Meeting of the
ITS Program Advisory Committee
March 2-3, 2011

Meeting Minutes

June 6, 2011

CONTENTS

1. General

a. A meeting of the Intelligent Transportation Systems (ITS) Program Advisory Committee (PAC) was held March 2 to 3, 2011, in the Ann Arbor Marriott Ypsilanti at Eagle Crest Hotel, 1275 Huron Street, Ypsilanti, Michigan 48197.

b. These minutes provide a summary of the meeting proceedings. A copy of these minutes, the meeting transcript, the meeting PowerPoint briefing charts, and other meeting documents are available for public inspection and copying in the ITS PAC Website at http://www.its.dot.gov/itspac/index.htm.

2. Meeting Attendance

a. Committee members present, in alphabetical order:

Mr. Scott Belcher; President and CEO, ITS America
Mr. Joseph Calabrese; Director, Greater Cleveland Regional Transit Authority
Ms. Robin Chase (via teleconference); Founder & CEO, Meadow Networks
Mr. Robert Denaro; Vice President, NAVTEQ Corporation (ITS PAC Committee Vice Chairman)
Dr. Adam Drobot; Managing Director and Chief Technology Officer, 2M Companies
Ms. Ann Flemer (via teleconference); Deputy Executive Director, Policy; Metropolitan Transportation Commission; Oakland, California
Mr. J. Peter Kissinger; President and CEO, AAA Foundation for Traffic Safety
Mr. Don Ostenberg; Senior Vice President, Safety and Driver Training, Schneider National, Inc.
Dr. Joseph Sussman; JR East Professor, Department of Civil and Environmental Engineering and Engineering Systems Division; Massachusetts Institute of Technology (ITS PAC Committee Chairman)
Dr. Peter Sweatman; Director, University of Michigan Transportation Research Institute
Mr. James Vondale; Director, Automotive Safety Office, Sustainability, Environmental and Safety Engineering; Ford Motor Company

b. Committee members absent, in alphabetical order:

Mr. Steve Albert, Director, Western Transportation Institute
Dr. Genevieve Giuliano, Senior Associate Dean for Research and Technology, USC School of Policy, Planning, and Development
Mr. Randell Iwasaki; Executive Director, Contra Costa Transportation Authority
Mr. Jack Lettiere; President, Jack Lettiere Consulting
Mr. Bryan Mistele; CEO, INRIX
Mr. Kirk Steudle; Director, Michigan Department of Transportation
Mr. Gary Toth; Senior Director, Transportation Initiatives; Project for Public Spaces

Mr. Pravin Varaiya; Nortel Networks Distinguished Professor, Department of Electrical Engineering and Computer Sciences; University of California, Berkeley

c. Others present, in alphabetical order:

Mr. Peter H. Appel; Administrator, Research and Innovative Technology Administration, U.S. Department of Transportation
Mr. John Augustine; Managing Director, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation
Dr. Robert L. Bertini; Acting Director, ITS Joint Program Office and Deputy Administrator, Research and Innovative Technology Administration, U.S. Department of Transportation
Ms. Valerie Briggs; ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation
Mr. James Buczkowski; Technical Fellow and Director of Electrical and Electronic Systems Research and Advanced Engineering, Ford Motor Company
Mr. Walton Fehr; ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation
Mr. Stephen Glasscock; Program Coordinator, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation (ITS PAC Designated Federal Official)
Mr. John Maddox; Associate Administrator for Vehicle Safety Research, NHTSA
Mr. Ron Medford; Deputy Administrator, NHTSA
Mr. Christopher Pangilinan; Special Assistant to the Deputy Administrator, Research and Innovative Technology Administration, U.S. Department of Transportation
Mr. Mike Schagrin; ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation
Mr. Steve Sill; ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation
Mr. Vincent Valdes; Associate Administrator for Research, Demonstration, and Innovation, Federal Transit Administration, U.S. Department of Transportation
Mr. Carlos R. Vélez, Jr.; Citizant, Inc.

