

TCCC Bi-Annual Meeting

June 7-9, 2005
Philadelphia, PA

Attendees:

Serji Amirkhanian – Clemson University, **Christie Anderson** – Iowa DOT/Multi-Regional Training and Qualification Council (M-Trac), **Cathy Betts** – Minnesota DOT, **Doyt Bolling** – Local Technology Assistance Program (LTAP), **Howe Crockett** – Federal Highway Administration (FHWA)/Western Federal Lands Highway Division, **Bud Darby** – National Institute for Qualification in Engineering Technologies (NICET), **Greg Doyle** – FHWA/Massachusetts Division Office, **Woody Hood** – Maryland State Highway Administration/Mid-Atlantic Regional Technician Qualification Program (MARTCP), **Linda Hughes** – Washington DOT/Western Association of State Highway Transportation Officials (WASHTO), **Laura Lawndy** – LGB & Associates/FHWA, **Tom Malerk** – Florida DOT/ Southeast Task Force on Technician Training and Qualifications (SETTFQ)/ AASHTO Subcommittee on Materials, **Martha Monjo** – South Carolina DOT/National Transportation Training Directors (NTTD), **Chris Newman** – FHWA/Office of Asset Management, **Garth Newman** – Idaho Transportation Department/WAQTC, **John O'Doherty** – National Center for Pavement Preservation, **Lee Onstott** – NM Department of Transportation/AASHTO Subcommittee on Construction, **Allan Samuels** – Arizona DOT, **Jim Sorenson** – FHWA/Office of Asset Management, **Leo Stevens** – New England Transportation Technician Qualification Program, **John Taylor** – FHWA/National Highway Institute (NHI), **Douglas Townes** – FHWA/National Resource Center (Atlanta)

Agenda topics

Welcoming Remarks & Introductions

Discussion: Howe Crockett welcomed the TCCC members and highlighted some of the activities that have taken place since the last meeting, such as attempts to populate the TCCC training database, distribution of the matrices, completion of the Bridge Construction Inspection Course, etc.

Howe Crockett also noted that Bob Peda had just been reassigned within the Pennsylvania DOT and would resign his position in the TCCC immediately. He provided the names of two potential AASHTO Maintenance representatives to replace him. Howe Crockett has passed these names along to Chris Newman and Jim Sorenson for follow-up.

Action items: None	Person responsible:	Deadline:
Recruit a new AASHTO Maintenance Representative	Jim Sorenson/Chris Newman	November 30, 2005

About TCCC

Discussion: Since there were several new members in attendance at the June TCCC meeting, Chris Newman spent several minutes discussing the TCCC. Chris Newman explained that the TCCC was created about 5 years ago to help coordinate the activities of training and qualification efforts within the States. There were the 5 regional

groups who had begun to successfully work on this issue, but were often duplicating efforts. The TCCC was created to pool resources and coordinate the development of needed training courses. With a trained and qualified workforce as its goal, the TCCC has spent the last 5 years developing matrices of competencies for 5 key areas within the highway transportation arena. These five areas include Employee Development, Construction, Maintenance, Materials, and Work Zone Safety. Additionally, the TCCC in partnership with NHI, State DOTs, and industry, has developed approximately 40 training courses that are available for distribution through NHI. Each course is designed to be functionally specific, while being generic enough for any State to adopt and use within its training program.

In order to achieve this mission, the TCCC established a pooled fund that is administered by FHWA. The pooled fund allows States combine limited resources in order to obtain quality training course materials for a fraction of the cost that they would have had to put out to develop a training course on their own.

Currently, the TCCC is continuing to develop new training courses as needs arise and is formalizing its processes through the creation of a business plan, by-laws, etc. Chris Newman further mentioned that in the future he would like to see the TCCC reach out more effectively to the LTAP centers to increase the training abilities at the local level.

Tom Malerk questioned whether there is a mechanism for tracking how the States are using the resources supplied by the TCCC. Chris Newman said that there is currently not a method for tracking use, but the TCCC is looking to establish such a method as well as other means to account for the performance of the TCCC.

Action items: None	Person responsible:	Deadline:

Information Sharing

Discussion:

National Center for Pavement Preservation (NCP):

During the information sharing session John O'Doherty outlined the training activities of the NCPP, which currently is offering a course on Asset Management in two phases, a top level for planners and a lower level for field technicians. The Asset Management Course is designed to be a 2 day course with hands on exercise in the afternoon. Teams of 4 are each instructed to put together a 5 year program with a mixture of projects, budgets, prospective treatments, etc. The teams are then instructed to put the same type of program together for differing levels of infrastructure depletion. At the end of the course the teams present their ideas, after which they are shown how to achieve the same solution through a mathematical process. The NCPP conducts the course 3-5 times a year with each course having about 40 participants. The NCPP is looking to have the course peer reviewed in the near future in an effort to achieve greater distribution.

The NCPP is also developing a course on Chip Seals, which is currently moving to peer review with the hope that it will be put out in the near future.

John went on to explain that the NCPP also does research administration (i.e. pooled fund administration) and outreach (States contract NCPP to conduct reviews of the State preservation systems).

The NCPP are serving as subject matter experts on the converting the Caltrans Maintenance Technical Advisory Guide (MTAG) to computer based training.

