

**AASHTO Highway Subcommittee on Construction
August 4 - 9, 2002 Meeting
Rehoboth Beach, Delaware**

Task Force Meeting Minutes

KEY PERSONNEL

AASHTO Highway Subcommittee on Construction

Chairman:	Len Sanderson, NC	919-733-7384
Vice Chairman:	Frank Gee, VA	804-786-2707
Secretary:	Tommy Beatty, FHWA-HIAM	202-366-6377
AASHTO Liaison:	Jim McDonnell, AASHTO	202-624-5448

Task Force Leaders / FHWA Liaisons

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	Jeff Kolb, CA	916-498-5037
Contract Administration	Steve DeWitt, NC	919-733-2210
	Jerry Yakowenko, DC-HQ	202-366-1562
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Pavements & Structures	David Graham, GA	404-656-5306
	Kevin Kliethermes, MN	651-291-6123
Quality	Lee Onstott, NM	505-827-5631
	Ken Jacoby, DC-HQ	202-366-6503
Research	Tom Bohuslav, TX	512-416-2559
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Computers in Construction

Attendees

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Charles Birkner	ATSER	charles.birkner@atser.com (281) 999-9961, fax (281) 999-9962

The task force opened with introductions and then began a discussion on the status of last year's (2001-2002) work plan.

Work plan items and status:

- Leadership on Site Manager – group members have made presentations on Site Manager
- Construction web page – the web page is up and running. Jim McDonnell gave a brief presentation on the web page and a site tour.
- Monitor use of handheld computers – This effort is continuing. Brad Parks made a presentation to the general session.
- Computer-based Training – Apparently the Transportation Curriculum Coordinating Council (TCCC) is already conducting a pooled-fund study very similar to this activity under Jim Sorenson (FHWA). Learning this, our group determined that we should coordinate our activities with that group to avoid redundant efforts.

The group then held a discussion on proposed reorganization of the Subcommittee on Construction's existing Task Forces. The consensus among the group was that there was a need to keep our Task Force whole rather than combine with the Contract Administration Task Force as proposed. There are enough activities needing additional time and attention in this focused area, that combination with another Task Force would only serve to dilute those efforts even further.

Discussion on the 2002-2003 Work Plan then took place.

2002-2003 Work Plan items:

- Continue to lead development on the construction web page with this and other Task Forces.
- Put together a presentation on Computer-based training and how it relates to the current TCCC activities. (Dexter Newman and George Raymond)
- Survey other states on their uses of technology in construction activities. (Jeff Kolb and Allan Holmes)
- Develop presentation on how Alabama DOT uses the "Blue Book" on the web. (Robert Johnson)
- Leadership and Enhancement of Site Manager activities. (Brad Parks)
- Continue leadership and development of a national specifications website. (Claude Oie)

- Presentation on the results from PennDot’s “Technology-assisted Speed Enforcement in Workzones” Pilot. (Tucker Ferguson)
- Investigate research ideas – potential studies on where the construction industry may be headed in the future regarding equipment operations, stakeless construction, etc. (Danny Shealy) (Danny Shealy agreed to work with the group to review the 23 CFR construction regulations to suggest any areas that may need to be “looked at” for the upcoming Transportation Reauthorization Act)

Additional discussion then concluded on reorganization. The group agreed that this Task Force should continue as a separate Task Force and not be combined with any other Task Force. We also agreed to expanding somewhat to include not only Computers but “Technology” in general.

Discussion then turned to nominations for a new chairman for the coming term as Claude Oie’s term was ending. After much discussion, and arm-twisting, Claude Oie reluctantly agreed to serve **one more year** as the Chairman of this Task Force. He was recognized for the excellent job he’s done as chairman over the past 2 years and then elected unanimously.

The group then briefly discussed applicability of presentations to the general session and agreed that these presentations should be geared to provide a general overview and not get too bogged down in details.

Additional information on TCCC activities:

- NPDES Training by Powerpoint – available on TCCC website.
- “Design and Implementation of Erosion and Sediment Control” – available on CD
- Workzone Traffic Control Safety – ARTBA Toolkits and interactive CD
- MARTCP – Pavement Marking manuals and CD’s
- NHI Pavement courses update – <http://www.nhi.fhwa.dot.gov/pavement.html>
- Website - www.nhi.fhwa.dot.gov/tccc or www.fhwa.dot.gov/construction

Contract Administration Task Force

Meeting Minutes

2002 Annual Meeting
August 4 - 9, 2002
Rehoboth Beach, Delaware

Meeting Minutes

Chairman Steve DeWitt welcomed the group to the Contract Administration Section breakout session. Thirty-seven Section members and visitors (12 State DOT representatives from 11 States, 20 FHWA representatives and 5 visitors) attended the session. A list of those attending is provided below.