3. Meeting Action Items

The reference following each action item is the paragraph and page number of the Summary of Proceedings below where the action item (in bold font) is located.

a. The ITS JPO will include the ITS PAC in the distribution for comment of the draft Concept of Operations of the Core System for the next generation integrated transportation system. (5.d.(3), page 8).

b. The ITS JPO will make available to ITS PAC members copies of V2V communications technology scan reports, either paper copies or electronically on the ITS PAC Website or by other means (5.d.(4), page 9).

c. When the Standards Program Strategic Plan is released, the ITS JPO will provide ITS PAC members copies for their reaction (5.j.(2)(j), page 15).

d. Dr. Sussman and Mr. Denaro will develop standard templates for subcommittee reports by March 21 (5.k.(1), page 16).

e. Dr. Sweatman and Mr. Denaro will develop a draft outline for the White House summit by the end of March (5.k.(2), page 16).

f. Subcommittees will develop and submit written reports with specific recommendations for the ITS JPO by April 29 (5.k.(3), page 16).

g. The ITS PAC will hold a Web conference in mid-May for initial vetting of the subcommittee reports (5.k.(4), page 16).

h. The ITS PAC will hold a face-to-face meeting in mid-June to review subcommittee reports as modified by input received during the Web conference. The goal of this meeting is to develop consensus on recommendation that can be submitted in the next advisory memorandum (5.k.(5), page 16).

4. Meeting Agenda

Wednesday, March 2

a. Opening Remarks: Dr. Joseph Sussman, Committee Chairman

b. Review of January Meeting: Dr. Sussman

c. Agenda Review: Dr. Sussman

d. Technology and Communications Discussion: Mr. Bob Denaro, Moderator; Mr. Walt Fehr, Presenter

e. Remarks: Mr. Peter Appel, RITA Administrator

f. Remarks: Mr. Ron Medford, NHTSA Deputy Administrator

g. Technology and Communications Discussion (continued)

Thursday, March 3

h. Transformation Discussion: Dr. Sussman, Moderator; Ms. Valerie Briggs, Presenter

i. Subcommittee Breakout Meetings

j. Subcommittee Report Outs/Presentations

k. Summary and Wrap Up

l. Adjourn

5. Summary of Proceedings

Wednesday, March 2

a. Opening Remarks

Dr. Sussman welcomed all present and requested they introduce themselves. Following the introductions, Dr. Sussman summarized the committee activities leading up to development of the current meeting's agenda. The committee, which had been reconstituted with 7 previous and 13 new members, met for the first time in April 2010. At that meeting, the committee identified the following issues of particular importance for the committee to focus on as it continues to work with the ITS JPO:

(1) Multimodalism – perhaps highway domination is an issue, the committee would like to better understand multimodal aspects of the ITS research program.

(2) The platform approach and Connected Vehicle (previously "IntelliDrive") – can the ITS JPO research approach provide a platform for other developments?

(3) Communications – the issue of DSRC versus wireless and other communication modes.

(4) Technology – the concern is that perhaps ITS in the U.S. is falling behind, technologically.

(5) Transformation – meaning institutional transformation, the notion that perhaps some new definition of relationships between the public and the private sector, and a redefinition of relationships between, for example, federal and state governments, might be helpful to more effectively deploy ITS.

b. Review of January Meeting

Dr. Sussman explained that these issues generally formed the template for the committee's January meeting and the current meeting. At the January meeting, the committee received presentations on the first two issues, multimodalism and Connected Vehicle (previously "IntelliDrive")/platform approach, and discussed them in some detail. At the current meeting, there would be presentations on and discussions of the other issues – a combination of communications and technology and institutional transformation.

Dr. Sussman stated that the other outcome of the January meeting was the formation of three subcommittees:

(1) Technology Strategy, chaired by Dr. Sweatman;

(2) Standards and Harmonization, chaired by Mr. Vondale; and

(3) Program Evaluation and Strategy, chaired by Ms. Flemer.

