

TCCC Meeting Minutes

June 15 - 16, 2004
Portland, Oregon

Attendees: Rob Elliott – FHWA, National Resource Center; Bud Darby – NICET; Allan Samuels – AZ DOT; Marlene Patterson – ADNET; Dan Holdredge – ADNET/NHI; John Taylor – FHWA, NHI; Debbie Gwaltney – FHWA, NHI; Chris Newman – FHWA, Office of Asset Management; Jim Sorenson – FHWA, Office of Asset Management; Anthony Boesen – FHWA, Oregon Division Office; Howe Crockett – FHWA, Western Federal Lands Highway Division; Garth Newman – ID DOT/WAQTC; Paula McGee – NM DOT; Luci Moore – OR DOT; Linda Hughes – WS DOT; Leo Stevens – NETTCP; Christie Anderson – IA DOT (MTRAC); Cathy Betts – MN DOT (MTRAC); Lee Onstott – NM DOT; Bill Beuter – VA DOT; Douglas Townes – FL DOT; Bob Lale – FHWA, Western Federal Lands Highway Division; Ben Gribbon – FHWA, Office of Safety; Cathy Nicholas – FHWA, WA Division Office; Laura Lawndy – LGB & Associates/FHWA

Agenda topics and Minutes

Welcoming Remarks & Introductions		Howe Crockett, WFLHD
<p>Discussion: Howe opened the meeting by welcoming everyone to the Portland area. He then introduced all of the new participants and invited the other participants to introduce themselves.</p>		
Action items:	Person responsible:	Deadline:
No Action Required		
Information Sharing: Accomplishments & Useful Informaiton		Council Members
<p>Discussion: Chris Anderson (Iowa DOT) – M-TRAC Update</p> <ul style="list-style-type: none"> • Chris is planning the joint TCCC/ NTTD/ TTC meeting that is being planned for the end of October, first of November (for further information, see below). • New course development for trainers is going well and she has received many calls from other states inquiring about the TCCC. • Minnesota DOT has adapted an inspector academy for mid-level technicians due to the recent round of retirements. This was an in-house training for DOT employees only in order to rebuild the workforce. The academy is designed to be a three year program and has 125 people currently participating in the program, which could possibly advance them to chief inspectors. Chris is also working with Iowa DOT to develop academy for trainers and is incorporating a lot of the matrices information for the academy. <p>Leo Stevens – NETTCP Update</p> <p>The NETTCP has successfully utilized the NHI courses on “Inspection of Driven Pile Construction” (NHI 132069) and will continue to use the course for certification.</p> <p>Garth Newman (Idaho Transportation Department) – WAQTC Update</p> <ul style="list-style-type: none"> • The WAQTC is starting to compile all data and course materials into one place (i.e. drilled shaft/driven pile courses) for easier access and use. • He expressed WAQTC’s appreciation to NHI for sharing information because States are now able to do “just-in-time” training and pull parts of a course as needed to meet the immediate need. Garth has received a lot of positive feedback on this method, which is a positive reflection on TCCC’s efforts. • The WAQTC group will meet in Portland in July to revise the training materials for the next year of construction training. The course listing will be available for use by October 15th. Garth further noted that Alaska and Utah have now joined the WAQTC. 		

Douglas Townes (Florida DOT) - SETTFQ Update

Material review is now being undertaken every other year. The FDOT is taking the course materials for inspection of driven piles course and is going one step further to include use of a hand held device that is being piloted this year. The cost for the development of this module for course was about \$80,000 and could be viewed as a 6th Chapter to the current program.

Lee Onstott (New Mexico DOT) – The next AASHTO Subcommittee on Construction (SOC) meeting will be held in Albuquerque, NM in August at which Chris Newman will be making a presentation on TCCC. Lee would also like to have presentations on the Computer Based Training platform developed by Minnesota, and whether it could be applied to construction subjects.

Allan Samuels (Arizona DOT) – Arizona DOT is now on the third generation of workmanship inspection certification and now have 60 checklists that are web-based. The inspector can plug into the web and download the checklists, which when the inspector has finished the inspection can be reloaded into the web database for information sharing.

Rob Elliott (FHWA/NRC Atlanta) – The FHWA National Resource Center is continuing the development of bridge construction inspection course with NHI. His team is also working with headquarters and NHI on contract administration and a few other courses for near future delivery.

