

AASHTO Technology Implementation Group (TIG)
Oversight Committee Meeting Minutes
September 15, 2005, Nashville, TN

The chair Gary Hoffman called the meeting to order w a brief discussion on the aftermath of hurricane Katrina and its damage to the highway infrastructure in Miss, Al and La. Harry Lee James would not be in attendance at TIG die to the Katrina aftermath in Mississippi.

Ken Kobetsky mentioned the Florida DOT implemented lessons learned from prefabricated bridge elements in the accelerated replacement of the I-10 bridges damaged by Hurricane Ivan in 2004. SCOH was to receive a presentation on this work on Sep 16.

Members Present: Gary Hoffman, Randy Iwasaki, Dave Huft, Amedeo Saenz, Len Sanderson, Paul Wells, Warren Sick, John Polasek, Valerie Edgar, and Paul Wells

Others Present: Art Dinitz (ARTBA/AGC/AASHTO Joint Committee Liaison) Doyt Bolling (LTAP Liaison), John McCracken, Neil Hawks, Ken Kobetsky, Adam Fisher, Bob Bryant, Marti Vitale

Members not in attendance: Harry Lee James, and John Rolf

Introductions: Discussion then moved to brief introduction of the attendees to Adam Fisher the new AASHTO staff coordinator for TIG.

Agenda Review: In review of the agenda it was noted that the planed duration of 13 hours would be reduced to the minimum. Furthermore, one agenda item, the review of Highways for LIFE was removed from the agenda due to the absence of Byron Lord. A major objective for the meeting was to decide on guidance for closeout of focus areas for the Lead State Teams and TIG.

Review of Old Minutes / Old Action Items: The meeting proceeded per the agenda with a review of the minutes and action items from the last meeting in March. Subsequently the minutes were approved by acclimation.

Accelerated Construction (1): An in depth discussion of the success of ACTT resulted in the first action item of the meeting. Everyone was pleased with the success of ACTT and the current status of implementation. TIG acknowledged that their involvement had ended and FHWA is now the champion for support and assistance. It was decided that a letter from the Chair would be sent to King Gee, FHWA Associate Administrator for Infrastructure, expressing continued support of FHWA's administrative funding. The letter will encourage FHWA to continue a high priority for support and funding of its FHWA staff supporting the administrative and technical support of ACCT. A key role for FHWA is the maintenance and coordination of an expert panel list of professional available to participate at the ACCT workshops. The letter will also ask FHWA to support and recognize the value of having private contractors, possibly the local AGC

representative, attend the ACTT workshops and include an endorsement form the FHWA Chief Counsel on the participation of contractors at the workshops. Furthermore, TIG applauded the recent memorandum to FHWA field offices prepared by King Gee on the subject of advancing ACCT as a standard practice nationwide and clearing stating the eligibility of normal federal-aid funding.

ACTT discussions concluded with discussion that TIG ask SCOH to request either a NCHRP 20-7 synthesis or a guideline summary by the ARTBA/AGC/AASHTO Joint Committee.

Financial Report: Adam Fisher presented a financial report. An estimated 38 states have contributed to TIG for FY 2005. The table of funding status conflicted with the actions taken in March as recorded in the minutes by not reflecting the correct amount of current funding such as in the case of GPR which should have indicated a budget of zero in lieu of the amount shown. First AASHTO staff will reconstruct the records left by Jeremy Fissel, verify account balance and contribution balances based on AASHTO accounting records. The corrected report on each focus technology would be presented to both the TIG liaisons and the lead State team for further comparison and validation. Once a credible report is developed TIG oversight committee will be sent the full report.

Consultant Proposal: John McCracken briefed TIG on the RFP sent to Worth Associates and the resultant proposal for providing communication planning and support to TIG. A motion to accept the proposal was made, discussed and approved by the committee. Adam Fisher will administer the contract with technical review and guidance by Warren Sick. Art Dinitz, Valerie Edgar, Neil Hawks and John McCracken.

ARTBA/AGC/AASHTO: Art Dinitz expressed his great satisfaction of the emphasis currently being placed on innovation and urged TIG to be prepared to lead in the development of guidelines and specifications for implementing technology the ARTBA/AGC/AASHTO Joint Committee can be helpful to TIG in accomplishing this objective. TIG continued the discussion by suggesting that Neil Hawks include the opportunity to include the development of implementation guidelines as a strategy to be considered by a lead state team as they plan the close out of a focus technology implementation.

Close Out Process: A close-out report guidelines will recognize that the time commitment for a lead state team is finite and not eternal. Key elements of the guideline:

- Knowledge base
- Identification of successes and benefits
- Remaining constraints to implementation
- Likely mechanism for future implementation
- Lessons learned
- Formal and informal communication with relevant AASHTO committees
- SCOH briefing or report upon closing
- Final “administrivia”

REVIEW OF FOCUS TECHNOLOGIES:

Active projects:

Accelerated Construction (2): Accelerated Construction discussion at the beginning of meeting was not repeated but 2 publications and a draft memo from FHWA were distributed. ACTT: A “how to” Guide for State Highway Agencies and ACTT NOW August 2005 innovation + collaboration = acceleration.

