR WILKERSON: Okay. I'll write it down.

(Off microphone comment)

CHAIR WILKERSON: Okay. So, this is two, four, eight, and one. This is the most popular one. Oh, you're very welcome. Thank you. Okay.

We don't have the ability to update this real time, do we? Is it possible?

(Off microphone comment)

CHAIR WILKERSON: Okay.

(Off microphone comments)

CHAIR WILKERSON: Oh, I should have given you my extra copy here. So, he has two --

MEMBER BELCHER: Two here?

CHAIR WILKERSON: Four under number one. Four, three, and then one. Three, yes.

MEMBER BELCHER: Okay.

CHAIR WILKERSON: Okay?

MEMBER BELCHER: Very good.

CHAIR WILKERSON: That way that will help everyone. So, just for the record, Raj has recommended, he's put two for automation, for those of you who want to write it in your chart.

Four under traffic safety culture. His third choice was vehicle hacking and cyber-security. And then his number one choice was the interrelationship between connected and automated vehicles. So, we will be updating that shortly.

In short, just looking at the big picture, the top four were automation. I'll go with the one that was most popular, interrelationship between connected and automated vehicles.

We have seven committee members who put that as their first choice, and five as number two. So that was pretty significant.

Under technology and active transportation we had three committee members who put that as their first choice. I'll tell you, we had three members put their first choice as automation, traffic safety culture, and technology and active transport. So those other three were the top.

For the second choice we had six members put technology and active transportation, and automation. So the very top were automation, interrelationship, and technology and active transport, being those who had one, or their first or second choice.

The other category, two other categories that I think stood out were traffic safety culture. We had three who put that as their number one choice. And then under rural deployment we had two people list that as their first choice.

So, just looking at first and second choices, those are the one, two, three, four, five subcommittee topics that had the highest number one or two choice.

Again, automation, traffic safety culture, interrelationship between connected and automated vehicles,

technology and active transportation, and then lastly rural deployment systems. Any comments on those?

MEMBER BELCHER: How many committees are you expecting this to be?

CHAIR WILKERSON: It's up to the committee. I think one way to look at this is that there's currently five really, well, that had the number one or number two choice.

Scenario planning, vehicle hacking, and reaffirmation of the ITS program accomplishments had the least number of, had the most number of threes and fours.

Although I think George had that as his number two as well.

So, I thought maybe we might want to just, the floor is open to share your thoughts about what this looks like.

MEMBER DENARO: I just have a question. What does reaffirmation of ITS program accomplishments mean?

CHAIR WILKERSON: If I can recall correctly, I think that was an opportunity to look back at -- does anyone else want to comment on that?

(Off microphone comment)

CHAIR WILKERSON: So, looking at the past recommendations that have been made, and taking sort of a broad look and saying, was there anything accomplished from

those recommendations? And, what's the status quo about those before we, you know, as we continue to go on, to make sure there aren't any that we might need to bring back to the table, or others.

Just a reflection. It was sort of a reflection. It's an opportunity for the committee to say, wow, there have been several recommendations over the, you know, the past several years.

MEMBER DENARO: Okay.

CHAIR WILKERSON: And is it an appropriate time for this committee to maybe have a committee go back and reflect, and look at some of those. I think that's, if somebody else has any other comments about that.

MEMBER CAPP: Sheryl --

CHAIR WILKERSON: Yes.

MEMBER CAPP: I think part of that was to just kind of look and see. Okay, we know what the memo said, and what the recommendation was. Well, did they do that?

CHAIR WILKERSON: Yes.

MEMBER CAPP: That was really --

CHAIR WILKERSON: That was another --

MEMBER CAPP: -- the big thing.

CHAIR WILKERSON: -- part of it.

MEMBER CAPP: So, it's one thing to write a memo

and say, yes, we concur with that. Because I write those audit letters all the time. It's another one to actually go back and do it.

CHAIR WILKERSON: Yes.

MEMBER CAPP: And do what you said you were going to do.

CHAIR WILKERSON: Well, that's an important task.

MEMBER MCKINNEY: We should all feel very strong about the rural performance system. But I think a two person committee, subcommittee, might be a little difficult to get things done.

CHAIR WILKERSON: Well, in the past, I mean, we've -- some topics, like shared use, we had a lot of discussion. It's my view that we don't have to write a, you know, five page synopsis on a recommendation. It can simply be one recommendation on a rule.

So, I think we shouldn't get hung up. If we decide to say we want to do all seven, it doesn't mean that we have to have five or ten recommendations for each. It could be that there's just one topic in there that we feel very strongly.

I recall rural was a huge issue for a lot of us. It just didn't come up as the number one, maybe because of

the time and expertise that some of us have. But I do recall rural was a huge issue.

And reaffirmation, I think that we did have a strong consensus around the table that we should at least take the opportunity to reflect whether we decide to make a recommendation.

But it might be worthwhile to have a small group of the committee just tackle a few of those recommendations, and see whether they came to fruition or not.

MEMBER ALBERT: I was thinking the same thing, being a rural guy. Is, I think I could have a, basically a teleconference with a couple of other folks, if they want to join. And we can knock out one paragraph, or a paragraph and a half with some action items, real quickly.

CHAIR WILKERSON: And that's --

MEMBER ALBERT: I'd be glad to basically take the lead on that and do it as a side meeting.

CHAIR WILKERSON: So, I think -- Oh, go ahead.

MEMBER CAPP: Sheryl, from a, maybe high-level process standpoint.

CHAIR WILKERSON: Sure.

MEMBER CAPP: So, I mean, by establishing these subcommittees we're kind of already kind of deciding, okay,

we're going to have recommendations in these categories, right.

CHAIR WILKERSON: Potentially, right.

MEMBER CAPP: We spit out a new letter, and we get responses back. The responses we got back when we talked about earlier, does that influence which topics we think --

CHAIR WILKERSON: Yes.

MEMBER CAPP: -- our energy is spent in? And do we want to generate as many recommendations? Would we want to, were they last? I mean, how do we want the final product to maybe have more impact than a little bit of the shrug of the shoulders we kind of had here this morning?

CHAIR WILKERSON: No. I agree.

MEMBER CAPP: And I don't know if maybe Ken could give us some input. You know, is longer better? Is shorter? Is a couple of more focused? My gut tells me a couple of more focused ones, where we could put some more meat on the bone --

CHAIR WILKERSON: Meat would be great.

MEMBER CAPP: -- that aligns with what their, the program team's, you know, influence and resources really are. The prioritization question I think is big.

CHAIR WILKERSON: Yes.

MEMBER CAPP: So, it can really help to steer them and

CHAIR WILKERSON: The top three that we should -

MEMBER CAPP: Yes. Because sometimes these sound like just a lot of good ideas.

CHAIR WILKERSON: Yes.

MEMBER CAPP: And then you get nice ideas if we had money, you know, yes.

(Off microphone comment)

MEMBER CAPP: Maybe a little focus is -- it just seems like a lot of committees that just go off in corners and just start writing ideas. We'll end up with 30 of them. And there we go.

CHAIR WILKERSON: Well no. I mean, this is why we're around the table. We're, the goal is to try to get some consensus about how to move forward.

MEMBER MCCORMICK: Yes. And I would suggest we just eliminate the vehicle hacking and cyber-security, for three primary reasons. One, we haven't had a malicious attack in a while. Probably because we're not keeping anything really valuable in our car, and it's not terribly scalable.

Second, it's pretty much a mature topic. We've

got industry working on it. We have, the feds funded the \$10 million dollars to CAMP to do their work. I don't see us adding anything of more value to something like that. And it wasn't high on anybody's priority list.

And although, unless Steve wants to be the entire committee, and I recognize that that's an important topic in terms of rural deployment, I might suggest that that can be incorporated, back to John's point, into one of the others.

I would like to see for this size group, if we had three topic areas that would give us a reasonable amount or number of people that, because we can make multiple recommendations, if there's one that comes up under one of those other areas, there's probably a way to incorporate it.

CHAIR WILKERSON: Comments?

MEMBER JOHNSON: I would say I support the recommendation. Because when you look at the various committees that are there, we have touched upon a myriad of different aspects of those.

So, I think to put our resources and our expertise, relative to what we bring to the table, and some of the areas which could be of greater benefit, leveraging, you know, prioritization, I think we would get more bang

for our buck. So, I support that.

CHAIR WILKERSON: Okay. Sounds like we are focused. We all agree on prioritization. Going back to some of the other topics that we talked about with the prior recommendation.

Procurement for grants and partnerships, and shared mobility policy, inclusivity, labor, all these external issues. Do those fit within any of those topics?

Or could they be subtopics under any of those potential topics --

MEMBER MCCORMICK: But didn't we already --

CHAIR WILKERSON: -- that are already up there?

MEMBER MCCORMICK: Didn't we already address some of those with our last paper? The shared mobility one I thought was covered very well. Why do we need to revisit it?

MEMBER SHAHEEN: I think we're just discussing the fact that there's still massive policy issues.

CHAIR WILKERSON: It's not going to go, it's not, there's no direct cutoff.

MEMBER SHAHEEN: Yes.

CHAIR WILKERSON: Like, just because we talked about it doesn't mean --

MEMBER SHAHEEN: It's a grant, a grant to

demonstrate pilots, right.

MEMBER MCCORMICK: Okay.

MEMBER SHAHEEN: So, what are we going to do about the issues with our funding paper, et cetera, that still remain unresolved?

MEMBER MCCORMICK: But I'm saying, they have to do solely with sole mobility, or shared mobility. Or does that have to do with the whole --

MEMBER SHAHEEN: Well, I'm wondering --

MEMBER MCCORMICK: -- grant funding issue?

MEMBER SHAHEEN: Yes. I mean, I'm not personally interested in writing another report on shared mobility. Maybe we could tuck it in additional recommendations into technology and active transportation.

MEMBER MCCORMICK: But --

MEMBER SHAHEEN: Because I think that shared mobility --

MEMBER MCCORMICK: Okay.

CHAIR WILKERSON: That's what I have, yes.

MEMBER SHAHEEN: -- should, could be --

CHAIR WILKERSON: It could potentially be a target.

MEMBER SHAHEEN: -- active transportation, right.

CHAIR WILKERSON: Okay. So --

MEMBER MCCORMICK: But I still think identifying policy here at --

MEMBER SHAHEEN: Yes.

MEMBER MCCORMICK: -- in that space --

MEMBER SHAHEEN: Yes. I don't want to spend the amount of --

MEMBER MCCORMICK: Okay.

MEMBER SHAHEEN: -- time I did previously.

CHAIR WILKERSON: Okay. No, I think you're just complementing the topic.

MEMBER SHAHEEN: Yes, yes.

CHAIR WILKERSON: Or enhancing it. So, we've, that can possibly, the subject could possibly come up --

MEMBER SHAHEEN: Yes.

CHAIR WILKERSON: -- in the committee, should we wish to proceed with --

MEMBER SHAHEEN: Yes.

CHAIR WILKERSON: -- technology and active transportation. What about the procurement for grants and partnerships? Does that tie into any of these topics, before we start to look at our prioritization?

MEMBER MCCORMICK: Well, would that fit under the reaffirmation of ITS program accomplishments? Because

CHAIR WILKERSON: Actually, it could.

MEMBER MCCORMICK: -- it becomes the vehicle by which you accomplish it.

CHAIR WILKERSON: It could be. I don't know.

MEMBER GOODIN: I think that another way is, they used to do the challenge with the deployment funding. Then I think that falls under really any category. There's always going to be underlying challenges.

MEMBER CAPP: Because it's a process, right.

CHAIR WILKERSON: Yes.

MEMBER JOHNSON: Yes. It is a process. And I think we talked about that earlier on. When you have opportunities to leverage monies and are forced to comply with certain regulations.

However, there's a limited amount of time in which you can actually expend those dollars. And you're trying to gather everyone around. I think it's prevalent under most of these areas though.

CHAIR WILKERSON: So, can you restate your recommendation?

MEMBER GOODIN: I'm sorry, the recommendation for --

CHAIR WILKERSON: Just your thought. So, you're

saying, okay, separate and apart? Or does it --

MEMBER GOODIN: I think in any of these categories, when we talk about deployment, actual field deployment, you're going to run up against the question of funding.

The procurement discussion had to do with, how can we leverage private sector funding to support, or to overcome the lack of public funding? So, to me funding applies in all of these cases, when we're talking about deployment at the local level.

CHAIR WILKERSON: So, are you recommending that the top three, I'm just restating. That whatever we choose to prioritize, that those subcommittees tackle that as a potential topic?

MEMBER GOODIN: Yes.

CHAIR WILKERSON: So, is that the recommendation?

MEMBER GOODIN: Yes.

(Simultaneous speaking)

CHAIR WILKERSON: Okay. So --

MEMBER MCCORMICK: As I look at it, I would think that the reaffirmation of ITS program accomplishments is cross cutting any one of those three or four topics that you pick.

Because it allows you to be more focused. And say, well, okay, did under, interrelationships between connected and autonomous address reaffirmation of our ITS objectives. Did the technology to active transportation address those areas of ITS affirmation?

CHAIR WILKERSON: I think that's fair. But I think we were looking a little bit more broadly at past recommendations. I think when we were on table, it wasn't just the ones that we were tackling.

It was looking back, maybe at prior committees, structures outside of us. And just taking a fresh look at some of those, and seeing if there was something ripe for discussion for us to address.

MEMBER MCCORMICK: Okay.

CHAIR WILKERSON: Right. So, we could even affirm that maybe some of those topics truly don't need to be addressed.

MEMBER MCCORMICK: And, Debra, you identified your number one as the traffic safety culture. Can you talk to us about what you're thinking there?

MEMBER JOHNSON: Well, I mean, part of it was a little personal, being in the public transit industry. And you talk about the safe aspect of moving mass vehicles, and transporting a myriad of people. I do have concerns as it

relates to doing that in a safe and efficient manner.

And then, when we talk about, you know, connected vehicles, and things of the like, how will that be safe as we look at the public transportation arena? So, that was the vantage point from which I was coming.

CHAIR WILKERSON: Okay. Any other questions about the topics? So, we have one suggestion that vehicle hacking or cyber-security not be on the top priority list. Any thoughts or comments about that? I'm just trying to work backwards. If you want to go the other way, I'm happy to do that.

(Off microphone comment)

MEMBER BERG: It's being addressed. It should be a priority being addressed.

MEMBER DENARO: Yes. I think one question we have to apply to any of these is, what would be a reasonable JPO role on this topic? And so, with that one it's kind of hard to think about what they would do that's not already being done by others. Maybe --

CHAIR WILKERSON: That's what you'd think.

MEMBER DENARO: And maybe we can apply that question to others too.

CHAIR WILKERSON: Okay.

MEMBER DENARO: What would the JPO role be? And

is there something that can add, you know, add to the field?

CHAIR WILKERSON: Okay.

MEMBER MCCORMICK: And we tried to, and that's dead. We tried doing the scenario planning one the last session, with a lack of enthusiasm. So I think that one should go away as well. If you get a --

CHAIR WILKERSON: Which one?

MEMBER MCCORMICK: The scenario planning. I believe that one, if there is something of relevance it can be incorporated as cross cutting across the ones we end up with anyway.

CHAIR WILKERSON: That topic had, one, two, three, four fours. Not very many focused on that. So, is there a consensus around eliminating scenario planning as a priority? And then to the extent it comes up, we can incorporate it. Okay. That's -- we're making progress.

The next category was the reaffirmation of ITS program accomplishments. We talked about what the intent was from that. Is there interest by a group of members who would be willing to revisit and maybe report back on some of the subject areas?

My thought was that it might -- what it might entail is taking some of the other reports, maybe coming up

with some of the subject matters, maybe a chart or two that says, here are ten topics that came up.

Yes, DOT has tackled that issue or not. Whether it's still relevant today or not. And then maybe reflect on that. Maybe we don't end up doing something on it. But just revisiting it.

MEMBER BELCHER: I mean, I think that's a great idea. I mean, I don't think it requires a committee. Maybe DOT could look back and do the chart that you're suggesting for us, rather than us do it. Have them come and tell us what they've actually done, as opposed to --

MEMBER BERG: That was really my suggestion.

MEMBER BELCHER: And then I think you could get three people, just like Steve had suggested before. You could get a couple of people on the phone and write a paragraph or two.

CHAIR WILKERSON: So, it could be that we could ask for them to come back and discuss that --

MEMBER BELCHER: Sure.

CHAIR WILKERSON: -- at one of our meetings.

MEMBER BELCHER: Yes.

CHAIR WILKERSON: At the next meeting. And involve one or two of us if they need, have questions or something.

MEMBER BELCHER: And that will help us too, evaluating which of the recommendations, or what type of recommendations have been useful or not.

CHAIR WILKERSON: That's a great --

MEMBER BELCHER: And it will give us a chance to give the feedback about the, yes, it's great, but we don't have any resources.

CHAIR WILKERSON: Right.

MEMBER BERG: Right.

MEMBER BELCHER: So that we --

MEMBER MCCORMICK: And if we can put the rural deployment assistance into one of the others, then I think what we can do is have everybody revisit, you know, where they -- for the three categories that we've now eliminated, where they would rather spend their time.

Because, you know, when I look at automation there's a difference of two people between it and the interrelationships between the connected and automated vehicles.

MEMBER BERG: Well, what are the definition's difference? I mean, could those be merged? I mean, you're already talking about --

MEMBER MCCORMICK: Well, I'm talking about rural deployment.

(Simultaneous speaking)

MEMBER BERG: -- one person different than connected and automated. Or could it --

CHAIR WILKERSON: Does anyone have any thoughts on --

MEMBER BERG: -- preclude --

CHAIR WILKERSON: I'm just trying to remember.

I have to have my notes, who had recommended that topic from the last discussion?

MEMBER MCCORMICK: On what topic?

CHAIR WILKERSON: The automation. We're raising, Roger's raising a question about the difference between automation and interrelationship between connected and automated vehicles.

MEMBER BERG: There could be, it's easy to define the difference. My question was, could it be merged?

MEMBER MCCORMICK: Right. That was my question. It might be a longer discussion. But now you've got the --

CHAIR WILKERSON: Well, I'm just trying to make sure that whoever might have made that recommendation, that it encompasses that. Or was it something totally -- no?

MEMBER ALBERT: Stand up and be guilty?

CHAIR WILKERSON: No. No, no, no. We had great

ideas around the table.

MEMBER MCCORMICK: Well, it was either John or Sheryl --

CHAIR WILKERSON: Okay. What's your thought on that, Roger?

MEMBER MCCORMICK: Well, I don't think it was John. I think it was Rob that brought up --

MEMBER CAPP: Especially if there's a synergy of any group that's working on both of them. Same types of thought processes. Although it may be difficult to have two groups working on similar subjects.

(Simultaneous speaking)

MEMBER MCCORMICK: It could have been talking about automation other than vehicle.

CHAIR WILKERSON: Okay.

MEMBER MCCORMICK: It could have been infrastructure related. I just don't --

CHAIR WILKERSON: Yes. That's what I was trying to get at.

MEMBER MCCORMICK: But I still agree with you that it's part and parcel of that third to your right.

CHAIR WILKERSON: Okay. Scott, did you want --

MEMBER DENARO: Well, I would say, as far as your point, there is a difference between those two.

There's a lot you can talk about in automation by itself.

CHAIR WILKERSON: Yes.

MEMBER DENARO: And then dealing with, why do we need communications, and what that's all about. That's not saying that it couldn't be handled in the same group. But we'd have to address those two pieces.

I guess the point is, if we had two separate committees, would there be overlap? Would they be coming up with some of the same thing? In which case we should have had them together anyway.

But the other consideration is, given the number of people who signed up in each of those, yes, it probably takes two-thirds or three-quarters of the group, if we look at all the numbers of people in that.

MEMBER MCCORMICK: Well, that was my point. If you look at the people that are assigned to both, it would be very hard to have both those committees meeting at one time.

MEMBER DENARO: Well, that's a good point.

CHAIR WILKERSON: Yes.

MEMBER MCCORMICK: The other issue that I have with that interrelationship between connected and automated vehicles is a fairly focused topic area. As opposed to just saying connected and automated vehicles, as a topic

area that can now include automation without worrying about — and then we discuss their relationships within that area of the topic. So, if we kind of re-characterize what that one is, the interrelationship one, at a little bit higher level of abstraction, then you could incorporate automation into it as automation, automation vehicles, and connected vehicles, for whatever discussion topics that you want to bring up.

MEMBER DENARO: I agree with that, Scott. But there is a very important distinction when you use the word interrelationship as it relates to the JPO.

They're in somewhat of a transition between the connected vehicle program, and now starting to address automation. And so the -- and there is controversy in the industry about how much connectivity you need or don't need, depending on who you talk to.

MEMBER MCCORMICK: Well, I'm not saying don't cover. I'm saying it can be one of the recommendation focus areas --

MEMBER DENARO: Yes.

MEMBER MCCORMICK: -- underneath that topic. It doesn't have to be the sole topic.

MEMBER DENARO: Yes. All I'm saying is, if we combine it I would not want to lose that focus on the

interrelationship part.

MEMBER MCCORMICK: Agreed.

CHAIR WILKERSON: I see what you're saying. Any other comments, Scott, that you have? Any comments? Okay. So, what's the consensus? Keep them separate for the start, or combine them?

MEMBER BERG: Combine the focus.

CHAIR WILKERSON: Okay. So that committee will then determine for the discussion today.

MEMBER BELCHER: Yes. But I do think we still want the DOT report back.

CHAIR WILKERSON: Yes. I mean, we've got, we'll have to make some kind of guidance on that. So, we have right now, is it possible to make a duplicate copy? Can you copy this chart?

And then we can delete some of the columns.

Maybe not get rid of that one, but create a duplicate of

it. And then we can delete the columns that we're --

MEMBER MCCORMICK: And, Steve, which one did you think rural deployment assistance fit best under?

CHAIR WILKERSON: And then, while he's doing that maybe we can talk about rural deployment. So, how about Steve, or Joe, do you want to talk about rural deployment, and what your thoughts are on that?

MEMBER ALBERT: How much time do I have?

CHAIR WILKERSON: All the time we have the committee will give you --

MEMBER ALBERT: Well, Joe, maybe I'll start. And if you want to say anything. I think the point of this one was that, and actually you could see it this morning in the discussions going on between Susan and Ginger.

Really, when something comes up from the feds it's always generally focused on the rich getting richer. The rural community could not compete for the Smart Cities stuff.

CHAIR WILKERSON: No.

MEMBER ALBERT: No way. So, what happens year after year after year, is the folks where the highest number of fatalities occur get the least amount of money.

And so, the idea for an assistance program was to create a catalyst, or create a system whereby money might be able to be used to jump start some things in rural areas where it doesn't exist right now, and they don't have the money to do it.

And yet, they have a dire need. And the feds have, as part of their, you know, towards zero deaths, we're going to worry about safety. Yet, the areas that have the least, most issues regarding safety don't get any

of the money.

And so, this was really kind of to create another assistance or pilot project program focused on rural areas. Maybe focused on connected vehicles, maybe not. Joe, or anyone else.

MEMBER MCKINNEY: I think there's a huge education component for rural communities on the need, the purpose, and I think the success of any of these programs in areas of need. At least have to have some support in rural communities.

And I think in a lot of areas we talked about it falls in as categories. But specifically there's some, something specifically done in rural communities to improve the knowledge on this topic, that's my interest.

MEMBER SCHROMSKY: And I'm going to argue with Steve and Joe that rural might be the best place for innovation. A lot of cases --

CHAIR WILKERSON: Yes.

MEMBER SCHROMSKY: -- if the structure is not there we have to rely on technology. And for instance, for us, our big growth in IoT is remote sensors, right. Remote sensors, meaning we're not in cities and densely populated places.

We can see, for instance, the VA is a huge

problem today. And a big initiative, Telehealth. And a lot of veterans don't live inside of -- close to a VA center. So, how do I treat veterans in remote places or rural areas out there?

And one of the main, you know, catalysts to do this is actually using technology to do this.

CHAIR WILKERSON: Right.

MEMBER SCHROMSKY: And so, and that's connectivity, I'm on Verizon but there's other ones out there. Remote connectivity grows, right, in cellular in one case.

We see Telehealth now, right, being deployed out there, and medical devices where, why do I drive 60 miles into the VA center, where I can send all my diagnostics in real time to the doctor, where he or she can actually make that determination what to do?

The same thing that we see, we're doing a project with the U.S. Geological Survey today, right, where in Northern California there's 247 sites that we look and we monitor. They're unmanned, and monitored using UHF or VHF, or physically driving out to those sites.

They put cellular. And going through it was all done over cellular. So, I would argue in some cases that rural might be an area that you will probably see even more

technology put in --

CHAIR WILKERSON: Right.

MEMBER SCHROMSKY: -- rather than urban areas.

CHAIR WILKERSON: And I think there's been a lot of discussion of -- and Susan, you can speak to this, about the fact that it's not tainted. It's fertile soil to be able to bypass all the constraints and barriers that the existing infrastructure has in place. And that there might be new technology that's suited, and might have the greatest impact in some rural areas.

MEMBER SHAHEEN: Absolutely. So, that's a -- I would be willing to also support that.

CHAIR WILKERSON: Okay. So we believe that at some point we should maybe have some discussion on that. And then the other was, that we didn't really spend a lot, was traffic safety culture.

MEMBER MCCORMICK: Well, I think the question is really, you know, do we want a committee of two? Or is that a subcommittee under one of those other topic areas?

CHAIR WILKERSON: It's possible. It could be a subset of a group of the committee. It doesn't have to be merged. I think right now we're just trying to vet the topics. And then we can decide how best to --

MEMBER MCCORMICK: Okay.

CHAIR WILKERSON: -- facilitate the discussion.

And use the next, the other two at the periods we've blocked out, to maybe split those in half, to maybe break out those topics so people can --

MEMBER MCCORMICK: Okay.

CHAIR WILKERSON: -- participate in one or more, two or more of those topics.

MEMBER DENARO: Where is technology and active transportation? I don't recall.

CHAIR WILKERSON: I was trying to go with the, well, that was, that one didn't have -- Well, it did have three ones and two six, six people had put two. Does anybody want to speak to that one?

MEMBER JOHNSON: Well, I'll talk about the active transportation component. When we're talking about using various modes of transport, and it goes to shared mobility, and so forth, a lot of folks, especially within the public transit arena need to get to a transit stop. And to do that you can ride a bike, you can walk, be a pedestrian.

So it's looking at that sort of universally, and see what we can do collectively to enhance the use of other forms of transport. And so, I had an interest in that.

Because I think when you look at America

holistically, and you talk about, you know, Americans being bigger, there's an opportunity to actually leverage that. And in the FAST Act, you know, there was a lot of things focusing on the health component, to get --

CHAIR WILKERSON: Yes.

MEMBER JOHNSON: -- people to doctors. But then, when you look at active transportation as well, I think it all sort of encapsulates what it is --

CHAIR WILKERSON: That's a good point.

MEMBER JOHNSON: -- that we should be doing collectively, and where we should have a focus.

CHAIR WILKERSON: Very interesting.

MEMBER CALABRESE: I think technology can really make that more seamless, and make it easier.

MEMBER DENARO: What does active transportation mean?

MEMBER JOHNSON: So, as I was saying, active transportation, being active as a form of transport. So, riding a bike, walking. I mean --

MEMBER DENARO: Oh, okay.

MEMBER JOHNSON: -- utilizing a skateboard.

MEMBER DENARO: Oh, I get you.

MEMBER JOHNSON: Whatever it is to get your body moving, that's what active transportation is.

MEMBER DENARO: All right. Got it. Thank you.

CHAIR WILKERSON: We've defined active. We need some. We need, maybe should --

(Simultaneous speaking)

MEMBER MCCORMICK: Bob waits for them to show up.

CHAIR WILKERSON: We saw a statistic that said that people were 60 percent more creative when they were walking. Maybe we need to --

(Simultaneous speaking)

CHAIR WILKERSON: A walking subcommittee.

MEMBER JOHNSON: Right. Exactly.

MEMBER ALBERT: I mean, I know we've been hearing about active transportation. And I know there's this huge argument, I think within the industry of where should be the system be. Should it be on the vehicle? Or should it be on the person walking around? Or should it be on the bus?

CHAIR WILKERSON: It's a good topic.

MEMBER ALBERT: And so, this whole transport of where does the system to detect that there's someone coming to you, versus warning you. Where should all that reside?

And I think it's great for pilot projects, and a whole bunch of other things. And we should strongly

endorse that. And Susan wasn't, didn't tell me to say that.

MEMBER SHAHEEN: Good for us to walk and cycle.

MEMBER JOHNSON: It is. And it's not coexistence when you're looking at, like kids, sharing and look at the roadway. And how do you coexist if you have a big vehicle, you know, on the street, and you have a bicyclist?

You know, that's something that we need to wrap our minds around. Because we always think of a vehicle as opposed to, you know, the safety aspects. And that's where it comes into play for me with the traffic safety culture.

CHAIR WILKERSON: Vision Zero.

MEMBER JOHNSON: Exactly.

CHAIR WILKERSON: Yes.

MEMBER SCHROMSKY: I will tell you, I was just in Denver and I went jogging down a trail heading for the city. And there's actually different paths where it's a shared path between bicyclists --

CHAIR WILKERSON: Yes.

MEMBER SCHROMSKY: -- and joggers.

MEMBER JOHNSON: Yes.

MEMBER SCHROMSKY: And there's a path that's only for roller-bladers --

CHAIR WILKERSON: Yes.

MEMBER SCHROMSKY: -- and cyclists, which I did not see. Got yelled at, and said, you know, on your own side, and not on this side, right. So there's still --

MEMBER JOHNSON: Yes.