Southeast Task Force on Technician Training and Qualifications (SETFTTQ):

Tom Malerk informed the TCCC members that the SETFTTQ met on March 9, 2005 in New Orleans, LA. Tom outlined the purpose and action plan of the SETFTTQ:

Purpose

- Forum to revise and maintain information on the SETFTTQ website
- Establish priorities for the development of future training materials common to members
- Serve as a voice for the Southeastern States to AASHTO and TCCC

Action Plan

- Maintenance and updating of website. All program matrices updated March, 2005
- Develop SE database of technicians with revoked qualifications – Tom explained that when a technician is disqualified in one State he or she often moves to another State and starts working, while never having corrected the behaviors that caused the disqualification in the previous State. Therefore, developing a database to track these individuals will allow the States in the Southeast to better communicate the issues that they have had with any given technician. The SETFTTQ is also looking at possibly adding disqualified contractors as well. The database must still pass through the legal review to ensure that it is not infringing upon the technician/contractor's rights. Currently, the database is set-up as a password protected site and only SETFTTQ members can access the site. Alternatively, the SETFTTQ is also looking to develop a listing of qualified technicians. John O'Doherty suggested that they look at having such a database and then removing the names of the individuals who have been disqualified which may assist with the legality issues surrounding the disqualification database. Allan Samuels informed the group that the NCHRP is working on a research project to look at the qualification of technicians for quality control purposes. Garth Newman questioned whether each State in the Southeast has the same standards for disqualifications. Tom Malerk said that each State has its own standards, but the SETFTTQ is looking at specific issues such as falsification, cheating, or stealing. The permanence of the disqualification varies from State to State following a due process investigation. Doyt Bolling questioned whether there is a newsletter that is sent out stating who has been qualified or disqualified, thereby alerting others to the situations. Tom Malerk said that there is nothing like this in the Southeast. Garth Newman mentioned that Idaho has such a newsletter that highlights the goings on within the qualification area. Bud Darby mentioned that NICET has a temporary disqualification and also a permanent disqualification that follows due process.
- Task team for regional acceptance program for aggregates – looking at reciprocity for testing of aggregates and accepting other States' findings
- TCCC work plan

A representative from Mississippi provided a presentation on "how do we ensure that we have the knowledge & skills needed to do business in the future?" Looking at do we buy it or build it? Howe Crockett mentioned that AGC has also been conducting this kind of courses as well.

Tom further outline issues that the SETFTTQ would like to coordinate with the TCCC

- Electronic transfer of SETFTTQ information to TCCC website
- Adequate representation to address needs of State DOT constituents
- Coordinator for regional groups and value in sharing of information
- Access and use of TCCC training programs for individual members

Multi-Regional Training and Qualification Council (M-Trac):

Before briefing the group on MTRAC's recent accomplishments, Chris Anderson mentioned that Iowa does list all of its qualified contractors. She also said that this same issue will be further examined at the M-TRAC meeting later in the summer.

M-TRAC met last fall during the joint meeting on Transportation Training and found the event to be successful, but agreed that a joint meeting should only take place once every 5 years. This year the MTRAC meeting will take place in Columbus, Ohio on August 24-25, 2005 and is supported by the Ohio Aggregate Group. The M-TRAC would like to have someone from TCCC make a presentation at the meeting. M-TRAC will also be inviting the NTTD and the TTC.

Agenda items will include

- State program updates
- Dequalification Process
- Reciprocity
- E-learning
- Update M-TRAC materials
- Completion of Portland Concrete Cement Center (PCCC) materials by the Center for Transportation Research and Education (CTRE)

The MTRAC is waiting to finish agenda in order to include any items that the TCCC may suggest.

The Instructor Development for Technician Course is a great success. Iowa will be conducting the course 4 times this year and Chris Anderson has received several inquiries into this course. Chris Anderson also provided materials for field technicians developed by the Center for PCC Pavement Technology to the group for use as needed.

Chris Newman mentioned that the PCC Center has a contract with the FHWA Office of Pavement Technology and suggested that this may be an avenue for developing any needed courses in the area of pavements.

Cathy Betts informed the group that she and Chris Anderson have sent out a call within MTRAC for course information to be placed on the TCCC website. Overall the opinion seems to be that the States would prefer to have links from the TCCC website to the individual States' site rather than populating a separate database. Chris Newman mentioned that this will not work as the sites will not be searchable as links off of the TCCC website.

New England Transportation Technician Qualification Program:

Greg Doyle briefed the group on recent NETTCP activities. The NETTCP performs a comprehensive review and update of course material every 5 years, which parallels the 5-year technician/inspector recertification requirement. Currently the HMA paving inspector committee and the Concrete Inspector committees are working on updating course materials. These updated courses will be available by January 2006. Annually, each committee reviews the course materials and makes minor updates to the course manuals as necessary. Leo Stevens mentioned that the NETTCP Board of Directors are required annually to attend a course and audit it. Decertification is an ongoing process for the NETTCP. The certified personnel are on a list and the NETTCP notifies the State/firms if decertification measures are being taken. The NETTCP also has a lab qualification program (LQP) that evaluates laboratories in four categories depending upon function (i.e. State/Contractor and Temporary/Permanent). Individual States may perform the inspection of the lab or the NETTCP will go out and evaluate the lab in accordance with the requirements of the LQP. AASHTO accreditation (i.e. AMRL, CCRL) is required for the central lab of each State, but other labs must only be "qualified," which is what the NETTCP LQP addresses. Each lab qualified through the LQP receives a paper certificate from the NETTCP that must be posted within the lab. This NETTCP lab qualification has an annual renewal process.

Mid-Atlantic Regional Technician Qualification Program:

Woody Hood noted that an updated version of the Pavement Marking Course is now available for distribution. Additionally, the Precast Concrete Technician Manual has been standardized and covers areas such as what is being done in the plant. The manual is now ready for final editing. The Prestressed committee has produced guidelines for precast/prestressed operations. These guidelines cover areas such as specifications, practices, procedures, materials, etc. The regional aggregate bulletin is being developed and the MARTCP is currently sharing quality results which is resulting in a reduction of time and effort for each State.

Woody Hood further explained to the group that Delaware and the District of Columbia do not currently have formal training programs, so the MARTCP has been conducting a lot of the training and qualification in these two States. According to Woody Hood, the MARTCP has also been maintaining the database of qualifications for MD, DE, and DC while PA and VA have their own, but are looking to unite them.

Western Alliance for Qualification and Technician Qualification (WAQTC):

Garth Newman briefed the group on the WAQTC, which is going on 10 years. The WAQTC has now been joined by TX, but CA and NV have discontinued membership. The WAQTC executive committee met in March 2005 to discuss the current AASHTO test methods and developed recommendations for updating standards to better reflect tester needs will be submitted to AASHTO for consideration. This topic will also be on the agenda for the July WAQTC materials meeting.