During the current meeting, these subcommittees would have the opportunity to meet to discuss what they have accomplished since the January meeting and how they will contribute to the committee's future deliberations. Dr. Sussman emphasized that the subcommittees will be very important in creating "intellectual capital" that can be of value to the ITS JPO.

Dr. Sussman informed the committee that he was asked make a presentation at the Transportation Research Board annual meeting in January on what the ITS PAC had learned and what it hoped to learn in the future. Dr. Sussman summarized the following major points of his presentation:

(4) The committee's view is that the ITS JPO should play a leadership role in the ITS program, but not oppressively so – it should provide guidance, but should not dictate what should be done.

(5) The committee is concerned with the slow rate of ITS deployment in the U.S.

(6) The committee is concerned also with the ITS program technology strategy, that the U.S. ITS program may be falling behind, technologically. Is the program developing technologies or drawing on "cutting edge" technologies developed in other sectors that will be in the long-term interest of the program?

(7) Does the ITS program provide a platform for development by others?

(8) ITS has a role to play with respect to "critical contemporary issues;" e.g., mobility, environment, global climate change, the aging society, global competitiveness, urbanism around the world, etc.

(9) ITS should be at the center of a new vision for transportation in the U.S., adding that perhaps the public was tiring of the transportation profession's grumbling about the poor state of repair of the transportation infrastructure and other problems, and that the profession instead might be better off taking a more positive perspective on helping to create a new vision for transportation, with ITS at the core of the vision.

c. Agenda Review

Dr. Sussman next reviewed the major topics of the meeting agenda, which included:

(1) ITS JPO staff presentations followed by committee discussions on ITS program technology and communications and institutional transformation.

(2) A dinner presentation by Mr. Jim Buczkowski, Technical Fellow and Director of Electrical and Electronic Systems Research and Advanced Engineering, Ford Motor Company.

(3) Subcommittee breakout meetings and report-outs on what the subcommittees believe are their appropriate areas of study and, perhaps, on recommendations the committee could make for ITS JPO consideration and, hopefully, action.

(4) A wrap-up session, during which the committee would identify some consensus on specific recommendations to the ITS JPO and discuss planning for a potential June committee meeting.

Dr. Sussman stated that he hoped the wrap-up session would lead to some committee consensus on specific committee recommendations to the ITS JPO.

Mr. Denaro underscored Dr. Sussman's comment that the committee must reach consensus on a manageable set of recommendations to the ITS JPO, and requested that committee members keep this mind during the meeting's deliberations.

Dr. Sussman turned the meeting over to Mr. Denaro for the technology and communications discussion.

d. Technology and Communications Discussion

Mr. Denaro provided background information on previous committee technology and communications discussions. At the April 2010 meeting, there was discussion of the ITS research program's focus on DSRC for safety applications. In the committee's August 2010 memo to the ITS JPO, it strongly recommended that multiple communications be considered to ensure program success, and the ITS JPO has aggressively moved forward in embracing other communications technologies. At the January 2011 meeting, the discussion included the Connected Vehicle program parallel research tracks – the safety track that relies on DSRC communications and the mobility track that leverages DSRC, but also includes other communications technologies. Mr Denaro stated that the purpose of the technology and communications presentation and discussion was for the committee to better understand the ITS program technology communications approach and to identify potential areas for committee advice to the ITS JPO on the subject. Mr. Denaro turned the meeting over to Mr. Fehr to make the presentation.

Mr. Fehr stated that his presentation would cover two major technology- and communications-related issues raised by the committee:

(1) Communications – The vehicle-to-vehicle (V2V) research initiative has emphasized DSRC as its communications mode. However, recently the ITS JPO

has considered other technologies and reserved DSRC for latency-critical communications for intersection safety. Although this is a step in the right direction since it provides an open platform for communications, DSRC can be expensive and sole reliance on it might constrain development of a multimodal program.