MEMBER SCHROMSKY: It's amazing that where there is an arrogance between motorists to cyclists, it still trickles down between cyclists and pedestrians --

MEMBER JOHNSON: Right.

MEMBER SCHROMSKY: -- out there as well, that same level of arrogance between vehicle and foot.

MEMBER JOHNSON: Right.

MEMBER SCHROMSKY: But it was interesting, where you go to Denver, which is a very big commuter city. It's not just by vehicles, but also by bicycle. That there, you know, when it's designed well, and how it works --

MEMBER JOHNSON: And you can coexist --

MEMBER SCHROMSKY: Like for the culture, and not residing in Denver, and going into there and not, now I know to pay attention, you know, this is what you look for, this is what you don't look for. It was kind of eye opening when you see that experience. You know, these bikes are moving at about 30, 40 miles an hour.

CHAIR WILKERSON: Raj.

MEMBER RAKJUMAR: I'd like to make an argument for keeping cyber-security as part of one of these subcommittees.

CHAIR WILKERSON: Okay.

MEMBER RAKJUMAR: I believe, personally, that the terror attack in Nice, where the truck ran over some people. In principle, you could do that remotely without the driver in the vehicle.

So basically it's not just one vehicle being taken over. You could actually take over a fleet of vehicles within the city. You can actually expand the attack to basically make it across the country, as what happened simultaneously.

So, I would really love to basically have the topic be involved in our discussions. And that could be just in the interrelationship between connected and automated vehicles, where cyber-security is a subtopic.

MEMBER MCCORMICK: Yes. I would leave it there. I wouldn't have a problem with that. I still question what we think we're going to offer we can do.

CHAIR WILKERSON: How is that different with what you said? You suggested --

MEMBER MCCORMICK: Well, I think the larger issue is always, what would our recommendations to the JPO

do with regard to that information? That there's a potential for a lot of things to happen, not just that.

My point was that there's a fairly mature process now in industry and academia, looking at where for those threat surfaces are the over communications, which in 2012 when we started subcommittee there wasn't. And so, now we've moved out in a path.

So the question I asked is that, well, yes, there's some multiple scenarios that could occur, and maybe under automated. But you're still talking about the same fundamental thing, which is the industry discovering where those threats surfaces are, and closing them off. Or in some manner addressing them. So, I'm not clear what the -- what we add to that party.

MEMBER BERG: I'm not sure what JPO would do.

MEMBER MCCORMICK: Right. I don't see what we - what they would do.

MEMBER BERG: We're not saying it's not an issue. Not at all. Not at all.

MEMBER MCCORMICK: No. I'm not saying it's not an issue. I'm just saying, I'm just saying I'm not sure what we would suggest that they could bring to the party.

CHAIR WILKERSON: So why don't you, if when we

break out in sessions, if that's still on there, right, you discuss --

MEMBER MCCORMICK: Right.

CHAIR WILKERSON: -- that a little further in the subcommittee. So, I'm going to go back to other. It was traffic safety culture. Do we have a clear understanding of what that entailed?

MEMBER ALBERT: I do.

CHAIR WILKERSON: Okay.

MEMBER ALBERT: I mean, this is kind of the area that we need a lot of the work in. And this whole issue was regarding if we're going to improve safety.

MEMBER MCCORMICK: Can you talk a little louder?

MEMBER ALBERT: Oh, yes.

CHAIR WILKERSON: Sorry.

MEMBER ALBERT: If we're going to improve safety, that 90 percent of the problem is the driver, and the psychology of the driver, not on the roadside infrastructure.

MEMBER MCCORMICK: Right.

MEMBER ALBERT: So, how can ITS or connected vehicles, or whatever, with applied traffic safety culture become even more safe? And I think we, this was one that we were thinking of bringing in one of my staff, before

Peter Kissinger stepped away and retired. Bringing him in, and actually having him do a presentation --

CHAIR WILKERSON: Oh, great.

MEMBER ALBERT: -- on what is traffic safety culture. But I think it, you know, it's a good standalone. Or it's something that's good as crosscutting. And you could almost crosscut it, some of it, with the active --

CHAIR WILKERSON: Active transportation.

MEMBER ALBERT: -- transportation as well.

Because it's, at least I see the problem with America,

quite frankly, is we're over reliant on the vehicle for

everything. And yet, we're not funding the active stuff

that --

CHAIR WILKERSON: Right. It also goes to -MEMBER ALBERT: -- reduces our reliance.

CHAIR WILKERSON: It also goes to the education of intelligent transportation, right.

MEMBER ALBERT: Right.

CHAIR WILKERSON: So, there's all, we do a lot of work on supporting education for driver's education programs. Helping people understand, you know, the importance of everything that touches that vehicle.

And now it's changing, how that information's being relayed. We probably won't have DMV manuals. We'll

have some other form of manual or training. Maybe you'll go online and test out a vehicle virtually before you buy one, or use one.

So, also, the internal components of the vehicle will likely change, and how you use the vehicle. So, that's a, could be a potentially good topic.

So, right now we have four topics up there, outside of reaffirmation, which is quite impressive we got that down, which could potentially address procurement, and then the shared mobility component in the technology and active transport, and procurement in general, for how we look at the grants and partnerships.

On the reaffirmation, if I may, I know one of the recommendations was that maybe we ask DOT to, or the ITS JPO office to sort of take a look at that.

Is it possible for us to talk about what kind of guidance we can give them? So that we can, what are our thoughts? Rather than saying, oh, can you go back and look at all, you know, 80 recommendations from the past five years?

Do we have any thoughts or guidance about topic areas, what we might like to see, what would be helpful to have brought back, maybe a chart or summary? Just would like to open the floor for what your thinking is.

MEMBER BELCHER: So what I'd like to see is a matrix with the recommendations that we made. And you can -- we can pick, it can be the last year, it can be the last two years. I mean, whatever you want, I don't particularly care.

And then I'd like to see the response, and then the actual action. And not just, you know, we concur. I mean, that can be the response. But then --

MEMBER CAPP: Right.

MEMBER BELCHER: -- what happened? So, we have a whole bunch of these that say, you should convene a meeting. You should convene a this, or a that.

CHAIR WILKERSON: Task force.

MEMBER CAPP: Right.

MEMBER BELCHER: And they say, we concur. And we've seen that back, back, back, back. I'd like to see if any of those happened.

CHAIR WILKERSON: Or which ones might be under - so, maybe what's happened, what's ongoing.

MEMBER BELCHER: Yes.

CHAIR WILKERSON: What, which ones are still lacking funding?

MEMBER BELCHER: Yes, exactly.

CHAIR WILKERSON: And then, okay. So --

MEMBER BELCHER: If we had that kind of a matrix, then it would be a fairly simple thing to do, to find out if we're all wasting our time, or we're being helpful.

MEMBER CAPP: In that fourth column with, for just an assessment from the --

CHAIR WILKERSON: Okay. So before we --

MEMBER CAPP: -- committee. Was it a helpful?

MEMBER BELCHER: Yes.

MEMBER CAPP: -- recommendation?

MEMBER BELCHER: Yes. I mean, that would be really good.

CHAIR WILKERSON: Keep those thoughts.

MEMBER CAPP: Yes, I agree. I completely --

CHAIR WILKERSON: Is it --

MEMBER CAPP: -- agree with that.

CHAIR WILKERSON: Keep those thoughts. Is it possible for you to take that second column, where it says -- that one? And merge the, clear the contents, and merge that so we can actually have just --

MEMBER MCCORMICK: And, Scott, maybe we could at that point also identify what we think the current priority for that should be. Because if we do that --

MEMBER BELCHER: And I really just pointed out

here, and you heard it. And his point was, it would be useful to get some feedback about whether it's a useful recommendation. I mean, I'd like to do that.

MEMBER CAPP: We may disagree with it. But it would be nice to know if they found it helpful. It would give them the ammunition to do something that will support it, or ---

(Simultaneous speaking)

MEMBER BELCHER: Right. I'd like to hear that.

MEMBER STEUDLE: I think, considering this is going to be an open public document, I think the answer to that's going to be a little softened. They're not going to say, yes, this was a waste of my time.

(Simultaneous speaking)

MEMBER BELCHER: Maybe to your point it's -instead we have a discussion about it with them, where they
can --

MEMBER CAPP: Right.

MEMBER STEUDLE: Although, this is recorded too, isn't it?

CHAIR WILKERSON: Okay.

MEMBER BELCHER: During coffee breaks.

MEMBER STEUDLE: Yes. During coffee breaks.

CHAIR WILKERSON: So, can we -- I've asked to

maybe put some guidance in here for us to think about. Can you repeat your thoughts about what we'd like to see? One was a matrix of some sort. So, maybe just put, one, matrix, two --

MEMBER STEUDLE: Well, before you go down that road.

CHAIR WILKERSON: Sure.

MEMBER STEUDLE: I'd like to go back more than one or two. Because I think I've been on this for four or five. And I personally know that there's issues that have been in every one of them.

CHAIR WILKERSON: Okay.

MEMBER STEUDLE: I'd like to see, what was the first one? And did they do what they said the first -- Or we have just, or we've just repeated it.

I remember with one of Bob's, when he was the chair, we got to the second one and said, well, the recommendation is the same because they haven't done it. So, why are we --

(Off microphone comment)

MEMBER STEUDLE: Yes. I think that's good. And then I think you can group them.

CHAIR WILKERSON: Okay. So let's --

MEMBER STEUDLE: You can group them in for

funding.

CHAIR WILKERSON: -- put that in for five years for --

MEMBER BELCHER: You know, it's just --

CHAIR WILKERSON: So reflect. So, maybe you can have it start at the top or the bottom, rather than type at the bottom.

MEMBER MCCORMICK: Sheryl, we had a program -- CHAIR WILKERSON: Sure.

MEMBER MCCORMICK: I need to make a call. We had a break programmed. Are we running close to that schedule?

CHAIR WILKERSON: Yes. We're just going to get these recommendations --

MEMBER MCCORMICK: Okay. Good.

CHAIR WILKERSON: -- and then we'll have --

MEMBER MCCORMICK: Because I didn't want to step out if I didn't have to.

CHAIR WILKERSON: Okay. I just want to get these thoughts. These are good comments. The first is a five year, or --

MEMBER STEUDLE: No. Go back to the beginning. Go back to the beginning, and then group the recommendations into topics.

CHAIR WILKERSON: Okay.

MEMBER STEUDLE: Because some of them will be the same. I know it.

CHAIR WILKERSON: Okay.

MEMBER STEUDLE: I'm sure they will. And then, you know, if two or three of them are the same, then synthesize, well, what do we do? I'm sure we may have done some steps in between.

CHAIR WILKERSON: Okay. So the second will be some matrix that would show what has been accomplished, what is ongoing, what has not been tackled or addressed. Is there -- we talked about funding to, and there are a lot of them. There's one that --

MEMBER MCCORMICK: Oh, yes. And if funding is the reason, it's the reason. If it's lack of resources, whatever that is.

CHAIR WILKERSON: Thoughts?

(Off microphone comment)

CHAIR WILKERSON: Okay.

MEMBER DENARO: What we've done about a lot of these things is we've had a briefing with JPO. So I like the idea of having a matrix to start with. But I think the conversation will be more by -- So basically --

CHAIR WILKERSON: Yes. The third one will be --

(Simultaneous speaking)

MEMBER DENARO: -- for our session, where we just walk through and have a conversation about that.

CHAIR WILKERSON: Yes.

(Simultaneous speaking)

MEMBER SHAHEEN: They're responsible for their not caring.

CHAIR WILKERSON: But we did say we would do that.

MEMBER SHAHEEN: Yes.

CHAIR WILKERSON: That would, I think that's perfect. And we said we'd do that at maybe the next meeting. But well before we're formulating --

MEMBER SHAHEEN: Yes.

CHAIR WILKERSON: -- the comments. So that we can reflect on that.

MEMBER SHAHEEN: Yes.

CHAIR WILKERSON: You know, we could have a committee formed just to review what they've said, and make comments about what they --

MEMBER SHAHEEN: Given the amount of time that goes into the development of these recommendations, I think a dialogue about how they arrived at those recommendations -- in response to the amount of time I personally took, I

would really like an opportunity to talk about what they said, and why.

CHAIR WILKERSON: Okay.

MEMBER SHAHEEN: Yes.

CHAIR WILKERSON: So just a briefing at a future meeting?

MEMBER DENARO: So, related to that note, we're a new committee now, or we will be soon, right. And so, typically we have an end of term report. And then the interim report can be that. It can be interim, where it can be a full recommendation.

You know, we have our choice. So, what are we heading to here? Are we saying we want to have recommendations by this January, or a year from this January? Or both?

(Off microphone comment)

MEMBER DENARO: Yes.

CHAIR WILKERSON: It's open for the floor.

MR. GLASSCOCK: I think once before it proved useful to have an interim. If you have those interim it adds more thought and more time to your recommendation.

MEMBER DENARO: I think there was a time --

(Off microphone comment)

CHAIR WILKERSON: I'm sorry.

(Off microphone comment)

MEMBER DENARO: Well we had, you know, we added some special reports that we did on a couple of things, like -- but I'm just trying to get the process down that, you know, our --

CHAIR WILKERSON: So, I'm just going back to this chart. So I apologize. It keeps popping. He keeps going back to it every time he types. Can we go back for a second? This was the timeline that we have for our advice group. But we can insert something else.

MR. GLASSCOCK: Yes, the January, your next advice to them can be in any form, and any contents that you want.

CHAIR WILKERSON: Can you hold on one second.

Can we go back to the timeline?

(Off microphone comment)

CHAIR WILKERSON: I'm sorry. I'm going back to the time. That's me. I'm moving it. So I apologize. So this, I'm just, Bob raised a good question. So, Bob, would you reiterate, and make a recommendation or suggestion?

MEMBER DENARO: Well, I'm saying, you know, January 1st, 2017 is like tomorrow, based on the meetings that we're going to have. We have this one. And will there be another one before that? I don't know.

So, I'm just saying, we have some flexibility with what we do January '17. The January '18 is really where we have recommendations. I think we ought to consider that process, and what do we want to achieve by this January 1st, and the following January?

MEMBER BERG: I remember something now. Because I think the reason, the whole reason we were going to go back and look at what might have happened in the past, was to kind of not indoctrinate, but inform the new administration --

CHAIR WILKERSON: Yes. That's right.

MEMBER BERG: -- in 2017 about what we had done before --

MEMBER DENARO: Okay.

MEMBER BERG: -- and what we think we can do --

CHAIR WILKERSON: That's exactly right.

MEMBER BERG: -- in the future.

CHAIR WILKERSON: We didn't want it to get lost.

MEMBER DENARO: But that might be making my point. Is that maybe that's something we want to focus on, as opposed to trying to rush all these topics to recommendations by January --

MEMBER BERG: Yes. Yes.

MEMBER DENARO: -- for which we might change our

mind by the following January.

CHAIR WILKERSON: I still think it's helpful to use that time collectively to --

MEMBER BERG: Just don't have the --

CHAIR WILKERSON: -- pollinate, and fertilize some of these topics.

MEMBER MCCORMICK: Yes. But part of it, I think that affirmation task might likely be part of that, what is it we've been doing? What value does this committee --

MEMBER JOHNSON: Right.

MEMBER MCCORMICK: -- add?

CHAIR WILKERSON: Right.

MEMBER MCCORMICK: So, if we do work on one thing, you know, getting started on that affirmation piece would be the appropriate thing to communicate to the new administration.

CHAIR WILKERSON: Right.

MEMBER BERG: So you don't have to report on all these other things.

MEMBER MCCORMICK: Right. Yes.

CHAIR WILKERSON: But we still --

MEMBER BERG: We can still work on them.

MEMBER MCCORMICK: Yes.

CHAIR WILKERSON: We just can work on them. And

then we'll be ready to go. So, I don't think it's a matter of excluding them.

MEMBER BERG: Right.

CHAIR WILKERSON: It's a matter of how we do it.

Okay. So, is there anything time frame -- well, we'll go back to time frames as we go into this. We'll take a break. And then, can we go back to the chart now, the one you've created?

So, right now we've got four topics. When we come back maybe we can sort of start to reflect on those, and figure out how we want to, which topics we might want to go back again, and see which topics we might want to do. Or break up, and then figure out how to break into subcommittees to talk about those.

Or we can, we've got time. We can talk about each one at this roundtable. We can tackle each one separately, if you think that would be better.

MEMBER JOHNSON: I think that's a good idea. So then we can share --

CHAIR WILKERSON: Okay.

MEMBER JOHNSON: -- everybody's thoughts.

Because --

CHAIR WILKERSON: So, we'll take a break.

MEMBER JOHNSON: Yes.

CHAIR WILKERSON: And then we'll come back. Okay.

MEMBER BERG: How long's the break?

CHAIR WILKERSON: Let's see. On the schedule we have --

MEMBER JOHNSON: Fifteen minutes.

CHAIR WILKERSON: -- 15 minutes. So, I'm fine with that.

Whereupon, the above-entitled matter went off the record at 10:10 a.m. and resumed at 10:33 a.m.

CHAIR WILKERSON: We're reconvening. For purposes of the transcript, they've asked if we could be sure to either raise your hand or say your name before speaking just because acoustics in here aren't great.

So we have until 12:00, well, let's see, 12:00 for lunch, so that gives us -- I'm sorry, I'm looking on my -- I should look on my phone. That gives us another hourand-a-half for discussion, and I -- let's see. Let's go back to the chart that we have.

So this is -- we've -- just to summarize, we've reduced a couple of those proposed topics. We have agreed that we would have some sort of reaffirmation of the ITS program accomplishments to sort of look at the value proposition for this ITS PAC committee and, you know, the

return on the investment for the U.S. DOT as some have said during the break, and then we've got four other topics that we've talked about, and we've got a couple of questions and comments for Ken to reflect on when he arrives.

We also had to reincorporate the procurement and the shared mobility sort of topic into these four that are listed there, or five, and then there was one issue that came up and I just want to make sure we take the -- it was on the table, was your U.S. Postal Service comment. Did you want to reflect on that before we start to engage -- take a deeper dive into these subcommittee topics or do you think you can address that in one of the other subcommittees?

MEMBER McCORMICK: I don't think it requires any more discussion right now. We can do it when we get to the committee forum.

CHAIR WILKERSON: Okay, and we also said that there were two sub-issues on the table back here. In cyber security, the recommendation was not to have it, but to discuss it in one of the technology -- I don't know which one it was, automation? Raj, I'm not sure which subcommittee we said we would tackle or discuss that.

We had -- there was consensus on that doing the info hacking, then this issue of cyber security came up and

you said we would tackle that discussion in one of the subcommittee discussions, and I don't know which one.

MEMBER McCORMICK: Probably technology.

CHAIR WILKERSON: Okay, all right, just didn't want to -- make sure we incorporated Raj's comments.

MEMBER RAJKUMAR: Automation.

CHAIR WILKERSON: Okay.

MEMBER McCORMICK: Probably automation.

CHAIR WILKERSON: Okay, so rather than --

MEMBER RAJKUMAR: In the subcommittee, maybe we can quantify the title of the subcommittee reaffirmation --

CHAIR WILKERSON: Can you repeat that again?

I'm sorry.

MEMBER McCORMICK: He wanted to rename it instead of reaffirmation to review.

MEMBER GOODIN: Review.

CHAIR WILKERSON: Okay.

MEMBER GOODIN: Yeah, that makes sense, review.

MEMBER ALBERT: That kind of presumes a response.

MEMBER GOODIN: Yeah.

CHAIR WILKERSON: Okay, and just for purposes of -- one of the questions that came up was when did this advisory committee start? It was in 2008. So, yes, Bob?

MEMBER DENARO: Just one comment. As we consider when we're going to be doing these, I would recommend that we think about things we'd like to request from outside parties, whether they be within the Government or experts from the outside. I think that's always useful for us to really kind of expand our horizon.

CHAIR WILKERSON: I agree. One of the things I will be recommending that we talk about -- if we go back to the schedule, our schedule, we didn't get a lot of feedback about how to structure this meeting, so we put a lot of time in for subcommittee meetings. I think it's been productive thus far.

I think for the next hour-and-a-half, we would then go through those four or five topics that we've talked about and really maybe come up with some subtopics or themes, and then we would break for lunch, have Ken's presentation, and then use that next 45 minutes to an hour, because then we've got a break in there, to maybe divide up those groups and figure out how to have some subgroups possibly meet and talk about those in general, possibly think about presentations that we might want to have on those topics if we decide that we're not going to make recommendations, but to continue to conduct research and discuss those topics, and then we would then have the JPO

presentation at our potentially next meeting, and then determine when we might have another -- when we might want to meet again and how best to utilize that review of the recommendations as we've changed them.

So that's my thought. If anyone has any other comments about that before we take a break or how we might want to use the rest of our time, I'm pretty open to that.

MEMBER BELCHER: Yes, I don't want to lose sight of the issue I raised about spending.

CHAIR WILKERSON: Okay.

MEMBER BELCHER: I'd like us to make an affirmative decision to either do something or not do something, but I think it's time to do -- to check that. So at some point, I'd like to move that one up.

CHAIR WILKERSON: Okay, so further into the connected automated vehicle discussion? Maybe it's a subtopic under there? Do you want to --

MEMBER BELCHER: You know, it's --

CHAIR WILKERSON: Okay, okay.

MEMBER BELCHER: The committee has to decide today to do something or not to do something.

CHAIR WILKERSON: Okay, so we'll leave time for that. I'll put that on the 2:00 to 3:00. Is that okay? So I'm sure we'll be coming up with a list of things as a

side table, so I'll list that for 2:00 to 3:30. Okay, any other side topics?

So if we go back to this chart, we have traffic safety culture. Why don't we spend -- let's see, we have an hour-and-a-half, so why don't we spend about 20 minutes maybe talking about this topic and maybe thinking about some themes that are related to this and why it would be important for us to potentially use this as a potential recommendation topic? The floor is open.

MEMBER JOHNSON: So as I shared before, as we look at the traffic safety culture, I think there's, you know, a variety of different aspects that we need to focus on collectively. Because while safety may not be our number one job, it should be our number one priority as we look at things holistically to, you know, move people, move goods, or what have you.

And so the whole aspect of talking about the whole existence when we look at different aspects of mobility and so forth, I think relative to what we're doing as a committee collectively, we shouldn't let safety falter, and have some understanding of the importance of creating a culture that is a safe one.

And so, as I stated earlier prior to the break, my interest, of course, is looking at the movement of

people in mass transit vehicles, in turn, when you look at active transportation components, that whole coexistence aspect.

So I throw that out because that's the vantage point from where I'm coming, and I think it could, you know, morph into other aspects and we could create themes, you know, in and around there. I don't know what other peoples' interests are, but I just thought I'd kick it off with my own thought.

CHAIR WILKERSON: So what topics under traffic safety culture would not be addressed under the active transportation?

MEMBER JOHNSON: Oh, from my perspective, it wouldn't be. I think it could be encompassed, but --

CHAIR WILKERSON: Okay, are there --

MEMBER JOHNSON: You know, to Steve's point earlier when we were talking about the traffic safety culture and we were looking at connected vehicles, and, you know, infrastructure and so forth, and you get the driverless vehicles, you have to take that into consideration, which can morph into the public transit arena as it relates to active transportation, and then see how that spawns off as well.

So I do think it can be incorporated in, but I

just wanted to throw my thoughts out there because I don't know what other viewpoints are as it relates to that.

CHAIR WILKERSON: So what are some of the themes, other subthemes that you -- that come to mind when you think about that, that we -- if we were -- let's say we were to make recommendations, what are the kinds of things that the subcommittee might discuss or have someone present on under that topic?

MEMBER JOHNSON: In my opinion, it's the whole aspect of how can you make, you know, a roadway safe when you're sharing that roadway with pedestrians, people that are in motorized vehicles and so forth? What is that infrastructure that would better enable one to be safe?

And it's what Steve raised earlier. You know, where does that really lie? Is it embedded into the roadway itself, or individuals wearing some kind of device that would alert those in close proximity that they are traveling that same path? There is a lot of different aspects about it.

So having a briefing whereby we could understand futuristically some of the technologies that are being, you know, viewed, it would be great to hear. And I don't know who these subject matter experts are, but relative to the whole coexistence when you look at, you know, the broad

brush bicycle community, there has been so much activity, at least, you know, in my neck of the woods, you know, working in partnership with bicycle coalitions and things of the like.

Because oftentimes, when there is planning and development in and around putting a bicycle lane or a roadway predominantly for bicyclists or pedestrians, what I have found, especially like within LA, there is something that's underway where nobody contacted the transit agency, and it's a major thoroughfare for, you know, articulated vehicles, buses that are 60 feet in length, and then you're sharing that with a bicyclist. How does that really work? And it's in close proximity to a major bus division where you have 300 buses pulling out.

So those types of aspects are things that are of grave concern to me, especially having been in this industry for a while and seeing a person be de-gloved, meaning their skin is ripped off by, you know, rear tires on the back of a bus. So those are the types of things that are top of mind for me that I would like to know if anybody else is thinking about.

CHAIR WILKERSON: Are there any coalitions, national NGOs or others, that are focused on this that might want to present to us in the future or at a future

meeting?

MEMBER JOHNSON: I could do some research and find that out for you. I do know at the local and state level, and perhaps you have some other thoughts.

MEMBER BELCHER: I can help on the bike solution.

MEMBER JOHNSON: Okay.

MEMBER CAPP: One of the things I was -- that just came to my mind when I looked at the topic really was distracted driving, you know, and kind of the safety culture, and we're seeing more of the distracted pedestrians.

MEMBER JOHNSON: Yes.

MEMBER CAPP: People walking with this whole Pokémon thing.

MEMBER JOHNSON: Yes, Pokémon Go.

MEMBER CAPP: It's crazy. People are walking in the middle of the street not understanding where there are.

MEMBER JOHNSON: Right.

MEMBER CAPP: So again, can technology help some of these issues?

CHAIR WILKERSON: Any other themes?

MEMBER DENARO: On the internet, you can find a picture of a city in, I think it's Stockholm, where there's

a warning sign to drivers showing two people looking at their phones or something like that, so it's warning distracted pedestrians in the area, you know, kind of thing.

MEMBER ALBERT: You know, I think traffic safety culture when you think about it, it's mostly psychology and community involvement. It's really a lot about how does technology become an enabler to making things more safe?

I think maybe one of the recommendations of this group is figuring out what are some of those enablers, and how do we foster those so that we seize funding, and so that it can be implemented?

MEMBER CALABRESE: Right now, you're seeing technology making it maybe less safe.

MEMBER BELCHER: See, you could -- you know, one idea is you could invite Max Donath to come and speak. Max is with the University of Minnesota. And he has a number of apps, but the one that's most relevant is one that gives feedback on driving and on distracted driving, and he's trying to market it right now to the carriers and stuff. They've got a number of active safety applications for mobile devices.

CHAIR WILKERSON: And the insurance industry is already looking at that too.

MEMBER JOHNSON: Right.

MEMBER BELCHER: Right, exactly.

CHAIR WILKERSON: Less for bicyclists --

MEMBER JOHNSON: Well, I was going to say to Joe's point that's very spot on because oftentimes you'll see somebody crossing the path of a train. You know, we were talking about light rail and if it's street running, and somebody's, you know.

And I have to tell you like six years ago, I was doing that same thing. I hopped off the train. I was in San Francisco, and my colleague pulled me back because I know better, but I was so engrossed in responding to some email, and it happens all of the time.

CHAIR WILKERSON: So best practice --

MEMBER JOHNSON: Regulation. It's one thing, like, you shouldn't be on your phone. It should be, you know, hands-free when you're operating a motor vehicle, but there is nothing about, you know, when you're walking, you know, in some densely, you know, populated area, and there's a lot of, you know, street traffic and things of the like, there's -- at least to my knowledge.

CHAIR WILKERSON: Okay, any other thoughts on traffic safety culture?

MEMBER DENARO: Is Peter Kissinger going to be

on our new committee?

MEMBER ALBERT: Yeah.

MEMBER DENARO: Okay, because, you know, he ran the AAA Institute, and they focus very strongly on traffic safety culture. He's the one that educated me the last time when we were talking about this, so we definitely want to have them involved.

In fact, if we're talking about presentations, I would say someone from AAA Institute would be ideal.

They've really, really looked into this whole area.

MEMBER ALBERT: Just a side note, my staff met with the NHTSA administrator and deputy administrator here in the last few weeks. I guess NHTSA is now going to become much more involved in the behavioral side of things

CHAIR WILKERSON: That's great.

MEMBER ALBERT: -- where they've been sort of hands off for the last few years, so they're going to take on the traffic safety culture central theme.

CHAIR WILKERSON: That's great.

MEMBER ALBERT: And maybe bringing them in or with one of my staff who are working with them on doing this might be good. I think they're going to throw a lot of money at it and a lot of attention and get some things

done.

CHAIR WILKERSON: Okay.

MEMBER ALBERT: And maybe we can work on some speakers, or identify some speakers with the group.

CHAIR WILKERSON: Sounds good. Raj? Oh.

MEMBER CAPP: Similar to the agency's priorities, they've got a lot of work going on with automation and things like that, but they realize that since most crashes are caused by driver --

CHAIR WILKERSON: John's speaking, sorry.

MEMBER CAPP: -- you can help improve safety a lot faster by trying to influence drivers' behaviors, whether it's drunk driving, texting, things like that, than you can waiting for a generation of technologies to evolve and turn over to the fleet and all of that, right.

MEMBER ALBERT: And they just had five national conferences this summer relating to traffic safety culture.