According to Garth Newman each State within the WAQTC has specific guidelines for the disqualification and/or removal of technicians. Each Attorney General officer reviews the guidelines annually and makes modifications as necessary. Within the guidelines, the terms for removal and/or disqualification are clearly defined and include areas such as "abuse", "neglect", "laziness", and "corruption". Information regarding technicians that have been disqualified is then shared across State lines once the due process is completed.

Local Technical Assistance Program (LTAP):

Doyt Bolling expressed his appreciation for the opportunity to participate in the TCCC meeting and welcomed the opportunity to become involved. He informed the group of the LTAP Centers and their activities and mission. Doyt Bolling sees a tremendous opportunity for the LTAP Centers to partner with the TCCC in the area of workforce development. The principal mission of the LTAP program is technology transfer and training with workforce development being one of the major objectives. In Utah, the LTAP Center has conducted training in many of the subject areas being addressed by TCCC and provides CEU's and PDH's through Utah State University to participants. Like the Utah LTAP Center, most other Centers offer similar training courses and issue training certificates. Most, however, do not have a certification or qualification program such as is envisioned by TCCC. The Utah LTAP Center does promote the WAQTC program and encourages local agencies to have their personnel certified under the WAQTC Certification Program. In addition, the Utah LTAP Center works closely with and provides Construction Inspector Training for the Utah Chapter of APWA and is working to get the APWA specifications and procedures approved for use on all local projects. Doyt Bolling would like to explore how LTAP Centers may be used as a means for delivery of TCCC courses. Doyt Bolling further mentioned that each State has a LTAP Center often housed in a University and that LTAP Centers as a whole are working to improve skills, knowledge, & abilities (SKA's) of local agency personnel. LTAP Centers do not "dumb down" the training but try to raise the bar and fit the training to local agency needs.

Doyt Bolling recommended that a TCCC representative attend the summer LTAP meeting in Iowa. He also suggested that the TCCC explore the possibility of partnering with the American Public Works Association (APWA).

National Transportation Training Directors (NTTD):

Martha Monjo briefed the group on the efforts of the NTTD. The NTTD has been petitioning AASHTO to become a subgroup of the AASHTO Sub-committee of the Standing Committee on Human Resources. Chris Newman would like to see that the consistency in training be maintained. He also questioned whether this new subcommittee would work similarly to the Standing Committee on Highways, Subcommittee on Construction/Maintenance. Chris Newman felt that it is important to explore where the TCCC will figure in so as to avoid duplication of efforts. Martha Monjo agreed to keep the Executive Council of the TCCC up to date on any new developments.

National Institute for Qualification in Engineering Technologies (NICET):

Bud Darby informed the group about the efforts of the NICET. The NICET has moved into the area of construction materials testing development (CMT). The CMT asphalt development committee met on March 21-22, 2005 and May 24-25, 2005 to establish the qualification competencies for the following 2 tracks:

- HMA laboratory testing
- Testing and Inspection of HMA Placement Operations

The committee is currently deciding if the plant area should be included in the HMA laboratory testing or be a stand alone topic.

NICET also developed a Highway Construction Steering Committee, which will meet on June 17, 2005 to focus on

the update of the highway construction inspection program. During the meeting, they will look at changing the name to transportation construction inspection in order to pull in all fields.

NICET is on the AASHTO SCOM agenda and will be making a presentation on the NICET/Penn DOT maintenance qualification program. The program will then be sent out for peer review.

Clemson University:

Serji Amirghanian informed the group that Clemson University currently has 5 courses on maintenance available that they administer for the South Carolina Department of Transportation. He further mentioned that Clemson University does not issue a listing of qualified technicians due to legal reasons. However, he has noted that the number of disqualifications has increased. Clemson University has a requalification process that technicians must undergo every 5 years in order to remain qualified, but they are having a difficult time convincing the contractors that they need to be requalified. Contractors perceive the requalification process as simply being a scheme by Clemson to get more money.

National Highway Institute (NHI):

John Taylor informed the group that NHI has been approached by China and Iraq to assist in the development of a T2 center in both countries. NHI is working with the Army Corps of Engineers to develop a training effort for the local personnel in each country. Chris Newman suggested the Instructor Development for Technicians training course be sent to Iraq.

Douglas Townes mentioned that he looked for this course on the NHI website, but could not find it. John Taylor clarified that since it is not an official NHI course it will have to be listed on the TCCC website and not on the NHI website. Chris Newman suggested that the TCCC look at some contractual method for having the course delivered to the States.

John Taylor also informed the group that the DOT has purchased a learning management system. Therefore, NHI is currently rewriting its website to match this new system, which must be live by September 30, 2005. John Taylor is open to any suggestions that the group may have with regard to the NHI website.

Serji Amirghanian questioned what the TCCC position is on assisting other countries such as China where there is a great need. Chris Newman stated the TCCC will support these countries to whatever extent possible for the TCCC. The TCCC will provide any training courses that are currently available to the States to other countries. Chris Newman also suggested that the TCCC may want to consider having some of the courses translated into Spanish for PIARC. NHI has a contractor on its Pavement Technology IDIQ Contract that can do this type of work.

Action items:	Person responsible:	Deadline:
Populate TCCC database with SETFTTQ course information	Laura Lawndy and Course Development Committee	November 30, 2005
Contact Woody Hood for copy of the MARTCP Pavement Markings Course and distribute	Laura Lawndy	July 31, 2005
Determine representative for the M-TRAC meeting in August 2005 in Columbus, OH	Chris Newman/Howe Crockett	July 15, 2005
Determine representative for the LTAP meeting in Dubuque, IA in July 2005	Chris Newman/Howe Crockett	June 30, 2005
Research NTTD/AASHTO proposal and determine how the TCCC might compliment this proposed subcommittee	Chris Newman/Martha Monjo	November 30, 2005
Research the possibility of partnering with the American Public Works Association (APWA)	Chris Newman/Howe Crockett	November 30, 2005

TCCC Initiatives Update

Discussion: Laura Lawndy and Chris Newman briefed the group on the status of the TCCC website updating, training course database population, and the pooled fund reconciliation effort.

