Technology Implementation Group Meeting Minutes

Meeting Notes

Biloxi, Mississippi

CALL TO ORDER

The meeting was called to order at 8:02 AM The Agenda was distributed to all present- See appendix Welcome and Introductions

Attendance: approximately 30 - see attached roll, appendix

Agenda review and goal of meeting-Beginning of Agenda

New Members: None

EVERY DAY COUNTS (EDC)

The EDC update given by Byron Lord, Highways for LIFE Program Director:

- Byron gave a brief summary and history of the Every Day Counts (EDC) initiative
- He talked about the alignment of the Technology Implementation Group (TIG) and EDC. The purpose of EDC:
 - Accelerate project delivery
 - Accelerate the adoption of new technologies
 - ≻ ROW
 - ➤ Utilities
 - Design Build
 - > CMGC
- Implementing new technologies business model for producing change; the five selected technologies are:
 - 1. Warm Mix Asphalt
 - 2. PBES Prefabricated Bridge Elements and Systems
 - 3. GRS Geosynthetic Reinforced Soil
 - 4. Safety Edge
 - 5. ACS Light Adaptive Signal Control
- EDC is developing a "spirit of technology implementation"
- Initiative is to focus FHWA resources on technologies
- Kevin how do we coordinate our TIG activities with EDC? Marketing should be synergetic. Strong Partnership in research – strong partnership in implementation.
- **Amy Lucero** (TIG) selected technologies that have had some success to move toward full implementation.
- Mal Does EDC have any money to help deploy? Byron: Support in the form of expertise. Highways for LIFE Solicitations – in 2011 we will again encourage the inclusion of EDC technologies that meet the HfL criteria. It is possible to get incentive money – grants of up to \$1 million for 15 projects – or waive federal match (unlimited projects). HfL is the pilot program – EDC is the next generation.
- Mal Is there a look at changing FHWA's regulations as a way to shorten project delivery? Byron: Current activities focus on addressing what we can accomplish within the existing regulations. However, there is an effort to identify opportunities which would require revisions in existing regulations (and then in subsequent efforts, look to make revisions).

- **Kevin** We need to revitalize TIG by reaching out to RAC The TIG is addressing deployment to help RAC, SHRP, member departments, and others.
- **Dave Huft** RAC has task force The Value of Research They have developed an Executive level brochure about high value projects; second more detailed report of over 100 technologies (that may be a good place for TIG to find new, implementable candidates for TIG technologies)
- Mark Vanportfleet EDC and Highways for LIFE (HfL) differences HfL incentive grants are for first time implementations EDC is about implementing programs or to reinforce programs. Can HfL support these initiatives? Byron: HfL can support programmatic implementations if they are new initiatives– so if you can emphasize programmatic, then maybe. HfL has help to assist states with building applications please use it.
- Art joint committee (? Not sure notes are clear here) recognizes that there is great innovation possible when bringing industry into conversation TIG is the answer to that partnership
- **Kevin** the partnership (between owner agencies and industry) is extremely important.
- Mississippi DOT (attendance list suggests this was Steven Granthan, MDOT) Do proposals need to be implementable? What are targets for research we want research products that are implementable –what guidance exists?
 - Kevin: We want what you have discovered TIG wants to implement what states have had success with.
 - **Dave**: RAC has a lot of work on the value of research there is good work everywhere – how do we find all of the states research, and how do we share? We see a lot of good ideas for TIG at RAC.