ITS in Work Zones: progress on ITS in work zones was described. On the TIG website <http://tig.transportation.org/?siteid=57&pageid=694> , case studies for 7 categories: (1) congestion mitigation, (2) traveler information, (3) incident management, (4) queue management, (5) weather road conditions, (6) speed management/enforcement/aggressive driving and construction management.

A work shop was recently completed in St Louis (see action item relative to preparing an article on this workshop)

Air Voids Analyzer: see attached report, John Wojakowski, Kansas DOT Concrete Research Engineer, and team leader of the Lead State Team has retired.. All that remains is the final close out report.

Global Positioning Systems: The mission advancing the implementation of GPS in surveying has succeeded. In '06 a closeout report will be prepared. TIG discussion included questions as to whether a national meeting/conference in conjunction with peer organization of surveyors be conducted as a close out finale. Suggestions were made to expand the lead State team effort beyond the area of GPS in surveying to include other GPS applications such as asset management and GIS.

Fiber Reinforced Polymer Wrapping of Cracked Interior Chords of Welded Tri-cord Aluminum Overhead Sign Structure Trusses: Outreach provided to the AASHTO committees on maintenance and materials. (report attached?). Close out report to be prepared.

Thermal Image Safety Screening for Commercial Vehicle Brakes: Kentucky has agreed to be the lead state. Dave Jackson of KY Transportation Cabinet will be the chair. Saftetea-lu has earmark of \$2M, is it relevant to TIG? Also KY and FMCSA need to coordinate.

Road Safety Audits: FHWA has produced a video and a brochure (<http://cms.transportation.org/sites/aashtotig/docs/TIG-RSAbrochure.pdf>) on RSA. Additional work by FHWA can be found at <http://www.roadwaysafetyaudits.org/>

Cable Median Barriers- see handout for report- The lead State team is planning on developing a best practices guide and a video on the implementation of cable median barriers. Valerie to review and comment on the plans for producing the video.

Virtual Weigh Stations - Team has been formed and a budget requested (see attached report)

Non-Active Projects:

Prefabricated Bridge Elements: Completed and handed off to FHWA and AASHTO bridge committee.

Ground Penetrating Radar: Tabled with zero funding

Low Cost Highway Railroad Warning System: Technology still not market ready. Continues to be tabled.

Non-Focus Technology:

High Definition Survey: brochure completed and printed by PennDot and AASHTO. (Note: To be added to the TIG website.)

Old Minutes from March 2005 Meeting

Minutes:

The minutes from the Oct. and Jan. meeting were approved. The TIG discussed of the availability of 100% pooled SP&R funds as the States voluntary contribution to support the activities of the TIG. It was pointed out that if a pooled funds project were established a State would have to agree to manage the project. Randy Iwasaki to volunteered to follow up with his staff at Caltrans.

Review of action items:

All of the Action Items from the Oct. meeting have been addressed. As a result of discussions additional action items were identified. Need to recruit a new SCOH member from Region 1 to replace Doug Rose who has resigned for the TIG.

Budget Report:

Jeremy Fissel presented the current status of the TIG budget and anticipated funding needs for 2005. A handout was provided to TIG members. See Budget Update Bookmark for document.

Communications Task Force:

John McCracken presented the task force positions on the Recommendations on Communications prepared by Worth Assoc. for TIG. John McCracken led the TIG in a discussion of the steps outlined by Worth. Several topics were identified that need to get underway:

- Importance of taking advantage of AASHTO's communication tools.

- Need to develop communication pieces for each technology.

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- Need to work with AASHTO.

- Need to get a comprehensive TIG communications plan.

A recommendation was made and adopted by the TIG to contract for support to assist the TIG in developing and executing a communications plan. The TIG instructed AASHTO Staff to solicit a proposal from Worth Associates for consideration at the next meeting. This would be funded out of the money set aside for Communication Plan. The task force was directed to develop a plan to identify how the TIG should manage the communications activities. See Communications Audit Bookmark for document.

Coordination ARTBA, AGC, AASHTO Joint Subcommittee on New Materials and Technologies:

Art Dinitz represented the Joint Subcommittee. He addressed ways to bring the TIG's work forward with the Joint Committee. Suggestions included:

- Add industry to the TIG Lead State Team.

- Use industry to present the technologies from a how to use/ build/ deploy the technology. This would help to reduce fear for using new technologies.

- Through Paul Wells as the AASHTO link to the Joint Committee the TIG can request the support of the Joint Committee.

The TIG engaged in a discussion with Art regarding future opportunities for cooperation/ coordination. Art will work with Ken and Tommy Beatty to prepare a guidance package for the TIG on how to make application to the Joint Committee.

Reports on Technologies:

Accelerated Construction Technology Teams: Jim Sorenson provided a briefing on

the progress of the TIG to date. Seventeen workshops have been presented. TIG has invested \$115,000 to date. Have almost 200 people in the peer groups. FHWA is looking to put out an implementation effort to institutionalize this process. FHWA will provide ongoing support and nourishment through the Resource Center or NPHQ, The TIG acknowledged the excellent support for this program. It was decided to support the ACTT Workshops with up to \$30,000 funding in 2005. The intent is to roll the program over to FHWA in Sept 2005.