With regard to the website updating and training course database population, Laura Lawndy informed the group that the website has been updated to include the most recent TCCC activities as well as the core curriculum matrices and the training course database population efforts are progressing. Laura Lawndy and Tom Malerk have been working together to input the Florida Department of Transportation's training courses directly into the database by importing the information directly from an Excel spreadsheet. The pilot test was successful, but the FL DOT information supplied to FHWA was not what was needed. Tom Malerk and Laura Lawndy will continue to work together to import FL DOT's training course listings.

Laura Lawndy then informed the group that the situation with the pooled funds appears to be coming to a resolution. The TCCC has been designated a "pilot program" for the FHWA Office of Finance's new accounting system that has been created to track pooled funds. According to the contacts within the Office of Finance, the TCCC monies should be available for use by June 15, 2005.

Douglas Townes raised the issue of transparency with regard to the financial information for the TCCC. He wanted to make sure that the TCCC is forthcoming about how and when pooled fund monies are expended. Chris Newman assured Douglas Townes that every effort is made to remain as open as possible with the TCCC funds and also mentioned that FHWA is required to post quarterly reports on the status of all pooled fund projects.

Tom Malerk questioned whether industry is contributing to the pooled fund along with the States as Florida DOT may not be able to participate in the pooled fund if the industry is funding it as well. Laura Lawndy confirmed that there have been industry contributions in the past, but also mentioned that the FHWA Office of Finance has gone through an extensive legal review to make sure that Federal, State, and industry monies are not being combined in any pooled fund projects. Tom Malerk said that he would check with the Florida DOT to make sure that they are comfortable with this process. Laura Lawndy agreed to provide Tom Malerk with any information that he may need.

At the time of the June meeting, a CEO from AASHTO had yet to be identified. Jim Sorenson had been working with the AASHTO Subcommittee on Construction to identify someone who could fill this role for the TCCC, but to no avail. However, following the TCCC meeting, Peter Rahn of Missouri DOT was identified to be the new TCCC CEO.

The group also discussed whether to resubmit the Kirkpatrick Level 4 Evaluation Research Request to NCHRP. Concerns were raised as to whether the research request is seen as being valuable to NCHRP. Doyt Bolling suggested pushing the request through LTAP as they have responsibility for moving this type of research along. Doyt Bolling and Martha Monjo requested that Chris Anderson send them a copy of the request. Doyt Bolling suggested that the TCCC submit the request to the training and education committee of NCHRP or the Technology Transfer Committee of the NCHRP.

Martha Monjo suggested that part of the issue in trying to get this kind of research request through is the intangibility of the results. The South Carolina DOT has tried to find this kind of data, but has been hard pressed to find an outside company that has the capability of conducting this kind of research.

John Taylor informed the group that NHI is currently looking at researching this issue and suggested that perhaps the TCCC could partner with NHI instead of taking it to NCHRP. John Taylor requested that Chris Anderson send him a copy of the request as well.

Chris Anderson suggested that the TCCC work with NHI instead of resubmitting the request to NCHRP. John Taylor said that NHI would welcome the input from TCCC; however, they are currently working to finalize level 3

evaluation and level 4 is on the horizon. Doyt Bolling, Chris Anderson, Martha Monjo, Douglas Townes, Bud Darby, and Chris Newman are willing to support NHI. Martha Monjo suggested that NTTD would probably be interested in supporting NHI's effort as well.

Serji Amirkhanian suggested that his colleagues at Clemson could be queried as to how to conduct this type of research. They routinely conduct tests to evaluate the Level 4.

John Taylor will work within NHI to see what the next steps are in developing a research plan.

Action items:	Person responsible:	Deadline:
Retry importing FL DOT's training course information	Tom Malerk and Laura Lawndy	July 31, 2005
Consult with FL DOT regarding industry contributions to the TCCC pooled fund	Tom Malerk	July 31, 2005
Send copy of the NCHRP Research Request to Doyt Bolling, Martha Monjo, and John Taylor	Chris Anderson	June 30, 2005
Work with John Taylor in support of NHI's evaluation research efforts	Doyt Bolling, Chris Anderson, Martha Monjo, Douglas Townes, Bud Darby, and Chris Newman	November 30, 2005
Follow up with John Taylor to determine what the next steps are in developing a research plan	Laura Lawndy	June 30, 2005

Significant Courses Update

Discussion:

Bridge Construction Inspection Course:

Linda Hughes provided an update on the Bridge Construction Inspection Course that was piloted in April 2005 in Missouri. According to Linda Hughes, Larry Jones from NHI was very impressed with the course. The committee requested a few minor changes on the course, but overall it was received very well by the States that participated in the pilot. The target audience for this course is the new person on the job (inspector with 1-5 years of experience). Major topics include bridge planning (i.e. design, environment issues, etc) and how they apply in the process, foundations, materials, substructure, deck, safety, etc. The course is designed to walk the participants through the process from the inception of the bridge to the completion of the course. Additionally, the course will teach participants to recognize when situations are not right and to seek out expertise in any given area to evaluate the situation.

This is a 1-week course covering topics that could take an entire college semester. States are encouraged to modify the course to consider the individual States' needs. The course finishes with an extensive test. The Bridge Construction Inspection Course was created to be modularized and broken down as needed. Portions of the course can be used via video deployment.

Chris Newman mentioned that during the development of the Bridge Construction Inspection Course the technical panel realized that the overall needs of Bridge Construction are much larger than this course. The FHWA Office of Bridge Technology and the Resource Center would like to continue the course development with a course on Bridge Rehabilitation. The target audience would remain the same as the Bridge Construction Inspection course. The Bridge Construction Inspection Course is under final review and will be available for distribution by late August 2005. In the short term Chris Newman and Laura Lawndy will make minor edits to the course and make the necessary copies for distribution to the TCCC members and the at the AASHTO Subcommittee on Construction meeting in August, 2005.

Following Linda Hughes' presentation, Douglas Townes suggested that courses being developed be turned over to the private sector for further development and maintenance when applicable to ensure that the courses are kept as

up-to-date as possible. Douglas Townes raised the issue of courses not being updated and losing credibility. Martha Monjo suggested that one of the subcommittees that will be created under the new business plan take on this activity. Chris Newman agreed that this should be one of their activities. John Taylor informed the group that the NHI is looking at means of better evaluating the courses that are put out. Bud Darby suggested that the technical panels used to create the course should also be used for the evaluation of the course every two years.