Chairman DeWitt reviewed the previous year's work plan as the first order of business (a copy of the status of 2001-2002 work plan items is provided below. The Section members agreed that certain work plan items should be continued on the 2002-2003 work plan. These topics include:

- Continued coordination on the Subcommittee's contract cost growth / best practices study,
- Ensuring 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,
- Continued support of the Utah State University Innovative Contracting web site (www.ic.usu.edu), and
- Continued support of the FHWA's efforts to update four technical advisories.

Chairman DeWitt led a discussion to identify construction topics that are of interest to the Section Members. These topics were considered to be candidates for additional research or the topic of a national survey to identify best practices. These topics include the following:

- Warranty liability (third party liability)
- Performance measures
- Alternative contracting
- Cost growth / overruns
- Design-build
- Fraud
- Bidding issues
- Price reductions for sub-par quality levels
- Pre-qualification
- DBE issues related to construction contract administration
- Causes for failure to complete contractual work on time
- Risk allocation

- Utility coordination and adjustment performed by the contractor
- Construction management processes
- Claims / dispute review boards
- Davis-Bacon Issues
- Rating of consultants performing construction management and inspection services
- Best value and options to improve the low bid system
- Policy on the use of positive separation
- Policy on the closure of facilities versus one-way operation
- Policy on enforcement and issuing monetary fines in work zones for speed control
- Electronic speed enforcement
- Long term effects of night-time construction on the workforce
- Product certification / approved material list
- Meaningful CPM schedules and updates
- OJT programs (Are owners moving to US Department of Labor approved programs?)
- Fraud detection indicators / training for inspectors
- Bid unbalancing
- Documentation of pay quantities on lump sum contracts
- State DOT implementation of FHWA's acceptance requirements in 23 CFR 637
- Incentives for low volume roads for early completion (are incentives appropriate when road user costs are not significant?)
- Road user costs
- Value engineering in construction (what qualifies for time and cost in a VECP submission?)
- Incentive based contracting
- Design liability issues
- Payment of home office overhead
- Air quality of asphalt paving machines
- Americans with disabilities act standard issues
- Congestion mitigation techniques / are A+B and I/D provisions cost effective?
- Owner controlled insurance programs
- What projects are appropriate for A+B, lane rental?
- Different insurance options for alternative contracting
- Performance standards / measuring congestion in work zones
- Recouping the costs of utility delays from utility companies

After this brainstorming session, the Section members recommended that the following topics be submitted to the Subcommittee Research Chairman (Thomas Bohuslav) for further consideration:

- State DOT implementation of FHWA's acceptance requirements in 23 CFR 637 (potential synthesis)*
- Policy on enforcement and issuing monetary fines in work zones for speed control*
- Third party liability issues when using innovative contracting
- Traffic mitigation techniques and cost effectiveness*

(On August 8, Thomas Bohuslav indicated that these studies would receive further consideration by SCOH*)

Chairman DeWitt then led a discussion to prioritize the list of topics for the 2002-2003 annual work plan and solicited volunteers for the various assignments. See the 2002-2003 work plan below for details.

On Thursday, Jerry Yakowenko gave an overview of FHWA related contract administration issues. These topics included:

- Buy America issues
- Davis-Bacon issues related to the site of work
- Summary of the DBE Notice of Proposed Rule Making issues concerning prompt payment
- Discussion of FHWA Technical Advisories
- National Innovative Contracting Conference
- Design-Build rule making issues
- Use of the Utah State University Innovative Contracting web site
- Status of FHWA's policy concerning project labor agreements

Finally, the Section members discussed several of the contract administration related questions that were posed to the Subcommittee membership.

2002-2003 Contract Administration Work Plan

- 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 Cliff Schexnayder's NCHRP 20-7 study concerning estimating techniques for major projects. (DeWitt, NC DOT, assisted by Ted Burch, FHWA-MT and Jerry Yakowenko, FHWA HQ)
- 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. (Yakowenko, FHWA HQ will coordinate with Jim McDonnell, AASHTO)
- 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. Suggestions for the web site should be forwarded to Mr. Doyt Bolling with Utah State University (doyt@cc.usu.edu).
- 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 (Jeff Grossklauss, MI DOT; Mark Eisenhart, WY DOT)
 - b) TA T 5080.15, Construction Contract Time Determination Procedures (Mark Eisenhart, WY DOT)
 - c) TA T 5080.10, Incentive/Disincentive (I/D) for Early Completion; draft should be available in late 2002; (Gendreau- ND, Angles-OH, Hundley – TXDOT,)
 - d) (New TA) Electronic bidding; draft pending, should be available in Fall, 2002; (Skelnar- TXDOT, Miller- WisDOT, Nichols – TXDOT; assistance from the AASHTO TEA-TUG Committee)
- 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 (Terry Zoller, MN DOT; Gary Angles, OH DOT; Yakowenko, FHWA)
 - b) Fraud training / potential PowerPoint presentation for State DOT training purposes (DeWitt, NC DOT; Nate Danforth NH DOT; Kevin McLaury FHWA-IL)