Ben Gribbon (FHWA HQ) – The FHWA Office of Safety is rolling out courses for practicing traffic safety engineers. They are also currently trying to coordinate courses on work zone safety and to combine a variety of safety competencies among federal agencies too then be applied to the highway safety community as a whole. The Office of Safety is coordinating with TRB on this project and will try to dovetail the competencies outlined by the TCCC.

Bud Darby (NICET) – NICET and NHI have entered into a Memorandum of Understanding in an effort to work more closely together to deliver courses in workforce development. Currently working to launch a Construction Materials course on the Asphalt phase of construction. The NICET will have a kick-off meeting in November 2004 and hopes to have a completed course developed by February 2005.

Oregon DOT is currently retooling the training for construction and would like to develop a QA program for contract administration. One step in this process is to develop an inspector training certification course, which will be outlined in the next few months to be ready for deployment by summer 2005.

Bill Beuter (Virginia DOT) – Virginia DOT has successfully piloted a course on documentation and record keeping and is beginning to train higher level inspectors on surveying.

Action items:	Person responsible:	Deadline:
Chris Newman to put together results of the TCCC meeting to be presented at the AASHTO SOC in August. Will provide to the group for review prior to the meeting.	Chris Newman	August 2004

Funding Update

Chris Newman & Laura
Lawndy, FHWA

Discussion: Chris Newman (FHWA HQ) reviewed the current status of funding for the TCCC. The pooled-fund has received \$610,000 to date from States, FHWA Offices, and private sector organizations. The report that was distributed is a running total based on what the States/private sector have given. This report will now be submitted quarterly for everyone's review. Chris noted that if a state does not contribute to the TCCC, courses are still available to that State.

The question was raised as to how the TCCC could raise more money? The general consensus of the group was that States are afraid to give money thinking that it will be lost in the pooled fund. Chris Newman and Laura Lawndy are continuing to work with the FHWA finance office to ensure that all monies are accounted for and will provide a detailed report to everyone on a quarterly basis to ensure transparency.

Lee Onstott (NM DOT) suggested that Chris Newman include the current funding and benefits information in his presentation at AASHTO Subcommittee on Construction meeting where he will reach a large audience and to make additional presentations at the regional meetings.

Chris Anderson (IA DOT) suggested that the regional representatives "sell" the program to the appropriate people. According to Chris Anderson the adaptation of the NHI training courses supported by TCCC will more than pay for Iowa's contribution and was a key point in convincing IA DOT to continue support the TCCC.

John Taylor (FHWA – NHI) recommended that the group work harder on marketing and show benefits by each state. He suggested that a cost/benefit analysis be completed and incorporated into a marketing program. Rob Elliott (FHWA/NRC – Atlanta) confirmed that he has access to marketing funds and could possibly put together a marketing team to develop a plan for marketing the TCCC and its accomplishments.

The group concurred with John Taylor's (FHWA – NHI) suggestion of the need to look at accountability and benefits. The question to answer in a marketing program is "how is pooling money better than what a state could develop "in-house" for a lower cost?" The general consensus is that the TCCC needs to develop a marketing program.

The group then discussed who is the appropriate person in each division office to assist with the marketing to individual states once a plan is developed? Cathy Nicholas (FHWA – WA Div.) suggested that the construction engineer is a good place to start and concurred that a marketing program to differentiate the TCCC from other pooled fund programs would be good.

Chris Newman (FHWA – HQ) also reviewed a listing of TCCC courses and how much money FHWA/NHI/Pooled-fund/and other organizations have put in to developing a course (see attached document).

Conclusions: The TCCC needs a marketing plan and program to better convey its mission and benefits and to obtain greater support from State DOT's and other organizations.

Action items:	Person responsible:	Deadline:
Include funding report in presentation to AASHTO Subcommittee on Construction meeting	Chris Newman -FHWA HQ	August
Develop a marketing plan for use in selling the TCCC final product and gaining financial report. State representatives need to provide information on what the States need to see/hear to support the TCCC.	Douglas Townes – FHWA/ NRC (Atlanta) Paula McGee – NM DOT Chris Newman – FHWA HQ	
Prepare a presentation for use at agency/ industry meetings to market the activities, objectives, and benefits of the TCCC.	Chris Newman – FHWA HQ	
Identify all of the meetings at which presentations could be made regarding the TCCC program.	Laura Lawndy – FHWA HQ	
Coordinate with Federal Lands (headquarters) to support program	Bob Lale – WFLHD	
Develop more detailed instructions for how to transfer monies	Laura Lawndy – FHWA HQ	

**TCCC/NTTD/Technical
Training Coordinators Meeting**

Chris Anderson (IA DOT), M-TRAC

Discussion: Chris Anderson (IA DOT) briefed the group on the upcoming TCCC/National Transportation Training Directors (NTTD)/Technical Training Coordinators (TTC) Joint Conference to be held in Kansas City, MO from October 31 – November 3, 2004. NTTD approached NHI for \$10k for the entire group to support the guest speakers that will be presenting at the meeting. It was agreed that the monies would be split among the groups to support Sunday and Monday costs.