MEMBER CAPP: Yeah, absolutely.

CHAIR WILKERSON: Raj?

MEMBER RAJKUMAR: I just have two comments with respect to traffic safety culture. The first is that I guess for the first time in a very long time, the number of fatalities in the U.S. due to automotive accidents has gone up in 2015.

We'd love to hear any viewpoints that the U.S. DOT has when Ken shows up later this afternoon. But I guess the primary suspect has been maybe smart phones have just taken over and people are just more distracted, so I think the safety culture needs to be addressed as well.

The second comment I guess is something related to what John just said. Thanks to the high profile nature of the Tesla incident/accidents and so on, clearly there can be increased education and awareness of not just the promise of the technology, but the limitations of the technology. I think education should be happening.

MEMBER McCORMICK: I thought there was -- back on your first point, and I think Kirk had mentioned it last time, is the repeal of the helmet laws for the motorcycles also generated an increase.

CHAIR WILKERSON: Can you repeat that?

MEMBER McCORMICK: That the repeal of the number of helmet laws for various states for motorcyclists also drove an increase in the fatalities. When NHTSA briefed us in March, was it, they hadn't really determined what the cause was, so I'm really hoping that they do know now or what the change was at least. Has the state looked at its numbers in terms of did you have a similar increase last year?

MEMBER STEUDLE: Michigan's analysis is strictly for individual errors.

MEMBER McCORMICK: Okay.

MEMBER STEUDLE: Fatalities overall went up, and we know there was more bike fatalities than in the past relative, you know. Bike fatalities is a small number. If it doubles, it doubles, but it's still a small number out of there, and how many are related to helmets, we don't have that number.

MEMBER McCORMICK: Okay, thank you.

MEMBER STEUDLE: It seems simple until you realize that when there's an accident and somebody goes to the hospital and they die a month later, that death has to get tracked back through the system to get recorded as a traffic fatality. It's simple when the paramedics go out and there's no heartbeat on site. That's easy.

MEMBER McCORMICK: Right.

MEMBER STEUDLE: It's the ones that are after that makes it difficult to really come up with a solid number.

CHAIR WILKERSON: Any other thoughts on traffic safety culture? Some of the themes that I've jotted down just for us to reflect on, or for the subcommittee to reflect on, or when you -- if we decide to break up into

groups is technology, whether it's --

MEMBER McCORMICK: Well, I did have one other question that --

CHAIR WILKERSON: Okay.

MEMBER McCORMICK: -- I think I'd like to direct to John, is that historically, safety didn't necessarily sell. Is that something that is selling now, that's selling vehicles is the fact that they've become aware of these benefits and the consumer is actively inquiring? Have you seen a difference?

MEMBER CAPP: Oh, yeah, yeah, over the course of my career, consumers are very tuned into safety technologies, and so you see crash avoidance and safety features becoming very --

MEMBER McCORMICK: Is it because of OEM's advertising or because of an awareness that they're getting from other sources, or both?

MEMBER CAPP: It's probably a variety, you know, awareness, driver training. People like to buy gadgets too, just like other things. It's probably a combination of things, but, yeah, there's great interest in safety.

MEMBER DENARO: But that right there is an issue for traffic safety culture, because if we can promote and advertise more about lives that are saved, accidents that

are prevented, and so forth, this makes people more aware of the importance and value of those functions. And I think as we develop automation and connected vehicles, traffic safety culture will be smart. You'd have to come along in parallel to support this.

MEMBER BERG: If you talk to the National Safety Council, they'll say, "Nobody even knows what their car does."

MEMBER DENARO: Exactly, "My car does what," right?

MEMBER CAPP: So they're making -- yeah, if you ask me, they're solving a little bit of a different problem. I think they're solving that one, yeah, but the culture part though, I think, you know, training people on how to use features on their car doesn't really create a culture of safety or make the features work better.

I always tell people if I have to train you on how to use a collision warning feature, then it's not designed very well. It shouldn't require that. It should just work. You might be curious to know how it works. You might wonder what kind of a sensor it has to kind of adjust it or things like that, but you don't need to do that.

And all of the V2V work that we've talked about here and other places, you don't have to train the customer

for V2V to work. You may want them to be supportive of it. You may want them to be happy about it. You don't have to train them to work. Whereas other driver behaviors like don't drink and drive, wear your seatbelts, be attentive, those are messages that you can always reinforce.

There are always improvements to be made. A third of fatalities are still due to alcohol impairment. Half of the fatalities have somebody that wasn't wearing a belt. These statistics have kind of been flat for many, many years. Those are behavior things.

MEMBER DENARO: But the --

MEMBER CAPP: Pedestrians are going up.

Pedestrian impacts are going up in cities across the U.S.

Well, you guys know that better than I do.

MEMBER DENARO: But the driving point then is to make sure people are aware of limitations, especially during a development period where we're not at full capability or whatever I think is an important piece.

MEMBER CAPP: Yeah, managing --

MEMBER DENARO: Yeah.

MEMBER CAPP: -- misuse, misuse and benefits is definitely a part of introducing technologies. I'd say that's a different culture than this broad traffic safety, yeah, but it's a part we agree about.

CHAIR WILKERSON: Other thoughts? So I've jotted down a couple and I'll -- I don't know if anybody else is doing that, but a couple of the themes that came up were the interplay of roadway safety with pedestrians and motorized vehicles, whether it's embedded in the roadway or some after-market application that a pedestrian may wear to -- that might show how they're co-sharing a pathway or usage, distracted pedestrians, the psychology of traffic safety, potential community involvement, technology enablers and technology limiters. I think it was Raj that said that, the limitations of the technology.

Potential speakers, we talked about Max Donath,

Peter Kissinger, and NHTSA. Is there any other? And then

the other theme was promotion and advertisement and helmet

safety. Those are some of the topics that -- Nick Ward?

I'll write that. Okay, so any other topics?

Otherwise, we can move onto -- I'm going to recommend we move onto the automation and interrelationship between connected and automated vehicles. The floor is open for that. First was automation, and then the other was interrelationship between --

MEMBER BERG: I think these are major themes in the strategic plan, JPO strategic plan, so I would think it would be obvious that they would want some advice on if

what they're doing is the right thing based on all of our experience or know-how, or the wrong thing, or, you know, different priorities or something like that. So I think that's why this topic was initiated.

CHAIR WILKERSON: So we would need to reevaluate? You're saying we should look at that strategic plan, revisit that, and --

MEMBER BERG: I do.

MEMBER McCORMICK: Looking at analysis?

(Simultaneous speaking)

MEMBER McCORMICK: You know, this is a fastmoving environment, you know, the level of automation that
are preceding the number of implementations around the
world, so, yes, I think it's worth looking at to see is
there a strategic objective current, and is there something
new they should be doing, or is there something that's, you
know, now a legacy for all that matters? I just, to Raj's
point, I think that's going to be the easiest way to eat
this elephant.

MEMBER BERG: To what?

MEMBER McCORMICK: The easiest way to eat this elephant.

MEMBER BERG: Oh.

CHAIR WILKERSON: Any other thoughts?

MEMBER DENARO: Yeah, Sheryl, one thing that I don't think we've talked about much, and I don't know what the JPO is doing, but the whole subject of certification or type approval for automation is an interesting one.

And the reason I mention that is because at our Automated Vehicles Symposium this past summer, we had both Secretary Foxx and the Administrator, NHTSA Administrator Rosekind present. And Administrator Rosekind said some comments that seemed to be indicating possible type approval considerations, so it seems to me that's an area where the JPO could play an important role. What is it? What should it be? What are the limitations or whatever, you know?

CHAIR WILKERSON: So can you -- how would you -- can you --- I'm typing in --

MEMBER DENARO: I'm just saying, all right, so a topic under automation is JPO involvement in certification.

MEMBER CAPP: We should maybe talk to Ken a little bit because I'm not aware that they would get involved with --

MEMBER DENARO: Maybe not.

MEMBER CAPP: Yeah, and even the NHTSA Administrator Rosekind would be the first to say that if they did go to an approach like that, I mean, it literally

requires Congress to change the Safety Act and give them new -- different authorities.

MEMBER DENARO: Okay, so let's just leave it as something to bring up with Ken, at this point.

MEMBER CAPP: Yeah, but if there's a role that the JPO would have in it in doing some research, I think that would be one that I'd be interested in.

MEMBER BERG: Doesn't Europe plan to do such a thing or was it one of their recommendations?

MEMBER DENARO: I've heard pieces about that, but I don't know.

MEMBER CAPP: Most European regulations are already through type approval, right? You round up crash tests, for example, in the presence of a type approval official, and that person decides whether you're good to go or not, whereas in the U.S., we self-certify, and we keep our own data on file, and we show it to the agency if they ask for it or if they do their own audits. It's a very different kind of a regulatory system.

CHAIR WILKERSON: So this is a big topic. What about the interrelationship part of the topic?

MEMBER BERG: Well, to me, I think it's part of that gap analysis that Scott suggested. I'm not sure what the research questions are that JPO is trying to answer. I

think we should -- maybe this committee should review that.

CHAIR WILKERSON: Okay, maybe we could pull that up. Is that possible to -- do we have a copy of that available for the committee?

MEMBER BERG: The strategic plan?

CHAIR WILKERSON: The strategic plan?

MEMBER McCORMICK: Yeah, I think it's online.

CHAIR WILKERSON: Yeah, but I'm just saying for if we do a break out on that, it might be helpful. I don't know. It's quite long though.

MEMBER BERG: But it's broken into --

CHAIR WILKERSON: Yeah, maybe if we could --

MEMBER BERG: -- viable sections.

CHAIR WILKERSON: Maybe that group could meet in this room and then pull it up. That would be a good idea, okay.

MEMBER McCORMICK: Yeah, it's available online. I'm looking at it.

MEMBER BERG: So does it compare and contrast with what the green power and the committee would suggest to maybe prioritize, or deprioritize, or are they looking at the right things, or are they missing things?

CHAIR WILKERSON: Okay, any other thoughts on this one? This was a pretty big one.

MEMBER BERG: Yeah, these are questions that aren't easy to answer.

CHAIR WILKERSON: They aren't. Okay, well, we can always use a lot of the time in the different subcommittees if we do that. Why don't we move on? Technology and active transportation, so Debra, I know you've already had your two cents.

Anyone else? Scott left. That was one of his topics. Joe and Susan also was involved in that one or had that as a high priority. Anything on technology? Any other subtopics we should be thinking about?

Oh, actually if we go back to the automation and interrelationship between connected and automated vehicles, are there any particular presentations that you would or speakers that you would want to have speak to that? I'm just thinking about that given that we've mentioned that for the first topic.

MEMBER BERG: Well, we'd have to come up with a specific topic, but certainly I think we'd want to hear from somebody from NHTSA.

MEMBER CAPP: And in addition, hearing from a person directly, you know, we expect sometime over the next month to see these guidance documents from NHTSA that will, I think, lay out a lot of this, a lot of their thinking and

what role they might have in the future with automation systems, and perhaps within there, there is some research work that the JPO will be involved with.

MEMBER DENARO: Of course they won't talk about it until it's out, but I think when it's out, we should have somebody, yeah, I agree.

CHAIR WILKERSON: Okay, so --

MEMBER BERG: Is that stuck in OMB too?

MEMBER CAPP: As far as I understand, it is, yeah.

MEMBER RAJKUMAR: It would be good to have views from U.S. DOT given to us. I would love to basically have somebody from maybe GM give a talk on, I guess, they're deploying DSRC, trying to deploy super groups. Those two things come together here.

MEMBER CAPP: This would be perfect, but we won't take much until this document is out though, I have to agree, but it probably will by next meeting, so, yeah.

(Off microphone comment)

MEMBER ALBERT: Is there any role that -- this is Steve Albert. Is there any role that this group could play in trying to accelerate the roll out of technologies, or anything that we should be making recommendations? And I go back to some of the earlier discussions this morning,

maybe by Ginger, and Kirk, and others about, and even myself, dealing with procurement. I don't know if it would fit into some of the bigger institutional issues.

MEMBER CAPP: Well, like Scott, I think we should have a specific discussion on it around the whole DSRC aspect if the FCC goes one way or the other, or if OMB decides not to do the full length. I'm sorry?

MEMBER ALBERT: Plan B?

MEMBER CAPP: Plan A, B, whatever, but I mean, that will totally affect whether even there is a roll out on what I think this committee always viewed as a key safety technology. So the point, I think that's probably the most near term and actionable thing from a real world roll out standpoint we could be involved with is that.

MEMBER DENARO: Roger, I thought you'd commenting, but regardless of what happens to the frequency application question, there's still the question technology evolution between DSRC and direct, and having presentations that, some of have some on us familiarity with that and others don't. I think diving a little deeper in that might be interesting. And then are there suggestions for the JPO based on that, right, Roger?

MEMBER BERG: Yeah, kind of what is the role of the national ITS research plan into establishing an

evolutionary road map for connectivity? I don't think it can just stop with 5.9.

MEMBER SCHROMSKY: Steve, to your point, the question was what's the incentive to deploy this, right? So if you're a banking institution, if you sign up for online banking, you might stop paying for your, you know, paper bill or \$4 or \$5 for your checking account. Why? Because I'm cutting down on my shipping costs, right?

You know, if you're an insurance company out there, I'll lower your rates if you wear a -- put something in your OBD2 port so I can manage your speed, and mileage, and your hard braking. I'll give you, you know, cheaper insurance rates, so there's a financial incentive. How do you do that to city, municipality, and state that if you adopt this, I guarantee you grant money? I don't think -- I don't -- I'm curious. I don't see why we couldn't look at something like that or JPO.

MEMBER McCORMICK: Well, historically --

MEMBER SCHROMSKY: But what's that incentive for them to do it, and what contractually, if they did this, quid pro quo, very --

MEMBER McCORMICK: Historically --

(Simultaneous speaking)

MEMBER McCORMICK: -- are articulated early on.

That's not a viable way to encourage states to do something. I mean, it works, but it's not an incentivizer.

MEMBER ALBERT: Folks in the private industry think all this pilot stuff is fine and good, but who's going to pay for the rest of this to get done across the United States, especially on the roadside stuff? And they're saying, "Where's the money?"

MEMBER STEUDLE: I think that becomes a real issue because there are now more deployments. More people understand it. The original deployment sites are basically being abandoned and said, "Well, now it's yours. You just pay for it." Having one of those, I am now having to find money to pay for it while I see five or six other deployment sites pop up in, you know, a smart city. I don't see the long-term plan as to how this continues to be funded, and creating an expectation that is not maintainable.

MEMBER SCHROMSKY: I think it goes into when you -- when you -- I think it goes into a greater, like a business development for the actual city, right? For instance, there's a competition to get talent and the urbanization draw, right?

Just like anything else, "I have visited this city here and wow, the transportation was unbelievable, the

infrastructure. It's live. It's innovative. Well, I want to live there," right? So I think its people say keeping up with the Joneses or something, you know. There's not -- it's the draw of many different things.

It's not necessarily transportation systems. But if we look across the whole, you know, gamut of this thing, "Wow, I really want to live here. It's growing. It's thriving," then other cities -- We're seeing mobility, right?

I mean, you know, at a time, mobility was only given to certain echelons. If you look at the government, it was only given to certain GS levels who had a BlackBerry, right? Now it's just table stakes that if you walk into an agency, you're going to have connectivity no matter what, right? It's just across, you know.

But what we see is yes, that cost is going up in that department, but then we see other ancillary things where, you know, "I'm having telework, so I don't need an office anymore, so I'm going to close that real estate," and, you know, that savings doesn't necessarily get translated, but it's really changing how things get done, right?

I think that's where it's mostly like a development or business, you know, economic council for the

city or the state that says, "Look at this as a whole," and say, "We need to do this because we want to drive innovation. We want to drive population," you know.

I'm sure Joe, you know, the ancillary benefit to having the RNC and the Cavaliers winning, it's great marketing that people are now looking at saying, "Why are they putting the RNC in Cleveland," right? You know why? It's a battleground state. It's economic development. There's this resurgence going back in there trying to stop that migration from north to south that now people are probably looking at Cleveland.

"You know what? Next time, I might want to have my convention." It might make the list where it wouldn't necessarily make it, right? So I think, you know, it's a hard way to incentivize the roundabout way, Steve. It's like, I don't think you can give one particular thing that's going to generate that initial bump.

MEMBER ALBERT: I don't know how you can turn this around.

CHAIR WILKERSON: I am waiting for a bullet. I have promote frequency allocation, the role of ITS in establishing a revolutionary roadmap for connectivity, funding and deployment issues, and then this --

MEMBER McCORMICK: And then what he said, that

would be the bullet, what he said.

CHAIR WILKERSON: How would you summarize that so that we would be able to reflect on that?

MEMBER McCORMICK: I think fundamentally what he's talking about is how do we approach incentivization, whether that's for the private industry, whether that's for the public, whether it's for the combination of the two, what we were talking about --

CHAIR WILKERSON: Incentivization.

MEMBER McCORMICK: How do you incentivize, you know, this to happen?

CHAIR WILKERSON: Incentives, I'll put incentives. What about speakers, potential speakers?

MEMBER GOODIN: I'm sorry, I couldn't hear you.

CHAIR WILKERSON: Just along the way, we've been filling out potential names for in the event we have presentations. We don't have to. It's just something to think about. We could pass on it.

MEMBER GOODIN: I think Kirk should speak.

CHAIR WILKERSON: I'm sorry?

MEMBER GOODIN: I think Kirk should.

MEMBER STEUDLE: All in favor?

MEMBER GOODIN: I mean, you're on the ground trying to do this.

(Simultaneous speaking)

MEMBER GOODIN: Well, I mean, you've got economic development interests that are involved in what you're doing. You're trying to look at the sustainable evolutionary plane with connectivity. You're thinking about this more than --

MEMBER STEUDLE: Might have been, yes, might have been.

MEMBER DENARO: I think another issue on the interrelationship, well, interrelationship of communication in automation is first of all, in addition to the automation guidance that's coming from NHTSA at the end of the summer, we're all waiting patiently for the NPRM announcement for V2V.

So it would be nice to also have a briefing on that in terms of -- and maybe it's from NHTSA -- what are some of the things they heard? What went into the whole planning for that and so forth?

But beyond that, in terms of evolution forward, we have this interesting discord, in my opinion, between on one hand, we've got collision mitigation systems coming in vehicles that look very attractive and people are embracing, yet we've got a V2V plan which gives warnings and doesn't put on the brakes.

But I understand all of the reasons for that, but it would be nice to hear more about that, and then consider whether the JPO has a plan or some activity that leads to the migration of that for where that becomes automated as well, the collision avoidance part of that.

So the issue, to give you your bullet, is a briefing on the NPRM, V2V NPRM when it's announced, and discussion of a JPO plan for evolution to automatic braking from V2V.

CHAIR WILKERSON: Thoughts?

MEMBER RAJKUMAR: In terms of speakers, we could get people from APTA, the American Public Transportation Association. We could even get somebody from the American quess it's the League of League of -- I American Bicyclists, I think. I think that's a very organization. We could actually even get somebody from AAA in terms of that they have actually have people that they go out and promote safety culture, talk about technology and such. I think that this brings in, I think, a wider awareness to this committee as well.

CHAIR WILKERSON: Are there other groups that come to mind on the active transportation? We're on active transportation, right?

MEMBER McCORMICK: We're on what?

CHAIR WILKERSON: Which one are we -- I'm making sure because we skipped over --

MEMBER McCORMICK: But see, I think what you just talked about, Raj, I think that really morphs us into the whole culture part of it because we need to address, like you had said, we need to address first responders. We need to address motorcycles, and bicyclists, and baby buggy joggers. We need to address, you know, collectively address that there non-motorized road users that are impacted by whatever is done and is maybe disenfranchised by something that's being done.

MEMBER RAJKUMAR: And technology does play a role because DSRC could be used by bicyclists and buses as well.

CHAIR WILKERSON: Right.

MEMBER McCORMICK: As could 5G, right.

MEMBER RAJKUMAR: Yes.

MEMBER JOHNSON: So as it relates, I think Raj hit the nail on the head. I mean, leveraging APTA would be, you know, something that would be great as well to figure out who would be best identified to come as a speaker because they have a number of resources.

CHAIR WILKERSON: Okay, all right, what about rural development?

MEMBER ALBERT: I think some of the rural

deployment is it exists in isolation ---

MEMBER McCORMICK: Stephen, I can't hear you.

MEMBER ALBERT: How do you incentivize all of this? That's probably the best area to talk about the subject, and making sure we nail all the stakeholders in rural deployment groups.

MEMBER McKINNEY: Yeah, it's a case of awareness.

CHAIR WILKERSON: What about prioritization? I mean, it's pretty broad. Are there any areas of rural deployment that need to be targeted first? I mean, we've talked about shared view. There's infrastructure.

MEMBER ALBERT: And rural is not just about safety.

CHAIR WILKERSON: Accessibility.

MEMBER ALBERT: Yes, accessibility. It hits, you know, three or four of the four-legged stools very nicely. It's not just about safety.

CHAIR WILKERSON: Joe, did you have any other thoughts? You were -- that was one of your top --

MEMBER CALABRESE: No, I'm all set. As we're sitting here, the FTA just released this new rulemaking of their oversight of safety --

CHAIR WILKERSON: Yep.

MEMBER CALABRESE: -- which, you know, used to be, before today, more focused on the rail side, but now it's taking the same on rail and bus, and whatever we can do to make a very safe mode of transportation even safer, both actually and from a perceptual perspective, would be positive, because if we can move some cars off the road, it makes it safer for those who remain on the road to do that.

CHAIR WILKERSON: Did you say rail?

MEMBER CALABRESE: Yes.

CHAIR WILKERSON: Okay.

MEMBER CALABRESE: FTA always, or has had of late, a strong oversight ability in regulations on passenger rail, that they're now taking that same regulation and overlaying it on the bus systems around the country as well.

CHAIR WILKERSON: What about speakers to go along with that? Any thoughts on that?

MEMBER DENARO: I think Steve Albert should be a speaker.

CHAIR WILKERSON: We don't have to do this. We're just throwing out some ideas here, so I'm sure we have committees that do that. Okay, so we've talked about those. We've talked about three of those. Is there anything else we want to talk about? Oh, I'm sorry.

MEMBER BERG: What do we want to do about this whole idea of the financial procurement that is cross cutting?

CHAIR WILKERSON: Yeah, I actually probably put funding as a bullet for each one of those, or procurement and funding.

MEMBER BERG: Do we want to make that some kind of universal -- or not universal, but broadly applied recommendation rather than just each one having their own recommendation about funding procurement?

CHAIR WILKERSON: Well, that's what we had thought about as a possibility.

MEMBER SHAHEEN: I think that's cross cutting for sure.

MEMBER McCORMICK: That's a good idea, Roger. We could have a summary section that said these are cross cuttings on all of these areas. That may be one of them, or maybe the only one.

CHAIR WILKERSON: Or each one addresses it.

Let's say there's a bullet recommendation from each one of these. We could then --

MEMBER McCORMICK: Well, the question is whether or not you could actually propose something at that granular a level for each of those areas as opposed to

generally. You know, we're going to see the evidence from the ITS review that some things weren't performed because of lack of funding or lack of identified funding, so we've got a historical reference in terms of why something wasn't done.

We have the need that says this is where it needs to be with a response from the JPO that will say, "Well, okay, great, but we don't have the money for it." Therefore, the recommendation can allocate more funding for that.

CHAIR WILKERSON: So what's the recommendation?

MEMBER McCORMICK: That it would be -- well, mind you, I'm viewing it as I don't think we can get into each, agriculture, automation, each one at a granular level to talk about funding or resources for implementation, is kind of a summary statement at each one, as opposed to a summary statement for the whole document that says, "Now we've covered these major areas. Here is a cross cutting issue that we see which is from a historical review of things, the lack of funding or the application of funding to certain recommended areas," that that's not what the recommendation is, that they consider applying additional funding to accomplish these areas going forward.

CHAIR WILKERSON: And how would that be

implemented? I mean, how would the committee -- how do you propose the committee address that? Is it somebody -- would we treat it like a separate topic or subcommittee?

MEMBER McCORMICK: Well, I think each one of the groups. If you look at this document, each one of the groups would come up with a recommendation, like recommendation eight was.

CHAIR WILKERSON: So you're saying --

MEMBER McCORMICK: -- "JPO should conduct research," blah, blah, incessant. Those could all be harvested into one summary section. It's just a thought. I don't -- mechanically don't care how we do it.

MEMBER ALBERT: The issue, going back to OMB doing an analysis?

MEMBER McCORMICK: Yes.

CHAIR WILKERSON: That was your question, right?
Was that sort of your question?

MEMBER BERG: No, I was just making some snide comments about OMB coming out with things. I shouldn't have said that.

CHAIR WILKERSON: It's on the record though.

MEMBER McCORMICK: Is there a side?

CHAIR WILKERSON: Okay, well, I will put funding and procurement under each one. I'm just taking some notes

and we can put it up on the board.

MEMBER McCORMICK: If every set of recommendations has its own little, "and you should add money," or, "you should add money," or, "you should add money," it gets ignored eventually because it becomes the harping that the group is doing as opposed to one strong recommendation.

MEMBER BERG: How about this suggestion? How about there become like some matrix kind of thing? So each subcommittee would have one or two people assigned to the finance part of that subcommittee's activity, and then have those finance people or --

CHAIR WILKERSON: Get together.

MEMBER BERG: Yeah.

CHAIR WILKERSON: All right, that's a good idea.

Any other thoughts?

MEMBER McCORMICK: I'm sorry?

CHAIR WILKERSON: Are there any other thoughts on rural systems?

MEMBER DENARO: I think, and I don't know how to address this, or whether we should address it, but I guess I would label it infrastructure readiness for automation in rural. I mean, that could be anywhere, but in particular, rural, and whether -- and I understand that's a state

versus Federal and all that kind of stuff, but should the JPO have some kind of role in it?

MEMBER McCORMICK: Well, I think that's a very good point.

CHAIR WILKERSON: Continuity, you mean continuity for states because eventually the states, you know, those --

MEMBER DENARO: No, I'm not going to get into the funding thing. You know, usually the problem has been typically, you know, that's a state issue. They've got to come up with the money, but okay, let's stop wishing and picking the bone out of the road. How are we going to address this? And what are the ramifications of not doing something?

CHAIR WILKERSON: Right.

MEMBER McCORMICK: And I think that's potentially a real good point is that how you would deploy in Chicago and Lansing is going to be different than how you're going to deploy in a rural area because now you're looking at corridors that are highly used, about accident levels that are prevalent along those specific areas.

So you're redefining your area of attack differently than you are in the city. Whereas in the city or even the suburbs, you can do that somewhat pervasively

and go, "Well, we need it everywhere," or, "We need it on the high structure." I think there may be some substantial differences in terms of, you know, where -- and I don't know that I know what the real difference is, but I mean, where those accidents occur, where that need is most easily satisfied.

MEMBER ALBERT: The need is very great in rural areas. My only concern is those two using the word, "infrastructure," when it's broader than that, and it's really about mobility, and accessibility, and being able to get people for medical trips, you know, that have to drive 200 miles in order to go see a doctor.

So, I mean, some of the accessibility, and Uber, and all of that other stuff is very important. Sometimes when people use the word, "infrastructure," you know, when you look at vehicle focused solutions as opposed to adding roads, and opposed to having a broader scope.

MEMBER DENARO: I agree with that. Mark Dowd really focused on something a little different. It was literally, I mean, it's the electronic equivalent of we discover that rumble strips make a big difference in front off-road accidents. What's the equivalent that we need to consider for automated vehicles in rural areas, and is the infrastructure adequate to support -- to give us the

benefits from those automated vehicles that we expect, or does there need to be more?

MEMBER STEUDLE: I think Scott's comments are right now. I mean, it's vastly different. Fifty percent of the rural roads in Michigan are gravel. So you want a rumble strip? It's called washboard. It's what happens when you don't grade it.

CHAIR WILKERSON: It's called what?

MEMBER STEUDLE: It's called washboard. It's like an old washboard, and you'll lose the back end of your car driving down the road.

MEMBER DENARO: So the whole road is a rumble strip?

MEMBER STEUDLE: The whole road is a rumble strip. You'll never put in a rumble strip on a gravel road, right? So to the extent that automation depends on a road feature, it won't happen in 50 percent of the roads in rural America.

And I think that's really Steve's point is that we're talking about all of these neat things that can happen in the city. They cannot be duplicated in a rural area if it's completely dependent upon infrastructure. If they can do it by high definition maps, if they can do it by GPS, okay.

But the other component of the 1,000 people that died in Michigan last year, two-thirds of them were on rural two-lane roads and that's where the accidents are happening, but we're focusing everything on, you know, the interstates, which is the safest piece of roadway you can be on.

PARTICIPANT: It's four times safer.

MEMBER STEUDLE: Right, I preach that to my brother-in-law that drives 60 miles to my house and always takes all of the back roads. I said, "Would you stop that? There's an interstate that goes right here." He says, "I don't like driving that fast." I said, "But you're safer if you're on the interstate than you are on that two-lane road."

CHAIR WILKERSON: It's the same coming out. Most of the fatalities from a long journey where people want to see that scenic route is that they don't realize that there are farmers and others who use those roads, and who drive a lot faster on those roads, and who cross over the lanes a lot faster making those turns, and it's a high risk.

MEMBER STEUDLE: Deployment in rural areas is very different than deployment in urban areas and the opportunities are completely different.

MEMBER SCHROMSKY: We might see a bigger bang for the buck if it's rerun as safety, right, so the question is really to your point, Kirk, is I kind of like this one, is how do I, with the constraints, I'm not going to be able to pave the roads, so what other technologies are out there?