Action Item: Closer coordination with RAC? More discussion necessary

NEXT ITEM – SHRP2

- Moving on to next item Mike Shama other opportunities for TIG to help?
 - SHRP2 seems to be opportunity
- Jerry DiMaggio 8 slides List of possible lead states implementation efforts
 - Review 130 products
 - Jerry's list of possible Lead State Team, LST, efforts
- **Is there money?** Very little
- Some of the 130 are ready to fit into TIG process
- Jerry's list is 22 all tied to SCOH's strategic plan these are the first available SHRP2 products (SEE appendix)
- Technology examples
 - Widgets
 - Institutional products
 - Process
- SHRP2 has done a much larger job of including stakeholders implementation is a communication problem
- Jerry's list
- A SHRP 2 coordinator is in the process of being hired at AASHTO Will work with TIG, SCOH, Subcommittees of SCOH, and AASHTO SC

- Need to pilot a technology and an institutional product
- Possible TIG/ AASHTO changes- Have waited to see what direction AASHTO and TIG are going?
- Lead State Products see handout
 - 4 ready now
 - 5 ready in 2011
 - 11 are technologies; 11 are institutional
- Discussion Kevin we are a SCOH committee we report to SCOH
- Second point 22 is doable much easier than 130
- Third question Who is liaison to which SCOH committees? Need to establish addressed later in meeting; Keith kept a list (ACTION ITEM: Make assignments to TIG members as liaisons to various committees: Kevin, Later in TIG agenda)
- 4th question can we map the 22 to various AASHTO subcommittees ? Do we need to make sure that we coordinate with those committees?
- Jerry there are 22 LST candidates (Candidates for LST implementation efforts, screened by Jerry) but there are still the 108 other technologies that will be referred to those subcommittees too, but through a different process
- **Mal** we need to make sure that we are disciplined in implementation if it is a SCOH lead, then they lead if it is a SCOP then SCOH needs to stand down
- **Kevin** each TIG committee member has a committee to liaison
 - May need to get more consulting to help TIG members with LST
- Margie Sherrif TRB is lead for research TRB, AASHTO, and FHWA are working together to implement developing roles and a strategic plan Jerry has applied the filter of what he knows and given you 22 there may be some more that ultimately come out. TRB is working on marketing plan for all 130 products. We welcome help, and possibilities for interaction with TIG.
- Kevin here is an implementation process that you can use if you want –we stand ready to help.
- McComie how do we get the right people together to help implement?
- **Vanportfleet** the perfect storm make some of these things happen because of the timing we can cherry pick some good ideas and implement a SHRP2 product
- Jerry we have some very little amount of money to help when you tell me specifically what you want I will make it happen
- Mike lead states should be easy to identify, the picture is starting to be clearer
 - TIG is better suited to the renewal research tract R01,26,09
 - We have lead states process a state nominates. SHRP process could happen the same way, or could just come off list?
 - Awareness: 2 3 states try; evolve; implement nationwide
 - AASHTO has full time position imminently to be filled
 - SHRP2 has money
- **Byron** Currently there is a scope restriction on TIG; what the TIG can address. It is confined to the areas of responsibility of SCOH

- There is a gap that maybe we need to do something about Should TIG be the technology implementation coordinator for all of AASHTO? This will ultimately require action by SCOH and BOD
- Only 22 SHRP 2 technologies fit TIG's current charter Who in AASHTO will address the other products, assess priority and help implement?
- What other business models are there that the TIG might support to do implementation? Test and evaluation, demonstration projects, showcases, oversight and deployment, presentations?
- **Mal** worried about our implementation model resources and concern about the pipeline for implementation " a good play called in the huddle; now we are lining up how are we really going to do it?"
- **Kevin** SCOH has a priority setting role they will provide direction. We have to realize that there is a limited number of volunteers and time out there how much can we do? How can we change our process?
- Jerry D In January will be doing second implementation plan. Mentioned earlier pilot. PBES implementation plan. End of January.

