

ITS Professional Capacity Building Workshop: Setting Strategic Direction
July 21, 2010
8:30 am – 12:00 pm
Northbrook, Illinois
Meeting Proceedings

Attendees included representatives from the following agencies and organizations:

ITE	Mixon Hill	TTI
Consystec	RITA/ITS JPO	Chicago DOT
Transcore	FHWA/ Resource Center	KLD Associates
FHWA, Office of Safety	Somat Engineering	University of Wisconsin-Madison
Michigan DOT	Car Buddy	Illinois DOT
Sensys Networks	Idaho Transportation Dept.	Arizona DOT
USDOT/ITS JPO	Heavy Duty Manufacturers	Siemens
USDOT/Volpe Center	Lockhead Martin	Telvent
Jacobs Engineering	SmartTraveler	FTA
ITS Institute/Center for Trans Studies/University of Minnesota	Sprint Corp	Silosmashers
Jacobs Engineering	URS	Cambridge Systematics
SAIC	APTA	

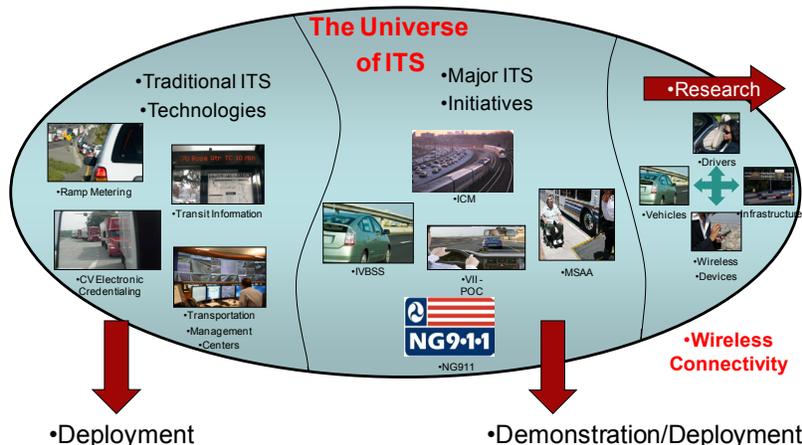
Facilitators:

Mac Lister, ITS JPO, U.S. DOT
 Larry Raskin, Volpe, U.S. DOT
 Liz Greer, Noblis
 Charlotte Burger, Volpe, U.S. DOT

The ITS Professional Capacity Building (PCB) Program held a workshop during the U.S. Department of Transportation's (USDOT) Intelligent Transportation Systems Joint Program Office (ITS-JPO) IntelliDriveSM Safety program three-day workshop. The objective of the ITS PCB workshop was to solicit feedback from the ITS community regarding the reshaping of its program strategy and its process to develop and update the ITS PCB Program Plan.

Introductory Exercise

Participants were asked to identify 'where they are currently working' in the ITS program, as indicated in the areas illustrated in the image below. Participants then answered what particular challenges they are facing within each area of the ITS Universe. The following represents the challenges mentioned by participants under the three main ITS categories of deployment, demonstration/deployment, and research.



What are the key challenges you are facing?

DEPLOYMENT

- *Misunderstanding of what ITS actually is*
- *Misunderstand of information, standards, requirements*
- *Not an island, integration*
- *Coordination across departments, organizations*
- *Integration of legacy systems,*
- *Coordination and cooperation across departments and across bureaus*
- *Meet procurement challenges*
- *Use of open architectures and understanding telecommunications networks- having a cross disciplinary understanding of systems*
- *Intellidrive- understanding of direction and timing of deploying Intellidrive*
- *Delivering what we are talking about- we've been talking about this stuff for 30 yrs.- now we need to deliver*

INITIATIVES/ DEPLOYMENT/DEMONSTRATION

- *Systems engineering process- not the process itself- but what part of the process to follow based on the project in terms of the RFP*
- *Not the same level of knowledge based on project size/cost – duplicative issues covered in different aspects of RFP- Systems Engineering process*
- *Getting everyone on the same page*

RESEARCH

- *New technology of ITS is challenging- more information technology oriented*
- *Intellidrive is a well kept secret- need to provide value and awareness to public officials*
- *How to assess the value of ITS to decision-makers*
- *Managing a lot of stakeholders,, programs with limited resources- where to focus ITS efforts for maximum value?*
- *Moving from technology to a product- how to prepare for a technology launch?*
- *Within the state DOT – how to break down silos?*
- *What is the ITS profession? How to make it a profession?*
- *Difficult to see the long term pay-off of ITS in light of budget and resource constraints*

DISCUSSION

The following comments were expressed by some participants as follow up to the previous exercise.

- *In terms of class room training, the materials provided are only 70% of the value of the course- but the communication that happens at the event, the in-person- face to face communication is often more valuable than the course materials.*
- *On-line list serves have been valuable for a continued venue for information sharing though they have limitations.*
- *The power of word of mouth is very powerful- the idea of 'affinity networks'- or networks of people or agencies that have a good reputation and can be trusted can be a deciding factor in hiring for services or paying for services. Often the reliance in these networks will result in agencies or people paying more for a service because it is trusted.*
- *Relevance of ITS technology is dependent on those who have experienced the technology in term of the positive and negative experience. Sharing of the experience is very valuable, in terms of a user explaining to other potential users the issues that they can expect to encounter.*

World Café Exercise

In this exercise, participants were provided with four questions to consider. One question was posted at each table. Participants were asked to go to the table with the question they would like to answer first. Participants discussed the question for a period of 10 minutes, while a designated scribe recorded the comments and answers to the question. After the allotted time, the scribe remained at the table and a new group came to discuss the question. This second group repeated the process again. The scribe for each question then reported on the responses and major themes that emerged from the table discussions to the larger group.