What more research can be done to address one, two, if it's fatalities, or roadside, you know, pick three, but, you know, what technologies other than paving the road can be done to alleviate the problem? I think that's really the goal.

CHAIR WILKERSON: Is there another organization? I know we talked about AASHTO and they had the anniversary of the national highway system. Is there another organization that's looking at the next generation of what that infrastructure looks like? I mean, we've looked at --

MEMBER STEUDLE: So there is the Association of Counties, NACo.

CHAIR WILKERSON: Well, yeah, okay, but are they looking at those --

MEMBER STEUDLE: To some extent.

CHAIR WILKERSON: -- the national --

MEMBER STEUDLE: There's a group called the Connected Automated Leadership Forum, which has automobile

manufacturers, has counties, cities, states, that had just come together. There's a deployment coalition that's dealing with the connected side, and then the leadership team is going back to look at the research needed on the automation side because there's a lot of research that's particularly on that. So there's -- that could be one.

MEMBER SCHROMSKY: The only one I could think of we could have is probably from a law enforcement, public safety, the National Sheriffs' Association, because they're the ones that are doing a lot of the patrols in rural, and that's a big issue, not only for the men and women that serve, but also the access and responding.

CHAIR WILKERSON: Listening to the other side, the administration.

MEMBER BERG: What did you say the percentage of dirt roads in Michigan was?

MEMBER STEUDLE: Fifty percent.

MEMBER BERG: Fifty percent.

MEMBER STEUDLE: Fifty percent of all public roads.

MEMBER BERG: Public roads, right.

MEMBER STEUDLE: There's 122,000 miles of public roads in Michigan, and roughly it's 40 to 50 percent.

MEMBER BERG: Okay.

MEMBER STEUDLE: And will never, ever --

MEMBER BERG: Right, so we have statistics on the number of accidents in rural areas. Do we also have statistics on accidents on dirt roads?

MEMBER STEUDLE: What was the last part of your question?

MEMBER BERG: On dirt roads.

MEMBER STEUDLE: So it becomes more complicated because they're not in the National Highway System, so whatever is on the National Highway System has to have a report from the state to the feds as to what the traffic values are, conditions, and all the rest of that. That only equates to about 35 to 40 percent of the lane miles in Michigan on the National Highway System, and I would think that percentage is probably consistent across Michigan.

CHAIR WILKERSON: So it's like a new app. Okay, so the last area is that we haven't talked about is the review of the ITS Program accomplishments. Is there any other thought or guidance on that? We've got three things. Can we make that a little bigger for folks to look at and see if there's anything else we might want to --

One thought is we might want to have one or two members, maybe more, of the committee to serve as a liaison to Stephen and others on this, or we just have them come

back to us, but it might be good for them to have someone from the committee that can talk to them regularly on this topic. I don't know if anyone has any thoughts on how we might liaise with the staff on this.

MEMBER SCHROMSKY: I think it's interesting, this topic, because I think going back to when I first joined, everything was centered on the vehicle in terms of the technology, the hacking. You know, we went up to Ann Arbor. We were in it.

And I noticed over the years, we've kind of gone away from the vehicle in terms of the whole ecosystem about it, but we still come back to we're still looking for a mandate to have DSRC or have this capability into the vehicle. So I think we've kind of expanded from what we originally did, but those problems still happen as things have gotten broader.

I mean, our goal is -- some of those still haven't been addressed, and I think we've moved on because they haven't been addressed, and we've looked at other things, if that makes sense.

I mean, we're talking about safety and everything else, but we still, the fundamental I remember when first coming on here was really looking at the vehicle. We looked at cyber, what technology could be used

to make this happen. I think Walt did a bunch of presentations and we looked at LTE. Now we're looking at 5G, but we still haven't -- you know, that problem still hasn't been solved since a couple of committees ago.

So, I mean, and I think since we haven't -- that hasn't been addressed, I think we kick around other ideas because we've been there, done that, so we looked at other things, but this is still open. So I don't know how we word that, but I think I like Scott's point that he mentioned before, that if there's matrix that says, "Okay, here are the recommendations. Here is the response," are we going to see more of white space than I would say green space in terms of things being done? I don't know.

MEMBER McCORMICK: Well, the other thing we could always do is to assess the viability of the recommendations we've made over the years. You know, we recommend that, you know, you do a particular thing, and JPO can agree to do it, and then it doesn't really add value. I mean, it's a difficult litmus test for us to take, but it's worth considering.

CHAIR WILKERSON: Yeah, I think that's what this is ultimately, and then the thought was are we --

MEMBER BERG: Say, "Are we being effective in what we're doing?"

CHAIR WILKERSON: Should we continue to exist in

MEMBER BERG: I mean, quite frankly, Steve's been talking about rural deployment systems for what, six years now? I don't know that we've ever had anybody join this committee and it's still the biggest death killer. Maybe we should reevaluate whether or not our parochial interests aren't as viable as the one that we're not paying attention to.

MEMBER STEUDLE: Well, and if you're still going to think about political support for deployment in rural areas, there's a lot of support in rural areas that -- and if we find a way to address it, now you get more people going, "Yeah," and you get Congress going, "That's a really good program because they're doing something in my rural area, and it's not just something for, you know, another big city that has all of the money anyway."

CHAIR WILKERSON: Well, that's what happened with the telephone industry, right? We had a committee when we did the '96 Telephone Act. There was a team of -- it was called the Farm Team of Congressional members, Congressman Dorgan and others from North Dakota, and we got broadband to play to some of those rural areas really quickly, and it was called the Farm Team.

MEMBER BERG: That's a good model.

CHAIR WILKERSON: It was a great model.

MEMBER BERG: For how we would do it with transportation.

PARTICIPANT: Well, for many years, the strongest Senator --

(Simultaneous speaking.)

MEMBER SCHROMSKY: -- been addressed since 1996 either, so.

CHAIR WILKERSON: But, I mean, it goes back to -

MEMBER SCHROMSKY: I think one of the things I always love coming to this committee, I always learn something new, but going back to what Kirk just said, I think if you asked your average Michigan resident and told them that 50 percent of the roads are gravel, I guarantee nine out of 10 probably didn't know that, right? I mean, I think, you know, I think to the point of this rural, I think people don't --

MEMBER STEUDLE: I'd bet --

MEMBER SCHROMSKY: Well --

MEMBER STEUDLE: We have gravel roads actually in some first rate suburbs that are gravel subdivisions, and they don't want to pave. They like the gravel and it's

going to stay gravel forever. I've seen subdivisions built in the '50s that are still gravel and they want to keep it that way.

CHAIR WILKERSON: Okay, any other thoughts on that just on the review of ITS program accomplishments, or thoughts on how we help facilitate that, or any guidance we can provide?

MEMBER BERG: To kind of wrap a ribbon around it or whatever, I think it's -- a reassessment of how we do our job has to be at the end of it.

CHAIR WILKERSON: Can we add that as a fourth on there?

MEMBER BERG: And how effective are we at providing that?

CHAIR WILKERSON: Have we provided it? Is there some evaluation?

MEMBER BERG: The effectiveness of this committee and --

CHAIR WILKERSON: That would be great.

MEMBER CAPP: That's why it's good to get feedback from the other side of the recommendation that's helpful, or you just feel like it's sending you on a wild goose chase whether you did it or not, and we need to know that.

CHAIR WILKERSON: That's great.

MEMBER BERG: That takes some trust and honesty.

CHAIR WILKERSON: I think it's great.

MEMBER STEUDLE: Considering Congress has mandated it, I can't imagine they're going to say yes.

MEMBER BERG: We might redefine the scope or recommend to define the scope if we're not effective.

CHAIR WILKERSON: That's right.

MEMBER BERG: If our results are not as what was originally intended.

CHAIR WILKERSON: Right, tweak the charter. They might tweak the charter or something.

MEMBER BERG: Yeah, 14 years ago, and things happen in 14 years.

CHAIR WILKERSON: I think it's important. Okay, so it's 11:40. What do you recommend? One of the things we can -- it might be helpful to talk about how we spend the rest of our time. We've got, let's see here, we have lunch at noon. We can always take a break before lunch, so we've got another 20 minutes.

It might be helpful to -- does anyone have to leave really early today, no, or have a flight that they need to leave before 4:00? I think we'll be done before 4:00, to be honest. But any thoughts on -- we've got Ken

coming up, so we'll take a break from the dialogue, and then we have literally about two-and-a-half hours if we want to break up and talk about these issues.

We did say that maybe that last, we wanted to have a discussion on action items, but the topic that Scott raised about 5.9. Were there any other topics like that that we need to make sure we have time to discuss?

MEMBER SCHROMSKY: Are we going to go, just like mentioned before, logistics in terms of we have the, what was it, the first -- we have an advice memo due on January 1, so just logistic in terms of are we going to meet face to face again before the year? Is it going to be conference calls?

CHAIR WILKERSON: Yeah, so that last item was discussion of action items, and next meeting was --

MEMBER SCHROMSKY: Okay.

CHAIR WILKERSON: We'll probably get there before we do that, but that is on that topic. We do have that listed.

MEMBER ALBERT: Sheryl, could we maybe talk as a group about what the format of these recommendations we're going to recommend today? Do we want to agree on a template that we can all write from?

CHAIR WILKERSON: Or if you want to do the --

MEMBER ALBERT: So they're consistent across the different subgroups, subcommittees, that might be helpful.

CHAIR WILKERSON: So we have these five topics, or technically four because one of them is for JPO's guidance. We could spend some time. Either we could come up and say which is everybody's top two that they are interested in, and then we could use the last hour to talk about, maybe come back and talk about those.

I don't know. I'm open. I think we've had some really good discussion. It's open to the group to revamp and figure out how we want to spend the rest of our time before we have to do our discussion of action items and make time for 5.9.

MEMBER CAPP: I was also wondering, since we talked about the review and the feedback idea, if, and I realize we'd be patching a hole, but maybe we could at least -- you know, maybe Ken could give us 15 minutes of thoughts on a reaction to what -- you know, we're going to go in and look at the review.

We're going to look at the last two years and what was done, and formalize a little bit, but maybe Ken could give us some transparent reactions to -- on this question of priorities and where to put our energy in a helpful way, and then it will get formalized when we do

that little report. It seems like hearing from Ken on that could be useful.

CHAIR WILKERSON: Okay, I have a couple of things from Ken. One was -- I'm just taking those. To what degree do we make this forward Federal Highway -- it's FHWA. Do you remember that topic? I don't know who said that, but -- Ginger and Susan, I think, had talked about the FHWA issue.

MEMBER GOODIN: We would love to do research --

CHAIR WILKERSON: Okay, and then the other was where is funding, the funding to tackle these issues, and then their transparency on the committee. Anything, any other guidance on how we might want to use this time after lunch we've got after Ken?

MEMBER CAPP: So I think Ken's got an hour instead of the half-hour.

CHAIR WILKERSON: If he has time. I don't know. Does he have time? So you think we need an hour for Ken?

MEMBER SHAHEEN: Yes.

CHAIR WILKERSON: Okay, so we'll go from --

MEMBER CAPP: I'm just guessing that, yeah, that

will --

CHAIR WILKERSON: Okay, so 12:30?

MEMBER SHAHEEN: It's a lot for him to cover in

a half-hour.

MEMBER CAPP: He's an animal.

CHAIR WILKERSON: So let's say 12:30 to 1:30 will be Ken, and then that leaves time for us to meet and one break. Well, we've got 5.9. How much time do we need for 5.9?

MEMBER CAPP: We can solve that in five minutes.

MEMBER BELCHER: Well, we can. I just don't know --

CHAIR WILKERSON: I just want to put that as a topic issue.

MEMBER BELCHER: I think you're going to need at least 15 minutes, maybe half an hour.

CHAIR WILKERSON: Okay, so --

MEMBER CAPP: I was kidding about five minutes.

MEMBER BELCHER: No, I know.

MEMBER McCORMICK: Sheryl has been part of this dialogue with Steve. What I asked Ken to do, because we had only a couple other people filling partial roles for them, I had asked him if he could kind of give us an update of how his organization was now structured since there is a bit of transitioning going on.

MR. GLASSCOCK: Yeah, and we did change our structure a little bit, and there's an org chart that's

going to go over --

MEMBER McCORMICK: So that's kind of why that's on the agenda.

MR. GLASSCOCK: Yeah.

CHAIR WILKERSON: Okay, so why don't we do 1:30? We've got lunch until 12:30, and then we've got Ken until 1:30. We'll probably want to take a break at 1:30, so why don't we make the break 1:30 to 1:45? Is that right, 1:30 to 1:45?

And then we'll have the remainder of the time to -- we'll break it up. And 5.9, how much do we need for 5.9? Let's see, how much time do we need for the subcommittee? What do we want to do with the rest of these four topics? Do we want to spend time talking about who might want to work on those issues?

Maybe we could have a conference call or two before the next -- a conference call before the next meeting. Maybe think about whether there's a discussion leader to help facilitate that for each one, and then again, we don't have to make recommendations like Roger said, but at least keep cultivating and thinking about structure so that should we wish to do something, it's teed up. Is that okay?

MEMBER McCORMICK: Well, the only thing I'd

offer is that the review of the past work probably is going to require all of us to weigh in to parts of it even though Kirk's going to chair it and all of that, and there's a specific committee for it.

MEMBER STEUDLE: Again, I'm in the room.
(Laughter.)

MEMBER McCORMICK: And I'm just thinking since that's kind of our goal for January, is that that's one of the things that when that committee gets going, they're going to say, "Well, okay, we have this recommendation," but they don't know whether it was implemented, or valuable, and would have to go back to whoever, you know, whether that was, you know, a GPS thing by Bob, or a security thing by me, or, you know, what everybody, Roger. You know, I think at some point, we all have to weigh in on helping that answer.

CHAIR WILKERSON: So part of that will be when we break out and we figure out who wants to be part of those discussions, one of my questions was I think it's necessary that there be one, or two, or more people who will liaise with them, because if that's going to be a priority, we need someone to engage so that when we do bring that up and want to draft something potentially before January. Is that fair?

MEMBER BELCHER: Yeah, I can be the liaison on the follow-up.

CHAIR WILKERSON: Okay, so we'll come back at 1:45. We'll do subcommittee. Can we do 1:45 to -- how much time for me to break out? Do we want to break out in topics after we figure out who does what or not? Do we need to, no?

MEMBER CALABRESE: It's kind of hard to tell right now. Yeah, why don't we --

CHAIR WILKERSON: Okay, so why don't we just do 1:45 to 3:00, 3:00 to 3:30, 5.9, and then we'll move it up if we finish the discussion. Is that fair? And then 3:00 to 3:30, 5.9, and any other topics that come up.

MEMBER McKINNEY: So the -- you're talking about breaking into subcommittees at 1:45 to 3:00?

CHAIR WILKERSON: Well, we would -- first, we'd go over that. We'd figure out who might want to work on one or two of those subject areas we can maybe break out like we did the last time with the subcommittees, maybe have a discussion leader, someone who might want to be the lead, and then we could have -- you know, they could set up a conference call later, and then if we have time, if people want to meet, we can still do that.

And something may come out of Ken's discussion

as well that we might need to spend some more time on, so 5.9 will be 3:00 to 3:30. So lunch is here, and if there are no other questions, we can take a break for lunch.

MEMBER BERG: Changing some of the categories?

People might have a different viewpoint of where they want to participate.

CHAIR WILKERSON: Yeah, so we'll put that chart out. I'm going to make another chart. And I have my little notes here, so I'll try to get that up.

MEMBER BERG: Okay.

CHAIR WILKERSON: Okay.

(Whereupon, the above-entitled matter went off the record at 11:50 a.m. and resumed at 12:42 p.m.)

A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

12:42 p.m.

CHAIR WILKERSON: Thanks again for lunch. We are going to get started with the JPO Strategic Plan and Organization update from Ken Leonard, and thank you for being here.

MR. LEONARD: Well, thanks for -- thanks for having me.

CHAIR WILKERSON: We have lots of questions for you. There were a couple of things that came out and possible questions for you, but we'll let you do your presentation and then we'll follow up with some of those thoughts.

And Stephen may have texted you a couple just to prepare you. I'm not so sure.

MR. LEONARD: All right. Well, one, while I try and find my index card that has my talking points on it, let me just apologize for not being here this morning.

You know, I like to -- I like to be at these

meetings for the whole meeting. And, unfortunately, we had a couple -- couple discussions that popped up in the building that required my attendance on some critical issues including Spectrum and cyber-security and Smart Cities and some of the things I want to talk to you about and I'm sure you want to hear about.

And since I don't have my notes with me, I am going to --

CHAIR WILKERSON: Take your time. Maybe they're here.

MR. LEONARD: I think I will just -- I think I - I think I know what I wanted to say.

So, one of the first things I wanted to talk about was some changes we've had in the Joint Program Office. We're in the -- we've completed a reorganization, if you want to call it that.

Many of you are aware that Brian Cronin who was a member of the team, was promoted to the Senior Executive Service. Actually, I was in meetings with him this morning, but he's working out at Turner-Fairbank.

He still continues to be an important advocate for the ITS portfolio, but one of the things we thought would make more sense inside the JPO being a relatively small organization and kind of being outside the norm of

kind of the org. structure with having an unusually heavy management-to-staff ratio, because we have a fairly senior staff, we went from three supervisory positions to two. So, what we did was we just consolidated the program manager staff under the two existing program team leads.

And to get more in alignment with Federal Highway's terminology rather than calling them team leads, which in some organizations are supervisory and some are non-supervisory, we declared that they are chiefs because that's some official supervisory language inside the Highway's administration. And so, this is just the revised org chart to help you know.

Now, we do still have two critical vacancies. We've got two people that we can tell you about that are new to the organization, neither of whom has arrived.

One arrives in about ten days, is on vacation.

That's Michelle Noch. She's going to be replacing Mac

Lister, who was an off-site employee who managed the

Professional Capacity Building Program.

For those of you who are not fully familiar with that, that's a program where we concentrated a lot of our training, the site courses, you know, CV 101.

All of the -- we boast that we have the world's largest, free, intelligent transportation systems training.

That was what Mac was running.

And three years ago he was making -- he was reaching out and getting about 700 participants in the PCB Program and training exercise -- or training deliveries.

About 700. This is four years ago in 2012.

By the time he retired at the end of this -- end of last year, it was well over 30,000 because he had shifted from doing solely in-person training to using email and internet delivery of training courses.

And one of the things that happened was we went from a lot of three-day courses to a lot of one-hour and three-hour courses, but also allowed people to just train in what they needed.

Also made it more possible for people to devote and target their training time. And so, we were able to really increase targeted, focused training.

So, Michelle Noch is going to come in and it's hard to say she'll be able to replace Mac, because everybody brings a unique set of skills. And Mac had almost four years of experience in the field and incredible knowledge, but Michelle actually has a professional capacity building background.

What we're going to have to spin her up on a little bit is intelligent transportation systems. That's

not her strong suit. But what she brings, she is a Highways employee.

And one of the other pieces that we're adding into that group is the Professional Capacity Building Program is part of trying to accelerate deployment. And so, we're going to broaden her portfolio.

We were doing this with Mac in his last six months, broadening the PCB portfolio so that it's not just the training piece, but it's a lot of the knowledge transfer elements that go with helping states, localities, industry embrace and adopt ITS.

So, it's more than just offering training courses. It's helping people get access to the information that they need whether it's cost-benefit information or, you know, any other kind of information that will help a locality make a decision to deploy ITS technologies, including connected vehicles and other technologies.

MEMBER BELCHER: Will Michael report to her?

MR. LEONARD: Michael Pina?

MEMBER BELCHER: Michael Pina.

MR. LEONARD: Michael Pina, communications?

MEMBER BELCHER: Will he report to Michelle?

MR. LEONARD: No. He is a peer of Michelle's.

MEMBER BELCHER: Okay.

MR. LEONARD: Mike is still managing our communications piece, but, you know, he will be working with her and trying to make sure that -- and, actually, she'll be working across a number of the organizations. So, for example, Marcia Pincus, who has a lot of the evaluation information.

You know, one of the things we have to do as a coordination team is make sure we coordinate inside the JPO and not just -- everybody spends so much time externally facing the folks that they're trying to coordinate with, we're also trying to make sure that they coordinate internally.

So, for example, in order to properly accelerate deployment, you have to be working with Steve Sill to make sure that we're communicating what we need to about standards in architecture.

You have to be working with, you know, Bob Sheehan and the work he's doing with the V2I Deployment Coalition to make sure that the people who are making those decisions, things that, you know, that if V2I deployment is going to move forward with their 20 by 20 concept, there are going to be a lot of states that need to know what it means and how would they go about deploying V2I technology.

And so, we need to make sure that the technical

work that gets conducted not only across the organization here, but across the department, gets packaged in ways that it gets to the people who need to have the information.

MEMBER BELCHER: So, the people in the boxes are peers, they're not -- there's not a reporting relationship

MR. LEONARD: The people in the boxes --

MEMBER BELCHER: -- in the boxes.

MR. LEONARD: -- are peers.

MEMBER BELCHER: Okay. Thank you.

MR. LEONARD: And their supervisor -- basically, we've gone to four categories, but all of these folks work together including our international interns who, you know, we host, but don't specifically supervise. They're supervised by their host country organizations.

The other person we're bringing on board, I will finally have for the first time in three years, a financial administrative officer.

We -- Linda Dodge has been filling that position along with contractor support. And we have hired someone who is coming in, in September from the Department of Justice who has a phenomenal background in financial reporting and financial administration skills. So, we're really happy to have Steven Maged coming on.

He is leaving St. John's, the U.S. Virgin Islands to come work at the ITS JPO. So, if you can imagine what a hardship it must be to give up living in paradise, but it tells you what a paradise it is to work in the ITS JPO.

(Laughter.)

MR. LEONARD: So, I couldn't let that pass without --

MEMBER STEUDLE: Keep telling yourself that.

MR. LEONARD: It's like being -- it's like being on a sandy beach with a pina colada --

MEMBER SHAHEEN: Sounds like it.

MR. LEONARD: -- and just helping to live the dream. So, we'll give the staff time for rebuttal later, but we're really happy to have Steven coming on.

We also have out on the street right now, so tell your friends, tell everybody who might be interested, the vacant position to backfill behind Brian Cronin. Again, non-supervisory, but what we're looking for is someone who has a broad research understanding, someone who can help bring together a lot of the integration -- systems integration, research elements and work within this team.

The other vacancy that is not announced yet, but that will -- should be out this month, is the backfill

behind Walt Fehr. And I think many of you know that Walt Fehr now works for the Volpe organization which is hosted in Cambridge, but Walt's going to be able to work -- he wanted to get back out to the Midwest. He's going to be able to work from his home where his family is in Indiana.

Indiana, right?

SPEAKER: Illinois.

MR. LEONARD: Illinois. I couldn't remember if he was Illinois or Indiana. So he's, you know, he's been able to give up his lease here in Washington and return home. So, he's very excited about that.

And, actually, we still have access to Walt's skills and knowledge through the Volpe Center. So, for us, it's, you know, we've invested a lot in Walt and his knowledge, and so we still have access to it through the Volpe Center. And we'll be bringing on an onsite replacement through a vacancy announcement.

So, those are the big changes in the organization, you know. And they're not earth-shattering, but they're important to us because it has an impact on how we execute the program and the resources we have to do that.

So, let's see. Unless there are questions about that, I'm going to move on to the next slide.

CHAIR WILKERSON: You're in the driver's seat.

MR. LEONARD: All right. Here we go.

MEMBER BELCHER: Have we met Egan?

MR. LEONARD: He was at the last review. I think he's actually been at the two last reviews.

MEMBER BELCHER: Okay.

MR. LEONARD: And you have not met Egan Smith? We'll have to fix that. He is a terrific managing director.

I really could not get through the day without the support I get from Egan. He juggles so many different taskings and activities, coordinates with the staff and really keeps the day-to-day business moving.

Susan and I were talking about the overwhelming onslaught of emails that come in and if you just spent a minute responding to each one, it would almost fill your day.

And so, having -- I don't know how Egan does it, but --

MEMBER SHAHEEN: He does.

MR. LEONARD: -- he does. And so, he is a great asset to the team. And I think many people here have met him and you're all familiar with the other members of the staff.

So, on to the strategic plan. And this is where I had about 18 different bullet points that I'm going to have to try and remember since I can't find them.

You know, we are in the second year of our strategic plan. I just wanted to remind everybody of the vision and the mission that we have.

We have a very simple vision, which is to transform the way society moves. That's what we believe intelligent transportation systems have the capacity to do.

And we do that through conducting research, development and I would call -- education, but also deployment or piloting activities to facilitate the adoption of ITS technologies. And that's all about the movement of people and freight.

And you're all very well familiar with the six program categories. And that's really what I want to give you some updates on and then go into Q and A, because I know there are a number of different questions that people want to talk about.

So, on connected vehicles, probably the most important thing that I believe everybody is aware of is that we still have an NPRM sitting over at OIRA.

That NPRM is still in what's called, I guess, the 12866 process, which is a public process that OMB has

defined where they go back and forth with the Agency, where they ask questions of the Agency, where they allow members of the public to come in and comment on the rule prior to its release.

Kind of in conjunction with that is the Highway's guidance, which is also out for review and the two are kind of inextricably linked. It doesn't make sense to put one out before the other ruling.

Everybody asks me, well, you know, what's the date by which the rule must be public in order, you know, before we say "game over"?

And my response is, there is no set date. I've had people tell me it was May. I've had people tell me it was June. I've had people tell me it was September.

Would I like to see the rule out? Absolutely. It was an articulated goal of the Secretary to get it out in this administration. And I can tell you people across multiple modes worked to get that rule out and over to where it is today. And they continue to work to address comments and questions associated with the rule.

And many of you and many of the organizations you work with have participated in that process, commented, you know, or otherwise tried to help, you know, move that rule along to a public announcement.

There's -- there is the ANPRM, you know. If you want to get a general sense of the rule, you can read the original one that went out in '14, but of course they're not identical. So, you know, and I can't go into the details of the differences.

And we can -- I'm sure there will be some questions around this, but what I can tell you is the rule is still under review. And I do believe that once the rule is released, it will spur greater activity, you know.

We're looking forward to GM planning on putting DSRC into 30,000 vehicles this year. Nothing would make me happier than to see seven or eight other automakers follow suit.

And I do believe, you know, if the rule were released, that would kind of change the risk environment and probably start that -- start that movement.

We can talk about other things that can start the movement towards a connected environment while we wait to see that rule move forward.

The other thing I wanted to mention on connected vehicles, you're well aware of the three pilots that we have going in Tampa, New York and Wyoming.

Those three sites are completing their Phase 1 activities and all of them are being readied to move

forward into Phase 2.

Phase 2 is the deployment phase. So, again, that's, you know, in the process of happening.

About the earliest I would expect to see equipment on the streets at those locations because, you know, once they are -- they move into Phase 2, they have subsequent procurements and activities that they have to engage in to begin the deployment activity.

Probably in the six to 12-months' time frame from now is when you will start to see devices ending up on the streets of those locations. And of course it will vary with the complexity of the locations. But what that means is in fiscal year '17, we should expect to see three new connected vehicle environments up and running as a result of those pilots.

And, again, we continue to, you know, look for questions that are going to be answered out of that.

I know Kirk is looking at me and saying, and don't forget there's one connected vehicle environment that's operating with 130 pieces of deployed roadside equipment in 3,000 vehicles and soon more.

But I think, you know, this is -- this is an important, you know, this is what we hope to achieve when we announce those pilots. It's moving along.

I sat through the oral presentations on one of the vendors and, you know, all I can say is I'm very pleased with the progress that they're making.

So, and the other thing I was going to mention on connected vehicles is this notion of the V2I Deployment Coalition to try and move forward with creating more connected vehicle environments and to -- Kirk, I think the concept is called 20 by 20. Is that the --

MEMBER STEUDLE: I think so. I'm not -- I'm not Deployment Coalition. That's all governed by the western states for some reason.

MR. LEONARD: All right. Well, but the concept being that there are, you know, that there are -- every state could have a connected vehicle environment deployed by the year 2020.

There's enough information that we know about the roadside equipment, we're able to deploy it, we're able to use it. And so, my understanding is that they'd like to see in every state at least 20 pieces of roadside equipment deployed.

And so, I think it's admirable. And I think one of, you know, pieces of feedback and discussion we want to have is to make sure that as people look forward to deploying connected vehicle technologies, that they think

about ways in which they can realize early benefits.

And, you know, some of the things that we think of as areas where early benefits accrue immediately even without widespread like vehicle deployment, is you need to think about first responder vehicles. And you can think about the utility vehicles that states run, snow plows and things like that.

We've done a lot of demonstrations to show how connected vehicles can support those services and provide immediate return to the municipalities that make those investments particularly in the snow plowing arena.

And then the third area would be in transit where, you know, many of you probably live in places where you have transit corridors that have bus rapid transit that go out where you can -- where you could use DSRC as a transit priority and you could demonstrate, I think, some immediate benefits by limiting -- by deploying in limited corridors where you have a lot of bus traffic.

And I think of one nearby here, the Columbia Pike Corridor in Virginia just a few miles away, or the Georgia Avenue Corridor that goes into Maryland, or, you know, the route that goes up towards Baltimore and Ellicott City.

There are a number of corridors here that are

major arterials that you would not have to equip a lot of traffic signals with DSRC. And you could equip a certain number of buses that tended to ride those routes and get some benefits that could immediately benefit the traveling public in ways that would be meaningful.