John Taylor informed the group that NHI is working to develop all courses as modules. The assessment at the end of each course is required if the participant wants the CEUs, but they are not required. NHI is also going to be reviewing its fee structure. Anything that is web training will be free for the next 2 years.

Construction Workmanship Course:

Allan Samuels briefed the group on the development efforts for the Construction Workmanship Course. The target audience for this course is the management level (i.e. level 4). The course is being developed because there is no existing construction workmanship course anywhere in the US. Allan Samuels queried the group as to the definition of workmanship. Garth Newman suggested that workmanship is not the material, but the process. It covers how it is done. Lee Onstott stated that workmanship did not cover quality, but simply what you get. Allan Samuels proved that this is an undefined area and that this course is the first in a line of courses that need to be developed. Allan Samuels further defined the difference between craftsmanship and workmanship.

The course will focus on HMA, PCCP, and bridges. The walkthrough is supposed to take place in July 2005, but may be postponed.

Maintenance Academy:

John Taylor provided an update to the group on all of the TCCC courses currently available or under development (See Attached Course Listing). John Taylor also briefed the group on the status of Maintenance Academy currently being developed by the TCCC and NHI. The Maintenance Academy is being developed to provide a four to six week program of college level courses to individuals that hold positions as district, county and state maintenance engineers. The participants will acquire an understanding of the various processes, methods and materials that are applied to maintain the bridge and highway systems. The target audience for this course is any individual that holds the position of a district, county and state maintenance engineers involved with the operations of running a regional, statewide, or county operation and need the skills and knowledge associated with Asset Management.

The course will be modular in nature and will encompass courses that already exist plus some new ones. Chris Newman suggested that the NCPP collaborate with NHI in the delivery of some of the Maintenance Academy courses. John O'Doherty mentioned that the NCPP would be very interested in collaborating with NHI with this project.

Doyt Bolling informed the group that there was a Maintenance Academy that had been put out approximately 15 years ago that could be used in the development of NHI's academy. Chris Newman noted that a Request for Proposal is under development and he expects the solicitation to be posted in July 2005.

Partnering Course:

John Taylor informed the TCCC that this course is moving along smoothly and should be ready for delivery in the near future.

Howe Crockett mentioned that a State had contacted him looking for contacts within TCCC member States who have had extensive experience with construction partnering. Woody Hood and Martha Monjo provided him with some key contacts and Howe will follow up with them.

QA Technologist Course:

Greg Doyle briefed the group on the status of the Quality Assurance Technologist Course. The course manual and slides were updated by NETTCP in 2003 based on comments from the December 2002 pilot course, along with some comments from the TCCC peer review. The NETTCP QA Technologist Certification Course has been taught six times in New England between December 2003 and March 2005 using the current (January 2004) course material. The updated course manual incorporating all TCCC peer team comments is scheduled to be printed and available in 2005. In the interim, the January 2004 NETTCP version is available for sharing with any region or state.

Allan Samuels informed the group that the course has been used to influence the consistency of definitions of QA terminology with the NCHRP highways community.

Chris Anderson questioned if this course would be presented as an NHI led course with NHI's instructors. Chris Newman informed the group that the intention was for the course to be an NHI delivered course. John Taylor suggested that perhaps this course could be brought into NHI for delivery using the "fast-track" method. Greg Doyle will forward a CD-ROM with the January 2004 material to John Taylor to assess. Greg will coordinate further with John and Ken Jacoby to deliver the updated material reflecting all of the TCCC Peer Team comments. Greg also suggested that NHI consider using the authors/instructors from the NETTCP, who are familiar with the program, as trainers, or at least to provide initial delivery through a "train-the-trainer" course for selected states in each region.

Work Zone Safety Course:

Douglas Townes questioned the status of the work zone safety training course. Since the new CFR is coming out, he sees this course as being a hot topic. Chris Newman said that they would have to talk to Bill Williams of NHI regarding the status, but said that the new regulation does not state a new mandate, but rather restated the same direction more strongly. Chris Newman said that they are aware of the need and will take it into consideration when outlining what training is needed to satisfy the regulations. Chris Newman suggested that the TCCC's role be to assist the States so that they do not develop 47 different forms of the same course.

Maintenance Technical Advisory Guide (MTAG):

Chris Newman informed the group that the Office of Asset Management is taking California's MTAG course and adapting it to be an online training course. The NCPP is the technical source for the modification of the course, which will be designed to be used by any State.

Minnesota Computer Based Training:

Lee Onstott asked if there had been any developments in the computer based training area with Minnesota DOT following the AASHTO Construction endorsement. Chris Newman said that to his knowledge there has been no movement on this. Howe Crockett suggested that the TCCC can assess the possibilities or practicality of working with the Minnesota DOT group to develop computer based training to meet defined needs. Cathy Betts suggested that Lee Onstott talk to Cathy Walz for more information.

Surveying for Inspectors Course:

Chris Newman informed the group that the Surveying for Inspectors Course is now available for distribution. This 2-day course was originally a Virginia Department of Transportation Course, but the TCCC has adapted the course to make it usable by all State DOTs.

Action items:	Person responsible:	Deadline:
Bring final updated QA Technologist course (TCCC Peer Team reviewed material) through the NHI "fast-track" process so that it can be delivered as an NHI course	John Taylor, Ken Jacoby, Greg Doyle	November 30, 2005
Contact Cathy Walz to check on the status of the Minnesota videos and construction training courses	Chris Newman	July 31, 2005
Distribute copies of the Bridge Construction Inspection Course once final changes have been made	Chris Newman/Laura Lawndy	September 30, 2005
Distribute copies of the Surveying for Inspectors Course to TCCC members and AASHTO Subcommittee on Construction	Chris Newman/Laura Lawndy	July 15, 2005

Electronic Instruction

Discussion:

Chris Anderson briefed the group on the States need for electronic instruction and posed the question of whether the TCCC would like to support the States by offering the software for distance learning. A few states are working to convert the courses, but many don't have the software required.