- c) Unbalanced bidding (Kathy Walker, FHWA NM; Bill Hakala, FHWA- WRC; Jerry Yakowenko, FHWA- HQ)
- d) Reduction of project documentation for lump sum design-build contracts (Bob Dyer, UT DOT; Dave Cough, FHWA- PA; Sandra Garcia, FHWA- UT)
- e) Recouping the costs of utility delays from utility owners (Thomas Bohuslav, TX DOT; Vince Tabor, FHWA- NY; Gene Wortham, ID DOT)
- f) Best practices for pay reduction for substandard quality (Cal Gendreau, ND DOT; Mark Richter, FHWA VT, Jeff Grossklaus, MI DOT)
- g) Incentive-based contracting (Bob Dyer, UT DOT; Gene Hoelker, FHWA-WI)

2002 Attendance

AASHTO SOC Contract Administration Task Force

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Current Status of Contract Administration Task Force Work Plan Items from 2001-2002

- 1) Work with FHWA to develop a procedure for further analysis of construction cost growth issues. Survey the State DOTs regarding cost growth on projects greater than \$10 million and report to the AASHTO Standing Committee on Highways in time for the December 2001 meeting (Williams –AZ, Jacoby)
Status: Ron Williams prepared a report for submittal to SCOH regarding cost growth on construction projects greater than \$10 million. This report was based on a 2001 survey of State DOTs. Len Sanderson presented this information to SCOH in late November 2001. Steve DeWitt provided a briefing for the Subcommittee at the annual meeting in Rehoboth Beach. Additional coordination is still necessary with the Subcommittee on Design and Planning to complete this report.

- 2) Update the Primer on Contracting for the 21st Century (Yakowenko and Hakala)
 - a) Publish as an AASHTO document and post on the Subcommittee's web site (McDonnell, AASHTO; Yakowenko-FHWA)
 - b) Include the innovative contracting technical special provisions from NCHRP 10-49 in the next edition of the "Primer on Contracting for the 21st Century".

Status: An electronic version of the report is available on the Subcommittee web site (<http://construction.transportation.org>). A hard copy printed edition is pending.

- 3) Assist FHWA with the update and revisions necessary for certain Technical Advisories, including:
 - a. FHWA Technical Advisory TA T 5080.4, Preparing Engineer's Estimates and Reviewing Bids (Volunteers: Gould -ILDOT, McLaury-FHWA-IL)
 - b. FHWA Technical Advisory TA T 5080.6, Guidelines on Contract Procedures with Emphasis on Bid Reviews and Evaluation (Bohuslav-TXDOT, McLaury-FHWA-IL)
 - c. FHWA Technical Advisory TA T 5080.10, Incentive/Disincentive (I/D) for Early Completion (Gendreau- ND, Angles-OH, Hundley – TXDOT, Lynwood- MIDOT)
 - d. FHWA Technical Advisory TA T 5080.15, Construction Contract Time Determination Procedures (Zoller- MNDOT, Boswell – TXDOT, Beaulieu – MDSHA)
 - e. Electronic bidding (new) (Skelnar- TXDOT, Rhinesmith- WisDOT, Nichols – TXDOT)

Status: The FHWA Office of Contract Administration is late in preparing draft copies for review; however, an initial draft version of some of the TA's was provided at the August 2002.

- 4) Support the Utah State University Technology Transfer Center Innovative Contracting web site (www.ic.usu.edu) by encouraging other State DOTs to submit evaluations and experiences regarding innovative contracting techniques.

Status: Financial assistance (FHWA \$10,000) and technical support were provided to the Technology Transfer Center during the past year.

- 5) Distribute a questionnaire regarding problems associated with retainage issues in association with the implementation of the DBE regulations. (Bohuslav – TX, Yakowenko – FHWA)

Status: Tom Bohuslav completed the survey in December 2001. A copy of the survey results has been posted on the FHWA Contract Administration web page:
<http://www.fhwa.dot.gov/programadmin/contracts/index.htm>.

- 6) Distribute a questionnaire regarding the procedures used by State DOTs in handling unsatisfactory performance (Gendreau – ND, with assistance from DeWitt and Hakala)

Status: This survey was completed in June 2002. A copy of the survey results is posted on the FHWA Contract Administration web page:

<http://www.fhwa.dot.gov/programadmin/contracts/index.htm>.

- 7) Support Construction Tidbits by supplying articles to Kevin Kliethermes, FHWA-MN (Kevin.kliethermes@fhwa.dot.gov).

Status: No tidbits were provided by the Contract Administration Section during the year.