NEXT ITEM Next item – moving around in agenda to accommodate schedules 10:15 item – Finalize TIG's new direction slide show from Keith

- Ideas for re-energizing AASHTO TIG impact within AASHTO community –Keith's Resolution in Appendix
- **Paul** we were getting fewer nominations. However we got more this year than last year.
- Is there a better way to go about this process?
 - Constrained by people implementers are valuable
 - We needed to continue to communicate with SCOH
 - Technology is a partial answer to help with less people
- **Paul** We need to improve our connectivity:
 - a. Annually publish a list of all nominations to let SCOH know about what we do, also post on web site share with others. Acknowledge the not selected
 - b. Strengthen our connectivity with RAC and maybe model TIG membership like SCOR membership, which includes regional RAC representation. SCOR has two RAC members per region we have potential to implement regional thoughts by similarly increasing RAC membership.
 - c. Increase connectivity to private industry-get ideas from private industry for TIG
 - Set a maximum budget for each LST like 40-45k\$
 - **Resolution**: to change and expand the role of TIG Kevin wants to modify
 - 4th whereas add other standing committees? Need board of directors to ratify if an expansion of current scope
 - Need whereas for private industry?
 - RAC membership idea?
 - **Art** joint committee took idea to joint committee to get more industry involvement in defining technologies believe there is support. Allows states to have industry submit on their behalf, if it meets the other parameters

- **Valerie** do we need to add piece about new business practice? Kevin: Not ready yet, but need to do it in spring.
- **Byron** what we need to do; whereas that charges us with developing these new business models
- Mal let's get them to ask the board to ask who is the lead and get them to tell SCOH
- Mark need to delete the numbers of technologies from the 2nd
- **Byron** need to keep chief engineers involved; use RAC membership to strengthen not replace
- **Kevin** need interjection of RAC ideas not RAC replication
- **Paul** RAC had two region RAC members per region we have potential to implement regional thoughts
- Kevin we have basis now we will send some forth to build language for resolution
- Jan we could have interaction by getting members from other standing committees we could propose size and numbers
- **Brian** we need to think about numbers we can add, but we need to keep as a working group
 - We are 12 members
- **Del** we need to have a strategic look at this entire effort TIG, RAC, Chief engineers we need to make recommendation to SCOH about membership
- **Kevin** we need to change our TIG organization to implement SHRP need someone to come up with that size and membership language
- **Dave Huft** –TIG is unique we have resources to implement. We need to support the same implementation in other standing committees we should add more members from these committees
- Mal we need to wait until we see the (SHRP2) plan then size accordingly
- **Mike** we take Mal's approach until the spring we wait for the plan, and then size accordingly
- **Mark** we need to make sure to give instructions to all the committees to come up with the plan so that we get there by spring
- **Del** not sure that SCOH will expand TIGS role -they may want more control
- Kevin no they asked us to add SHRP we are responding to what they want
- Kevin Whereas. we have a dilemma who does implementation? TIG then?
- **Del** where do we think AASHTO is with regarding to TIGs expanded role?
- **Kevin** we should see by submitting resolution
- Action items : Kevin to present resolution to SCOH,

BREAK

- After break Paul Kugler continued discussion of SHRP2 item 3 under 8:10 agenda item
- Potential coordination structure for SHRP2 product implementation see handout in Appendix
- Comments:
 - Margie- FHWA has no resources to coordinate now maybe in future
 - **Kevin** we should modify plan please work to refine

Byron – Champions – two types – yes, I want to be a champion and some that can't because the state has other stuff for them to do. We need to secure institutional support of champion involvement.