(2) Technology – The committee is concerned that the U.S. ITS program is already substantially behind, perhaps by ten years, in the application of technologies.

To address these issues, Mr. Fehr discussed two ongoing ITS JPO activities: a system definition update/reassessment, and a technology scan and assessment.

(3) The system definition update involves a rigorous systems engineering process to update the definition of an enabling technology system, particularly with respect to the communications that take place away from the roadside. Earlier iterations of the system focused on the mobile component and the first point of contact between that mobile component and the infrastructure. What has become apparent is that it is extremely important to understand what happens once communications get off on the side of the road into the rest of the applications that exist in the initial Internet area. The current system definition update is more holistic, so the word "communication" applies to not only "over the air," but also through the Internet, because both are equally important to successfully operating applications. The process began with a re-canvassing of user needs. A draft Concept of Operations, which will include a detailed articulation of user needs, will soon be circulated for public comment. Mr. Fehr stated that **the ITS JPO will include the ITS PAC in distribution for comment of the draft Concept of Operations of the Core System for the next generation integrated transportation system.** Mr. Fehr stated that one of the interesting outcomes of the system definition update has been the realization that management and oversight will be one of the more important aspects of the system to prevent a "wild, wild west, where anybody with a computer in their basement can create stuff, but it may not be the appropriate stuff." Also, there is more cognizance that the system is a logical, versus a physical, system. He added that the system architecture will be available in July of this year. Mr. Augustine made the distinction that this will be the V2V communications technology architecture, which will be a part of the national ITS architecture.

(4) The technology scan and assessment is being conducted by ITS America and has two major objectives:

- To track trends, technologies, and innovations that could influence, or be leveraged as part of next-generation ITS systems, within a five- to seven-year horizon.

- To assess potential of transformative technologies that could profoundly affect the advancement of connected vehicle technology.

Mr. Fehr made several copies of one of the scan reports available in the conference room and stated that **the ITS JPO will make available to ITS PAC members copies of V2V communications technology scan reports, either paper copies or electronically on the ITS PAC Website or by other means**.

Mr. Fehr stated that the scan had highlighted the very desirable ability of the system to transport a packet of information from one system application component to another without changing it. The scan is also analyzing trends in the vehicle and communication industries, such as telematics business models and the "App Store" phenomenon.

Mr. Fehr stressed that he hoped a key take-away from his presentation would be that, "We now understand that we will have a very different, more diverse deployment than what we may have understood in the past."

After a scheduled break in the proceedings, Mr. Denaro announced that there would be a pause in the technology and communications discussion to allow Mr. Appel, who joined the meeting late, and Mr. Medford to make remarks.

e. Remarks: Mr. Peter Appel, RITA Administrator

Mr. Appel stressed that the ITS program's biggest and most visible objectives cannot be achieved unless RITA has advice and coordination with a broad range of stakeholders, of which ITS PAC members represent many, so U.S. DOT needs will listen to their advice very carefully. He stated that in his recent conversations with ITS JPO staff he has stressed that one of the ways to think about the V2V and V2I wireless communication for safety program is to imagine that these technologies are successfully deployed in a substantial number of vehicles in the year 2025 and then to answer the question, what did we have to do, what needed to have happened to get to that point? He added that the answer to that question is the most important input U.S. DOT needs from the ITS PAC. Certainly, U.S. DOT staff have a good idea of what the issues are that need to be resolved to get to that "nice spot" in 2025, but it is important to have the ITS PAC's perspectives on these issues. Mr. Appel concluded his remarks by emphasizing the ITS program will be taking some very major steps in the next 12 months, and he appreciates the time ITS PAC members take out of their schedules to participate in this effort.

Dr. Sussman thanked Mr. Appel for his remarks and asked him how he deals with senior U.S. DOT leadership on the question of whether ITS technologies might cause driver distraction, since reducing driver distraction is one of the Secretary of Transportation's major priorities? Mr. Appel stated that he and the Secretary see no conflict between driver distraction prevention and development of new technology to advance safety, adding that there is plenty of good technology in vehicles that adds value without creating unnecessary distraction.