Environmental Task Force Meeting Minutes

**AASHTO Subcommittee on Construction
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Art Gruhn (CT DOT) presided as Task Force Chairman
Eight states were represented at the meeting

Self-introductions of the meeting attendants

- Art Gruhn (CT DOT)
- Tim Bertram (IN DOT)
- John Walker (WV DOH)
- Bob Pieplow (CALTRANS)
- Jim Tynan (NYSDOT)
- Ron Gray (VA DOT)
- Jeff Albright (NH DOT)
- Dean VanDeWege (CO DOT)
- Don Hancher (Univ of KY)
- Jeff Lewis (FHWA-CA)
- Jason Dietz (FHWA-CA)
- Bob Rodriguez (FHWA-OK)
- Mark Doctor (FHWA-TN)

ACCOMPLISHMENTS

Art led a discussion on the accomplishments from last year's work plan

1. Updated survey on "Issues facing us on environment"
 - Tim Bertram (IN DOT) led the effort to update the survey
 - 22 responses were received out of 55 surveys sent
 - 10 responses indicated that Erosion and Sedimentation Control (E&SC) issues are still most important – this coincides with results of previous survey done in 1995
 - Other important issues identified: permit delay, endangered species, wetland issues
 - 7 of the 22 responding States have turbidity measures
2. Survey of "Constructability Review Best Practices" guide and update efforts
 - Some states have not seen the guide
 - 8 states currently have constructability review guidelines
 - 9 states have a post-construction review program although some have no written procedure

- Reasons identified for not performing constructability reviews: manpower, can't measure results, difficulty finding best time during design to perform review

NCHRP completed a study on how to do a cost-benefit analysis of constructability reviews. It was recommended that this report be included as a chapter in the "Constructability Review Best Practices" guide.

It was also recommended that the guide be reissued in 2003 to include information on best practices for the time in design stage to perform constructability reviews.

KY has a study underway on constructability review issues: who should do them, what practices are most effective, etc.

The KY study is expected to be finished by next Spring

DISCUSSION ON SOC REORGANIZATION

Art led a discussion of SOC reorganization and the proposed changes in responsibility of this task force.

Bob Pieplow (CA), spoke in favor of the proposal for three sections and recommended a name change for the Section to "Environmental and Human Resources".

The task force favored the proposal that safety issues be included in the environmental section. Safety never had a formal home within the subcommittee. Previously it was dealt with in some manner by the various task forces, but not formally. It was also discussed that economic issues should also be an item within this section and that "Environmental and Human Resources" was a more indicative title of that.

ELECTION OF NEW CHAIRMAN

Tim Bertram, Indiana DOT, was elected as the new Chairman. Tim previously served as task force Vice Chair. Tim accepted the position, but indicated that he may be retiring after next year.

John S. Walker, West Virginia DOH, volunteered to serve as Vice-Chair. The Vice-chair will serve on the research steering committee representing the Environmental and Human Resources section.

POTENTIAL RESEARCH TOPICS

Tim reported on the research topics presented to the research steering committee

Two topics raised by the task force, utility relocation and human resource impacts of accelerated construction, are proposed to be included in the F-SHRP program.

The needed research involves better ways to identify utilities and control their relocation. The other topic involves the impacts of accelerated construction on Human Resources (i.e. impacts to workers for working on weekends and nights only, being on call 24 hours, etc.)

A third research topic was identified on water quality and turbidity measurement in construction (Issues such as “What are acceptable criteria for measurements?” and “Methods to manage and control turbidity”).

Jeff Lewis and Jason Dietz (FHWA-CA) agreed to follow-up by preparing the problem statement and application forms for submittal of this topic as a research project.

SCANNING TOUR

Jason Dietz (FHWA-CA) made a presentation on tracking environmental commitments and the results of a recent process review made in California.

A multi-state domestic scanning tour will also be conducted later this year on best practices for tracking environmental commitments and ensuring implementation of commitments in projects.

RESOLUTIONS

Two resolutions were brought up by the task force.

1. Resolution to support the implementation of Environmental Stewardship best practices in construction and maintenance with NCHRP 20-7 funding.
2. Resolution to urge member States to make a voluntary contribution to the National Work Zone Safety Information Clearinghouse.

Both motions were carried forward to the SCOC and were passed at the Subcommittee Final Meeting.

WORK PLAN ITEMS FOR THE COMING YEAR (2002 –2003)

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. The work group will collect written post-construction review procedures from those states that have procedures and summarize best practices in the draft guide.

Workgroup:

- Art Gruhn (CT DOT) - Lead
- Bob Piepelow (CALTRANS)
- Jeff Lewis (FHWA-CA)

Schedule:

- Develop Cost/Benefit section - Jan 2003
- Develop Post-construction review section - Mar 2003
- Draft revision will be sent to task force members for comments
- Final draft to be sent out electronically to all SOC members prior to 2003 meeting with goal of asking SOC approval to publish revised document at the 2003 meeting

2. Conduct best practices survey of environmental commitment tracking and implementation (“How do we better convey environmental commitments into contract documents?”)