NEXT ITEM

- Next item back to 9:15 working group side of meeting
 - Report on Lead states teams
 - MDSS Dave Huft final 3 outreaches accomplished 20 states using, wrapping up and closing out.
 - Precast concrete slabs ready to do closeout meeting in November or December; Funding to do closeout.
 - **SPMT** closeout meeting November 17^{th.}
 - **AMG** unknown status trying to contact chair.
 - Surface resistivity nationwide repeatability testing development going on.
 - Linear referencing systems want to extend time because consultant procurement took longer than thought. No objections.
 - Electronic document management system for utilities proceeding.
 - Electronic document management for grade crossing s federal requirements require implementation, proceeding.
 - Environmental planning GIS tools working turnover in committee a problem may need more time.
 - **TowPlow** Just approved marketing plan and analysis review distribution? Any questions or comments? None approved.
 - **Towing and recovery service partnerships** Washington's program funded by legislature, but was cut by legislature. They will still work on LST. Committee discussed and is comfortable.
- **Jerry** 4 that are SHRP2 tie points
- Kevin how do we get ready to incorporate information into our website? How do we make sure our marketing plan is addressed? A process we could use is the peer review process we could put that in our marketing plan we could maintain and promote the idea of peer reviews as a new business model.
- **Byron** maybe we need a FAQ how does one engage the TIG process to implement a technology in a state? To be published on website?

NEXT ITEM

- Next item Review of seventeen 2011 proposals
- Let Paul and others who have read the proposals do first cut?
- Keith presented rankings and went through on screen (get from Keith)
- Went through projects starting on bottom of ranking rejected starting from bottom of list
- Insync adaptive controls referred to EDC for inclusion in ACS lite
- Second level discussions
 - Florida Automated Faulting method

- Automated cross slope
- Identifying vibration sensitive work zones based on FWD
- Enhanced pavement surveys using nondestructive survey equipment
- Synch guide intelligent sequential barricade warning light system
- Jam Logic referred to Snow and Ice control group for recommendations
- GreenLITES referred to performance management or climate change for comments
- Real time signalized intersection modeling
- Permeable friction course pavement
- **Del** perhaps we should have this examination of pavement condition lead to a suite of technologies that gauge pavement condition, and see which are the most useful technologies?
- Discussed a possible change in process to add review by pertinent committees so we could get their input and consider that as part of the TIG evaluation.

LUNCH

- Continuing selection:
 - Jam Logic referred to Snow and Ice control group for recommendations
 - GreenLITES referred to performance management or climate change for comments
 - Real time signalized intersection modeling
 - Permeable friction course pavement
- Ended up with 9 for a second look.
 - Action item: Krugler to provide second level evaluation. TTI will do a second-level evaluation of only eight of the nine selected technologies. Krugler stated potential conflict of interest with the AWAM technology. Keith Platte said he would make other arrangements for second-level evaluation of AWAM.
 - Florida Automated Faulting method
 - Automated cross slope
 - Identifying vibration sensitive work zones based on FWD
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NEXT ITEM Budget Discussion:

- FY2010 36 states supported TIG
- FY 2011 11 states so far have paid
- If we fund 3 at the \$40k we will be fine

- We also have been told to do marketing plan, and we should do that
- Action Item: Continue development of marketing plan?

NEXT ITEM -Committee assignments: each committee member should have an assignment to be a liaison, will discuss later in meeting

NEXT ITEM -Discussion of the solicitation process:

- What did we do different?
- We had discussion at SCOH
- Byron advertised in Focus and Innovator
- Mark Liaison duty will probably increase the number of submissions we should make sure we solicit the subcommittees and RAC
- We should send out a report that contains a compilation of all submissions
- We should also do something about encouraging private industry to collaborate with states to submit
- Keith to work with Art to send notification.
- Big discussion about proprietary products again

NEXT ITEM - Subcommittee Assignments:

- Del: Traffic
- Brian: Design
- Mal: Structures
- Brian B.: Materials
- Dave: RAC and SCOR
- Mike: Maintenance
- Mark: Row/ Utilities
- Byron: Construction
- Kevin: Highway Transport/System Ops
- Action Item Keith to send email to subcommittee chairs advising them of this new liaison situation. We now need to establish function.
- Marketing Plan need bulleted list of objectives outcome driven
 - What do we want who are we marketing and why?
 - Action Item : Assigned to Valerie?