Dr. Sweatman stated that autonomous applications likely will be available by 2025, and asked Mr. Appel how the ITS program will work to accelerate the development and

deployment of purely advisory applications while at the same time considering the transition to autonomous applications? Mr. Appel responded that the program should not force this transition – that we should first achieve a very high level of comfort with the advisory approach before implementing intervention technologies. The program must maintain credibility with the public that intervention technology will not be deployed until there is satisfactory certainty that it will add value. Mr. Appel invited Mr. Medford to make remarks.

f. Remarks: Mr. Ron Medford, NHTSA Deputy Administrator

Mr. Medford stressed that despite the deployment of ITS technologies in the past 10 years, traffic deaths are still one of the most significant public health issues, so reducing traffic deaths is one of the most significant contributions that can be made to public health. Mr. Medford believes that the effort to reduce traffic deaths had been languishing and lacked commitment, but now has new momentum due to RITA's leadership role. He stated that V2V technical issues are not that complicated – that most complications are related to security and privacy, so NHTSA will make a regulator decision about V2V in 2013. He added that the technologies needed to make a significant impact on traffic safety "in our lifetimes" are available. The challenge is to find ways to apply these technologies and to solve the policy and security issues. He added that ITS PAC advice on these very critical policy-level issues is very important to ITS program progress.

Dr. Sussman asked Mr. Medford to clarify the nature of the 2013 regulatory decision, specifically, will a regulation take effect? Mr. Medford replied that a regulation will not be promulgated; instead, a cost-benefit analysis will be conducted in 2013 based on available data to determine whether or not to begin the regulatory process, which could go on for a number of additional years. Dr. Sussman further asked whether the rule that would ultimately be promulgated require automobile manufacturers to install a specific technology. Mr. Medford replied that it would and further clarified the rulemaking process.

The committee discussion that followed included the following major topics:

(1) Change in culture – traffic fatalities are a leading public health crisis, but not a foregone conclusion. This reality can be changed.

(2) Driver distraction – although technology will create some driver distraction, it also can help to solve the problem when combined with enforcement and public information.

(3) Warning-based versus autonomous control systems – the challenges to achieving auto industry and driver acceptance for transitioning from notification, to intervention, to autonomous control technology.

(4) Expansion of V2V research to transit. V2V research is migrating from passenger vehicles and heavy trucks to transit vehicles.

(5) Cybersecurity – staying ahead of the hackers is a major challenge. This is a high-priority issue within the White House Office of Science and Technology Policy, so it may be possible to leverage this interest to get access to the nation's "best of the best" thinkers in this area.

(6) Safety – the strong safety focus of V2V and V2I is important because safety is a moving target; e.g., as vehicles get smaller and lighter to meet fuel economy and emissions reduction standards, their reduced mass may make them less safe in a crash.

g. Technology and Communications Discussion (continued)

Mr. Denaro requested the committee return to the technology and communications discussion. He added that to address the requirement of formulating potential recommendations to the ITS JPO, the committee should focus, not on "coming up with answers," but on the questions the ITS JPO should focus on to be successful with respect to communications. In summary, Mr. Denaro identified the following major questions:

(1) What is the proper balance between the need to commit to a communications technology and the benefits of remaining technology-agnostic?

(2) Is the ITS JPO taking a performance-based requirements approach in evaluating potential/emerging communications technologies?

(3) Are cybersecurity issues being properly addressed?

(4) Is current and projected ITS program spending adequate to ensure program success?

(5) Do ITS research plans properly address transit and trucking?

Mr. Denaro concluded the discussion, stating that he believed the day was the best day yet for the committee, and thanked committee members for their input.

The meeting adjourned for the day at 5:09 p.m.

<u>Thursday, March 3</u>

Dr. Sussman opened the second day's deliberation by thanking Mr. Vondale for arranging the previous evening's excellent dinner presentation by Mr. Buczkowski of Ford. Dr. Sussman also introduced Dr. Rob Bertini, RITA Deputy Administrator, who would participate in the second day's deliberations.

