

AASHTO Highway Subcommittee on Construction
Task Force Work Plans 2002/2003
August 29, 2002

Task Force Work Plans 2002/2003:

Computers in Construction Task Force

- Computer based training – Continue to survey states to determine needs and specific topic areas. Develop a list of training that could be used by others.
- Work with the Transportation Curriculum Coordination Council (TCCC) to prepare a computer based training in construction presentation for next summers meeting.
- Subcommittee on Construction Website; continue working with the various task force representatives in getting appropriate information uploaded onto the website.
- Develop a survey on Technology in Construction and prepare a presentation of the results for next summers meeting.
- Develop a presentation on how to use the internet to assist with contract administration. Alabama DOT will showcase its use of an electronic blue book and other publications.
- Leadership and enhancement of the National Specification Website.
- Leadership and enhancements of SiteManager.
- Development of a presentation on the PENNDOT Technology Assisted Speed Enforcement pilot project.

Contract Administration Task Force

- 1) Continue to coordinate and finish the Subcommittee's report on construction contract growth. The remaining work includes coordination with the AASHTO Subcommittees on Planning and Design and coordination with the NCHRP 20-7 study concerning estimating techniques for major projects.
- 2) Ensure that the Fourth Edition of the Primer on Contracting for the 21st Century is posted on a web page and, if possible, published in hard copy format.
- 3) Continue to support of the Utah State University Innovative Contracting web site (www.ic.usu.edu). (All Section members should ensure that their State SEP-14 evaluations are posted on the web site.
- 4) Assist the FHWA's in the update four technical advisories:
 - a) TA T 5080.4, Preparing Engineer's Estimates and Reviewing Bids / combined with TA T 5080.6, Guidelines on Contract Procedures with Emphasis on Bid Reviews and Evaluation

- b) TA T 5080.15, Construction Contract Time Determination Procedures
 - c) TA T 5080.10, Incentive/Disincentive (I/D) for Early Completion; draft should be available in late 2002
 - d) (New TA) Electronic bidding; draft pending, should be available in Fall, 2002
- 5) Document the current state of the practice and identify best practices (by performing surveys, preparing briefings, summarizing existing research or policies, preparing training material, etc.) for the following topics:
- a) State DOT rating of consultants providing construction management or construction inspection services
 - b) Fraud training / potential PowerPoint presentation for State DOT training purposes
 - c) Unbalanced bidding
 - d) Reduction of project documentation for lump sum design-build contracts
 - e) Recouping the costs of utility delays from utility owners
 - f) Best practices for pay reduction for substandard quality
 - g) Incentive-based contracting

Environmental Task Force

1. Update and improve the “Constructability Review Best Practices” guide by producing a second edition to include a Cost/Benefit Analysis section (how to measure the benefits) and a new chapter on best practices for post-construction reviews. Develop Cost/Benefit section - Jan 2003; Develop Post-construction review section - Mar 2003.
2. Conduct best practices survey of environmental commitment tracking and implementation (“How do we better convey environmental commitments into contract documents?”) Survey will be sent out Feb 2003 to other states; Best Practices draft by Aug 2003 meeting.

Pavement & Structures Task Force

- Certification of State Bridge Painting and Lead Paint Removal: Inspection and Certification; a draft training course is scheduled for November 2002. A possible presentation on these efforts may be given at next summers meeting.
- Develop and disseminate the task force newsletter entitled “Construction Tidbits” with posting of the newsletter on the subcommittees website.
- Develop State of the Art in Falling Weight Deflectometers (FWD) guide specifications.
- Liaison with the National Asphalt and National Concrete Pavement Associations on pertinent issues for the subcommittee with possible presentations for next summers meeting.

- Development and delivery of a presentation on the new Design Guide for Pavements.
- Develop and deliver a presentation on Current Issues in Bridge Construction along with information on grouting issues and training in Florida.

Quality Task Force

- Finalize and distribute the results of the Customer Focus in Construction – State of the Practice Survey. December 2002
- Finalize, publish and disseminate the document “Major Types of Transportation Construction Specifications”. December 2002
- Compile and disseminate information on Performance Specifications.
- Continue the National Partnership for Highway Qualities (NPHQ) liaison duties.
- Continue coordination with the Transportation Curriculum Coordination Council and its efforts to gather information and finalize a report on Resident Engineer Academies. FY03
- Determine the State of the Practice in Innovative Contracting practices and their efforts to improve quality during preconstruction.
- Creation of a “Quality Management Team” (QMT) to work on quality in construction issues at the state level. A presentation may be developed for next summers meeting.
- Development of a presentation on “Quality Construction Through Certification” with a presentation at next summers meeting.
- Preparation of a presentation on Work Zone in Workmanship.
- Presentation on FHWA’s Nationwide Customer Survey.
- NPHQ Performance Measures and Performance Results Presentation.
- Streamlining of construction inspection - Risk assessment of inspection activities.

Research Steering Committee

Development and distribution the NCHRP 10-58 project brochure, “Construction Engineering & Management Research Needs.” Intended to aide Agencies in developing their research agendas this is scheduled for distribution in the fall of 2002.

Future-SHRP (F-SHRP); The area of interest in F-SHRP for SOC is NCHRP 20-58(1), entitled “Detailed Planning for Research on Accelerating the Renewal of America’s Highways (Renewal).” The research team will develop a framework, topic areas, vision statements, and research projects and will focus on rapid, higher, faster quality. The report is scheduled to be complete by the beginning of 2003.

Research Topics Under Consideration:

1. Protective coatings for concrete in harsh environments. (Research Project)
2. Construction administration of design-build. (Synthesis)

3. Utility location technology. The current technology to locate subsurface is lacking, (F-SHRP).
4. Accelerated construction impacts on human resources – both agency and contractor. We are being asked to do more with less, faster. How much of this accelerated construction can they stand? (F-SHRP will be covering worker fatigue)
5. Water quality and turbidity measurement in construction. There is a wide range of acceptable criteria for turbidity. The EPA may possibly be proposing new controls. (Research Project)
6. Develop guide specifications for verification of contractor data obtained using stake-less equipment. (Research)
7. Innovations in technology in industry standards that will affect DOT practices. (Write up as a synthesis). Mr. Jencks will submit this as a 20-7 project.
8. Synthesis on Identifying where we are at with State Quality Assurance programs (CFR 637).
9. Synthesis on State sanctions for traffic violations in work zones.
10. Traffic mitigation techniques and cost effectiveness, including the public in the process, (F-SHRP).
11. What is the state of the practice of what can be done to develop for customer-based contractor incentives? (F-SHRP)

Scanning Tours; the steering committee will provide ideas for future scans by September 30, 2002. A suggestion to do a United States scanning tour on construction practices was discussed. A proposed topic on Construction Management Practices included testing inspection requirements, pavement process, and project documentation is also under consideration.