MEETING ADJOURNED

Appendix

| 10/28/10 | AASHTO TIG. |
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| Byron La | d FITUA i byron lord@dot.gov |
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| Brian Blo | |
| ANDREW | |
| PAUL KRI | |
| LETTH PLAT | |
| JAY TER | |
| Tom Cl. | |
| MICHAEL | |
| Jon VALLAM | a setting SPR Americas N jon vaccara estisus spr.com |
| Nicholas | |
| Amylu | |
| FRIK MA | NINGA AASHTO 1) SMANINGAQ AASHTO, 019 |
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Technology Implementation Group Meeting Thursday, October 28, 2010, 8:00 a.m.-3:00 p.m., Azalea C PRINT NAME COMPANY SIGN NAME SEKTSUF SPR 1. Jonathan VALLARD SPD A 2. MICHAEL CRAIG USIN Tom Clamons ems 3. JAY TERRILL 4. 5. 10 TH Paul Krugler 6. ANDREW WIMSATT 7. TTI 8. Drian Blanchard FDOT 9. MAR KERLEY VIRGINIA ADT IDAHO TRANSPORTATION DELT 10. BOB KOFBERLEIN TRANSPO INDUSTRIES 11. ARTHUR DINITZ 12. JAMES MCMINIANS ARA (APPLIED RECENTED 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25.____ AASHTO 2010 Annual Meeting 1

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Action items from TIG in Biloxi, MS

Action Item: Closer coordination with RAC? More discussion necessary. No assignment, no date.

Action Item: Make assignments to TIG members as liaisons to various committees: Kevin, Later in TIG agenda Various TIG Members assigned to committees to act as Liaisons, Report on Committee activities due next TIG meeting

Action Item: Kevin to present resolution to SCOH on the finalized new direction of TIG, Kevin took resolution to SCOH, and received some input. Done.

Action item: Kugler by next meeting to provide second level evaluation on 9 technologies. TTI will do a second-level evaluation of only eight of the nine selected technologies. Krugler stated potential conflict of interest with the AWAM technology. Keith Platte said he would make other arrangements for second-level evaluation of AWAM.

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Action Item: Continue development of TIG marketing plan? Assigned to Valerie?

No assignment made, no date

Action Item - Keith to send email to subcommittee chairs advising them of this new liaison situation. We now need to establish function. Subcommittee Assignments:

- Del: Traffic
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Keith, By next TIG meeting.

SHRP 2 Potential Lead State Product List

By Jerry A. DiMaggio (10/28/10)

2011

- ***R01: Encouraging Innovation in Locating and Characterizing Underground Utilities Web-based Decision Support Tool Available May 2010 ***
- **R06-F: Evaluation of Continuous Deflection Devices** Documentation of field data and performance of existing devices, Training materials and training manual to facilitate the transfer of the technology to the users. **Available September 2011**
- ***R09 Guide for the Process of Managing Risk on Rapid Renewal Projects Guidelines for Managing Risk on Rapid Renewal Projects, Training Materials Available October 2010 ***
- R11: Strategic Approaches at the Corridor and network Level to Minimize Disruption from the Renewal Process Recommended practices and methods for planning corridor and network-level renewal activities Available December 2011
- **R15-B: Identification of Utility Conflicts and Solutions** Utility Conflict Matrix (UCM) to facilitate the identification and resolution of conflicts between state DOTs and utility companies' facilities during highway renewal planning and design. Includes a standalone tabular version of the UCM as well as a data model and prototype database representation of the UCM, Training materials and procedural manual for UCM training events, and specific strategies for implementation of the training materials **Available November 2011**
- *****R16: Railroad-DOT Institutional Mitigation Strategies** Best Practices and streamlined permitting procedures, Model Agreements **Available October 2010*****
- *****R26 Preservation Approaches for High Traffic Volume Roadways** Guidelines for preservation approaches for high traffic volume roadways **Available October 2010*****
- L12: Training and Certification of Traffic Incident Responders Incident responder training materials: instructor guide, participant manual, Power Points, and participant certification process
- C09 Guidebook linked to the Decision Guide developed in C01 for incorporating GHG emissions analysis into the highway capacity decision making process. Available March 2011