I mean, if you could save five minutes commute for a hundred thousand commuters, that's material and that creates the kind of public benefit from a mobility perspective that we want to see out of technologies like connected vehicles.

So, we can come back and address questions around any of these topics. I want to move on to automation.

Many of you are aware that the -- Mark Rosekind spoke recently at the TRB event in San Francisco on automation. There's a lot of discussion about the upcoming NHTSA guidance, policy guidance on automation.

I'm not going to go into the details on that. There's enough that's been written publicly, but, again, this is something we anticipate coming out very shortly.

The other thing, and I'll touch on this a little bit more in the emerging capabilities section, but with the Columbus Smart City Award, we do have an automated vehicle component in that.

And so, we're very excited that the JPO is going to be having, you know, a part of the program in Smart Cities that will have this automated vehicle deployment piece.

And, again, I don't think we'll actually see that out on the street in '17, because there's some work that has to be done around the Smart Cities Program.

It's a program that will run for four years, but one of the things in making the budget decisions we had to make, some of the resources that are supporting Smart City came out of our automation budget.

So, this is actually one of the outcomes that we hoped for is that in the areas where we had to cut resources, we would see that the proposals that were refunded actually made up for some of the shortfalls that got cut. So, there were quite a few proposals that included automation and, again, we're excited that we're going to continue automation research there.

There's a lot of other issues going on -- or work going on in the Department, including some truck platooning work out at Turner-Fairbank. We've had some good discussions on truck platooning in the Department this summer.

And so, I'm not going to go into any great

details on automation, but there is an AASHTO CAV which is -- stood up in April which is focusing even more attention on both connected and automated vehicles recognizing that this is an important growth area.

In the emerging capabilities area, the big news is, of course, Smart City and the Columbus award. I think you're all familiar with -- on the data on that.

We had 78 applicants at South by Southwest in March. We downselected to seven. We did have to put a few -- a few additional resources into the downselect to seven, because we were supposed to downselect to five. And we gave awards of \$100,000 to each of the seven finalists. So, we had to do some budget juggling to come up with an extra \$200,000, but we got -- we got seven great proposals.

And those seven proposals, between them, brought about \$500 million in matches from the states, the cities and the industries around those.

So, one of the big things that we're having discussions around aside from our excitement about the Columbus proposal, is how we can keep the momentum moving with not just the other six finalists, but the other 77 finalists and any others that want to come along. So, you know, this Smart City concept is one that I see as vital and integral to the future of intelligent transportation

systems.

If this were 1999, we would be talking about how the future is connected vehicles and we need to do this research and we need to make this investment, because connected vehicles are going to transform the transportation environment.

And I think that would have been a correct statement back in 1999. I think it still is.

It's 2016 and I think in 2030, I hope we're looking back and saying, wow, we started Smart Cities just in time. It is transformational not just to transportation, but to how we live and interact as a society.

And so, I think this is just the start of something very big and our \$40 million is going to go a very long way.

I am a part of a group that meets multi-departmentally. So, about two dozen Federal departments meet to talk about the general concept of Smart City. And there's other work going on around the US Government in terms of Smart Cities, and actually around international governments as well.

I can tell you uniformly in that room, people are looking at the Department of Transportation and say, we

never expected to see the Department of Transportation in the leadership role in Smart City. But with this award to Columbus, that's really where we are.

And, you know, the challenge is going out to other departments to step up and try and do what we did with the Smart City challenge, which is figure out how cities and localities and communities can solve their needs and what their vision is for solving their needs around -- by using things like transportation or energy or the other -- remember, Smart City is not just about transportation. It's about how do we -- how do we live and work better and utilize the transportation system to deliver the goods we need, get people where they need to go for whatever those reasons are.

So, one of the things I want to talk about just in Columbus, and this is something that still amazes me, one of the incredible things in the Columbus proposal was their interest in using the transportation system and using the challenge as an opportunity to solve their infant mortality problem.

If anybody had told me when I came into this job three years ago that I wouldn't be working on solving just the traffic collision problem and the traffic fatality problem, but that we would also be addressing how we were going to save lives by improving the use of information technology and transportation systems provided by the city to make sure that expectant mothers and mothers with small children could get their -- get to the doctors for those prenatal and postnatal care to lower what in Columbus is a -- I think they said it was four times the national average.

I looked at the statistics. They have a very high infant mortality rate. Not a place that you would expect would have such a -- they pull the national average up.

So, they want to use -- part of what they wanted to do in this program is address that problem through transportation services. And so, that's kind of amazing.

And that's -- that is really the promise of something like Smart Cities. It brings together all the elements of intelligent transportation systems, you know, people and technology and transportation systems, and it can be used to solve a whole host of societal needs and ills because you'll recognize the transportation system is integral to everything we do.

So, I just -- I didn't expect to be working in that field or didn't imagine that that would be something I would be thinking about three or four years ago. And, I

don't know, maybe you all thought and I didn't, but it's a pretty exciting thing.

So, enterprise data. I actually do have some notes in front of me on that. Many of you have met Ariel Gold or she -- I know she was at the last meeting.

She is our new manager on the enterprise data area and she is -- she comes from Amazon Web Services and is just this bundle of energy who has these terrific ideas for revamping our research data exchange and the operational data exchange and our whole enterprise data program.

So, she is in the process -- she has actually generated a draft program plan, which I just got that we are reviewing. But aside from firming up and understanding of needs and requirements and stakeholder views on the larger enterprise data systems approach, she's also developing approaches to how we can develop products to support early deployers of technology, trying to develop methods of adoption of products to support national deployment, and also find ways to enhance third party access to data.

So, I mean, all of these things are important elements that we had envisioned and when we created enterprise data, but we've got somebody in the office now

who is focusing full time on these issues working with others around the Department, including our CIO Office, including the chief data officer, Turner-Fairbank and others who are in this area.

So, you know, more to say there. Probably this is an area where we will probably have her come in and brief at maybe the next Program Advisory Committee meeting, because I think at that point we'll have some slides we can talk about where we're headed.

You have heard me say before that I think that data is as fundamental to the future transportation system as asphalt. And I think Ariel takes that seriously and is going to help make that real for us.

Interoperability. This is where I really wish I had my notes, because there's a lot going on. Again, many of you are familiar with what Steve Sill does with standards and architecture.

We're also, you know, one of the things that we're trying to figure out is how do we address the growing expanse of the universe of standards that have to be addressed, you know.

Each of you probably work for organizations -- I see Scott nodding his head -- for organizations that deal in the standards environment. But when you think about

things like the internet of things, which is what we're taking on with something like Smart Cities, you know, Verizon is dealing with this, right, the number of standards that become relevant to what all of us are thinking about becomes mind-boggling.

So, we're actually trying to figure out how we can -- and I'll also point out this is an area that we cut the budget on. I mean cut in half for fiscal year '16 and '17, in part, because of some of those discussions we had before.

We have a new deployment program mandated by Congress, we have the Smart Cities challenge. So, those resources in a static budget environment, had to come from something.

So, one of the areas we cut back on was our standards development activities. So, we are -- we continue to be in an area where we're trying to figure out how to address a growing problem with shrinking resources or doing more with less, which is a challenge.

And one of the things we are looking at and one of the groups that I am talking to, in part, through the work on Smart Cities, is NIST, the National Institute of Standards, and trying and seeing if there aren't lessons we can learn from their approach to standards or others who

work in the standards areas to see if we can't find some efficiencies here.

MEMBER BELCHER: So, just so you know, NIST is going to ETSI for their standard -- for standards help in the Smart Cities area rather than coming to United -- to standards bodies from the United States because of -- largely because of resource issues, but that's bad. I mean, we're foregoing our leadership.

MR. LEONARD: No, I -- and I -- I don't want to give up US leadership in this area, but we are going to have to figure out how larger groups are going to collaborate, share resources and divvy up problems.

And so, I'm not saying we're necessarily outsourcing our standards problem, but -- or questions, but we have -- we really have to figure out how we are going to deal with this growing area.

Because if any of you have ever done work in the standards area, you realize what a time and resource sink standards can be.

MEMBER BELCHER: Well, with -- I'll let you finish.

MR. LEONARD: Okay.

MEMBER BELCHER: I'll come back to this.

MR. LEONARD: We can come back to it. This is

an important area and it's one that I continue to grapple with in terms of what is the best approach for the JPO given the resources it has to address this critical area.

And I know there's an appreciation in the room and certainly on the Hill, for the importance of standards in architecture. It is fundamental.

If we don't get it right, everything else gets more complicated, more expensive and wasteful. So, this is an area that we're going to have to continue to work in.

There are other aspects of interoperability that start to border on accelerating deployment issues like our certification program, our cyber-security work. Those are also areas where -- certainly cyber-security, where we are looking to do broader governmental cooperation.

And not just governmental, but also with industry because, again, the Government can't solve the cyber-security problem by itself. Industry has to step up and own a piece of the cyber-security because that -- it's at the product that a lot of cyber-security attacks begin. And so, you know, that's another area that we're going to have to address.

On the accelerating deployment part of the strategy, probably the biggest thing I want to talk about is the ATCMD grants.

Again, this is the Section 6004 of the FAST Act, which we, the ITS JPO, are contributing \$21 million to the \$60 million pot. And that's on an annual basis for the next five years. So, there will be \$300 million in deployment money available.

Now, there's certain rules that govern that money. One, it's going to be -- the solicitation -- the grant solicitation came out of the Highway's operation office. So, we're working with them and Turner-Fairbank, the three contributors/funders of this activity. We work with them, we provided reviewers and we're in the process - we will award those grants this year.

Now, what I can tell you is that, you know, the grants can be up to about \$12 million. We have to award a minimum of five, a maximum of 10.

I'm not going to tell you how many we're going to award, in part, because we haven't quite settled it, but we definitely got a sufficient number of interest and a sufficient number of bids that we will be able to award all \$60 million this year.

And I expect that we will get a sufficient number of bids every year that we will be able to award \$60 million.

There was a provision in the law that allowed a

take-back if funds couldn't be awarded. And I can just assure you from day one, we have thought we would always award all \$60 million and I'm really happy with the response we got.

Again, it comes at a cost, but accelerating deployment was always a part of our strategy and, you know, it is -- it's important that we get ITS technologies out of the laboratory and into places where people can use it.

So, by the next time we meet, I'm sure we'll be able to talk to you about the awards that are made in this area.

I was not personally a reviewer, but I am aware that we got quite a number of solicitations and good responses. And so, we will be seeing some exciting awards coming out of -- out of that grant program.

And so, across the whole strategy, I feel like in each of our six program areas we are making good progress, you know, we're seeing a lot of activity.

So, I think that's my last slide. That's my last slide. So, I figure with that, I'll answer any questions anybody has, if I can, starting with Raj.

MEMBER RAJKUMAR: Ken, thanks for that insightful presentation. I was wondering whether you could speak to the NPRM schedule given the pending positions at

FCC.

MR. LEONARD: I can't really speak to the schedule, you know. It is there and I know that everyone is eagerly awaiting a decision, you know.

I do believe that the sooner we get it out, the sooner it will -- we will make progress in creating a connected vehicle environment and reducing risk for everybody who wants to see that environment started, you know.

For the ITS JPO, one of the things I'm trying to think about is, you know, how do we move forward without that regulation in place? Because if it came out tomorrow, we're still two years away from a final regulation.

So, you know, every day that goes by leaves me thinking, well, we know what a connected vehicle environment should look like, we've built a couple, we're building a couple more. How do we move forward from where we are with or without that regulation?

And I, you know, I readily admit that not having the regulation changes the risk equation, but what alternatives do we have and can we think of that will promote that environment that can reduce collisions, save lives, increase mobility in the absence of the regulation?

So, you know, what I can tell you is there have

been questions on cost-benefit, on Spectrum, on cyber-security, you know, on a host of issues, and these things are in the public record and I'm like everybody else waiting to see a -- NHTSA be able to release that rule.

MEMBER RAJKUMAR: Is there any way that this committee or community can help?

MEMBER MCCORMICK: I mean, if I said, like, Ken Leonard said it was coming next week, would that help?

(Laughter.)

MEMBER STEUDLE: Well, we're having an extra meeting in three weeks. So, you can come back with your --

MR. LEONARD: I don't think it would help me if you said that, you know. What I can tell you is that, you know, it's a public process.

My understanding is that OIRA is hearing from people and on both sides of the issues. I mean, there are -- there are, you know, a lot of people in this room want to see a DSRC connected vehicle environment.

There are other people who want that spectrum for other purposes. There are other people who have concerns about electromagnetic radiation somehow being a health hazard and view DSRC as adding to that environment.

So, you know, there's a whole host of things in the public record about where people are expressing their

concerns. And there are people who weigh in on both sides of those issues.

So, you know, I don't have any magic insight into what will tip the balance for the decision-making. The administration has announced publicly two goals. One, to make 500 million -- 500 MHz of spectrum available. Also, to get the rule out and create that environment. So, just on that issue, you know, there are competing goals.

And some of the other issues, you know, I saw a petition that talked about that somehow we were singlehandedly responsible for the impending zombie apocalypse, that's an actual quote out of a filing, if DSRC became available.

Somehow I think it forgets that the drivers are not zombies. They're people like you and me who are driving vehicles that just have additional information, but, you know, so there's heated emotions and perspectives and I think, you know, people just need to continue to let that process work its way out.

And in the meantime, we're moving forward with adding to the body of knowledge, help -- everything we can do to try and reduce risk, talk to the segments of the industry that can help bring about a connected vehicle environment.

And I know NHTSA is working, you know, on a continuous basis to address all of the concerns associated with that rule. And we regularly continue to meet with them and say, is there anything we can do? Is there any research, any question we can answer that will help resolve the -- whatever uncertainty is keeping that rule from being released by OIRA?

And so, I don't have a --

(Simultaneous speaking.)

MR. LEONARD: Steve.

MEMBER ALBERT: We'll start calling you Walking Dead Leonard.

MR. LEONARD: Yeah. Thank you.

MEMBER ALBERT: You mentioned the first --second grant that you mentioned, that was around \$60 million.

Has that been allocated, but not awarded, or is that something that's going to be announced soon?

MR. LEONARD: The ATCMD grants, or Section 6004 of the FAST Act -- ATCMD is Advanced Traffic Congestion Mitigation Deployment grants. Those are the grants that I said the ITS JPO was contributing \$21 million to --

MEMBER ALBERT: Right.

MR. LEONARD: -- Turner-Fairbank, and the

Highways Operations are contributing the other \$39 million.

That solicitation was announced and has closed for FY16.

MEMBER ALBERT: Okay.

MR. LEONARD: We're in the midst of the evaluation process and fully expect an announcement before the end of the fiscal year. So, that --

MEMBER ALBERT: Do you expect another Smart Cities-type initiative; do you think, maybe --

MR. LEONARD: Well, let me just stick for a moment with the 6004. I expect four more of those.

MEMBER ALBERT: Okay.

MR. LEONARD: So, every year I expect a \$60 million grant solicitation.

One of the things that that solicitation calls for is both a geographic and technological diversity. So, over time, you know, we should see a fairly wide geographic and range of technical solutions being proposed and funded.

Now, some of those, and certainly within the scope of the ATCMD grants, are Smart City-like activities. That was certainly -- I think it was specifically enumerated in the grant area along with several other focus areas.

One that I mentioned was connected vehicle first responders, electric vehicles, connected vehicles. All of

those were in the grant solicitation.

And so, I think we'll see some variations of those and different emphasis to round up the geographic and technical diversity as that solicitation goes through five years of activity.

MEMBER ALBERT: Thank you.

MR. LEONARD: In terms of any specific subsequent Smart City solicitation, I think you may see some others coming out of other departments before you see another one coming out of Joint Program -- for instance. But, you know, at this time, we are not planning a major \$40 million solicitation.

I think you will see some work coming out of the Joint Program Office that's relevant to Smart Cities. Again, keep in mind we had a Smart Cities program. It's been a part of the ITS portfolio since we launched the strategic plan.

And even, you know, well over a year and a half ago Marcia Pincus on the staff, I don't know if she briefed here, but we were doing briefings around the Federal Government on Smart City activity. Scott.

MEMBER BELCHER: So, a couple of things. First, on the electromagnetic issue, I take that seriously. I

know Brian and Verizon and TIA are subject to hundreds of lawsuits right now on that topic, the fear that -- that using cell phones causes brain damage and it's a big deal.

MEMBER BERG: That's been going on for 30 years.

MEMBER BELCHER: I know. Yeah. But when you're on the receiving end of these --

MEMBER BERG: Of course.

MEMBER BELCHER: -- these cases and --

MEMBER BERG: It has a certain level of intensity, right.

MEMBER BELCHER: -- you get them every day, it's pretty scary.

MEMBER DENARO: This is on what, now?

MEMBER BERG: It's electromagnetic exposure to humans.

MR. LEONARD: Electromagnetic exposure and --

MEMBER DENARO: From?

MEMBER BERG: From cell phones, for example.

MR. LEONARD: -- it's impacts on -- or radio or any kind of -- any kind of electronic emitter.

MEMBER BERG: Anything, yeah.

MEMBER DENARO: Okay.

MR. LEONARD: So, I do take it seriously. And when the initial comments came in on the ANPRM in this

area, I asked if there was a sufficient body of knowledge available to NHTSA to address the comments or if we and the JPO needed to fund any research.

We did not fund any research in this area, but took it seriously enough to ask, you know, is there a sufficient body of knowledge already in existence to address the comments that we had?

MEMBER BELCHER: So, if you need help, I know Verizon, I know the other carriers, I know, you know, there are experts out there and there is a huge body of knowledge out there on whether it -- on the health effects.

MR. LEONARD: And I will, you know, I can make some inquiries again of Matt and others to see if they continue to need responses in that area, but I mentioned it simply because if you look at the public document, you will see public comments expressing concern in that area.

MEMBER BELCHER: Well, if we could, I'd be happy to.

MR. LEONARD: I appreciate it.

MEMBER BELCHER: The second thing which probably goes into the category of -- yeah, we -- of course we thought about it, and that is -- and one of the things I've always thought about would be an easy way to get what -- get penetration of DSRC is to work with IBTTA and the toll

agencies because it's -- it wouldn't be expensive to put a DSRC chip in the -- on the responders, and you have a concentrated group that uses the same roads every day, and you could demonstrate real safety very quickly.

Are you working with Pat and IBTTA and that group?

MR. LEONARD: I can tell you that I've spoken at IBTTA and certainly we recognize that DSRC is one technology that certainly could be used for tolling.

And certainly depending on how legislatures decide to fund road transportation and tolling activities, I mean, some people have talked about VMT.

From an ITS JPO perspective, we're agnostic as to whether or not there's a VMT system or a gas tax. We recognize that there are a number of technologies that can be used to support that NDSRC as one of those technologies if legislatures want to go in that direction.

MEMBER BELCHER: So, I'm actually thinking of it a little bit differently. I'm not -- I know your situation there and the sensitivities with that.

I'm thinking of it as an overlay on top of whatever system they have. Putting another chip in the transponder is easy and cheap --

MR. LEONARD: Right.

MEMBER BELCHER: -- and they've got gantries that are easily accessible. My guess is with some creative grant-making, you could get widespread deployment with very low funding.

I mean, I think -- I think you -- I just think it would -- it would happen pretty -- it could happen easily.

MR. LEONARD: I, you know, I think it's worth having further discussion about -- I can see, you know, positives and negatives.

One, is that clearly a national laydown of DSRC gives something that we don't have yet today despite the expression of congressional interest.

I think Congressman Mica put in that he wanted to see national interoperability in the tolling system, and we don't have that nationally.

DSRC would enable that if it were in a national deployment, because you have different competing tolling standards and there are multiple ones.

I do know that there are manufacturers, I believe Kapsch is one of them, that has made a unit that has a DSRC reader in it that can be used for tolling purposes.

I don't know that they're actually using it in

any deployments, again, because of right now the limited number of deployed units of, you know, light vehicles with DSRC in them.

If we got to the point where it's rolling out of every vehicle made -- manufactured in America, that problem gets solved very quickly, you know. In ten years, pretty much it's universal.

MEMBER BELCHER: But this is your aftermarket play as well.

MR. LEONARD: I agree. I agree.

The one issue that I would want to make sure that we addressed would be that with regard to the privacy aspect in terms of the information we transmit over DSRC, we just care that your 2,000 pounds of metal turning left in the intersection. We don't care who you are.

If I'm collecting a toll from you, I want your Visa, you know. I do care who you are, because I want to charge your bank account for that 75 cents.

So, how we address that -- our safety and I don't want to use the word "anonymity focus," because I -- anonymity is rare in the world, but that respect of privacy that's we're not about knowing who you are, we're about preventing the collision whoever you are.

And so, balancing those interests and figuring

how to address that, clearly it would have to be an opt-in rather than a mandated system that you attached your Visa to. So, I think that would require further discussion.

MEMBER BELCHER: I just -- it's an opportunity.

A similar opportunity is, if you haven't thought about it,

and I'm sure you have, again, I don't mean to raise things

you've already thought about, but I want to make sure it

didn't slip through the cracks.

We talked a little bit about this before. There's seven or \$8 billion -- or \$7 billion has been allocated to create a public safety network. And, you know, I don't think, quite frankly, that DSRC is even on their radar screen.

And it's probably too late to get them into that process, but it's probably worth a trip over to see Kennedy and just to explore that.

MR. LEONARD: And that's something -- we may have had some of those discussions. There's another office in Highways that is dealing with that. And Linda Dodge on our staff was involved in the enhanced 911 activity, which I believe is tangential to that.

And I know that they were having discussions, but you're taxing my recollection on whether or not -- what the resolution was.

MEMBER ALBERT: That's a -- those discussions have been going on for about 20 years now.

MR. LEONARD: Yeah. And I'm aware of some --

MEMBER SCHROMSKY: Well, yeah. It's supposed to be ready by 2020, but --

MR. LEONARD: And I'm aware of some discussions last year, but there were still some Spectrum issues that they were ironing out. But it would be worth reopening that issue and I'll take note of that.

MEMBER BELCHER: Well, and it's out for bid right now and a number of the big players, you know, for it to be successful you're going to have to have a big player win it and invest in it. And so, again, it's another thing to at least explore.

The final thing --

MEMBER SCHROMSKY: Well, one comment on that. I mean, one of the things that gets overlooked when we first met, is the money has been appropriated, but future monies have not been appropriated, right?

MEMBER BELCHER: Well, and it's not nearly enough money.

MEMBER SCHROMSKY: So, I mean, when you look at one of the things, if I take my non-Verizon hat off, right, if I look collectively, the carriers probably spend close

to a couple hundred billion dollars building up their networks and you're talking about six to \$8 billion for a next generation, it's supposed to cover every inch of the United States, public safety network.

You run the math, you come up short with no guaranteed income as well, right. I mean, there's no guarantee. It's not a mandate that state and local agencies have to use that network, right, so that there is a chicken or egg kind of thing here or Field of Dreams, whatever one you want.

But, I mean, I think it -- I think one of the things we're addressing is kind of a blending model using the best of both worlds where you would use, you know, dedicated network, and then you would use commercial services to supplement those areas, which I think is the best of both worlds because all in, I mean, I talked to Harlan McHugh (phonetic) and it's worked in their program for years.

And as Steve mentioned, this has been going on for 20 years. It got highlighted before, it was something before 9/11, and then it got highlighted in 9/11, and we're 15 years past 9/11, right. So, but there is an RFP on the street.

So, there's some lessons that could be learned

from there, but, you know, I think one of the things to look at is it's really a partnership between commercial and government, I think, is probably the best way it's going to happen. The supplements and things are going to be holes.

MEMBER BELCHER: But if Congress were creative - a big "if" and not likely, but if they -- if they really
wanted to ensure the deployment of DSRC, there is a
potential play there --

MEMBER SCHROMSKY: Sure.

MEMBER BELCHER: -- and that would be a win-win where they could incent that deployment and it would make it much easier for Verizon or AT&T or whomever the winner is.

MEMBER SCHROMSKY: Yeah, there's ways of leaving
-- I think one of the things you look at when you look at
DSRC and I think what you're getting at is there's
possibilities outside of just columns in terms of talking,
right.

So, if I equipped a fireman or firewoman with a jacket that has DSRC in there and I start mapping the building, I know exactly where the individuals are, yes, there's real, you know, if you talk to some people and that wasn't the intent of what it was designed to do, so, right.

So, I think there's definitely lessons learned

that could be applied to JPO. I don't disagree with that.

I think -- because I think we looked at a couple committees. They were looking at first as a model of how you do that private-public partnership to put a network, right, a first responder network. Could that also be a DOT network, right?

I know Shelly when she was looking, that was one of the models that they were looking at and say, okay, if this works, can we take some of the things and make it applicable to DOT?

And I think, you know, we're finally there and to Scott's point, there's an RFP on the street. So, it's still a couple years away though.

MEMBER BELCHER: One last comment and I don't mean to dominate the time, but so you -- with respect to standards having worked with you on standards for many years, I'm devastated to hear that you're cutting support in half.

It's going to create lots of challenges for the Department and for your ability to support it.

One of the things that I'm seeing on the communication side on standards is the -- and all standards bodies internationally is kind of opening up the aperture to address new technologies.

And the traditional standards processes like you see through ISO/TC 204 or IEEE or TIA, in many cases don't work anymore. And so, the whole industry is shifting to much more best practice-based, open source software development.

And it's challenging in our environment, because you don't want to install -- you don't want to install a software system in your car that you've got to iterate.

And I get that, but it is -- it is at least I think important for the ITS JPO to be aware of these new tools, because they're either going to -- you're either going to drive them or you're going to be the beneficiary of them whether you like it or not, because it is -- it is very real.

MR. LEONARD: You know, I -- like I -- again, I'll say it one more time. I think standards is an incredibly important area. We have to figure out an approach that is somehow more efficient than what we, you know, that will enable us to address the growing -- I mean, it's just staggering how many standards we're going to have to deal with.

I can't scale the resources and still have an ITS program if I try and match dollar for dollar our previous approach on standards. And so, we have to -- we

have to be inventive and we have to come up with something and we have to look to see what is -- how is the rest of the world dealing with this problem, too.

It's not unique to ITS JPO. I mean, we --

MEMBER BELCHER: No, except for in Europe, they fund this. They take it seriously from a competitive -- they want their industry to win this. And so, they're willing to put money into it.

I mean, that's the difference and that's what we have to deal with, or else we're going to lose.

MEMBER SCHROMSKY: So, Ken is it -- that was going to be my -- on the interoperability piece, because I look at it -- I'm sorry, Raj -- I look at it as not standards. Maybe it's not flashy because it's perceived as boring, right. To your point, it's a lot of work.

I would try to spin it more in terms of security and credential. Because if I am a city planner, right, and I am using this technology, as you said, Smart Cities -- and I think Smart Cities is a catchall. It could be anything and everything, right. It could be smart lighting, it could be smart vending, it could be smart parking, toll collection, whatever it may be.

And if everybody represented a different company or device manufacturer, you're all going to transmit to me.

I think -- the question is, I know I can get the data from all of you to me. I might have to have a platform that takes all how you transmit it, you know, ZigBee, 5G, 4G, 3G, UHF, VHF. I could collect all that data.

What I don't see and what -- I'm actually meeting with a federal healthcare agency, is I don't have a common security credentialing platform among all of you. And I'm responsible for all of you that if one of you act haywire, for lack of a better word, I have to have a way -- a mechanism that shuts you down, whatever it may be and I think that may be something of interest.

If you look at interoperability, I think transmission will eventually go to ones and zeroes and IP. We can get the data back and forth, right.

I think one of the areas if you look at Smart Cities, it's really the credentialing piece okay, if you want to hook into -- if I look at a city and say, if you're going to hook on, you're going to have to put this security wrap around your transmission, this is how you're going to get into me, right, because this is a way -- I basically put a label that I have verified if I am in the city of Detroit that, you know what? You're good to go, right.

I think that's one of the big areas that a lot

of people are grappling with. I can get the data to and from and I can ingest it. To Scott's point, there's ATIs, open source, there's common language there.

But in terms of security, I know we looked at this before that SCMS, right, I think that area is really one that maybe if you maybe took away operability part or maybe credentialing or security, people start saying, you know what? National security, infrastructure.

Then more people look at this and say, hey, this is, you know, a national security issue as well as a standards issue. Kind of like a little Trojan horse there may be a way of garnering or working with another agency to get you resources.

MR. LEONARD: I agree. Probably two things I should respond with. One was on the connected vehicle up there, I probably should have mentioned we're making great progress on the SCMS and anticipate having an operational version in time to support all of the prototyping activities, which was our plan, but we're on track for that.

The other part of that is in our early discussions with the Department of Commerce and others around the larger Smart Cities activity, not just our challenge, but, you know, bringing in all of the other

players, one of the things we -- two things we wanted to share with them.

Well, one are connected vehicle reference architectures and standards work we had done, and also the security systems, a certificate management system so that they would understand where we were coming from. Because we recognize that as transportation interfaces with utilities and energy and all these other activities that, you know, there's going to have to be a system of systems compatibility that really gets the whole heart of the internet of things.

So, we had some of those preliminary discussions including offering, hey, you know, we've invested all this resource into this and created an advance environment. Plagiarize it to your heart's content, you know, so that -- because, you know, sometimes the early systems become the standard. And so, we have had some of that discussion as well to make sure.

On the cyber-security issue, I'm kind of a -two minds on this and I share this with different groups.

There is a balance between a single, consistent cybersecurity solution and security through obscurity.

The, you know, if we all use the same package, you know, pick a vendor who sells an email security, if we

all use that same vendor and you get hacked because they figure -- they can get into all of us.