Chris Anderson has spoken with Debbie Gwaltney and Susan McDonald Osborn at NHI regarding the possibility of converting courses. Susan Mc Donald Osborn said that if the course is 100% complete and well organized then States could be looking at \$18,000-\$20,000 per training hour to convert a course. Doyt Bolling informed the group that the LTAP centers are looking to move more toward web based learning as well.

Lee Onstott questioned whether this is a software that anyone with basic computer knowledge can use or if an expert would need to be hired. Chris Anderson said that according to her research, anyone can use this software, but need the mechanism to obtain the software. Is this something that the TCCC can provide to the States? John Taylor mentioned that NHI is looking to buy "Breeze" for \$300,000 and thought that perhaps an agreement could be reached to convert courses. Douglas Townes mentioned that Florida DOT uses "Authorware" for web-based training and Chris Anderson said that Texas told her about a program called "Articulate." According to Chris Anderson, Texas DOT found the "Articulate" software to be better than "Breeze" as well as less Expensive. John Taylor said that he would assess the "Articulate" software in comparison to "Breeze."

Chris Anderson raised the issue that each State may want to convert State specific courses and wasn't sure how that would work if NHI had to convert all of the courses. John Taylor suggested that perhaps the States could use Power Point to achieve the same thing. Chris Anderson suggested that perhaps a course may be needed to teach State people on how to use Power Point. Chris Newman informed the group that there are many private courses available that could be considered. The downfall of Powerpoint is the inability to connect to LMS's.

Serji Amirghanian suggested that the TCCC strongly consider whether to use web-based training. In his opinion this option may not be an effective method of training. Linda Hughes mentioned that in Washington, they have training courses in a "classroom" setting and then use web based learning for refreshers. Chris Newman suggested that perhaps the pre-course material could be used via web-based learning. John Taylor suggested that brand new topics not be provided via web-based training.

Douglas Townes suggested that everyone in the group take the NHI course "How to Develop High Impact Training." He found this course to be valuable as it helped the participants evaluate the cost of instructor lead training versus web-based training.

Action items:	Person responsible:	Deadline:
Identify Power Point training courses that may assist the States in converting training courses to web-based courses	John Taylor/Laura Lawndy	September 1, 2005
Determine viability of NHI converting TCCC courses and working with the States to share the "Breeze" Software	John Taylor	September 1, 2005
Assess the "Articulate" software in comparison to the "Breeze Software"	John Taylor	September 1, 2005

Aggregates and Mining Qualification in the Southeast

Discussion:

Douglas Townes briefed the group about SETFTTQ's research into the possibility of finding common training and qualification criteria in the aggregates area. John Shoucair, of Florida DOT, and Douglas Townes have put out a survey to access the basis of commonality among the States with regard to the testing of aggregates. Following the survey, it is intended that the group will have a teleconference/meeting to discuss the findings and develop a work plan.

The two points of commonality for this issue

- Reciprocity for qualification of mines and/or rocks (which is currently being undertaken by MARTCP)
- Reciprocity of individuals

Serji Amirkhanian questioned how the committee will work around States that require some tests that others don't. Woody Hood informed the group that the MARTCP got around the issue by requiring that all tests be conducted. However, they do still send in Quality Control Inspectors to ensure that the materials still meet the qualifications. The MARTCP also requires that the quarry only mine from a specific area. If they change the mining location the MARTCP must be informed and the new area must be qualified.

Douglas agreed to keep the group informed of his findings and the results of the teleconference.

Action items:	Person responsible:	Deadline:
Provide TCCC with results of survey and teleconference	Douglas Townes	When completed

AASHTO Subcommittee on Construction Qualification/Qualification Program Survey

Discussion: Bud Darby outlined for the group the results of the AASHTO Subcommittee on Construction, Environment, and Human Resources Section Qualification/Qualification Questionnaire. On November 22, 2004 a national questionnaire was submitted to 56 AASHTO construction organizations, which resulted in 33 respondents including Ontario and the PA Turnpike Commission. The objective of the questionnaire was to determine the status of qualification/qualification requirements amongst the AASHTO Organizations.

The survey centered around 3 questions:

- Other than materials testing, what qualifications/qualifications do States require for their field inspection technicians? What regional (NETTCP, WAQTC, SETFTTQ, M-TRAC, etc.), National (NICET), or other State qualification/qualification programs for field inspection do States accept as an equivalent, if any?
- Do States require private firm (CEI) field inspection technician personnel to be qualified/qualified?

Bud Darby also informed that the group that NICET, in response to customer queries, is looking to develop a listing of available training courses. This would be an unevaluated listing and would be free to NICET partners such as

TCCC and NHI. However, a fee would be charged to other organizations for this service.

Action items: None	Person responsible:	Deadline:

**Construction Inspection
Qualification/Qualification**

Discussion:

Douglas Townes briefed the group on efforts to have construction inspection included in the requirements for qualification and qualifications relative to 23 CFR 637 that was changed in 1995. From Douglas Townes' perspective the regulation appears to mostly involve materials people and not construction people, thereby eliminating half of the transportation workforce and a substantial opportunity to influence construction quality. He did concede that CFR 637 involves construction, but does not explicitly cover qualification of construction inspection personnel. However, workmanship is a very real consideration in that it evaluates how well the materials are used.

The question remains, however, what is the real goal for this regulation? The public needs assurance that the workmanship is up to the same level of scrutiny as the materials. Concern was raised with regard to simply giving a test and then sending a person out as being certified/qualified. Greg Doyle stated that although Independent Assurance (IA) evaluations have primarily focused on sampling & testing personnel, some states (and the updated QA Technologist and proposed AASHTO R10 definitions) have expanded IA to also include evaluation of inspection personnel. According to Chris Newman 23CFR637 is geared to the end materials and in theory encompasses materials sampling & testing personnel as well as inspection personnel. What needs to be considered is whether the regulation needs to be rewritten to more explicitly define what is covered and expected.

After extensive discussion, the group consensus is that clearer requirements for personnel qualification are needed and the TCCC would like to see 23 CFR 637 more widely interpreted to include construction inspection.