Workgroup:

- Bob Pieplow (CALTRANS) - Lead
- Jeff Lewis (FHWA-CA)

Schedule:

- Survey will be sent out Feb 2003 to other states
- Best Practices draft by Aug 2003 meeting

POTENTIAL PRESENTATION TOPICS FOR NEXT YEAR (2003)

- NPDES Phase 2 issues (speaker TBD – possibly from NC)
- Turbidity measurements
- Work zone safety
- Commitment tracking best practices
- How is your DOT enhancing cooperation with environmental resource agencies?
- A State to talk about their post-construction review process
- Viewpoints from a resource agency on various topics or requirements, hints on how to best get them involved, and how to get them as advocates for the project

OTHER ITEMS

Frank Gee asked for a volunteer from the section to serve on a task team to look at reauthorization issues, and recommended changes to 23 CFR, to provide draft position papers to AASHTO. Art Gruhn volunteered to represent the section.

Jeff Lewis and Tim Bertam volunteered to coordinate with Claude Oie on helping to develop the SOC web page and provide input from the Environmental and Human Resources Section.

There was discussion on the need for greater public relations to promote the good things done by this Subcommittee. AASHTO does have a public relations committee, but the discussion asked if there is something this task force wants to undertake such as promoting environmental sensitivity case examples of the good things we do (compilation of environmental accomplishments). Also, to promote the concept of “The Green Engineer” to help recruiting efforts to show students they can make a difference in the environment through transportation engineering careers.

Pavement & Structures Task Force Meeting Minutes

AASHTO Highway Subcommittee on Construction (SOC)
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August 5, 2002 Breakout Session

After welcoming from Chairman David Graham and introductions of everyone, the Task Force reviewed the previous year's work plan. The following work items were completed:

- Summary on HPPC
- Superpave Presentation
- Survey on bridge painting inspection & certification

The work plan item to publish Tidbits was not completed due to the fact that no articles were received. The work item to gather information on the state of the art in Falling Weight Deflectometers was not started. After discussion it was decided not to include this item in the new work plan.

The Task Force then heard a presentation from Mr. Lou Triandaflu on the HPC Technology Delivery Team. Mr. Triandaflu updated the group on the teams web page and upcoming events.

Mike Praul with FHWA and Bob Cogler from the Turner Fairbanks Research Facility updated the group on efforts to set up a certified training course for bridge paint inspectors. They hope to have a draft course out by November 2. They requested that Task Force Members get involved so that the construction perspective is represented.

David Graham asked members to consider filling the vacant Vice Chair position for pavements.

Mark Elicegui will continue to serve as Vice Chair for structures and to represent the Task Force on the Research Steering Committee. Mark requested research topics from the group. The following items were presented:

- Protective Coating Systems for concrete in harsh environments
- Synthesis of best practices on construction administration of design build projects
- Structural and durability benefits of smooth pavements

The group then held discussions on the proposed SOC reorganization. The members were evenly split on eliminating the computers in Construction Task Force.

The Task Force Meeting was adjourned.

August 8, 2002 Break Out Session

Kevin Dayton, Washington was selected as Vice Chairman for pavements.

Kevin Kliethermes agreed to liaison with Computers in Construction Task Force for the web page development.

The following items were discussed for inclusion in this years work plan:

- New Design Guide for Pavements
- Post Tensioning group problems
- Opening an ongoing discussion of issues with NAPA and ACPA
- Involvement of construction engineers in Painting Certification
- Pavement Smoothness

From this list the Task Force 2002-2003 Work Plan was developed.

See attached.

PAVEMENT AND STRUCTURES TASK FORCE 2002-2003 WORK PLAN

- Continue to publish Tidbits and post notices to receive a greater input of articles
- Establish ongoing communication with ACPA and NAPA
- Presentation on new Pavement Design Guide
- Presentation on post tension grout problems and inspection

Quality Task Force Meeting Minutes

AASHTO Highway Subcommittee on Construction (SOC)
August 4 - 9, 2002 – Rehoboth Beach, Delaware

Lee Onstott, Task Force Chairman, began the meeting with introductions and brief discussion of the work that needs to be completed during the Task Force meetings.

Discussion of Last Year's Work Plan:

1. Customer Focus – State of the Practice. Survey the States about their efforts related to business owners and other citizens regarding impacts of construction (both on project site and off-site locations); **Action By:** Greg Xanders and Byron Coburn
 - Florida DOT has completed the first phase of a customer satisfaction survey, which they are using to obtain feedback from their major customer segments that interact with FDOT construction projects. Based on the results of this survey, the FDOT is now focusing on two primary issues; 1) Timeliness of construction; and 2) Business access.
 - FDOT is now planning to hold focus meetings with business owners to get a better idea of the problems and issues these owners have with access to businesses within construction work areas. FDOT plans on performing a second survey next year, which they will develop with the input they receive from these focus meetings.
2. Implementation of Performance Specifications; **Action By:** Greg Xanders
 - FDOT is looking into methods of using performance-based warranties based on rut, ride, and cracking criteria to pre-qualifying contractors for future projects.
3. Creation of the “Quality Action Team” (QAT); **Action By:** Lee Onstott, Bill Hakala
 - No action has been taken on this work topic to date. The idea behind this topic was to have a team that would be a resource to solve problems and suggest new ideas on various technical issues when requested by a state. The team would have a core group of representatives, but additional technical experts could be called in as needed, depending on the issue at hand. The Team could look at either project or program issues.
4. Finalization of the Document “Major Types of Transportation Construction Specifications”; **Action By:** Greg Doyle
 - Greg Doyle handed out copies of his draft report, and gave a brief update on the report and what it covered. The report has been revised to incorporate comments received by Quality Construction Task Force members and others. The report is now ready for a final review by the full SOC, after which it will be published as an SOC document.

5. Work Zone Quality Presentation; **Action By:** Anker Winther, Mike Marttila
 - Status: Anker Winther developed a presentation on Work Zone Quality, which he presented to the full SOC during the Quality Construction Task Force Presentations on August 6.
6. National Partnership for Highway Quality (NPHQ) Liaison activities; **Action By:** Ken Stoneman
 - Ken Stoneman gave an update of the NPHQ, and briefly explained the efforts underway by its Subcommittees.
 - The NPHQ has completed the selection of this year's Making A Difference Award winners, which will be announced at their annual awards banquet in November. The NPHQ holds their annual working meeting in conjunction with the awards banquet, and completes the rest of its business by holding quarterly conference calls.
 - There were some comments raised about the lack of recent products by the NPHQ and the benefits that the highway community is getting from this group. Ken will bring these concerns forward to the NPHQ members at their next meeting.
7. Quality Task Force Web Site coordinator; **Action By:** Mike Seigfried
 - Status: No known activity has been completed on this work topic.
 - Ken Stoneman agreed to work in the future with the other task forces in updating the SOC's website.
8. Buy America Response; **Action By:** Ken Stoneman, Lee Onstott
 - Status: This work topic is based on a resolution that was voted on by the SOC at the 2000 Summer Meeting. There has been no recent work activity.
9. Construction Workmanship Training Course Development (through NHI); **Action By:** Lee Onstott
 - Lee has continued his liaison responsibilities with the Transportation Curriculum Coordination Council (TCCC). Lee explained how all of the Regional Technician Certification and Training groups, FHWA, and industry have been coordinating through the TCCC to develop training materials. AASHTO passed a resolution last year to provide pooled funds for this group's work activities. The TCCC is currently working on the development of core curriculums for major areas of construction. They have also developed a website, which is available at <http://www.nhi.fhwa.dot.gov/tccc/>
 - NHI developed an outline of a training course on construction workmanship. This outline was subsequently reviewed by the TCCC and revised accordingly. An RFP is

now being prepared for a consultant to develop the training course materials based on the revised outline. The target audience for this course will be field inspectors.

10. Impacts of Utilities in Construction – Best Practices; **Action By:** Ken Stoneman

- Status: A video has been developed and released, which focuses on coordinating with utility companies early in the project development process in order to reduce impacts of utilities during construction. Copies of the video can be obtained through the FHWA. Contact Paul Scott at 202-366-4104, or by email at Paul.Scott@fhwa.dot.gov

11. Performance Specifications Coordination; **Action By:** Ken Stoneman

- A Performance-Related Specification Technical Working Group (TWG) was formed last year and had their first meeting in December 2001. At that time the TWG agreed to begin work on a national long-range plan for the implementation of performance related specifications. The TWG also recommended the formation of 5 separate Expert Task Groups (ETG) to address the application of performance related specifications for specific areas. These areas include concrete, HMA, structures, pavement preservation, and miscellaneous PRS.
- The concrete ETG was established, and held their first meeting in July 2002. The Pavement Preservation ETG is now in the process of being established and has tentatively scheduled its first meeting for September 2002.
- The TWG is planning on holding its next meeting in November 2002.

12. Workforce Development; **Action By:** Chris Drda

- Status: No known activity has been completed on this work topic.

13. Streamlining of construction inspection – Risk assessment of inspection activities; **Action By:** Mike Marttila, Greg Xanders

- Status: No activity has been completed on this work topic.

14. Liaison with Subcommittee on Materials; **Action By:** Kathy Petros

- Kathy was unavailable to give an update of the SOM's work activities.

AASHTO Subcommittee on Construction Reorganization

The group discussed the 3 options outlined for the proposed SOC reorganization. There appeared to be unanimous agreement among the members present that the Quality Construction Task Force should not be abolished. Most of the members felt that by eliminating the Quality Construction Task Force, the SOC would lose its focus on quality that it has maintained over the years. The members agreed that quality is an inherent part of the work activities that all of the

other Task Forces are involved with. But they also felt that if there were no group specifically addressing quality, the proactive consideration of quality initiatives would be lost.