If we all use a different one and you get hacked, it's a shame for you. The rest of us are still secure and then I have to figure out how to hack each new system.

So, when you think of security in layers of defense, we have to have that balance between, well, if you can hack into the air traffic control system, can you also hack into the energy system, can you also hack into the phone system, and retail, and connected vehicles, and automated vehicles?

Where do we want commonalities that represent the best practices and where do we need to have differences that say, okay, if you got -- if you break into that one, you can't break into this one? I think that's a debate we'll be having for a long time.

MEMBER RAJKUMAR: Ken, earlier this year there were some indications that in 2015 there was an unexpected, but significant spike, the number of road fatalities.

Does the USDOT have any additional data to confirm that if that was, any early inferences of why that's happening now?

MR. LEONARD: So, I think if I -- and I --

that's one piece of paper I didn't -- I had in my hand yesterday, I almost thought about bringing it, was that the fatalities, the FARS data system, I think, is reporting -- I want to say -- 35,800 fatalities in '15 up from 33,675.

So, it was almost a seven or eight percent increase in fatalities with only about a three and a half percent increase in vehicle miles traveled. So, that is a -- a very real spike unaccounted for by the increase in miles traveled.

I can tell you inside the Department there are a lot of folks, and I was in a data meeting across the Department, where this was the topic of discussion. We really want to get at the heart of, you know, what's happening regionally.

And it was in almost every region of the country. I think there was a -- down in the Texas southeast area, I think there was an actual decline for the region. But if I recall, almost every other region in the country had significant increases.

I think northwest was up 20 percent. And, again, without the data in front of me, I don't quote the statistics, but it's significant, it's a concern, and we really do want to get at the heart of where is all this -- where is it coming from, because we don't understand what's

causing it, you know.

Why would pedestrian fatalities be going up?
Why would bicycle fatalities -- is it simply more exposure?
Is it more distraction, you know? There are some root causes here that people want to get at the heart of.

A lot of it does come down to behavior. I mean, the Secretary --

MEMBER CAPP: Pedestrians, too. Aren't they up a little bit more, Ken?

MR. LEONARD: What's that?

MEMBER CAPP: Pedestrians --

MR. LEONARD: I believe --

MEMBER CAPP: -- are partially up. There's a factor there.

MR. LEONARD: -- pedestrians, bicyclists, vulnerable road users generally are up.

MEMBER CAPP: Yeah.

MR. LEONARD: You know, I believe that -- I won't quote him exactly right, but the Secretary, you know, quotes the number 94. 94 percent is the number of times the driver is, you know, the contributor.

It's very rare that it's the vehicle that breaks down and that, you know, a tire or a malfunction or a brake failure. It's, you know, nine and a half times out of ten

it's the human being in the equation that is the problem. And so, that speaks to behavior. And but we in order to address it, in order to find -- in order to get that downward trend, we have to understand it better.

Now, you all know I believe that intelligent transportation systems and the connected vehicle environment are the best chance we have to keep that downward trend.

And I was thinking about this commuting in, in the morning and I really need to, like, buy a paper or something instead, but I was thinking, you know, in a hundred years of surface transportation -- actually, I was reading an article yesterday about the first person who died in a traffic fatality in 1899, the first American.

The first traffic fatality was actually 30 years earlier with like a steam-powered vehicle in 1869, but the first American died in 1899 and it's been downhill ever since, right.

The numbers have climbed for 50 years, the number of traffic fatalities. And we created the NHTSA organization and the Department of Transportation and, you know, the public outcry about fatalities. And the government and industry work together and created things like seatbelts and crumple zones and safety equipment.

And for years the number of vehicle miles traveled went up and the fatality numbers and rates went down. Went down like six or sevenfold. And that's because -- you've heard me say this before: If we still had the same traffic fatality rate, we'd be killing 125 or 150,000 Americans every year. That would be unconscionable. 35 is way too many -- 35,000 is way too many.

I think our next big step downward comes through connected, and the next big step after that comes down through automated.

MEMBER DENARO: So, Ken, before we leave that topic, it's been trending up now for like three years, I think; is that right?

MR. LEONARD: I think this year was --

MEMBER SCHROMSKY: Distracted driving, I think, is one of the -- I think we saw that presentation from --

MR. LEONARD: But I think --

MEMBER SCHROMSKY: Teenagers.

MR. LEONARD: I think this is the first year for a total increase. Different elements. I think pedestrians has been trending up.

MEMBER SCHROMSKY: I thought it was teenage drivers we saw trending up.

MR. LEONARD: I'd have to -- again, I'd have to

look at the statistics.

MEMBER SCHROMSKY: So, there hasn't been any analysis on those previous years yet in terms of getting to cause. We just don't know at this point is that right?

 $$\operatorname{MR}.$$ LEONARD: Well, again, my recollection was that we had been trending down --

MEMBER SCHROMSKY: Yeah.

MR. LEONARD: -- from about 2008-2009 and that this was the major turnaround year.

And, Raj, you're shaking your head yes. Do you remember any -- I don't remember us being up in '12 or '11, but generally the trend was downward --

MR. HOEFT: I think it started in like '13, if I remember.

MR. LEONARD: We could get out the NHSTA --

SPEAKER: I have -- I think 2014 was the first year that it booted up. And it booted up from 2014, and then 2015.

MR. LEONARD: Okay.

MEMBER DENARO: Okay. So, we just don't have the analysis yet.

MR. LEONARD: Yeah -- or I don't have any analysis of it, yeah.

MEMBER DENARO: Yeah.

MR. LEONARD: I do know that the vulnerable road users is a significant -- I believe that was the major uptick in '14.

MEMBER DENARO: The which?

MR. LEONARD: Pedestrians, bicyclists, motorcyclists.

MEMBER DENARO: Oh.

MR. LEONARD: What we call "vulnerable road users."

MEMBER DENARO: Yeah. Yeah.

MR. LEONARD: People not sheathed in a ton of steel.

CHAIR WILKERSON: Any other issues about the FHWA? Did I miss that? There was a discussion on FHWA?

MEMBER GOODIN: Right. We had talked earlier about the response to your recommendation on P3s, you know. We were talking about how through the Smart City initiative it was staggering how much private interest was generated.

I mean, you alluded that, too, but the type of barrier at least, again, in Austin we're kind of regrouping and figuring out where we're going and one of those barriers is procurement, law, how do we -- how do we do these partnerships?

We had recommended exploring that in our -- in

this committee's recommendations, and it would -- the response was that FHWA has been looking at it for kind of the hard side, the infrastructure side.

So, the question came up, then, to what degree are we leveraging research dollars kind of across DOT towards some of the things that we, you know, some of the items that we have recommended from this committee? And that was one, as an example.

MR. LEONARD: Well, it's a good topic. And, you know, one I was discussing with staff this morning.

I mentioned the \$500 million in money that was put on the table in the Smart City process. Specifically to Columbus there's our 40 million, there's the 10 million from Vulcan Foundation, five or six million essentially from Mobileye, but there's a total of \$140 million in partners in Columbus.

And by partners, I'm talking about people -- 140.

MS. GOODIN: Because they leveraged.

MR. LEONARD: So, you know, in their proposal.

So, I, you know, every once in a while somebody says, oh, gosh, you know, it's a shame you lost that money.

And I'm thinking the ITS budget just grew from - we turned 40 million into 140 million.

MEMBER GOODIN: That's amazing.

MR. LEONARD: I'm trying to figure out how to do that with the other 60. If I can do that every year, I don't have to go to Congress and say "increase my budget." I found a way to do it, you know -- boy, I sure wish that that wasn't in the transcript.

But, you know, the idea of how do we use publicprivate partnerships, how do, you know, how do we get
stakeholders interested in learning from this and
leveraging public investment and private resources and
achieve public ends?

MEMBER GOODIN: Uh-huh.

MR. LEONARD: So, I still think this is a growth area for us. I was talking to staff about a proposal, you know, a staff proposal and have them back in consultation with other people, legal and acquisitions in the office, to understand public-private partnership.

I've got meetings on my calendar this month to talk to people outside of the Department about public-private partnerships. And I've had discussions with our own legal and acquisition people to better understand how we do this.

Now, there are positives and negatives to it.

And I'm not saying it's going to solve all our problems,

but it is something -- it's certainly something I want to look at and figure out how we -- now, we've often had matching programs, right?

These ATCMD grants I mentioned, 60 million -- 60 million has to come in from the private sector, but people were able to do that. People were able to get matching grants.

So, how we can do that and do it in a positive and constructive way and maybe increase the amount of money people can bring in is something I want to continue to look at as a way of leveraging ITS JPO resources to achieve this, but I know what -- it's not just a simple answer.

There's a lot of work that went on in the Department and outside of the ITS JPO. It helps when the Secretary's office is -- the Secretary is making the announcement. He's flying down to South by Southwest, you know.

I can't do that with every JPO project. That is -- we owe a great debt of gratitude in the JPO to the Office of the Secretary, to Mark Dowd who is the assistant Secretary, and also special advisors to the Secretary for the visibility he helped garner for this Smart City challenge.

It would not be where it is without his vision

and his input and his dogged determination to make this work. So, I --

MEMBER GOODIN: I think Kirk mentioned -- and it's not -- it's not just Smart Cities, but I think states and local governments just -- this is a huge challenge --

MR. LEONARD: Yeah.

MEMBER GOODIN: -- to figure out how to make these work and politically and legally and --

MEMBER SHAHEEN: We're not really set up to do this, you know.

MR. LEONARD: We're not either.

MEMBER SHAHEEN: Yeah. And so, how do we, I guess, facilitate that? Through the research program? Maybe it's lessons learned coming out of Columbus or the other Smart Cities. I'm not sure, but, you know, what I learned having participated, and I know Ginger did, too, is that these guys aren't set up for this.

MR. LEONARD: Yeah.

MEMBER SHAHEEN: And, I mean, there's a lot of land mines.

MR. LEONARD: Yeah.

MEMBER SHAHEEN: So, working with a private sector from a public perception -- perspective, you know, is there unfair competition and those types of things?

And it just seems like there's got to be a way to set it up so that there's more protection and makes that procurement process itself easier.

And the other comment I would have is a lot of the cities have never, I think, put together anything like that before. They're used to writing grants --

MR. LEONARD: Right.

MEMBER SHAHEEN: -- for stuff like buying a bus. And so, they didn't really even know how to respond to writing those proposals. So, lots of, like, unknown territory that, you know, maybe JPO can assist with. I don't know.

MEMBER BERG: Maybe that -- maybe that's one of the best things of having, I mean, let's take like the DARPA Urban Challenge. There was only one winner, but look what it -- it almost started a whole automated vehicle business domain, you know.

Maybe this idea of a winner and 77 other cities going, oh, man, you know, we really got to start thinking about this, that might be the biggest benefit out of it, if anything, and not just -- not just what goes on in Columbus.

MR. LEONARD: Absolutely agree with you. I've said those words. I know we believe that and we even try

and avoid the winner language to like that there was only one winner.

There's only one person who's getting 40 million from us. I think there were actually a lot of winners out of this process and the whole Smart City concept itself was a major winner.

MEMBER BERG: Right.

MEMBER SHAHEEN: Yes.

MR. LEONARD: But we had cities approaching us out of the 71 after South by Southwest, who said, well, we still like this idea, we still like this proposal, we know you're not giving us any money, but we want to learn from what you're going to do so that we can -- we liked our proposal. We still think it's the right answer for our jurisdiction.

That's a winner. That -- and that's -- that's like when I told you I sit around a room with -- about this size with colleagues from all the other federal agencies talking about Smart City and everybody is just in awe at the interest and the excitement that got generated out of that challenge.

MEMBER BERG: I think that's what Ginger and Susan are talking about. How can we use that momentum before it wanes?

MEMBER SHAHEEN: To leverage more money.

MR. LEONARD: What do you suggest?

MEMBER BERG: I don't know. I'm not an expert in any of that stuff, so I don't know. Maybe people like Kirk who, you know, been --

MEMBER SHAHEEN: Well, Kirk was talking about procurement as a major obstacle.

MEMBER BERG: Uh-huh.

MEMBER STEUDLE: And it's an issue with all the grant programs. Whenever you put one in, you know, we've gotten private partners that want to come along and say, are you going to provide this, you provide this, we'll provide this.

But when we send it in, we've got to send it in pretty generic and not say here's the partners. Because when we get it back, we have to do a procurement to then pull them into the process.

So, you're taking the information and you're packaging it, sending it in and then doing procurement after, or if there's a long enough lead time, you can do procurement before about who wants to be on board, but at some point, there has to be a public procurement component.

MEMBER SHAHEEN: Right. And it's awkward.

MEMBER STEUDLE: Otherwise, whoever is taking

the lead whether it's the mayor, city council, the governor, whoever, is out on a limb. Well, why did you pick them and not them, you know? Did they contribute to your campaign?

And there may be zero truth to it --

MEMBER SHAHEEN: It's depth perception.

MEMBER STEUDLE: -- but the opponent will just - whoever their political opponent is will crawl all over
them for that.

MR. LEONARD: Sure.

MEMBER STEUDLE: So, it's a -- and it's not just the Smart Cities piece, it's all of them, you know. Even the last one that -- we won't talk about the deployment grant, but it's -- all of those deployment grants have had the same kind of -- when we did the safety pilot, we had the same issue.

MR. LEONARD: I know, and there's always going to be -- like it's -- it's a challenge when, you know, we know it's tough for people who are competing. It's tough for the office that's trying to make an award and make the selection, you know.

And I can tell you in the Smart Cities challenge process, it was a different kind of procurement. It moved faster than anything we've done before on this scale.

I mean, you know, to give you a sense, for the deployment, the CV Pilot Deployments, we did two years' worth of pre-work before that solicitation went out.

We conceived, launched, went through two phases and selected in nine months on this at the same amount of money, essentially, you know, give or take five percent. This is the same amount of money, you know.

Just even the process of generating the NOFA and the number of iterations we went through and the vision elements and the background crafting and the public outreach that went with it, you know, it was just tremendous.

And then not knowing how many proposals we're getting and being able to, you know, to mount an evaluation whether you get three responses or 300. And, you know, we kind of had a little informal betting pool, no funds were exchanged on, you know, the bragging rights to the winner in terms of guessing what the final count would be.

And we had somebody who guessed 80 and I, you know, I thought that was pretty good to get 78 people applying for the 78 cities. So, it's -- it is a challenge to have to down select from that many because there were really good proposals and really good ideas.

MEMBER STEUDLE: You know, one thing in looking

at the balance in the future is -- well, everybody is applying for one grant. So, there's 77 cities that spent some time, some agency is putting those together, and seven spent a lot of time and only one was the winner.

You can do that a couple of times, but you can't do that very often. You can't be second through 77 more than once or twice and just say, this is not worth it, I've spent way too much money putting this together.

MR. LEONARD: But, okay, again, one difference, each of those seven got a hundred thousand dollars.

MEMBER STEUDLE: I'm talking about the other 70

MR. LEONARD: Right. Right.

MEMBER STEUDLE: -- that went through the first process, because those don't just happen overnight.

MR. LEONARD: Well, that's true. Shorter proposals --

MEMBER STEUDLE: Having been part of those and not one of the final seven, it isn't insignificant to put the first phase together.

MR. LEONARD: That's true. I mean, it is a -it is a tough choice, you know. If you're going to throw
your ring in the hat, you know, your hat in the ring,
you've got to -- you have to know how much you want and

then whether, you know, whether you're willing to make that investment. And --

MEMBER SHAHEEN: That's why I think the approach with the congestion mitigation grants maybe is a good choice, you know, where you have five to ten awards going out per year.

MR. LEONARD: Uh-huh.

MEMBER SHAHEEN: So, then there's a higher chance of a win, right?

MR. LEONARD: That's true.

And on those, there is a 50 percent match. So, people will have to bring money to the table.

MEMBER SHAHEEN: Uh-huh.

MEMBER GOODIN: So, I'm going to circle back to kind of, I think, where we started with this discussion back to our recommendations.

So, the response on this recommendation that we have about exploring how P3s could be used for ITS, the response was that there's capabilities now within Federal Highways and they've done a lot of work in P3s given that it's a different, but related, topic.

What's the possibility of kind of leveraging the energy and the interest that's come out of Smart Cities and work with FHWA maybe jointly, but their research program

helping to fund some continuing work in this area? Because the response was, we don't have funding, but we know that there are some capabilities and expertise at Federal Highways.

I know they have research dollars as well. They're probably just as tight, right, but that -- so, I think that was the question and whether it's FHWA or FTA or some other area.

And what ways can we go leverage research dollars in other areas to addressing the things that need to be.

MR. LEONARD: Yeah, that's -- and I can't speak to the other research budgets and what interest they might have in investing in the whole P3 area or whether that's viewed as more of a policy and acquisitions kind of question.

It is -- from a JPO perspective, it's a topic that we're interested in. We're putting some staff resources on it spending -- trying to address questions and in consultation with acquisitions and legal and trying different approaches like you saw with Smart Cities, you know, and bring true partners in.

I mean, anybody can be your partner if they think you're going to give them part of the \$40 million.

That's not being a partner. That's being a vendor.

Partners are people who are bringing resources because they're not looking for the contract in your city, they're looking for the expertise and the knowledge and the value they get out of it by what they contribute.

So, it's kind of more of an act of charity or a long-term investment than I want to work with you and I'm going to count on you giving me ten percent of that -- of your award.

And so, finding true partners is the challenge, I think, people who are in it for the long haul and recognizing there's an investment that they have to make as a partner.

And then that still doesn't obviate the questions you've raised here about the appearances and the conflicts and the political questions and the public challenges to why did you pick Vendor A over Vendor B or Partner A over Partner B.

And in some cases, part of the answer is, we picked A, B, but not C, because A and B each brought \$5 million and C said they would only bring half a million and it was a \$5 million ante to get into the game. That was our criteria.

You can disagree with the criteria, but if you

don't have skin in the game at this level, you're not -you don't meet our criteria for a partner.

So, those, I think, are the ways you get around that is to make it absolutely clear what you mean by having a partner.

Raj.

MEMBER RAJKUMAR: I think this is just a comment. Just last year the president submitted a ten-year \$4 billion budget request for automated vehicle research, development and testing. I'd like to encourage the USDOT to continue that good fight, if you will, under the new administration.

MR. LEONARD: I missed the first part of that question. Could you --

MEMBER RAJKUMAR: So, the president submitted this \$4 billion request.

MR. LEONARD: The four billion.

MEMBER RAJKUMAR: Of course it did not go through, but I think with the new administration, maybe we could try that again.

(Laughter.)

MR. LEONARD: We put -- the ITS Joint Program Office in the prior year budget, we had put in a request for -- I think it was \$222 million for automation into the

GROW AMERICA and it was in GROW AMERICA. Congress chose not to enact that, much to my great disappointment.

This year the administration has asked for \$4 billion. They didn't ask for it in my budget, so I don't have as much skin in the game there, but really at the Department level recognizing that there's work at the vehicle level, there's work at the highways level and across all the modes. Congress has not acted on that. We'll see what happens.

I can't tell you what will happen with the new administration. Don't even know who the new administration is going to be yet. We'll all know that in November, but I hope that whatever the new administration is, that they will understand what we're trying to do with intelligent transportation systems, you know.

We will -- the Department will prepare transition materials to communicate to the incoming administration the importance of the work that happens in the ITS Joint Program Office.

And everybody around government will be doing this, right? Every agency and every department does this to communicate what the important issues are and what the hot topics are.

I cannot imagine a new administration coming in

on January 20th, and a new Secretary of Transportation coming in probably in January because the cabinet tends to get appointed fairly early and confirmed fairly early, I can't imagine them coming on board and not having an appreciation for something like automated vehicles, because it's so much in the popular imagination and culture.

There are other parts of the ITS portfolio and issues that probably are -- will surprise them or that they might not be aware. So, you know, we're going to have to make sure that that message gets communicated and we will spend a great deal of time to bring to both a new Congress and to a new administration, an understanding of what we're trying to achieve, as will everybody else be vying for attention at the same time.

I'm not holding my breath waiting for \$4 billion. But if it happens, I assure you the Department will spend it wisely.

(Laughter.)

MEMBER STEUDLE: Just remember the biggest chunk of that will go by formula to the states.

MR. LEONARD: I'm sorry?

MEMBER STEUDLE: Just remember the biggest chunk of that will go by formula to the states. There won't be a \$4 billion JPO program.

MR. LEONARD: Well, it was -- that four billion was actually in the NHTSA budget over --

MEMBER RAJKUMAR: Ten years.

MR. LEONARD: -- ten years, I believe. All right. And so, it was not --

MEMBER STEUDLE: Oh, okay. All right. The longer piece, right.

MR. LEONARD: It was not the 40 billion in formula funds which goes to the states. This was specifically to address cyber and automation. And cyber is another very big issue.

MEMBER STEUDLE: And over the ten years.

MR. LEONARD: Over ten years, yes. It was four billion over ten years.

MEMBER STEUDLE: Okay.

MR. LEONARD: You know, once we figure out this public-private partner thing, we'll be leveraging all our money so far. So, but I, you know, we will continue to put in budget requests and, you know, there will be a new Congress and a new administration and they will have to act on those requests.

And until that new administration is in place, I can give you no indication of -- and have no knowledge of what support there would be for any of the ITS or other

parts of the departmental portfolio, but our interests and issues don't change.

MEMBER SHAHEEN: So, I had a question about some of the responses on the shared mobility. Do you have the memo?

So, a lot of the responses were great, concurrence, and a lot of discussion about FTAs were with the MOD, which we applaud, which is wonderful.

Similar to Ginger, there's another side to DOT, the FHWA, and we're aware that FHWA is also doing work.

So, is there a vision through ITS JPO to sort of coordinate on shared mobility? Is it all in FTA's house? How do you envision this going forward?

Because probably with shared mobility, we're at the very early days of this and there's a lot of unanswered questions. Particularly the policy-related ones, right?

So, I think the question I think some of us had was, what's -- is there a plan to coordinate across the Department? Will JPO have a role in that?

What are your thoughts? Because this is a new one --

MR. LEONARD: Right.

MEMBER SHAHEEN: -- for you guys.

MR. LEONARD: Right. It's a new area. It's one

we've been discussing for a while, Mobility on Demand or mobility as a service.

MEMBER SHAHEEN: Yes.

MR. LEONARD: You know, we often get questions about, so, what are you guys doing with Uber and Lyft?

MEMBER SHAHEEN: Yes.

MR. LEONARD: And it's like, well, you know, directly nothing. I mean, we don't, you know, that's how I got here today, actually, but that may be my most direct connection in terms of, you know --

MEMBER SHAHEEN: Your mobility.

MR. LEONARD: -- funding, but we certainly see the potential for those --

MEMBER SHAHEEN: Yeah.

MR. LEONARD: -- service providers to be a part of a Mobility on Demand or mobility --

MEMBER SHAHEEN: Right.

MR. LEONARD: -- as a service provision. So, and I think everybody is aware of the FTA Mobility on Demand Sandbox, the \$8 million. They're actually putting more resources into this right now than we are.

MEMBER SHAHEEN: Yes. Uh-huh.

MR. LEONARD: We're working with them, but, I mean, and I'm glad to see that. I'm glad to see --

MEMBER SHAHEEN: Yes. It's wonderful.

MR. LEONARD: -- that the transit people are thinking about Mobility on Demand and mobility as a service and not just thinking about buying buses.

It's because -- it's kind of embracing -- and Therese McMillan who was the administrator previously, you know, it was a real delight to see her speak at ITS America and talk about this realization that it is about moving people. It's not just about buses and transit services and really thinking about that.

And I'm seeing the same language coming out of Highways --

MEMBER SHAHEEN: Right.

MR. LEONARD: -- and an appreciation for -- call them "transformative," call them "disruptive" technologies and how they impact.

And, you know, one of the things I try and bring into the Federal Highways discussions is it's not always just about highways. It's not, you know, and I think there is a --

MEMBER SHAHEEN: It's both.

MR. LEONARD: There is a great appreciation --

MEMBER SHAHEEN: Right.

MR. LEONARD: -- and a growing appreciation

particularly out of the R&D shops, but also out of the policy shops for, you know, these things are going to change. And technology is going to cause changes in how the agencies have traditionally done business.

So, and also, you know, there are other aspects of it like bike share and bike lanes and all of that. And, you know, cities changing their urbanization and commuting patterns and taking away lanes, shutting down lanes and all of that.

And so, it's -- it kind of is rippling across the Department. There's not -- there's not a single --

MEMBER SHAHEEN: Point yet or --

MR. LEONARD: There's not a single point yet.

MEMBER SHAHEEN: Uh-huh.

MR. LEONARD: So, and I would say the most energy is around kind of the combined Highways/transit/mobility as a service discussions.

MEMBER SHAHEEN: Uh-huh.

MR. LEONARD: And Mobility on Demand discussions.

MEMBER SHAHEEN: Uh-huh.

MR. LEONARD: And the ITS is a part of that.

MEMBER SHAHEEN: Uh-huh. Good. Because, like, it should be integrated, because I think the essence of

Mobility on Demand is it's multimodal.

MR. LEONARD: Yeah.

MEMBER SHAHEEN: So, therefore, sometimes it's going to be on a bus, and other times it's going to be on a bike or on a highway in an Uber.

So, it's not -- it's not just an FTA issue, I guess, is sort of what we're getting at. I think, again, kudos to Vince Pelta for all of his efforts and what he's trying to take on in looking at the role that these services could play relative to first mile/last mile or in lieu of transit where there may not be any transit, but it's -- I think it's a much larger issue than FTA, you know.

It's an integrated model, you know, and it seems like the logical place is JPO to assist, but I'm unsure of the plan. It sounds like --

MR. LEONARD: And so, like, I can tell you there have been some proposals that have come to us to have some external workshops. And one of the things that -- and I have been pushing back on this. I want to see some internal workshops first. Because before we start going out and telling the world what we're going to do, I want us to collectively agree on what we're going to do and, you know, what have we considered and what are those

alternatives --

MEMBER SHAHEEN: Well, that's great. So, that would be -- the next step, right, is to figure out what DOT's role is going to be.

MR. LEONARD: Right. We have to kind of figure out what approach do we want to take, how are we going to do that engagement. It's kind of like ready, fire, aim rather than fire, ready, aim, you know.

MEMBER SHAHEEN: Yeah.

MR. LEONARD: Let's think about what we want to do rather than just saying, we've got to do something, so let's do something.

MEMBER SHAHEEN: Yeah.

MR. LEONARD: Let's think about it and come at it with a strategy, communicate that strategy, get feedback on that strategy, you know, plan, act, do, correct rather than do, correct, do, correct, do, correct.

MEMBER SHAHEEN: Uh-huh.

MR. LEONARD: So, let's -- I want to get a little bit more of the --

MEMBER SHAHEEN: That's great.

MR. LEONARD: -- planning out.

MEMBER SHAHEEN: That, to me, is a really good sign.

MR. LEONARD: Okay.

MEMBER SHAHEEN: Yeah.

MR. LEONARD: Good.

MEMBER SHAHEEN: Because the response made it sound like it was like FTA's got this. And FTA, I think, has the lead at the moment, right, with the MOD?

MR. LEONARD: Well, and, in part, again, and I just -- I probably should say this to the larger group here: One of the issues that I have when we get the recommendations that we get, and I appreciate it and I read them, and my staff reads them and they respond to them.

MEMBER SHAHEEN: Uh-huh.

MR. LEONARD: And if I took the response I get from the staff and that was what we sent forward to Congress, I would need to double my budget in order for that document to be true.

And so, what I don't want to say as an honest response to the group is, love it, great, terrific, yeah, but then a year later you're going to say, wait a minute, I don't understand, you said you were interested in this. And I don't tell you that, yes, I am, but I don't have the resources to do that.

So, I mean, I hope getting -- when you see a response back that says something other than, you know,

than, yes, we're wholeheartedly embracing your recommendation, you'll realize that that's not because we're not interested and not because we don't believe in the topic, but because we have to continually prioritize among competing --

MEMBER CAPP: Sheryl, did you tell Ken about his new task?

CHAIR WILKERSON: No.

MR. LEONARD: Not yet.

MEMBER CAPP: Oh, okay.

(Simultaneous speaking.)

MEMBER CAPP: Not yet. I noticed you were looking at your computer.

MR. LEONARD: Okay.

MEMBER CAPP: And then the purpose of that, though, it's not just to do an "I gotcha" kind of --

(Laughter.)

MEMBER CAPP: -- it's really to help -- well, part of it, yeah. But that it's really then to spur a conversation either on the record or off the record about how we can provide better advice --

MEMBER SHAHEEN: How can we be helpful?

MEMBER CAPP: -- whether it's fewer pieces of advice, whether there's some things that aren't helpful --

MEMBER SHAHEEN: Concentrated.

MEMBER CAPP: -- how we can be -- we want to be helpful and we also don't want to waste our time. I mean, you get a lot of really -- people whose time is very valuable and we don't want to waste our time either.

MEMBER SHAHEEN: Yeah.

MR. LEONARD: No, I absolutely agree with that and, I mean, this is why I'm -- I want to be very candid about that.

My staff loves coming and engaging in these conversations. Everything we talk about here is of interest inside the JPO -- I mean, 99 percent of what we talk about is of interest inside the JPO to somebody or to many somebodies, but we do have a resource allocation issue --

MEMBER SHAHEEN: Yes, we get that.

MR. LEONARD: -- that has to be addressed. We have a prioritization issue. And I, you know, my pushback to the staff was, you're making it sound like we're going to do this, and we just had the budget meeting where we don't have the resources to do this.