Dr. Sussman introduced Ms. Briggs for the Transformation presentation and discussion.

h. Transformation Discussion

Ms. Briggs stated that the objective of her presentation was to address the committee's questions concerning the ITS JPO role in ITS institutional transformation. The ITS PAC's August 2010 advisory memorandum to the U.S. DOT stated that, given the pressures the world of transportation and ITS face, transformational change and innovation is an imperative, adding that transportation/ITS needs new institutions, new deployment and funding mechanisms, etc. The advisory memorandum asked what role the ITS JPO could play in creating a positive transformation and identified two areas in which transformation may be appropriate:

(1) The Federal/states interface. While the Federal Government cannot drive ITS implementation other than by cooperation by the States, it can provide leadership and incentives, and can track deployment success. How can the ITS JPO best contribute to this relationship?

(2) The public/private interface. Public/private relationships are especially relevant to how vehicle and infrastructure technologies relate in ITS deployment, so they must be made more efficient and effective. How can the ITS JPO best address this issue?

Ms. Briggs first described ITS institutional relationships within U.S. DOT, stressing that ITS budget development is a multimodal effort managed collaboratively at the Administrator level through the ITS Management Council and at the Director level through the ITS Strategic Planning Group. This is the only U.S. DOT program operated in this manner. Ms. Briggs went on to describe the ITS JPO's active stakeholder relationships with U.S. government agencies, the safety/public safety sector, state and local governments/roadway authorities, and the private sector. ITS PAC questions were directed primarily at better understanding how the ITS JPO works thorough its Federal/states and public/private relationships in exercising its ITS program leadership role. The sense of the committee was that:

(3) The ITS JPO has made significant progress in recent years in its ITS program leadership role.

(4) The ITS JPO does not have the authority, resources, and funding necessary to satisfactorily accelerate ITS program success.

Mr. Denaro stated that although the discussion had not resulted in the identification of problem solutions, it had provided more clarity on the problem of the ITS JPO's program leadership limitations.

i. Subcommittee Breakout Meetings

The committee broke out into its three subcommittees to discuss and prepare reports on their proposals for recommendations to be included in the committee's next advisory memorandum to U.S. DOT.

j. Subcommittee Report Outs/Presentations. Following are key portions of the three subcommittee reports.

(1) Technology Strategy Subcommittee. Dr. Sweatman presented the Technology and Strategy Subcommittee report. The report addressed three areas: desired research program characteristics, specific recommendations, and next steps for the subcommittee.

(a) Desired research program characteristics:

- Integrated rather than independent.
- Technology agnostic – frameworks, architectures, etc. should not depend on specific technologies or solutions.
- Multimodal.
- Focus on data – data security and data brokerage.
- Leverages as much as possible existing authentication encryption technology.

(b) Specific recommendations:

- Sponsor a transportation communications and technology (White House) summit jointly with the White House Chief Technology Officer (CRO) in the fall of 2011 to help move the ITS program forward.
- Better define/develop the vehicle research platform.

(c) Subcommittee next steps:

- Revise the subcommittee's original charge and formulate specific additional proposals for recommendations to U.S. DOT.
- Increase subcommittee membership to include sectors that will be included in the White House summit.
- Prepare a white paper in preparation for the White House summit.

- Recruit the White House CTO as a subcommittee co-chairman to help organize the White House summit.

(2) Standards and Harmonization Subcommittee. Mr. Belcher briefed the Standards and Harmonization Subcommittee report. The PowerPoint briefing slides as available at the ITS PAC Website at http://www.its.dot.gov/itspac/index.htm. Mr. Belcher reported the following major subcommittee activities/accomplishments to date:

(a) Sharing of presentations.

(b) A conference call with Dick Shnacke, chairman of the International Standards Organization TC-204, to discuss the TC-204 standards setting arena and challenges.