Jim Sorenson stated that a clarification to the regulation would be written to include construction inspection, but the regulation would not be rewritten.

Action items:	Person responsible:	Deadline:
Rewrite the language on personnel qualification in 23 CFR 637 to more clearly include the construction workmanship inspection aspect of the highway workforce	Douglas Townes/Chris Newman	November 30, 2005

**TCCC Presentation Topics for AASHTO/Other
Meetings**

Discussion:

During a brainstorming session, the TCCC Members discussed how best to present TCCC at various meetings and conferences, especially the upcoming AASHTO Subcommittee on Maintenance and Subcommittee on Construction summer meetings. While everyone agreed that this is a good activity for the new Marketing Committee, it was also agreed that the marketing team would not have enough time to develop anything prior to the meetings in July/August.

Therefore, Douglas Townes will tweak Chris Newman's presentation on the TCCC and use that at the AASHTO meeting. The point of the presentation is to provide an update on the TCCC activities that have taken place since the last SCOC meeting. Douglas Townes proposes to take the recent course information and upcoming courses with the presentation. Lee Onstott suggested that Douglas Townes use a snippet of the Bridge Construction Inspection Course at the beginning of the presentation to grab everyone's attention. The idea was then suggested that CDs for the new courses be handed out at these meetings as well.

Laura Lawndy suggested that the State reps work together, whenever possible, to make presentations at the meeting as it would probably be better received than the FHWA making the presentation. John Taylor also suggested that the TCCC create a library of slides that can be pulled down and used in any presentation. These slides could be housed on the TCCC website and used by any of the TCCC members whenever he or she is called upon to make a presentation.

The team spent the last ½ hour compiling a list of conferences or meeting at which a presentation by a TCCC representative would be beneficial. This list will be supplied to the Marketing Team and Resource Advancement Team for consideration.

Action items:	Person responsible:	Deadline:
Create 2 standard TCCC presentations – 1 for people/organizations new to TCCC and 1 as an update on TCCC projects	Marketing Team	November 30, 2005
Supply list of conferences and/or meetings to the Marketing/Resource Advancement Teams	Laura Lawndy	July 31, 2005
"Tweak" the TCCC Power Point presentation to include suggested changes	Chris Newman/Douglas Townes	November 30, 2005

TCCC Draft Business Plan Introduction and Discussion

Discussion: Monica Worth of LGB Associates/Worth Associates presented the draft business plan to the group. Monica Worth outlined the contents of the document and then lead the discussion on key issues for consideration such as the reorganization of the TCCC Committee.

The group discussed the categories suggested for the reorganization. Douglas Townes questioned which group would have fiscal control so as to ensure transparency with the States. Chris Newman stated that he envisioned that the financial decisions would be made by the Executive Council with recommendations from the other sub-committees. Garth Newman raised a concern about many States receiving benefits from the TCCC, but are not contributing either financially or in personnel to the TCCC. Monica Worth suggested that the Committee for Pooled Fund Advancement will need to focus in on the States that are receiving the courses from the TCCC, but not contributing back in an effort to bring them on board.

Lee Onstott questioned how the committee chairs will have a voice in the Executive Council. Will the Executive Council be the committee chairs or will the committee chairs make up the Executive Council. Chris Newman envisioned that the Executive Council would consist of the 5 regional representatives, the 3 AASHTO representatives, NTTD representative and FHWA representatives, with the Executive Council being the committee chairs.

The group came to consensus that the Executive Council will have financial responsibility for the TCCC as outlined in the business plan.

Doyt Bolling suggested having a committee that would liaison with outside organizations such as NICET, LTAP, NCPP, etc.

Monica Worth asked the group how they would like to assign committee responsibility. According to Chris Newman, there is no size limit for each committee, but rather they are open to whoever would like to participate in them. It is hoped that newcomers would then be easily plugged into a group that met their interests. Greg Doyle pointed out the perceived overlapping of the Committee for Core Curriculum Matrix Implementation and the Committee for Course Development/Course Sharing. He further raised concern that the current TCCC members may gravitate to these two committees while ignoring the Committee for Pooled Fund Advancement, Committee for Communications/Marketing, and the Committee for Performance Measurements as they may see these groups as being administrative in nature.

Doyt Bolling suggested combining the Pooled Fund/Marketing Committees. Martha Monjo suggested leaving the committees together and volunteered to serve on either of the committees. Bud Darby suggested combining the Communications/Marketing with the Performance Measurement Committee. Monica Worth raised the concern that combining the two groups may overwork the committee members. Chris Newman pointed out that all of the committees are going to have to work together and will be interdependent. The walls between the groups are porous and fluid, not a fixed hard wall. Allan Samuels stated that the Performance Measurement Committee should remain separate so that there is an independent assurance that the committees are achieving the tasks that have been assigned to them.

Douglas Townes raised the question as to the necessity of the Committee for Course Development/Course Sharing. He sees the functions of this committee being the role of the Core Curriculum Matrix Implementation Committee in that they should be the ones advising the Executive Committee on which courses need to be developed and then assign the courses to the technical panel. Chris Newman described the Matrix Committee as being responsible for updating the matrices on a regular basis and identifying gaps in training. The Committee for Course Development/Course Sharing will then take the input from the Matrix Committee to recommend course development.

Monica Worth pointed out that the biggest challenge to the committees is going to be to ensure that there is open communication/collaboration between the committees. She further suggested that there are some key tools in the market place to aid in this process.

The group decided that the reorganization will move forward as recommended in the draft business plan.

Discussion of By-Laws:

The question was then raised as to whether the committee chairs should be appointed or voted. Howe Crockett and Lee Onstott suggested that the Executive Council volunteer to take on the role of the committee chairs and then the representatives at large be comprised of volunteers as well. Monica Worth suggested that the Executive Council may have to work to nominate members and then convince them to volunteer. The group decided that the committee chairs will be appointed by the Executive Council.