I don't want to lie to the advisory committee or mislead the advisory committee or mislead the Secretary or mislead Congress because we're enthusiastic, I want to

communicate honestly this is an important area, but we have six other important areas before this that are zero funded, because there are 12 others in front of that that are getting the resources to solve other issues.

So, while this is an important issue and we may be able to put some staff time on it or convene some low-cost activities around it to keep it bubbling along -- and some things we can't even do that on. You do eventually have to lower some things to zero, I want to be candid in the response back to you and respect your time and contribution.

MEMBER CAPP: Right. But if -- most of our recommendations, and it kind of seemed that way, most of our recommendations were outside your sphere of capacity, then we're missing the mark a little bit on the advice we're giving you, too, right? That what -- we need to align that a little bit better.

MR. LEONARD: Well, and the other part of this is, remember, where we're focused are on the six program categories that I just briefed.

If you think we've misread what's important for the Nation's --

MEMBER CAPP: Well, we need to make sure we're -

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MR. LEONARD: -- ITS program --

MEMBER CAPP: -- targeted on those, too, Ken. That's helpful.

MR. LEONARD: -- you need to tell us we're wasting our time on automated vehicles, it's never going to happen, and take that money and put it on something else.

Sorry, Raj. I --

(Laughter.)

MR. LEONARD: If you think we're misguided in where we're focusing our attention, that's where you should be advising us we're missing the boat and you think there's a key area that we don't understand and why --

MEMBER McCORMICK: Well, and I think, you know -

MR. LEONARD: -- and then we should have that discussion.

MEMBER McCORMICK: -- there's another value that comes out of this. You and I had talked about this, is that it may not be something you're able to execute on. It might be something that's just collateral to where you are, but you're getting the cooperative opinion of a variety of domain expertise in the public and private sector that may be reaffirming what you guys were suspecting or had talked to others about.

And because this is on record, there's a certain word-smithing that goes on to get that harmonization between us. So, even if it's not something you're necessarily going to do, I don't know there's many topics that you guys haven't talked about, at least you've got this opinion to go back on and say, well, I mean, this has been reaffirmed by, you know, this bunch of talking heads.

MR. LEONARD: So, I mean, anything we can do to make the guidance more meaningful to you, to us, to Congress, to the Secretary, I'm all for that.

If it seemed like we pushed back a lot more this year, it was because I wanted to make sure we didn't just give you a happy talk response.

MEMBER CAPP: I don't know that the group sensed it that way. The group just kind of sensed that we were probably off target a little bit on what was helpful to you, right? Because that was -- that's where we were coming from.

MEMBER GOODIN: Or maybe there's just too many recommendations.

MEMBER CAPP: Yeah. Too many great ideas and not enough peeps to work on them.

MEMBER BERG: That's why we decided on the reflection, you know. How much of this stuff actually

happened or resulted in anything meaningful and maybe we see some pattern or something.

MR. LEONARD: Well, and remember, too, that the things -- the things that you recommend on, it's not that they're not -- that there's no interest around them. And part of this is recognizing, you know, what things are we going to put tens of millions of dollars into --

MEMBER BERG: Right.

MR. LEONARD: -- and what things are we going to put a week of staff time into. And, remember, a week of staff time is very valuable to me.

In the entire time I have been in the JPO, I have never had a full complement of staff and we're an organization of 17 people. When I lose a person, it hurts. Especially when it takes about six months to fill that gap.

MEMBER BERG: Same thing happens in the private sector. Exact same thing.

MR. LEONARD: Yeah, but in the private -- when I was in the private sector, I could get authorization to hire and fill a position and have somebody in the seat that week, and that -- that's a little harder in the public sector.

MEMBER McCORMICK: Did you hire anybody in one week, Roger?

MEMBER BERG: No.

(Laughter.)

MEMBER McCORMICK: One month?

MEMBER BERG: No.

MR. LEONARD: No, I appreciate that. I appreciate that. Well, all I'm trying to say is there's dollar resources, there's time resources, and both are incredibly valuable.

And so, recognizing that some of the things -some of the most valuable things we do don't take money as
much as time and attention in order to make sure that
something happens as a result of it.

Don't get me wrong. Money helps make things happen and the research doesn't happen without dollars, and the management of that research doesn't happen without dollars, but, I mean, having the Secretary go and make an announcement might cost some money, but the return is incredible.

You know, having the Secretary talk about the connected vehicle program, having them talk, you know, I loved going to TRB and having the Secretary talking about five programs, and three of them are ours.

MEMBER SHAHEEN: Yeah. Yeah.

MR. LEONARD: That just, you know, that just

makes you feel like you're doing the right things.

MEMBER GOODIN: I think one of the things that might be helpful on your program categories is if you can say how much budget you are allocating to each of the program areas --

MEMBER SHAHEEN: Percentage.

MEMBER GOODIN: -- or a percentage.

MR. LEONARD: Sure.

MEMBER GOODIN: Just give a sense of --

MEMBER McCORMICK: Or manpower, however is the appropriate way --

MR. LEONARD: I actually think -- I think we have a budget document we submitted to Congress.

MEMBER McCORMICK: A pie chart or something to help us understand your relative priorities.

MR. LEONARD: Well, yeah. I mean, it's what we put in the -- it's what we put in the budget to Congress, and we can share that, yeah, recognizing that, you know, we tweak that every year. And last year was a big tweak.

MEMBER DENARO: We had a real nice strategic plan that we spent a lot of time on and so forth.

What kind of semi-formalized documents then come below that, operational plan, execution, whatever else? How does -- how do you flow down from the strategic plan to

what you're doing every day?

MR. LEONARD: So, a couple different things. We have a program management office contract that tracks schedule -- all our contract schedule deliverables. So, you know, we make awards, we, you know, those awards have statements of work and deliverables.

We track those and we have regular meetings, monthly reviews of exceptions, you know, which, you know, in first implementing the system, we had some growing pains in getting from why is everything late? And it was like, you know, well, what do you mean it was late? Well, because people were missing the reporting deadlines and it was appearing late.

So, you know, of 150 or so milestones, you know, we're having to follow up on eight to ten to understand why something is behind schedule in any given month. So, that's an important execution document/monitoring document for us.

Another thing we do as part of the budget process, every year we create something called a PIF, a Project Information Form, so that it describes what a program manager or a modal partner is proposing in terms of a body of research, what deliverables will come out of it. We use that as a process of internally setting our budget.

And just to give you some insights into that, we're finalizing this process a little later in the year than I would like to do it, but, you know, we get -- we have 95 million new dollars to spend every year, roughly, once we get our appropriation and then certain taxes are taken out of it to Congress mandate. We have about 95 million in new dollars every year to spend.

We allocate that among the areas, but we also put out a call to our modal partners saying, well, what work needs to be done in connected vehicles and automated and in these different areas.

This year we got fewer out-of-budget requests. We used to get about twice as many requests as we had resources. This year we've had a smaller problem, because we told everybody with Smart Cities, with all these other activities, a lot of resources are spoken for. So, we got, frankly, fewer requests this year. People understood the budget situation.

So, we go through that process. That generates the program information forms and that's largely our execution and budget-setting document.

We review that, we take it to all -- well, to the associate administrators around the department to make sure we kind of have a meeting of the minds.

We brief that to the administrators in something called the Management Council, which the deputy secretary chairs. So, that's kind of our process for getting from our -- those program information sheets, and the budget that gets set out of that, and the briefing we do with the Management Council essentially becomes our execution plan for the year.

And if you recall in our strategic plan, it says, we will generate an execution plan. That's really the form that that takes is, here's the body of work we want to do. And then that body of work turns into contracts that are monitored by the Program Management Office and the schedule.

MEMBER DENARO: Is there any explicit mapping of projects in the current budget back to the strategic plan to say we're doing this bunch of things, we've still got these to do, that's going to be another year, and that sort of thing?

MR. LEONARD: Everything in those project information forms tie to one of the strategic plan elements and sub-elements --

MEMBER DENARO: Okay.

MR. LEONARD: -- with the exception of some office overhead activities, administrative support, things

like that.

MEMBER DENARO: Okay.

MR. LEONARD: So, 95 percent of the budget, you know, ties back to the strategic plan execution.

CHAIR WILKERSON: Okay. So, we're over time, but we will take a break and then we will maybe take, let's say, another 15-minute break -- 10-minute break. 10-minute break.

So, we'll come back at 2:50 and we will spend probably, let's say, 20 minutes on the subcommittee maybe putting people -- assigning people to different subject areas on those topics.

I think we have the chart up there that we can put up on the -- so, maybe we'll put that up during the break for people to get their thoughts. And then we'll move to the discussion that you mentioned and then discuss action items. Okay. All right.

(Whereupon, the above-entitled matter went off the record at 2:39 p.m. and resumed at 2:55 p.m.)

CHAIR WILKERSON: We have an hour left to get three things done.

The first task is to, what I did was I took those top five issues and put them in a chart. And I tried to highlight some of the themes that we talked about

underneath each subject matter.

They're not perfect. There are probably typos for other things there. But the goal was just following this meeting when the subcommittees, if we do do them, meet at the starting point for discussion.

And we obviously don't have time to break into sessions this time but should there be conference calls or other means of communications with the various subcommittees, this hopefully will afford you some guidance.

So I thought it would be helpful if we went around the room and we put our names in a minimum of two of those categories.

MEMBER MCCORMICK: How many?

CHAIR WILKERSON: Two. A minimum of two. If you want to do all five that's fine too.

And then if we can find if there's anyone in the room who would be interested in being the discussion leader or chair or co-chair of a particular subcommittee then we could put those things down too, okay?

Has everybody sort of had an opportunity to think about this in light of what they've done before?

So why don't we just start and we have a scribe here who's willing to insert our names. So why don't we

start. Did you have a question? Yes?

MEMBER MCKINNEY: Joe McKinney in Rural Development Assistance and Technology and Active Transportation. And Steve's agreed to be the chair of the Rural Development.

CHAIR WILKERSON: It's not typing?

MEMBER SCHROMSKY: It's stuck.

CHAIR WILKERSON: There you go.

MEMBER SCHROMSKY: It's typing away.

MEMBER MCKINNEY: The second one is the one beside it, the Technology and Active.

CHAIR WILKERSON: Okay.

MEMBER CAPP: This is John Capp, C-A-P-P and I would put me down for number two and then three. And I could be willing to be a facilitator but maybe let's see how it goes. If someone else wants to that's okay too, but I'm willing to.

CHAIR WILKERSON: And you could do more than two if you'd like.

MEMBER CAPP: No, that's good.

(Laughter)

MEMBER SCHROMSKY: You've got to put your bets, one or down too much you're not going to win, right?

CHAIR WILKERSON: That's true. Okay. Ginger?

We're putting our names, we're picking two, a minimum of two of the five but you can do more. And this would be committees that you would want to participate.

MEMBER STEUDLE: I think Scott should do the one chair.

CHAIR WILKERSON: Well --

MEMBER STEUDLE: Scott Belcher to do the one chair.

CHAIR WILKERSON: Well, why don't we just keep going around the room and then we'll come back to you guys so you're just having time to think. Why don't you go next?

MEMBER ALBERT: I'll go, Steve Albert, Traffic Safety and then Rural Development Assistance. And if you need a facilitator for either one I'll do it.

CHAIR WILKERSON: Can you put an asterisk, for which one?

MEMBER ALBERT: For Rural Development.

CHAIR WILKERSON: For Rural, can you put an asterisk by his name to show that he would be interested in facilitating or serving as chair or co-chair?

CHAIR WILKERSON: Sheryl Wilkerson. Review of ITS Program Accomplishments and can I just stick with that? I'm stuck between the two of them right now. So I might

fill a gap. So I'll just leave that one for now.

Ken, would you like to serve on, no, just kidding.

Susan, we're going around the room picking two, a minimum of two subcommittees that we might want to participate.

MEMBER SHAHEEN: Yes. So Technology and Active Transport. And then, Automation and Interrelationship.

MR. STERN: You had a second one?

MEMBER SHAHEEN: Yes. Automation and Interrelationship.

MEMBER BERG: Am I next?

CHAIR WILKERSON: Yes.

MEMBER BERG: Column two and column three.
Roger Berg.

CHAIR WILKERSON: Roger Berg. Joe?

MEMBER CALABRESE: Joe Calabrese. One and four.

MR. CLARK: Oh, great.

MR. STERN: And who was that?

CHAIR WILKERSON: Joe Calabrese.

MEMBER CALABRESE: Joe Calabrese. One and four, thanks.

MEMBER DENARO: And Rob Denaro. You said to choose two?

CHAIR WILKERSON: You can do two to five.

MEMBER DENARO: Two to five.

CHAIR WILKERSON: Two to five, two to five.

MEMBER DENARO: Two to five, minimum of two, I got it. Okay.

CHAIR WILKERSON: I made that rule.

MEMBER DENARO: I was wondering so.

CHAIR WILKERSON: We can always backtrack if we have too many people.

MEMBER DENARO: So I would do column two and three.

MEMBER JOHNSON: Debra Johnson for, D-E-B-R-A,
Traffic Safety Culture and Technology and Active
Transportation.

MR. STERN: And three?

MEMBER JOHNSON: No. Four, Technology and Active Transportation.

MEMBER MCCORMICK: Scott McCormick. I'm going to do number three. I'm not sure how much I can add to number five but I think it's something I need to know more about.

CHAIR WILKERSON: Okay. Three and five.

MR. STERN: And John, did you say you were facilitating three or was that two or I missed that.

MEMBER CAPP: Not necessarily interested, I'd do, do two or --

MR. STERN: Oh, okay.

MEMBER CAPP: For now, I'll just do that one.

MEMBER SCHROMSKY: Brian Schromsky. I will go with number four and number five.

(Off microphone comments)

MEMBER RAJKUMAR: Raj for one and three.

MEMBER STEUDLE: Kirk Steudle, two and three.

MR. STERN: Two and three.

(Off microphone comments)

MEMBER GOODIN: Ginger Goodin. Two and three.

CHAIR WILKERSON: Scott?

MEMBER BELCHER: Interrelationship Between Connected and Automated Vehicles. I don't know which number that is.

CHAIR WILKERSON: Three.

MEMBER BELCHER: Three, and Technology and Active Transportation. What one is that?

CHAIR WILKERSON: Four.

MEMBER BELCHER: I can't see.

CHAIR WILKERSON: Oh, it's okay.

MEMBER BELCHER: Scott Belcher.

CHAIR WILKERSON: Who are we missing? Tina? Do

you want to suggest --

(Laughter.)

MEMBER MCCORMICK: She will take one, three and four. Oh, three and four.

MR. STERN: All right.

MEMBER MCCORMICK: And, you know, given the number of people in three, you can move mine to four. I just figure we ought to try to balance it out a little.

CHAIR WILKERSON: Yes. Are we missing anyone?

MEMBER MCCORMICK: Is this where we do horse trading?

Take my three and move it to four, yes. Well, we had Peter.

CHAIR WILKERSON: And did he leave or just step out?

MEMBER JOHNSON: No, he wasn't here today.

CHAIR WILKERSON: Oh, that's right. Do we have everybody who's here? It looks like we're missing somebody.

MEMBER MCCORMICK: Everybody but George Webb.

CHAIR WILKERSON: Okay, hold on. We've got Joe

--

MEMBER MCCORMICK: George wasn't here today.

MEMBER JOHNSON: No, Joe McKinney gave his

first.

MEMBER MCCORMICK: Right.

MEMBER JOHNSON: He stepped out.

MEMBER MCCORMICK: We had Peter Kissinger and George Webb left on the committee.

MEMBER JOHNSON: Yes. Those are the two that are missing.

MEMBER MCCORMICK: No, left to be on a committee. Those are the two that haven't signed up for any because they're not here.

MEMBER JOHNSON: Right. Two people remaining I guess you said.

CHAIR WILKERSON: We've got Susan, Roger, Bob, Deborah, Scott, Brian, Susan, Raj, Kirk, Joe. So we need Joe. Is Joe up there?

Peters? I mean, I'm sorry, Kissinger. Peter.
Joe.

(Off microphone comments.)

CHAIR WILKERSON: Okay. All right. Well, that's a start. We're putting asterisks, I thought maybe we might have maybe one or two people who might want to cochair or lead if one can't do it or that way we can assure that calls take place and there's some coverage.

So I know earlier we did have some folks who

did. Steve, Roger, John, Scott, Ann, and Ginger were interested in possibly chairing. I don't know if that's still the case given these topics or if there are others.

MEMBER MCCORMICK: I'll facilitate four with someone else, with Debra.

MEMBER JOHNSON: Gee.

MEMBER BERG: I'll do three.

CHAIR WILKERSON: Okay. So we've got Roger Berg. Put an asterisk next to his name for number three.

MEMBER CAPP: Or on four --

CHAIR WILKERSON: Okay.

MEMBER CAPP: Co-asterisks.

CHAIR WILKERSON: Did you get that? John Capp will also have an asterisk there so they'll --

MR. STERN: On number three?

CHAIR WILKERSON: Work together. Yes, so number three.

MR. STERN: And I've got Scott here on four?

CHAIR WILKERSON: Anyone else on number four, Technology and Active Transport?

MEMBER MCCORMICK: Tina? How about you?

CHAIR WILKERSON: Anyone else?

MEMBER MCKINNEY: I'll -- you make it more appealing than Tina.

CHAIR WILKERSON: I'm sorry? I thought he said Tina.

MEMBER MCKINNEY: Scott would probably have a -MEMBER MCCORMICK: Wait a minute, wait a minute,

Debra just raised her hand for four.

MEMBER JOHNSON: I'll do four, good God. I don't mean it like that.

CHAIR WILKERSON: No, no, no.

MEMBER JOHNSON: Yes, no, no, I just, you know.

CHAIR WILKERSON: Okay.

MEMBER JOHNSON: Not trying to over commit it.

CHAIR WILKERSON: So what about Traffic Safety
Culture? That was one of the ones you were looking at,

wasn't it?

(Off microphone comments.)

CHAIR WILKERSON: Debra said she'd like to switch --

MEMBER JOHNSON: I'm going to switch and then Davis is going to help out with Active Transportation.

CHAIR WILKERSON: Anyone else on Traffic and Safety Culture?

MEMBER MCCORMICK: Tina.

CHAIR WILKERSON: Tina. Okay. We'll put Tina, all right. What do --

(Off microphone comments.)

CHAIR WILKERSON: Okay. Any one on the review of ITS Program Accomplishments? We've got a good team there.

So you'll do three?

MEMBER BELCHER: I don't know what three is.

CHAIR WILKERSON: You're on Automation.

MEMBER BELCHER: Yes.

CHAIR WILKERSON: And you're on Technology and Active Transportation.

MEMBER BELCHER: So is the --

CHAIR WILKERSON: You can do three if you want.

MEMBER BELCHER: Is the ITS Review, is that just

a --

CHAIR WILKERSON: That's working with --

MEMBER BELCHER: -- protocol?

CHAIR WILKERSON: That's working with our ITS JPO staff. So we'll probably have one or two. I think it might be helpful to have at least one or two people who are helping facilitate and then bringing it back to, if you would be willing. Okay.

So let's see, we've got, do we have two already? So Ginger, we'll put an asterisk next to Ginger's name on number two. Anyone else?

MEMBER MCCORMICK: Hey, Steve. Hey, Steve. We a reasonable enough size we can do --

CHAIR WILKERSON: I will be happy to help facilitate that with you since Steve and I help out.

We'll just facilitate and then. Okay. Do we need, Technology and Active Transport has just one.

MEMBER MCCORMICK: Yes, my travel schedule's fairly hectic so I need a backup there by Scott.

CHAIR WILKERSON: The last two.

(Off microphone comments.)

CHAIR WILKERSON: We only have one person for yours?

MEMBER BELCHER: No, it's for the Active Transport.

CHAIR WILKERSON: Active, I'm confused.

Active right now is Scott and, Scott McCormick and Brian.

MEMBER BELCHER: Which one are you looking for?

CHAIR WILKERSON: So it looks like Rural needs one more as a backup. And does Automation have two? Yes, we have two for that one. So Rural?

MEMBER SCHROMSKY: No, no, no.

(Laughter.)

MEMBER SCHROMSKY: I got a whole separate

question. Should we dwindle, now that we've put one in two and we're kind of off balance on more than others, can we go down to, I'm just thinking logistics, right. We still have two committees. It's going to be a lot of work, I mean, if we do this right this could be a lot of work on some. Especially the smaller ones, right, so.

CHAIR WILKERSON: Well, if I may --

MEMBER JOHNSON: Yes, that's what he was suggesting.

(Simultaneous speaking.)

MEMBER SCHROMSKY: For instance, I would drop a four and just go to five. I think Rural for me when I learn what Steve and Joe --

CHAIR WILKERSON: It's just a committee. It's -

MEMBER BELCHER: I really want to go to that, I kind of --

CHAIR WILKERSON: I just initiated that just to start the dialogue. You can change whatever you, do whatever you like.

MEMBER BELCHER: Pull me off four, would you? We are at, we're just counting up each groups to decide whether or not that's --

CHAIR WILKERSON: Well, can we finish the

committees first? Can we go back to your question?

MEMBER BELCHER: My question is, I mean, for instance I just did it when asked to. I mean, for me I'd rather put one effort into one committee and go after that rather than spread to two. So I just took my name off of four and I said I'd really like --

CHAIR WILKERSON: Okay.

MEMBER BELCHER: So I think the goal is if you have one and two you can kind of see --

CHAIR WILKERSON: Yes.

(Simultaneous speaking.)

MEMBER BELCHER: --you know, what's lacking. So for instance, I'm not saying that if anybody was on, if their preference is one and they're on number three I would back out of three and stay on one, right?

MEMBER JOHNSON: Right.

CHAIR WILKERSON: That's fine. What would you like to do?

MEMBER BELCHER: Well, I mean the response is which one would you like more? Or you might like both.

MEMBER RAJKUMAR: Yes, I'd like both.

CHAIR WILKERSON: You'd like both?

MEMBER RAJKUMAR: Yes.

CHAIR WILKERSON: You're fine. Next?

MEMBER SCHROMSKY: I'm good. I'm done with one.

CHAIR WILKERSON: Okay. Have we taken you off

okay?

MEMBER SCHROMSKY: Yes.

CHAIR WILKERSON: Scott? You okay? Everyone else, anyone else have issues or?

MEMBER MCCORMICK: Yes, because I'm going to let Brian do all the work on four.

MEMBER SCHROMSKY: I'm not on four.

MEMBER JOHNSON: He moved himself off to five.

MEMBER MCCORMICK: Yes, five. Excuse me.

CHAIR WILKERSON: So Brian, is there anyone else that wants to work with Steve on that one? I don't know, Steve, are you comfortable leaving that?

MEMBER ALBERT: I'm comfortable leaving it.

CHAIR WILKERSON: He's comfortable leaving that, okay. So any other changes?

MEMBER MCKINNEY: Can you take me off of four?

Joe McKinney.

CHAIR WILKERSON: All right. We can do that.

MR. STERN: So just one chair or leader of four, Scott?

CHAIR WILKERSON: Scott did two of them. Does anyone else want to run this job?

MEMBER MCCORMICK: It's not really a good way to characterize it. That's not how you get to yes with this group, just so you know. They know me.

(Simultaneous speaking.)

(Laughter.)

CHAIR WILKERSON: Would anyone else like to facilitate Technology and Active Transportation?

MEMBER MCCORMICK: Anyone prefer to facilitate over Scott?

MEMBER BELCHER: I do need a backup because otherwise it's going to be difficult, so.

CHAIR WILKERSON: Let's see.

MEMBER MCCORMICK: And I'll schedule it around my schedule still.

MEMBER BERG: So in your first conference call you will appoint an assistant.

MEMBER BELCHER: Okay.

CHAIR WILKERSON: So who's not here? We're missing one person.

CHAIR WILKERSON: Peter isn't here.

MEMBER JOHNSON: And George, right?

CHAIR WILKERSON: Maybe we can put Peter there and put a question mark.

MEMBER MCCORMICK: You know, that would be nice.

Peter would be good for that, yes. We just put his name in italics or something, place holder.

CHAIR WILKERSON: We could put a place holder but we need to put to be determined or checked or something.

(Off microphone comments.)

CHAIR WILKERSON: I have no idea. I'm just trying to make sure we don't miss out on people. They can change it later.

MEMBER DENARO: Wouldn't Peter be on one as well?

CHAIR WILKERSON: I'm sorry?

MEMBER DENARO: Wouldn't Peter be on one as well?

CHAIR WILKERSON: It's up for the committee.

Just speak up.

(Off microphone comments.)

(Simultaneous speaking.)

CHAIR WILKERSON: So add Peter to number one as well. Is that what I'm hearing from the floor?

Okay. We will follow up with him. I'm sorry?

I didn't hear that.

(Off microphone comments.)

CHAIR WILKERSON: That's what we're missing,

George. Yes. So let's put those in highlights or to be determined and we'll check with him. Okay?

So that's a start. It can change. The goal is to move from here. Anyone else have any thoughts on how the subcommittee should facilitate going forward?

MEMBER SHAHEEN: Well, I do have some thoughts. You know, I've been on the committee for two years so I went through the whole process before.

And to me I feel like more interaction with the ITS Joint Program folks would be very helpful and to have more of an interactive dialogue would achieve more potentially helpful then the development of lengthy documents that then they are not necessarily in a position to respond to.

And so trying to figure out how we possibly develop a new procedure for doing that interaction to that editor process.

Maybe less focus on documents and more focus on gap analysis or telling them, hey, you're doing a really good job, keep doing that.

That kind of process seems to me to maybe make better use of our collective resources so I'd like to just put that on the table.

Because I just wonder how much people have time

to read these documents and I wonder how much time we have to write them. So just throwing it out there. You can tell me no but --

MEMBER JOHNSON: Well, I guess your question actually goes to Ken in some respects whether his team has the time and --

MEMBER SHAHEEN: To brief us and --

MEMBER JOHNSON: -- interest and willingness to do that, to engage with the subcommittees because they're very busy. So I don't know if there's a conflict either.

CHAIR WILKERSON: So can you propose what that would look like, what that might look like?

Are you saying once a month they talk to five or we have a conference call?

MEMBER ALBERT: Can I make a suggestion?

CHAIR WILKERSON: Sure. Yes, let's hear it.

MEMBER ALBERT: It's a pretty easily straightforward suggestion. Make this a two-step process where the first meeting is, someone gets together beforehand and creates a strawman.

So you have your first meeting, you discuss it. Everyone says what change needs to be made and then you have a second one.

And as part of the second one, Joint Program

Office, if they want to attend can participate and provide input or say, oh, we're already doing that, don't you know that. And make it a two-step process and you'd include them if they want to be involved.

CHAIR WILKERSON: Sounds good.

MEMBER ALBERT: It seems pretty straightforward.

MEMBER SHAHEEN: I like the interim part to be - you know it would be really helpful if we could help each
other through dialogue.

CHAIR WILKERSON: Debra?

MEMBER JOHNSON: I have a thought about that too. You know, like what you suggested, but perhaps we could flip- flop it. Have a briefing first so then we have an understanding of what they may be working on and then we fill that void if there's something.

Because to go through the process and say let's do this and they're already working on it, it could be an exercise in futility.

And, you know, we may have to flesh some things out but I'm just thinking from the onset perhaps we receive a briefing about what it is, if it's in the pipeline, if it's not, and then we can have dialogue amongst ourselves within the committees.

MEMBER ALBERT: Fine. My only concern would be

that anytime I think you deal with either sponsors or with a broader group, just don't start with a blank piece of paper. And it's got to, you got to have something in writing even if it's very rough to react to.

MEMBER SHAHEEN: Some kind of description for what we're going for.

MEMBER JOHNSON: Right. There could be different elements, right.

MEMBER ALBERT: Yes.

MEMBER JOHNSON: I do see that.

MEMBER SHAHEEN: I think a description that we wrote up.

MEMBER JOHNSON: Yes. Okay. I like that. A description. I mean as opposed to writing a document per se.

MEMBER ALBERT: Yes. No, no. I'm talking a rough thing that --

MEMBER JOHNSON: Oh, okay. I'm amenable to that.

MEMBER ALBERT: -- you know, going the right direction, you're crazy, whatever.

CHAIR WILKERSON: So Steve --

MEMBER ALBERT: And someone has to prepare a template, I think, that we're all going to use.

CHAIR WILKERSON: I was just going to say that. Would you be willing to facilitate a template?

MEMBER ALBERT: Hell, no.

(Laughter.)

MEMBER ALBERT: Sure. Whatever you want.

CHAIR WILKERSON: Just a one pager --

MEMBER ALBERT: Sure.

CHAIR WILKERSON: -- as a template. That way we're all working from the same page. Okay? That's a great action item.

MEMBER DENARO: I have a thought too, I don't know if this makes sense. But we've talked before about either having things on a plenary where we're all participating versus one of these subcommittees goes out and does something by themselves.

One suggestion would be that the subcommittees each arrange a discussion period for one of our meetings. That would include maybe JPO presenting something about the topic and what they're doing as we said.

Also as we talked about earlier, maybe an outside speaker comes in and illuminates us on more. But my point is that we all participate in that.

CHAIR WILKERSON: Yes.

MEMBER DENARO: And so we dedicate one meeting

to the first three, let's say, and the second meeting to the last two or something like that.

And then after that process where we've all, you know, been throwing out ideas, all the hearing and everything and so forth, then that subcommittee goes away and drafts up the recommendations and that sort of thing and comes back with a duplicate.

Because sometimes I feel that, gee, I have interest in this and I'd kind of like to know what's going on and maybe there's value in having all of us participate in each one of these, at least expect to have discussion period before it goes into final recommendation.