2012

- ? R01A: Field tested 3-D utility data repository Available July 2012
- R03 Identifying and Reducing Worker, Inspector, and Manager Fatigue in Rapid Renewal Environments Fatigue Risk Management Guidelines and Plans Available July 2012

- **R04:Standardized approaches for accelerated bridge design and construction** Tool Box, including: Standard Plans, Details, Design Examples **Available February 2011**
- **R05 Modular Pavement Technology** Draft model Design procedures, Draft model specifications and Construction Guidelines **Available January 2012**
- **R06A: NDT to Identify Concrete Bridge Deck Deterioration** Electronic Repository of NDT Techniques **Available January 2012**
- **R10 Project Management Strategies for Complex Projects** Guidebook for innovative project management, Example case studies of project management strategies for complex projects, NHI ready training packages to support adoption of these management strategies by all stakeholders **Available July 2012**
- **R19A: Bridges for Service Life beyond 100 Years: Innovative Systems** Design for Life Guide, Standard plans, details, detailed examples for bridge systems, subsystems, and components for 100+ year life **Available April 2012**
- **R21 Composite Pavement Systems** Draft Design Procedures for composite pavement systems, Draft Construction Guidelines and Quality Management procedures for composite pavement systems, Training Materials to promote the use of composite pavement systems **Available January 2012**
- **R23 Using the Existing Pavement In-place and achieving long-life** Draft design and construction guidelines for using the existing pavement in-place, Training Materials **Available March 2012**
- L14: Effectiveness of Different Approaches to Disseminating Traveler Information on Travel Time Reliability Guidebook and deployment advisory for conveying travel time reliability information to system users Available March 2012
- TCAPP An integrated web resource for collaborative planning and environmental review (Incorporates C01, C02, C03 C08, C09, C06A, C06B, C12, C15, C19, and L04) Available Full Level Version I release July 2012 Beta Versions earlier.
- C06 A&B Ecological Templates, crediting system, business case Available after piloted version in July 2012

2013

- L02: Establishing Monitoring Programs for Travel Time Reliability Guidebook on the design, installation, and operation of traffic monitoring systems Available February 2013
- Safety Roadway Characteristics Database (S03, S04A, S04B) Roadway characteristics database for the 6 NDS sites, long-term data management plan Available July 2013

2014

Administrative Resolution AR-1-10 Title: Expanded Role of AASHTO Technology Implementation Group to include SHRP2 Products

WHEREAS, TIG will continue with the stated mission of "Champion the implementation of technology among AASHTO member agencies, local agencies, and their industry partners to improve the Nation's transportation system.", and

WHEREAS, Under TIG's current mission, the scope of the group will increase to assist in deployment of many SHRP2 products, with appropriate and sufficient funding from the SHRP2 program as outlined in the AASHTO SCOH Strategic Plan Section 4, Action Item 3 over the next 5 years, and

WHEREAS, While TIG has increased its scope, TIG will continue to review, select and fund high payoff technologies not included in the SHRP2 program, as outlined in the AASHTO SCOH Strategic Plan: Section 3.0, Action Item 3, Section 8, Action Item 1, 2, and 3, and

WHEREAS, the implementation of SHRP2 products and projects will require the coordination of several AASHTO Standing Committees, and

WHEREAS, the successful implementation of SHRP2 products and projects will require resources from its members

WHEREAS, TIG understands the need to develop and deploy a marketing effort which will clearly communicate the goals, value and accomplishments from past years, and demonstrate, in measurable means, the benefit of TIG, and now, therefore, be it

THEREFOR BE IT RESLOVED, the TIG strongly recommends that the SCOH request the Board of Directors to clearly assign the roll and responsibilities of its Standing Committee in the implementation of SHRP2 products and projects to maximize the committed resources of its members.