Monica Worth raised the question whether at least one industry member should serve on the Executive Council? Leo Stevens suggested that there be 1 industry individual and 1 academia. Chris Newman questioned which industry individual? Due to the competition in the industry it may be seen as the TCCC showing favoritism to one company or industry in particular. Chris Anderson suggested that the industry representatives be committee members and not be a member of the Executive Committee. The chairperson of each committee has voting power on the Executive Committee and thereby will represent the desires of the entire committee. Greg Doyle briefed the group on the NETTCP board composition, which does include industry representation on the board and suggested that the group consider including the industry.

After extensive discussion, the consensus of the group is to move forward with industry and academia as part of the committees, but not as voting members of the Executive Council or Committee Chairs at this time. The Executive Council will further discuss this issue during the Executive Council meeting.

The TCCC evaluated the mission statement and agreed that it might be best for a smaller group to wordsmith the mission statement and bring it up to date as needed.

Monica Worth walked the group through some of the recommendations and goals that the TCCC may want to consider.

- **Pooled Fund Goals:**

Doyt Bolling agreed to petition the LTAP centers to contribute \$500.00 each for a total of approximately \$25,000 each year.

The group determined that the goals set out for the pooled fund committee are ambitious, but not too ambitious and are achievable.

Linda Hughes questioned where the FHWA money is highlighted in the business plan/by-laws. The group discussed how to represent FHWA's contribution and agreed that the monies contributed by FHWA for course development, administrative support, etc. should be demonstrated as seed money to the TCCC. This information is found in the business plan, but needs to be conveyed more clearly.

- **Pooled fund Advancement:**

Gap analysis study
Champion among AASHTO members
Market to States and industry
Recognize State participation
Spotlight value of contributing

Linda Hughes suggested having a job descriptions for each of the committee chairs, committee members, and technical panel members. These job descriptions will aid in recruitment of new volunteers and will also aid current members in justifying their continued participation. The job descriptions will outline the responsibilities at each level as well as estimated time commitments.

Bud Darby is going work with the Professional Engineers in Construction to encourage them to contribute \$5,000.00 for the Pooled Fund. Bud Darby will also petition the American Institute of Contractors and the Construction Management Association of America.

Communications and Marketing Recommendations

Next Monica Worth outlined the recommendations for the communications/marketing plans for the TCCC. These recommendations were well received by the group at large and put back to the Executive Council for further consideration.

Laura Lawndy suggested having an annual work plan that will lay out the activities of the TCCC for the next year. Greg Doyle suggested that each committee create a work plan with the priorities/budget needed for the year. The Executive Council will then review each plan and vote on the proposed activities.

Performance Measures and Improvement Recommendations:

Monica Worth briefed the TCCC on plans for the Performance Measures and Improvement committee. She highlighted the fact that this going to be one of the more challenging committees but felt that it was very valuable to the success of the TCCC.

Chris Newman suggested that the performance measures plan also look at the method of course development. Is the current method employed by the TCCC meeting the needs of the States.

Linda Hughes suggested that the performance measures also consider the time that it takes to develop and deliver a course.

Allan Samuels suggested that the targets for performance measurement be established by the Executive Council with recommendations from the committee.

Lee Onstott suggested that the pooled fund measurement not be the primary goal for the performance measurement committee. He also suggested that the overall marketing not focus on the creation of the pooled fund. The pooled fund should be on the list, but not the top of the list. The group agreed that this shift in appeared priorities be shifted.

Monica Worth then walked the group through the timeline of anticipated activities.

The group agreed that the business plan and by-laws are acceptable to move forward for further review at the Executive Council level.

Action items:	Person responsible:	Deadline:
Committees to consider recommendations laid out by the TCCC as a whole	Committee Chairs	August 1, 2005

Matrices Review and Course Gap Prioritization

Discussion:

The TCCC group spent a good amount of time evaluating the current matrices for necessary updates and training gaps. The committees then provided a recommended list of the top 5 training needs in each of the categories as well as suggested members of the new committees.

Team Findings & Recommendations:

Materials Curriculum Team:

Suggested Committee Members:

Core Curriculum – Woody Hood (Chairperson)
Leo Stevens (member)

Course Development – Garth Newman (Member)
Chris Anderson (Member)

Pooled Fund Advancement – Garth Newman (member)
Tom Malerk

Communication/Marketing – Leo Stevens (Member)
Woody Hood (Member)
Cathy Betts (Member)

Performance Measurements – Tom Malerk (Member)

The team reviewed the matrices and determined that there doesn't appear to be many gaps in the materials arena as it is a well established field. The area of miscellaneous materials is of concern and may need to be addressed, so there may need to have courses developed for that subject matter. This may be a good topic with which to test the new business plan process. The committee would also like to consider developing the needed miscellaneous courses as web-based courses. Howe Crockett suggested that the "Minnesota Group" may be helpful in converting courses to web-based courses. Another option may be to do CD learning as opposed to web-based training as the various software may not communicate together.

Construction Curriculum Team:

Core Curriculum - Linda Hughes (Chairperson)

Course Development- Greg Doyle (Chairperson)
Doyt Bolling (Member)
Linda Hughes (Member)

Pooled Fund Advancement - Lee Onstott (Chairperson/Member)
Martha Monjo (Member)

Communication/Marketing- Douglas Townes (Chairperson)
Martha Monjo (Member)

Performance Measurements - Allan Samuels (Chairperson)

Courses for Development:

Surveying Verification
Excavation and embankment (Grading) pg. 15-17 of the matrix
Bridge Painting
HMA Placement (Lay Down) – update of 131032 (specifically for level 4)
Drainage (pg. 20 of the matrix) specifically related to HDPP and Flowable Fills/Compaction

The team found a lot of cross-over is needed between the matrices and would like to propose that the committee take a look at correlating all of the matrices as well as aligning current training courses to the various competencies as well as levels.

Action items:	Person responsible:	Deadline:
Committees to consider recommendations and implement	Committee Chairs	November 30, 2005

Future Meetings:

**December 6-8, 2005 in Austin, TX
or Meet with NPHQ in
New Orleans, LA/December 12-15, 2005**

**June 6-7, 2006 in Denver, CO
or Salt Lake City, UT**

**Decision made on December meeting by June 30,
2005.**