Discussion about next year's work plan (2002-2003)

After reviewing the last year's work plan, it was agreed that several of the work plan topics should be continued on the 2002-2003 work plan. These included:

- Customer Focus Report
- Finalization of the document "Major Types of Transportation Construction Specifications"
- National Partnership for Highway Quality coordination
- Construction Workmanship Training Course Development and TCCC coordination
- Performance Related Specifications coordination
- Coordination with the Subcommittee on Materials

The Task Force members also brainstormed on new quality initiatives for consideration in the 2002-2003 work plan. The topics included the following:

- A+Q bidding – Identifying the state of the practice, and issues involved with this type of contracting.
- Building and maintaining a quality workforce – This activity could potentially look at practices being used to attract new employees into the highway workforce.
- Quality Management Expert Task Group – Ken Jacoby presented a proposal for the development of a "Quality Assurance Systems" ETG. The task force members agreed to the idea in concept, but wanted it broadened to cover "Quality Management" rather than "Quality Assurance Systems". The formation of this ETG was seen as one mechanism for the SOC to retain a focus on quality after the Quality Construction Task Force is eliminated.
- Quality construction through certification – Bud Darby proposed developing a presentation on this topic for next year's summer meeting.
- ISO certification
- Work zone workmanship – Anker Winther proposed developing a presentation on Work Zone Workmanship based on concepts identified through an upcoming workshop on this subject.
- Partnering
- Prequalification practices
- National Customer Survey – FHWA is currently working on the next national customer satisfaction survey, which will be a follow-up to the "Moving Ahead" survey that was published in 2000. A presentation on the status/results of this survey could be presented at the next summer meeting.

- Measurement Systems – Charlie Trujillo, from New Mexico SHTD, is doing work for the AASHTO Standing Committee on Quality (SCOQ) in this area, and may be able to give a presentation at next year’s SOC meeting. Ken Stoneman will coordinate with Charlie. Quality Measures were also discussed as a possible topic that should fall under the future Quality Management Expert Task Group initiatives.
- Resident Engineer Academies – Tim Chavez gave an update of recent efforts by the TCCC in this area. A team visited resident engineer academies in California, Washington State, and Maryland/Virginia. They are now working on a report of their findings from these reviews, which could possibly be extended to other states.

2002 – 2003 Work Plan

1. *Customer Focus - Florida DOTs Approach.* A report will be developed summarizing the results of FDOT’s recent customer survey, the subsequent focus group meetings, and the 2nd follow-up survey. **Action By:** Greg Xanders
2. *Finalization of the document “Major Types of Transportation Construction Specifications”.* Lee Onstott will distribute Greg Doyle’s draft document to the entire SOC members for review and comment. After the document is revised to incorporate any comments received, it will be published as an SOC document. A target milestone date of January 2003 was set for completing and publishing the document. **Action By:** Greg Doyle
3. *Performance-Related Specifications Technical Working Group Liaison Activities.* Amar Bhjandas replaced Ken Stoneman as the Task Force liaison for the PRS Technical Working Group. **Action By:** Amar Bhjandas
4. *National Partnership for Highway Quality (NPHQ) Liaison Activities.* Ken Stoneman will continue to keep the SOC apprised of current NPHQ activities. **Action By:** Ken Stoneman
5. *AASHTO Highway Subcommittee on Materials Liaison Activities.* **Action By:** Kathy Petros
6. *Construction Workmanship Training Course Development, TCCC Liaison Activities;* Lee Onstott will continue to continue coordination with the Transportation Curriculum Coordination Council including work on the Construction Workmanship Training course, Resident Engineers Academy and computer based training. **Action By:** Lee Onstott
7. *Construction Quality Through Certification.* Bud Darby will develop a presentation on this topic for the next SOC Summer Meeting. **Action by:** Bud Darby
8. *Work Zone Workmanship.* Anker Winther will develop a presentation on Work Zone Workmanship for the next SOC Summer Meeting. **Action by:** Anker Winther
9. *Quality Management Expert Task Group.* Ken Jacoby will work through FHWA to establish a Quality Management ETG. Amar Bhjandas agreed to represent the Quality Task Force in

this initiative. Greg Xanders also agreed to serve as an industry representative. **Action by:** Amar Bhjandas, Ken Jacoby

10. *Resident Engineer Academy.* A final report of the findings from the TCCC’s field reviews of resident engineer academies in California, Washington State, and Maryland/Virginia will be prepared and presented at the next summer meeting. **Action by:** Tim Chavez
11. *Performance Measures and Results.* AASHTO Standing Committee on Quality (SCOQ) Performance Measures and Performance Results Presentation. **Action By:** Ken Stoneman
12. *Task Force/Section Coordination.* Coordinate quality effort and focus through the other Sections in subsequent years. **Action By:** All task force members

Quality Construction Task Force 8/8/02 Meeting Attendees

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Research Advisory Steering Committee Meeting Minutes

AASHTO Subcommittee on Construction
August 4 – 9, 2002
Rehoboth Beach, Delaware

ACTION ITEMS are indicated in **bold**.