The following are the questions posed to the group and the major comments and themes that emerged out of each discussion.

What are the best ways for you to receive learning?

- *Depends on the content, participant/ attendees/ costs*
- *Well – structured*
- *In person, class room, group, peer-to-peer, mentoring, hands on practice/example, internship, shadowing, “mobility assignments” – TMC oriented, scanning tours, narrow list-serve, web-based video training, new technology, technology narrow, CBT, video conference/real time-interactive*
- *Identify target level- 1,2,3, - profession*
- *Entry level- web format, level 1, 2, etc.*
- *Age dependent, interaction RFQ*

What do you need to reach the next stage of your ITS career?

- *Consistent information/ DOT direction*
- *Direction of Intellidrive/ITS program need to be formalized*
- *What is Intellidrive?*
- *What is the career path of Intellidrive?*
- *Guidance of elements of Intellidrive*
- *As part of the formalization- need development of concrete standards*
- *Product definition- i.e. what is Intellidrive- what is the product?*
- *How to drive to the next level of ITS?- What information do I need? What is the game changer?*
- *ITS Career path- e.g. in a DOT how to get to an ITS Technician on your staff- is it through certification similar to a PTOE or credential program?*
- *Continued learning opportunities for mid-level or late level career folks*
- *Need an “operations perspective” to be integrated into broad deployment – need comprehensive understanding of ITS among maintenance, operations, public works dept. police, etc.*
- *Definition of ITS career- potentially divisions or specializations with the ITS field, e.g. Intellidrive, signals, etc.*

How do you determine that a learning experience has had value for you?

- *Ability to come up with more defining questions*
- *Ability to implement something new*
- *Comprehending the utility of what is learned*
- *When I can apply the new knowledge, “tweak” what I am doing*
- *Building bridges among different groups, bridge building*
- *Seeing the opportunity to implement/affect ongoing work*
- *Excitement to share knowledge with others*
- *Enhancing personal self worth, especially for the lifelong learners, self- actualization*
- *Developing contacts, networks that are lasting*
- *Ability to work with contacts to address questions- short term and long term*
- *Broadening perspective on how to approach new things*
- *Change a career*
- *Something I didn’t know before*

What kinds of information do you need (content)?

- *Web technology to move current content onto modern platforms*
- *One resource- “ITS Google”*
- *Real world experience, from the source, the ability to ask questions of the presenter*
- *Specific cost-benefit- importance of ITS (synthesized for decision makers)*
- *Awareness of ITS for decisions makers (through peers)*
- *Content customized to user (define users)*
- *How ITS fits into transportation landscape*
- *Consistent – core competencies, but also consistent policy*
- *How ITS will solve real transportation problems*
- *Wireless communication applications*
- *Probes and performance measures*

ITS PCB Program Goals exercise

In this activity participants were asked to pick their top goals from the following list of draft goals presented below and developed in a previous visioning session by key ITS PCB stakeholders. Participants voted for the goals that best answered the question, “if this goal were achieved it would really help me perform my ITS work.” Participants were also asked to write down additional goals that may be missing from the list.

The following illustrates the number of votes for each of the objectives under the four draft ITS PCB program goals and the additional goals included by the group.

Draft ITS PCB Goals

Develop the ITS Profession by:

- *Designing baseline ITS curriculum and/or model ITS programs for all states to adopt. **7 votes***
- *Determining core competencies for the ITS Professional. (Someone wrote “Delivery core competencies.” **14 votes***
- *Facilitating the incorporation of ITS training into academic programs. **12 votes***

Leadership Outreach:

- *Promote the use of ITS by developing champions of ITS technology in every state. **10 votes***
- *Highlight best practices and model users. **12 votes** (“**Real world experiences not only best practices**” received **3 additional votes.**)*

Knowledge Exchange:

- *Build a knowledge sharing network that utilizes the most effective mechanism for reaching professionals with just-in-time knowledge, including forums for practitioners to share their experience. **10 votes***
- *Develop collaborative network of trainers and educators who are working to advance the state of ITS learning and are willing to share their experiences with the ITS PCB program. **14 votes***

Innovation:

- *Develop ITS portal that provides one stop shopping for comprehensive training courses, technology transfer, technical assistance, and Peer to Peer (P2P) sessions. **15 votes***
- *Make effective use of social media and other collaborative technology to facilitate knowledge exchange. **3 votes***

Additional ITS Goals

- *Create a certification equivalent to PTOE, PMP, INCOSE, etc.*
- *Track retention, how many people staying the field*
- *Set goals for agencies and private? Goals should be written so that they apply to all agencies and partners involved in ITS, not just states.*
- *Alignment issues among different agencies.*
- *Continuous education needs to be mentioned.*