MEMBER ALBERT: Bob, you know, one of the things that I think the group talked about over and over again today was the idea of cross cutting.

MEMBER DENARO: Yes.

CHAIR WILKERSON: Yes.

MEMBER ALBERT: Maybe in that next meeting, the third meeting, maybe that's where we really kind of home in on the cross-cutting stuff.

MEMBER DENARO: Yes, well, I mean to be specific I would say, you know, our next meeting, okay, we're going to do Automation Interrelationship and we're going to do Technology and Active Transportation.

And then we have speakers, we have discussion and whatever else goes with that. And then the meeting after that, we do the other three and we go through the same thing and the subcommittees go away.

And in that process since we're all together that will create some of that cross federalization, I think.

MEMBER MCCORMICK: The only thing I would suggest is since trying to shoot for the January 2017 --

CHAIR WILKERSON: For the Accomplishments.

MEMBER MCCORMICK: -- the review of the ITS, is that that be one on probably both sections.

MEMBER DENARO: Yes.

MEMBER MCCORMICK: Just so that we get closure on it.

MEMBER DENARO: Yes, no, that's fine.

MEMBER MCCORMICK: But there's also sort of by the way, if we do, well, I'm suggesting that we're not producing final recommendations this January.

CHAIR WILKERSON: No.

MEMBER MCCORMICK: And I'm kind of leaning that direction anyway. You know, so let's give ourselves a year and a half and time --

MEMBER SHAHEEN: That's just an artificial

deadline right?

MEMBER JOHNSON: Right.

MEMBER MCCORMICK: Yes. And we have freedom to decide what we do with this. You know, in the past example we just, hey, here's what we're thinking about and the progress we've made and so forth. We just report on that and give ourselves a full year and a half to work through all of this and then finally come up with recommendations.

CHAIR WILKERSON: Comments, criticism, suggestions?

MEMBER BERG: I agree.

MEMBER JOHNSON: Yes, I like it too.

CHAIR WILKERSON: You too? Okay. So we've made a decision on a potential template. We've made a proposal. Why don't we think about some dates before we move on that would be in line. Would you be willing to suggest a timeline based on what you just said?

MEMBER DENARO: Suggest a timeline?

CHAIR WILKERSON: Yes.

MEMBER DENARO: Well, let's start at the top. I think we need at least two meetings to get through all these topics because I don't think we should do, unless we have two, maybe we could do that.

But I'm thinking two one-day meetings and then

possibly a third day, a third meeting before we're finished to review inputs coming back from subcommittees which were recommendations that we all review.

So I'm saying between now and a year from January, three meetings.

CHAIR WILKERSON: Three between now and December?

MEMBER DENARO: No.

MEMBER JOHNSON: No. He said a year from January.

CHAIR WILKERSON: Oh. Okay. But how do we get to this by the end of the year.

MEMBER MCCORMICK: We should have one in November.

CHAIR WILKERSON: For the Accomplishments?

MEMBER MCCORMICK: Yes, I think we should have one in November.

CHAIR WILKERSON: One in October or November?

MEMBER MCCORMICK: And October's shot. There's too many things going on.

MEMBER DENARO: Yes, November's better.

MEMBER MCCORMICK: I mean, there's just too many conflicts.

CHAIR WILKERSON: What does everyone else think?

I like October and you like November. Anybody else?

MEMBER JOHNSON: It could be --

MEMBER DENARO: Scott's right, we've got a lot of other things going on in October.

CHAIR WILKERSON: Well, what about the committee members who are going to be working on that? What's the thought initially?

MEMBER DENARO: Doesn't matter to me.

CHAIR WILKERSON: Okay. Anybody else?

MEMBER DENARO: I know you've got your conference on stuff in November.

(Simultaneous speaking)

CHAIR WILKERSON: Yes. I have a tougher time in November, but. I'm sorry?

MEMBER DENARO: I was talking to Scott. I'm sorry.

CHAIR WILKERSON: Okay. So we'll end up doing another, well, we'll get together as a group and then --

MEMBER BERG: I think you have three steps. So the first one is to get together the data and put it in this little matrix.

CHAIR WILKERSON: Yes.

MEMBER BERG: The second step would be to discuss their dialogue. Then the third step would be,

okay, what does that mean?

CHAIR WILKERSON: Right.

MEMBER BERG: So whether you do that in one meeting, two meetings or three meetings, I don't care but just make sure we incorporate all that in the plan.

CHAIR WILKERSON: I don't know.

MEMBER DENARO: What were those three areas, Roger?

MEMBER BERG: So one is the collection of the history and putting it in that matrix form.

MEMBER DENARO: Backgrounds?

MEMBER BERG: Yes, so gather the information.

The second is to --

CHAIR WILKERSON: And that relies on JPO so we really have to wait until they tell us.

MEMBER BERG: So at some point then that information should be presented to this subcommittee.

CHAIR WILKERSON: Yes.

MEMBER BERG: And review it and determine, you know, how should it be organized for the, what do you call, the plenary. And what would be the recommendation of this committee as to what the plenary should do with it.

CHAIR WILKERSON: That would be October or November.

MEMBER BERG: Yes.

CHAIR WILKERSON: Okay. So we'll have one meeting October, November, we'll figure out the other two dates.

Okay. What about your recommendation, Bob had other recommendations for --

MEMBER BERG: We could get it done by October.

CHAIR WILKERSON: I mean we can move it into December if we need to.

CHAIR WILKERSON: Tomorrow?

MR. LEONARD: I think you'll get it emailed to you well before October.

MEMBER BERG: Okay.

CHAIR WILKERSON: Okay. That's good. We'll just come up with a template for the committee.

MEMBER BERG: So my idea was when Stephen collects the information then there should be some conference call with this subcommittee --

CHAIR WILKERSON: Yes, which we will do. Yes.

MEMBER BERG: -- and decide what to present or what to discuss.

CHAIR WILKERSON: Right. At the October meeting.

MEMBER BERG: In the October meeting.

CHAIR WILKERSON: October, November meeting. I like that. Okay. And then what about the other two, the other four areas you had proposed?

MEMBER DENARO: Well, yes, so the question is, is that the only thing we're going to do in the November meeting or should we do two of these?

MEMBER SHAHEEN: It would be good to do at least two.

MEMBER BERG: I think so.

MEMBER SHAHEEN: Oh, yes.

MEMBER BERG: So what should we do besides column two?

CHAIR WILKERSON: Well, we said we've got speakers potentially.

MEMBER SHAHEEN: Well, I just love the idea of JPO along with outside speakers. I think that's just fine.

CHAIR WILKERSON: And we also, down below that chart you'll see we listed, if you scroll down a little bit. I stuck the names of those speakers for those particular topics that people raised. At the very last bullet you'll see some that could provide some guidance too.

MEMBER SHAHEEN: We need to get this out fairly -- very quickly.

CHAIR WILKERSON: Well, it depends on what topics you want to cover.

MEMBER SHAHEEN: Yes, I know. But I'm just saying --

CHAIR WILKERSON: Yes.

MEMBER SHAHEEN: As somebody who was asked to speak I'm almost fully booked.

CHAIR WILKERSON: Thoughts on the topic?

Otherwise we can just pick the first one.

MEMBER SHAHEEN: Can we go back up to the top?

CHAIR WILKERSON: We're trying to figure out what other topic we would want to cover in October.

MEMBER SHAHEEN: This would be Interrelationship, Active Transport, Rural.

MEMBER JOHNSON: Transportation, yes, and Rural Development.

CHAIR WILKERSON: Yes.

MEMBER SHAHEEN: Could we do Rural? Do you think we could be ready for that soon?

MEMBER ALBERT: Yes, that's real easy for me.

CHAIR WILKERSON: Okay, so let's --

MEMBER ALBERT: Where is our next meeting? Why don't you come up to Montana?

CHAIR WILKERSON: We haven't figured out.

CHAIR WILKERSON: Can we pick a topic first?

Rural? Okay, so is --

MEMBER ALBERT: Yes. Just kick your butts out the door and say there's Rural.

CHAIR WILKERSON: Okay. Is there consensus from this committee that Rural is potentially the next, is another topic?

(Simultaneous speaking.)

MEMBER SHAHEEN: I think we all discussed it. We think it needs more priority.

CHAIR WILKERSON: I just would like it from more than three people, that's all, okay?

All right. So Rural it is. So the next meeting which will be sometime in October or November will include our discussion of this ITS Program, Accomplishments and Rural.

And then I'm assuming we will, once we determine what we can work with ITS JPO, we will then do a Survey Monkey for October, November meeting date.

MEMBER SHAHEEN: Okay.

CHAIR WILKERSON: Okay?

MEMBER DENARO: And then the desired outcome of that November meeting, if that's when it is, is that those subcommittees have sufficient information either from where it speaks to us or from the input of the team, that they are ready to go away and start working on recommendations to come back to us two meetings later, mid-2017 to present recommendations.

CHAIR WILKERSON: Do you mean from just those two or all of them?

MEMBER DENARO: Just those two. And then that, let's say there's a meeting in the spring, then we cover the other three, those subcommittees are going to go away.

CHAIR WILKERSON: Okay, so let's go with that. So spring we will discuss the other three?

MEMBER DENARO: Correct.

CHAIR WILKERSON: We don't know when but we will

MEMBER DENARO: And then summerish we would have a meeting with draft recommendations so we can kind of clean that up and get ready to go.

CHAIR WILKERSON: Okay.

MEMBER DENARO: That's what I'm seeing.

CHAIR WILKERSON: Consensus on that? Okay, super. Anything else I'm missing other than location of the October meeting because we have constraints with the budget for ITS JPO as well.

MEMBER MCCORMICK: You know, at one point we

were going to do it at Volpe but I don't know if that's a budgetary constraint for the DOT.

CHAIR WILKERSON: You talked about Rural. I don't know what constraints there are for that.

MEMBER MCCORMICK: Yes, we could do it in a cornfield.

MEMBER JOHNSON: He said we could do it in a cornfield.

CHAIR WILKERSON: Someone had raised the, since we're doing Rural whether we should do something rural. But my concern is that since we're going to be focused on ITS Program Accomplishments we might need to do that here.

MEMBER JOHNSON: It'd be easier.

CHAIR WILKERSON: Yes, just go talk to the group.

CHAIR WILKERSON: Comments on the floor about location otherwise we will pursue keeping it in Washington.

MEMBER SHAHEEN: Sounds like D.C. may be a good option.

MEMBER JOHNSON: Yes, I think D.C. considering the subject matter it'll be easier to get to.

CHAIR WILKERSON: Okay. So we will send out a Survey Monkey for October or November. Is that okay?

MEMBER SHAHEEN: Okay, so the only thing I'd

like to raise regarding the recommendations is do we want to have the same approach as we did last time where I think each category had four or five recommendations?

Do we want, at least reach some kind of consensus that what we're going to do is go for something, more bang for the buck? Maybe one or two? Because there's 5 groups right now.

MEMBER BERG: I think in general that's a good theme but hopefully this review will give us some indication about what makes sense.

MEMBER SHAHEEN: Yes, I understand that. I'm just putting on the table if we produced 20, some recommendations last time --

(Simultaneous speaking.)

MEMBER SHAHEEN: I'm just, I'm not trying to be descriptive but what I'm trying to say is are we philosophically on the same page that we want to kind of streamline this time. That's all I'm saying.

MEMBER DENARO: But there's no point in a subcommittee unless you generate recommendations unless you decide everything's going wonderful and you don't need to. So and I agree with the focus but it probably means if there's one or two recommendations each which sounds like between five and ten total recommendations.

MEMBER JOHNSON: Right.

MEMBER SHAHEEN: That sounds like we're cutting it in at least a half --

MEMBER DENARO: Yes, Okay, all right, all right. I'm good with that.

MEMBER SHAHEEN: Which makes more sense I think.

MEMBER DENARO: I agree.

(Simultaneous speaking)

MEMBER DENARO: And we don't get measured by our quantity of recommendations.

CHAIR WILKERSON: Right. It's the quality.

MR. LEONARD: I'm trying to create a measurement.

MEMBER SHAHEEN: Yes. And hopefully that whole feedback session will allow us to prioritize better than we were able to previously because we didn't have that level of interaction is what I'm thinking.

MEMBER JOHNSON: Right. We didn't have as much background information which we hope to obtain.

MEMBER DENARO: Right, right.

CHAIR WILKERSON: Somebody took the last sheet. How many did we have last time? I was just looking at my sheet and stopped at 15, 17.

MEMBER JOHNSON: A lot.

CHAIR WILKERSON: I don't have the last page. I think I just loaned it to someone. Okay. 17?

CHAIR WILKERSON: Yes. Okay. So we weren't that far.

All righty. Next was the 5.9.

MEMBER CAPP: That's Scott's.

CHAIR WILKERSON: Okay. Then we will table that for the next meeting.

MEMBER CAPP: He asked me to kind of--

MEMBER SHAHEEN: That was important to Scott.

MEMBER CAPP: Just bring it up to --

MEMBER SHAHEEN: No, I was just saying that that was really important to Scott, remember?

MEMBER CAPP: Yes, well, he said he had to take this call so he asked me to bring it up for him.

MEMBER SHAHEEN: Oh, okay. Great.

MEMBER CAPP: So really what he was wanting to do is, we all know that the urgency of the spectrum debate and Ken referred to a lot of it, it's NPRM that's sitting at OMB and everybody kind of wants it to move on its merry way and get out.

What Scott was just trying to bring up is, is there anything that we could do as a committee forget subcommittees, forget future needs, is there anything we

could do or should do now to help that process? Is there anything constructive, to jointly write a letter or knock on somebody's door, is there anything else we could do?

(Simultaneous speaking)

MEMBER MCCORMICK: We did that two years ago.

MEMBER CAPP: There's lots of us individually have, you know, some of us have met with OMB and provided our input and other things.

MEMBER SHAHEEN: And contact representatives.

MEMBER CAPP: What's that?

MEMBER SHAHEEN: Contact the representatives?
Things like that.

MEMBER MCCORMICK: I thought we did that two years ago?

MEMBER CAPP: Yes. Things like that. Scott was there as a committee --

MEMBER MCCORMICK: I thought we did that two years ago? Wasn't that one of our recommendations, was to protect the spectrum?

MEMBER DENARO: Yes, we did.

CHAIR WILKERSON: We wrote a letter. There was a letter.

MEMBER MCCORMICK: I mean, but that's worth reinforcing it, right?

MEMBER CAPP: Yes.

MEMBER MCCORMICK: But because we have some new members, that's one.

MEMBER SHAHEEN: We write a letter and then we all sign off on it.

MEMBER CAPP: It's the same thing that Scott was just asking us to talk about, if we think that would be helpful and I don't know.

MEMBER MCCORMICK: Given that we have some new members I think it would be very useful to dust off that recommendation we made and see if there's any word-smithing we'd change or any, and then resubmit it. We could do that by January also.

MEMBER CAPP: I'd would say if --

CHAIR WILKERSON: That's too late.

MEMBER DENARO: -- I mean, my sense, if we think we want to do something helpful it's got to be in weeks, not months.

Many people were hoping that the NPRM was going to be out just like Ken said, a month or two ago. There's a lot of debate going on about this frequency thing. That seems to be what the rub is, is there anything we could be incrementally helpful with or not?

CHAIR WILKERSON: Okay. So there's a

recommendation on the floor in the committee to revisit or take a look at the last letter that we wrote on the topic to see if we might want to refresh our statement.

Is everyone in consensus or is anyone opposed to doing that?

MEMBER DENARO: I'm a little confused.

CHAIR WILKERSON: On the 5.9.

MEMBER DENARO: Yes, we're talking about the spectrum sharing.

CHAIR WILKERSON: Yes.

MEMBER DENARO: Is that related to the NPRM, I mean I know --

CHAIR WILKERSON: Yes.

MEMBER CAPP: Yes.

MEMBER DENARO: Is the NPRM going to address spectrum sharing?

MEMBER CAPP: No, but I think most believed that, you know, that the spectrum sharing debate is probably the single biggest reason that's keeping it in OMB.

MEMBER DENARO: Oh, I see.

MEMBER CAPP: They're not, the administration isn't ready to go ahead and let it go out while there's this lingering spectrum debate.

MEMBER DENARO: Which our biggest measure of our input would be addressing, it wouldn't, I guess where I'm coming from, and we're not going to affect the speed with which the NPRM comes out.

They're going through the process whatever it is, but what you're saying is maybe we should still weigh in in terms of spectrum sharing program.

MEMBER CAPP: Yes, and I'd say most people that are speaking up right now are trying to weigh in on that piece, you know.

MEMBER DENARO: Okay.

MEMBER CAPP: And we're trying to help the OMB folks that are looking at this understand maybe the difference between some of the facts and some of the fiction on the spectrum.

MEMBER DENARO: When you say most people who are speaking up do you mean being invited to address that or in the press or?

MEMBER CAPP: Yes, both.

MEMBER MCCORMICK: If I can add something to that, when this came, started to come up it was actually driven by the administration causing the problem because in the job they asked for two, four or five, 5.9 spectrum for unlicensed devices.

And your guys, me, and your guys and you all went and testified to the subcommittees to the transportation committee saying hey, you haven't done adequate testing.

The FCC Chairman said, well, yes, we can demonstrate that an unlicensed device can recognize what we expect under a licensed device, and I said, yes, in a laboratory.

But you haven't tested fully enough to determine if a hundred users hammering against that spectrum and then recognize and releasing the spectrum for a licensed user, is any different than a denial of service attack. And so he agreed that he would go back and do more testing. Well, that's been almost two years now.

MEMBER DENARO: Right.

MEMBER MCCORMICK: Which I assume they've done that testing. The point is that we two years ago had made that, a little over two years ago had made a suggestion that says we need to protect the spectrum and that I don't believe that it's what's holding up the administration.

I believe there are other political reasons but if there's value for us to dust that off and reiterate that we still, two years later, believe it's important or in conjunction with the new users, I think that adds value. Because to John's point it's something we can do right away and something that, I don't know anyone disagrees with.

MEMBER CAPP: I think Scott has honestly a good pulse on a lot of the different voices on both sides so I mean he's in a good position to kind of characterize where the rub is.

But that is the gist, is would it be helpful for us to weigh in and say hey, like a lot of people have, stop messing around playing games with the spectrum thing, which Scott like to say, let's move on getting DSRC going. That would be the gist of it.

MEMBER DENARO: In a year from where you're closer to actually this being implemented by you guys as well as others anyway, so there's proof that's been utilized.

MEMBER CAPP: Yes, in the industry we've tried to weigh in by trying to show that hey, this, we know that the criticism exists, that it's been out there for ten years, you guys haven't done anything, fine, but we are now.

MEMBER DENARO: Definitely, definitely.

MEMBER CAPP: And there's good sign, signs that the infrastructure like Michigan being deployed, there's

signs that the industry has started to deploy.

MEMBER DENARO: So those are all good things, yes.

MEMBER CAPP: So, you know, we have tried to make those points.

MEMBER CAPP: There's other people that have different views that this is a pretty valuable spectrum of a free market, et cetera, et cetera, watch movies, forget it. I assume we wouldn't take that position here.

MEMBER BERG: So I think the FCC offered that opportunity between June, maybe end of May and July 7th with a public notice of the refresh.

So we might be too late.

MEMBER DENARO: It could be, it could be too late.

MEMBER BERG: The refresh, the NPRM refresh I think it was called.

MEMBER STEUDLE: If it's too late for December it probably is too late.

MEMBER MCCORMICK: I quite frankly don't see this activity taking more than a week to complete if we're all diligently --

MEMBER BERG: If we agree on what the tenet of the memo might be.

(Off microphone comments.)

MEMBER CAPP: So, Scott, we've talked about it all. Would there be value to drafting something, who would we send it to and, if you think we really need it.

MEMBER BELCHER: I think I would, I think you could send it to Chairman Wheeler and members of the FCC, initialed with the FCC. That would be the one place.

And I think you could send it to the chair and the vice chair of the Senate House Committees with jurisdiction and that would be my -- you might send it to OSTP but I don't know. Yes. Probably the OSTP as well.

CHAIR WILKERSON: Would it be appropriate to send it to NHTSA again since it's the same letter and then half the other parties?

We're just looking at refreshing because the question was whether it's outside of --

MEMBER BELCHER: Right.

CHAIR WILKERSON: -- of the current comment period. So we're weighing in on a proceeding that's currently being discussed on the merits of the proceeding. What's the best way to do that given our respective responsibility? That's the question.

CHAIR WILKERSON: Yes.

MEMBER BERG: If it's not within the comment

period.

MEMBER BELCHER: Yes, it's just simply the terms of stating a position and we've made this, we've stated this before.

I mean I presume that the decision was we support 5.9 and we want to make a comment. Is that the sense of the group?

MEMBER CAPP: Yes, it's the sense of the group.

Rationale is what is actually constructive and what does it look like and where would it go. The sentiments are there.

MEMBER BELCHER: So in, didn't, haven't we made this comment in the past?

CHAIR WILKERSON: And so we just discussed, it's being pulled it up right now. They're just pulling them up right now.

MEMBER BELCHER: Okay. So that's a NHTSA.

MEMBER CAPP: But it was to NHTSA.

CHAIR WILKERSON: Yes.

MEMBER CAPP: So NHTSA edited, so NHTSA's done their job now. Right. So sending them, hoping them to help, we're actually on the same side as NHTSA trying to push this thing.

MEMBER BERG: Keep going, keep going, keep going, keep going.

CHAIR WILKERSON: Can you make it a little bigger?

MEMBER BERG: This is all background. Can we go to the bottom of the page? Yes. Right there.

MEMBER RAJKUMAR: So I'm conducting a study that was conducted but there was this question of a study being conducted to see the effects of interference between different technologies by file versus data slice.

MEMBER CAPP: Yes, because we're going on, and Roger would like, he probably knows more specifics.

MEMBER BERG: I do. So I should say the automotive industry responded to the public notice giving reasons why the band splitting proposal should not be adopted and gave indications about which, what are the proper tests to show that end goal, right. Was that your question?

MEMBER RAJKUMAR: And was that conducted?

MEMBER BERG: Was it conducted? No. There's a plan to do that testing between the end of July and January 17th, I believe, to follow the FCC's testing plan.

There's a three-phase plan. A laboratory minor field test and then more of a nature field test.

And I think part of the response was that that's not nearly enough time but you should still go forward and

adopt or save the band and force the other side to show that they're not interfering. I believe that was essentially some of the context of that response.

MEMBER DENARO: And that was in the consolidated response or --

MEMBER BERG: That was the part, the one that I know of which was a consolidation between Alliance, Global, ITS America, and DENSO, I believe.

MEMBER DENARO: Okay.

MEMBER BERG: So I call that, I don't know what it is. Transportation industry.

MEMBER RAJKUMAR: That was this other proposal that maybe a different kind of sharing is feasible where if a new Wi-Fi device using this spectrum is near a roadway it will be, it doesn't set it off.

MEMBER BERG: Yes. It would be test and vacate.

MEMBER RAJKUMAR: Yes, that would be much better.

MEMBER BERG: Yes. And the prototype was delivered to the FCC on the 29th of July as prescribed. The Wi-Fi Broadcom and Qualcomm got extensions on supplying the prototype device. I couldn't tell you exactly how long it is, a couple of weeks.

MEMBER RAJKUMAR: Yes, I'm not sure this letter

included these options. It's politically may be impossible to basically say no sharing, keep it dedicated. I think we need to produce some proper or some feasible compromises, if you will.

MEMBER CAPP: Yes, I think we could probably take portions of some of these industry letters that have been sent almost verbatim for this, put our names on it.

MEMBER BERG: Isn't that plagiarism.

CHAIR WILKERSON: What did you say?

MEMBER BERG: I said, isn't that plagiarism?

CHAIR WILKERSON: No.

MEMBER DENARO: Well, it seems to me our approach here would be maybe referring back to our 2013 letter saying following up, the current committee wants to bring to the attention for this review, the fact that a lot of things have happened.

There is deployment now, both in terms of vehicle and infrastructure. We're more committed than ever to the safety benefits of this technology and so forth and just kind of bring it up to date on that.

Just maybe what I'm suggesting is we don't have to get wrapped around the axle and technical evaluation of the splitting of the spectrum and all of that.

And Scott, I think we, I suggest that we weigh

in and say here's why this is still important, here's what's happened since then which makes this even more obvious it's going to happen and that's kind of our contribution. Does that make sense?

MEMBER BERG: I wonder if our committee's opinion weighs-in more than the automotive industry or the infrastructure industry or AASHTO or, you know.

So this memo was not talking about, the memo we wrote to NHTSA was not talking about spectrum sharing?

MEMBER BERG: Correct. It was just talking about, hey, get the --

MEMBER MCCORMICK: Yes, this came up before spectrum sharing was an issue. It was before the --

MEMBER BERG: I don't know about that. It was before we thought it was an issue maybe.

MEMBER MCCORMICK: Well, because he and I testified in March of '14, so.

MEMBER BERG: But the NPRM was written in 2013. (Off microphone comments.)

CHAIR WILKERSON: I'm just doing a final check here. We've got about nine minutes to 4:00.

MEMBER MCCORMICK: Okay. So is our action plan for us to review this and then consider what our current response would be?

CHAIR WILKERSON: I think it's just on the floor whether or not we want to entertain this recommendation or just the idea of weighing in on this matter.

MEMBER MCCORMICK: But I liked that Bob's suggestion was about leveraging off this is this, this is what's not happening and then creating more reinforcing, then we continue on that path. That's my nickel.

MEMBER BELCHER: I can volunteer but I can volunteer to maybe edit it. I just don't have the bandwidth.

CHAIR WILKERSON: You've raised that issue.

MEMBER BELCHER: I know. I raised the issue, I realize that. Except that I just, I know that that's --

CHAIR WILKERSON: I understand. I'm just, I'm teasing. Any other comments about this or thoughts on going forward or whether we should pursue it, whether anyone has time to take this on in light of the short time frame?

MEMBER ALBERT: I support Bob doing it, putting it together and circulating it.

CHAIR WILKERSON: Bob?

MEMBER MCCORMICK: We're all looking at you, Bob.

(Laughter.)

MEMBER DENARO: Oh. Sorry. I was looking for the, what was the question?

CHAIR WILKERSON: It was a statement.

MEMBER ALBERT: I said I supported you putting together the draft and --

MEMBER DENARO: Oh, I see. Well, shame on me.

MEMBER MCCORMICK: We're waiting for you to read the rules so we just used your inattention.

MEMBER DENARO: Yes, sure.

CHAIR WILKERSON: Okay. So we currently have consensus on the issue and that Bob will take a stab at drafting something and circulating it to the committee for their input. And then depending on whether we have consensus on that, we'll decide whether to move forward on it by communicating online rather than here today. Okay?

Do you have any idea what time frame so people have an idea of when they might expect something from you to weigh in?

MEMBER BERG: What we should do is say we have to submit by some date.

CHAIR WILKERSON: Yes, I'm just trying to get an idea so we're not all hanging out there while people are on vacation trying to get consensus.

MEMBER RAJKUMAR: We also need to have a lead

person at least in charge.

CHAIR WILKERSON: Excuse me?

MEMBER RAJKUMAR: We also need to have a lead person or persons to take charge.

MEMBER DENARO: I'll get a draft, I'll get a draft, very strawman a week from Friday. A week from tomorrow.

CHAIR WILKERSON: Okay. And all comments will be due back to you by?

MEMBER DENARO: Within ten days.

CHAIR WILKERSON: It's up to Bob.

(Simultaneous speaking.)

CHAIR WILKERSON: The day after Labor Day just about.

MEMBER MCCORMICK: Yes, I think our goal should be October 1st given the December closure period.

CHAIR WILKERSON: That's kind of late isn't it?

MEMBER MCCORMICK: You've got to give people time to read it and receive it.

CHAIR WILKERSON: That's kind of late though, isn't it?

MEMBER MCCORMICK: All right. Well, mid-September?

CHAIR WILKERSON: I mean, I'm just speaking as a

former policy person.

MEMBER DENARO: I mean, we've got to get that draft out. If we took another two weeks to get all comments back on that, that leaves September 2nd. If we took another --

MEMBER BELCHER: Well, if you're drafting a letter --

MEMBER DENARO: What's that?

MEMBER BELCHER: If you're drafting a one or a two, a one-page letter, probably isn't more than one page, we can certainly get you comments back within a week.

MEMBER DENARO: Okay.

MEMBER BELCHER: If we can't, then shame on us.

MEMBER DENARO: Yes, okay. We have no --

MEMBER BELCHER: I think we need to do that.

(Simultaneous speaking.)

CHAIR WILKERSON: My only caveat would be that if you make recommendations, please draft the language so that Bob does not have to do any of the, articulating your thoughts. Okay?

(Simultaneous speaking.)

CHAIR WILKERSON: All right. So we have four minutes to go and we will look for the email from Bob.

We will have a Survey Monkey at some point once

Ginger and I communicate with Stephen. We'll have a meeting in the spring and potentially one in the summer to address the last three issues.

We said in October, November. So any other comments, concerns, questions, issues?

MEMBER DENARO: Everyone travel safe.

CHAIR WILKERSON: So first off I'd like to thank you for being here. I think your contributions, we were really looking forward to hearing from you. Thank you. I think we spent almost two hours going through those issues and we're real happy with doing. Thanks again, Steve, for everything that you do.

MR. GLASSCOCK: Yes. Thank you Sheryl, for your job chairing.

MEMBER MCCORMICK: I'd prefer it on binders.

CHAIR WILKERSON: Electronic. Sounds good. Thank you. So this meeting is adjourned.

[Whereupon, the above-entitled matter went off the record at 3:57 p.m.]