(c) Mr. Vondale's and Mr. Sills' participation in the International Organization of Motor Vehicle Manufacturers' initial call of standard setting bodies.

(d) Agreement to add technical experts to the subcommittee.

(e) Agreement to continue conference calls.

Mr. Belcher invited Mr. Sill to discuss major aspects of U.S. DOT cooperative standards systems development. Mr. Sill addressed the following questions/answers:

(f) How does USDOT support ITS standards development?

- Strategic plan to guide future standards developments/policies.
- Financial support to standards development/maintenance efforts.
  - Do not generally define contents of standards, not prescriptive.

(g) Why harmonize?

- Reduce need for different hardware/software.
  - Reduce cost and accelerate implementation.
  - Multi-region capability, broaden supplier base.
- Avoid duplication of effort and expand knowledge base.
  - Cooperation on applications, technical research.

(h) What's next?

- US cooperative systems architecture published late 2011.
- Develop and test standards for the defined interfaces.
- Continue DSRC standards development.
- Seek to harmonize when in the public interest.
  - Adopt/adapt existing standards when appropriate.

(i) Mr. Belcher next presented an international standards and TC-204 overview and concluded his presentation with the following issues that could form the basis for advice to the U.S. DOT:

- There does not appear to be a U.S. champion for the ability to generate U.S. positions.
- There is need for forums to facilitate harmonization.
- There is a need to agree on the list of top issues for harmonization (many have been identified).
- Identify implications for lack of harmonization on top issues.
- Identify various SDOs and support groups that have influence over top issues.
- Identify appropriate U.S. role in various groups.
- It is unclear whether standards harmonization has adequate resources and support.

(j) During the discussion that followed, Dr. Bertini stated that **when the Standards Program Strategic Plan is released, the ITS JPO will provide ITS PAC members copies for their reaction.**

(3) Program Evaluation and Strategy Subcommittee. Dr. Sussman invited Mr. Kissinger to brief the Program Evaluation and Strategy Subcommittee report.

(a) Mr. Kissinger stated that the subcommittee had come to agreement on the following overarching tenets to frame the discussion of the program evaluation and strategy:

- The focus is on program (top-level) evaluation and not project evaluation.

- Resources well beyond what the ITS JPO has may be needed.

- The subcommittees findings my go beyond the ITS JPO "charter" as seen by others.

(b) Mr. Kissinger added that in the context of the tenets above, the subcommittee developed the following five declarative statements that could be interpreted as recommendations or objectives for the ITS JPO – the ITS JPO should:

- Provide an effective environment for system development, investment, and deployment by others.

- Work towards institutional transformation where it is of value; for example, public-private partnerships and federal-state interactions.

- Have a technology strategy that recognizes and leverages technology development in other sectors such as defense, telecommunications, etc.

- Develop and execute a multimodal ITS strategy.

- Work toward an ITS program that contributes to a sustainable transportation system where the three E's are present: economic development, environmental protection, and social equity.

After general discussion of the Program Evaluation and Strategy Subcommittee report, Mr. Denaro transitioned the discussion to the meeting summary and wrap up.

k. Summary and Wrap Up. The committee identified the following actions:

(1) Dr. Sussman and Mr. Denaro will develop standard templates for subcommittee reports by March 21.

(2) Dr. Sweatman and Mr. Denaro will develop a draft outline for the White House summit by the end of March.

(3) Subcommittees will develop and submit written reports with specific recommendations for the ITS JPO by April 29.

(4) The ITS PAC will hold a Web conference in mid-May for initial vetting of the subcommittee reports.

(5) The ITS PAC will hold a face-to-face meeting in mid-June to review subcommittee reports as modified by input received during the Web conference. The goal of this meeting is to develop consensus on recommendation that can be submitted in the next advisory memorandum.

l. Adjourn. The meeting adjourned at 3:35 p.m.

We hereby certify, to the best of our knowledge, that the foregoing minutes are accurate and complete.

John Augustine
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