The 2002 meeting of the AASHTO Subcommittee on Construction (SOC) Research Advisory Task Group was convened at 6:30am on August 6, 2002 in Rehoboth Beach, Delaware. Those in attendance are listed at the end of the minutes. The Chair, Thomas Bohuslav (Texas), began the meeting calling for self introduction and reviewing the agenda.

Cranford Jencks (TRB) discussed the NCHRP 10-58 project brochure, “*Construction Engineering & Management Research Needs*.” **Mr. Jencks requested the group review the brochure and provide him with comments within 2 weeks.** The brochure is intended to aide Agencies in developing their research agendas.

The Chair reviewed the ongoing NCHRP synthesis and research projects – highlighting the projects of interest to the group.

F-SHRP

Tim Hess (TRB) discussed the F-SHRP Program. F-SHRP is proposed as a \$450 million dollar, 6 year program. F-SHRP has several focus areas. The area of interest for SOC is NCHRP 20-58(1), entitled “Detailed Planning for Research on Accelerating the Renewal of America’s Highways (Renewal).” The Renewal area is proposed as a \$19 to \$20 million dollar a year program. The principal investigators for this project are: Iowa State University, Purdue University, and TDC Partners, LTD. The research team is developing a framework, topic areas, vision statements, and research projects. Their report will be complete by the beginning of 2003.

The Chair provided a handout covering the overall Renewal program

Ted Ferragut (TDC) stated that renewal is focusing on rapid, higher, faster quality. The research team has identified 8 topic areas. The research team will meet again in Oct 02 with a list of around 80 projects.

One of their main challenges is that many topics have already been touched on by FHWA and NCHRP. So much of renewal is trial and error; we have never done a national construction related research study. The team is looking to build consensus and looking for input from this group.

Mr. Jencks clarified that F-SHRP is looking at the feasibility of a second SHRP program. If approved it would be a ¼ percent draw down on the highway program.

RESEARCH TOPICS

Following the F-SHRP update, the discussion turned to the research priorities that had been identified at the meetings of the SOC's various task forces during the 2002 annual meeting. The individual task force issues are as follows:

Mr. Jencks brought up that the Bridge Committee has asked SOC to endorse a 1st stage problem statement on tunnel failures. The floor requested to review SOC proposed research before considering giving their endorsement. Upon later discussion, the group did not give its endorsement.

- **Synthesis statements are due to the Chair by e-mail by September 30, 2002.**
- **Research statements are due to the Chair by e-mail by September 10, 2002.**

Items appropriate for F-SHRP are indicated by (F-SHRP).

Pavement and Structures Task Force – Mark Elicegui (Nevada), given in order of priority:

1. Protective coatings for concrete in harsh environments. (Research Project)
2. Construction administration of design-build. (Synthesis)
3. What costs for smoothness can you pay and/or penalize? (Synthesis)

The Chair cautioned that syntheses do not develop any new information, suggesting that the title of number 3 be rephrased.

Environmental Task Force – Timothy Bertram (Indiana)

1. Utility location technology. The current technology to locate subsurface is lacking, (F-SHRP).
2. Accelerated construction impacts on human resources – both agency and contractor. We are being asked to do more with last, faster. How much of this accelerated construction can they stand? (F-SHRP will be covering worker fatigue)
3. 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)

Computers Task Force - Danny Shealy (South Carolina)

1. Develop guide specifications for verification of contractor data obtained using stake-less equipment. (Research)
2. 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.
Mr. Shealy needs to provide Mr. Jencks with a write up by September 15, 2002.

Contract Administration Task Force – Cal Gendreau (North Dakota)

1. Synthesis on Identifying where we are at with State Quality Assurance programs (CFR 637).
2. Synthesis on State sanctions for traffic violations in work zones.
3. Traffic mitigation techniques and cost effectiveness, including the public in the process, (F-SHRP).

Quality Task Force – Greg Xanders (Florida)

1. What is the state of the practice of what can be done to develop for customer-based contractor incentives? (F-SHRP)
2. Incorporating quality in the low-bid process. What systems need to be in-place to assure quality? (Dropped – To be addressed by ongoing research)

SCANNING TOURS

The Chair moved discussion to discuss future scanning tours. **The Chair requested the group to provide ideas for future scans by September 30, 2002.** Greg Xanders suggested doing a United States scanning tour on contraction practices. Mr. Ferragut noted that there has not been a scan on construction management.

Proposed Topic: Construction Management Practices – includes: testing inspection requirements, pavement process, project documentation.

Adjourn 8:15am.

ATTENDEES

Attendees

<u>Name</u>	<u>Agency</u>	<u>Phone</u>	<u>E-mail</u>
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