

ITS Program Advisory Committee (ITS PAC) Advisory Memo to U.S. DOT  
Number 1

May 29, 2008

Introduction

On March 13, 2008, the ITS Program Advisory Committee (ITS PAC) met at DOT HQ in Washington, DC. Minutes and supporting documents from the meeting have already been distributed by JPO staff. This memo was prepared by Joseph Sussman (chair) and Robert Denaro (co-chair) and vetted by the committee and constitutes the committee's considered views and advice to the USDOT with respect to ITS and related programs as presented.

While the committee had two meetings prior to the March 13, 2008 session—one by conference call and the other in Washington--- this was the first meeting since Joseph Sussman and Robert Denaro were named as chair and co-chair respectively. Accordingly Sussman chaired the meeting.

Given this is the first committee-prepared communication to JPO, we begin by laying out the “rules of engagement”.

Rules of Engagement

Role of ITS PAC - The role of ITS PAC as the name suggests is advisory; we have no executive power. We will simply advise JPO on ways to further the ITS program. At the same time the ITS PAC provides an *independent* view to JPO; indeed it is our independence that creates the value of the committee's inputs. The committee will produce a written output after each meeting, vetted by the committee for consensus, that will constitute the “advice” of the committee to JPO. The committee can also respond to JPO requests for advice between meetings.

ITS View - The committee will take a broad view of ITS. ITS and the transportation system at large constitute a complex socio-technical system and the committee will bring a *systems approach* to its deliberations. To that end, the committee sees itself as reviewing “ITS” within the federal US government, and not simply the JPO and USDOT. So for example, programs related to ITS at the Departments of Commerce and Homeland Security are important for us to understand. Indeed, even more broadly, to do our task effectively, we must be concerned how the federal role in the ITS area relates to the roles of the private sector and the research community, including advising on the structuring of organizational roles, relationships between the public and private sectors, and relationships between the federal, state and local government in the ITS context. We suggest there is still some ambivalence and uncertainty about what the appropriate federal role should be. This will be a continuing area of discussion.

The committee will approach ITS both from the perspectives of the individual surface modes and from an intermodal/ multimodal perspective. This dual focus is important. Within each mode, the issues are often unique and require unique treatment; at the same time, an intermodal/multimodal perspective is needed to assure broader opportunities are not missed. Both perspectives are vital to the long-term success of ITS and indeed the transportation system more broadly in the U.S.

In accord with this broad systems view of ITS, in the first meeting we took a strategic view of ITS, and how it relates to other USDOT transportation programs and studies; hence we had discussions of the UTC program; the RITA role in helping to structure the USDOT RD&T strategic planning process; and the National Surface Transportation policy and Revenue Study Commission. We will continue to take that broad perspective in our further deliberations.

### Comments on ITS Program Goals

The committee sees the goals of the ITS program as being multidimensional. Those stated by JPO were mobility, safety, the environment -- the committee was pleased to see the addition of the environmental goal since our last meeting in November 2007 when the committee spoke out on the need for an environmental perspective-- and 21<sup>st</sup> century institutions, innovations, and partnerships. These goals reflect vital national transportation priorities—dealing with congestion, improving safety, environmental protection and enabling the deployment of new transportation technologies through institutional innovation. All of these goals should be considered from an integrated systems perspective.

The committee notes that the program goals appropriately reflect that the ITS program is not simply technology but must relate to a variety of political, social and deployment issues. With respect to the current goals and focus areas, the committee felt that explicitly tracing their interconnections and relationships would help in creating a more integrated sense of the ITS Program.

Various committee comments on the goals and focus areas were incorporated in the edited minutes. In addition, the committee suggests a further goal: *universal access* to the transportation system as facilitated by ITS technologies. We note that if one puts together 1) mobility and safety as an enabler of economic development, 2) the environment, considering the impacts of the transportation enterprise on the environment, broadly defined, and 3) universal access, which deals with questions of social equity, we have the classic idea of *sustainability* as an overarching goal of the ITS program.

Specifically, the committee suggests adding the following additional goal:

### ***ITS-enabled Universal Access to the US Transportation System***

The proposed focus area under this goal is

*Conduct research on and enable deployment of means by which all citizens can access the full mobility and information benefits of the US transportation system through ITS technologies*

#### Further Cross-cutting Comments on the Program

##### *Vehicle Infrastructure Integration (VII)*

VII, being studied through SAFE TRIP 21, aims toward a launch of important demonstration technologies for the New York World Congress in November 2008. Some specificity on what can be expected for the New York meeting would be helpful. Currently the idea is to allow private sector companies and public sector organizations to form partnerships for field tests. What will emerge from that is uncertain; we trust more specificity will be forthcoming soon. We have concerns that without some leadership from USDOT, we may end up with a collection of demonstrations that lack cohesion and consistency with the goals of the U.S. ITS program.

##### *Outreach to University Transportation Centers (UTCs)*

There is a real opportunity with the UTC program, which has considerable research support. The idea is that JPO could reach out to the UTCs to suggest ITS-related research areas they might usefully address. We suggest that many (not all) UTCs would view these suggestions as friendly as they work to structure a relevant program. This outreach can be expedited by attendance of JPO staff at the summer meeting of CUTC in San Jose State University's Mineta Center in late June. Since UTC operates within RITA, as does JPO, there is a natural opportunity for interaction.

##### *Program Linkage*

We were presented with an interesting set of new goals and focus areas, as an output from the recent JPO strategic planning process. We need a better understanding of how those goals and focus areas link to the current programs that were described to us during our November 2007 meeting.

##### *Public Acceptance*

At several points during the meeting the importance of public acceptance of and enthusiasm for ITS was noted. The program will never be successful unless the traveling public and commercial organizations recognize the importance and value of ITS. Ways of creating public acceptance and support should be discussed at subsequent meetings.

##### *Budget*

We spent very little time on budgets for the ITS programs in DOT. The committee needs to develop a better understanding of program budget elements in future meetings.

### *Demand-side Activities*

The committee felt there was insufficient demand-side work in the ITS program – This includes not simply managing the transportation demand we have more effectively, but changing the temporal and spatial patterns of demand as an approach to the congestion and environmental issues we face. Better balance between the substantially supply-side oriented solutions currently on the table and demand-side alternatives is needed.

### *Technology and Organizational Scanning*

#### Technology

There is a role for JPO in broad-based *technology scanning* to assure that our ITS activities are advantaged by the most informed view of what is going on technologically. This includes scanning of international activities which may yield insight into technology opportunities as well as early indications of public acceptance and enthusiasm for ITS.

#### Organizational Models

JPO should collect information on organizational ITS deployment models worldwide. Many countries in both the developed and developing world have created organizational models that are largely not used here in the US. Perhaps there are good reasons for this, but certainly we should be informed about organizational alternatives.

### Conclusion

The committee has developed a deeper, more comprehensive understanding of the ITS program from the meetings it has held and from the detailed material distributed to us by JPO and other DOT staff. We thank all those who presented to us and those that participated in facilitating the meeting.

We hope this memo is of value to the JPO and other participants in DOT programs and we look forward to subsequent meetings and opportunities to contribute to the ITS program.