Prefabricated Bridge Elements: The outstanding work of Mary Lou Ralls and the Lead State Team was acknowledged. The team held their last workshop in Oct. This activity has been transferred to FHWA. The Subcommittee on Structures has been asked to take up and continue the advancing this technology to Standard practice.

ITS in Work Zones: This program is still not underway. The proposal prepared required significant investment beyond the resources of the TIG. In Oct., the TIG proposed a strategy for this activity. The team is instructed to focus their activities to accomplish a work plan they can deliver. They need to identify technologies they are able to assemble adequate information on and that the team is able to deliver. This work plan needs to be completed and presented to the TIG with sufficient time for review prior to the next meeting. The TIG needs to appoint a new liaison to this team to replace Doug Rose.

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Air Voids Analyzer: Guide Specification in Subcommittee on Materials. A letter will be prepared from the TIG Chairman to the SOM Technical Section chairman encouraging their action on the guide specification.

Global Positioning Systems: Reduced budget to \$35,750. Presentations to National, Regional, and State Conferences. The team is working on a video. Eastern Federal Lands and Central Federal Lands will work with the team to fund the video.

Ground Penetrating Radar: This technology has been withdrawn until the issues regarding FCC restrictions can be resolved. This action needs to be reflected in the web site.

Low Cost Highway Railroad Warning System: There are field tests underway by NCHRP scheduled for completion March 31. Recommend that the technology continue to be tabled until the NCHRP work is completed. The web site should be revised to reflect the current status.

FRP repair of cracked overhead sign structure aluminum tri-trusses: Team has completed 3 on site demonstrations and 3 presentations at AASHTO Subcommittee Meetings. 3 demonstrations are being planned in spring/summer 2005. It was suggested that the Team measure effectiveness of the demonstrations by surveying those State visited.

Thermal Image Safety Screening using Infrared Inspection Technology: Gary indicated no progress in this area. Need to find a new team leader. FL DOT candidate declined. A team needs to be identified.

Road Safety Audits: A team has been formed. They met at TRB. There is a brochure in development. There has been strong participation by the team. It was suggested to get legal involvement and add Stewart Thompson, Utah LTAP, to the team.

Cable Median Barriers: Team members identified. The team is preparing to meet. North Carolina is the Lead State.

Multi-Agency Weigh-in-Motion (WIM) Project: Dave Huft working with N. Dakota. Attempting to form a lead state team.

High Definition Survey: Penn DOT Lead State working on brochure and case studies. Tri-fold color brochure in the next three months. NY, NC, & FL are interested in participating.

Disposition of Technologies not selected at last meeting

- Maintenance Decision Support System

Aimed at winter maintenance, program recommends optimum response to the technology. Limited testing validation was conducted in Ames Iowa in 2002-3
Technology not ready for full implementation. Dave Huft demonstrated software now
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available. Revised software is to be tested in 2005. The TIG recommended the improved system be resubmitted in the next solicitation.

- Construction Analysis for Pavement Rehabilitation Software

Caltrans will resubmit this in the next round and address the questions posed by the TIG.

- Wireless Concrete Maturity Monitoring System

This technology does not rise to the priority to be addressed by the TIG.

Texas Transportation Institute Support to the TIG: A task order agreement has been established with TTI to provide support to the TIG based on Task Orders. Paul Krugler's services can be available to the TIG. Includes a provision for travel. Could address analysis of proposed technologies, refinement of work plans, etc.

Highways for LIFE

Byron Lord gave a power point presentation on FHWA's pilot program Highways for LIFE "Getting Started." He addressed the three vanguard technologies as well as opportunities for the TIG to partner with FHWA:

- Prefabricated Bridge Systems

- Road Safety Audits

- Making Work Zones work Better

It was agreed that the TIG should partner with the new FHWA technology teams. A joint press conference or "launching" of effort at the upcoming May AASHTO meeting was suggested. If agreed to by FHWA, this will provide visibility to effort. FHWA and the TIG should work together whenever possible to mass their resources to achieve their goals. There are opportunities to jointly fund activities such we have been doing with the ACTT initiative.

It was decided the Chairman would prepare a letter to FHWA inviting cooperation. We will invite FHWA technology teams to the next TIG meeting and include them as affiliate (or other terminology) members of the TIG. Future FHWA Highway for LIFE technology teams should be considered for identified TIG technology areas.

Process for Selection of Technologies:

Jeremy and David Huft presented a timeline for the key process elements in the selection of new technologies. The TIG adopted the schedule proposed by Jeremy and David.

Jeremy provided a handout to the TIG, see Solicitation Timeline Bookmark.

Closing Out Technologies:

The TIG discussed the major elements we need to accomplish when closing out one of the focus technology elements:

- Need to have a continuum, someone to continue the efforts i.e.: SCOH

subcommittee

Need for a close out report (Need to identify what we put in the final report.)

Need to permanently archive materials and documents; this may be accomplished with a website.

We need to develop templates of what we are looking for as guidance to the teams