The groups will meet together on Monday and Wednesday afternoons, but other meetings will be individual. TCCC will not have a registration form, so Chris Anderson needs to know who will be participating in the Sunday evening reception and Tuesday morning breakfast. She also will need to know who will be leaving on Wednesday evening, if anyone so that she can coordinate rooms with the hotel.

The joint meeting that will be held on Monday will include a participant on the panel representing TCCC. The organizational team would also like to have someone from NHI on the panel.

The TTC's separate meeting will include the following topics: "Measuring Technical Training, Multi-lingual Instruction, ADA Materials, Technology for Tomorrow, E-Learning, Sharing Materials, Copyright or Free for All, Training or Testing, Growing Training Programs, and State Sharing". NHI will provide

speakers for some of these sessions so there will be no cost for those speakers.

TTC would also like NICET and ACI to present on what's new with their groups.

All three groups will gather on Wednesday afternoon to summarize the conference and to discuss the possibility for future meetings. The organizational team would like to see this become an annual meeting.

The organizational team is currently trying to decide if they should include vendors in the meeting? However, before vendors can be invited questions as to how the vendors will be selected, where would they be stationed, when will conference participants visit stands, etc. need to be answered and the group is working to do so.

Howe Crockett (WFLHD) asked Chris Newman (FHWA HQ) if there was funding to support this program. Chris Newman explained that this is a program that FHWA would like to support but that funding is going to be tight going into the end of the fiscal year. Chris Newman will discuss the availability of funds with Jim Sorenson (FHWA HQ), using a breakdown of funding needs that will be provided by Chris Anderson (IA DOT). FHWA expects that \$20,000 - \$25,000 should be available, and will review the submission and provide funding by the end of July.

Chris Anderson mentioned that the organizational team would also like assistance from FHWA with marketing and wondered if they could put article in Focus magazine in support of program. Debbie Gwaltney (FHWA – NHI) confirmed that this is a good idea and that they are welcome to submit an article. Chris Anderson will meet with Lisa Pope, a Focus technical writer, to get several articles (the joint meeting, the curriculum, success stories, and other training development) into a July or August edition of Focus.

The other issues that the organizational team is working to settle are who should be included among the invitees – FHWA division offices, private sector/associations, T2 Centers, LTAP, etc. Also, how do they address the issues of overlap? Is TCCC going to meet separately or with the TTC and NTTD? Chris Newman suggested that the TCCC have some separate agenda time to discuss the current movements in the program. If all representatives can make it to the sessions that would be good, but the group understands that the TCCC will be short on personnel.

Action items:	Person responsible:	Deadline:
Represent TCCC on the panel during Monday meeting	Chris Newman – FHWA HQ	
Work up request for federal funds to include a scope of work and cost estimate	Chris Anderson – IA DOT	
Get information to FHWA for Focus article and to invite Division Offices to meeting.	Chris Anderson – IA DOT	
Add to calendar and E-mail to Chris Anderson informing her	TCCC Group	

of participation details		
TCCC/NHI Agreement		Chris Newman, FHWA – HQ John Taylor, NHI
<p>Discussion: Chris Newman (FHWA – HQ) briefed the group on the background of the TCCC. The TCCC was started by bringing together SHA regional groups, AASHTO, private sector, FHWA, etc., but did not have an official agreement on how the group will be organized. The TCCC, FHWA and NHI have drafted an agreement outlining what the TCCC is created to accomplish and how it is to be set-up. This agreement has been signed by the FHWA, Office of Infrastructure, and NHI. Chris will be sending copies of the agreement to the TCCC members and it will be put on the website.</p>		
<p>John Taylor and Debbie Gwaltney (FHWA – NHI) briefed the group on course development indicating that NHI can support 3 ways of distance training: Web conferencing, Tel-8 (Julie Rodriguez of ND DOT) video teleconferencing, and web based courses. John Taylor also mentioned that NHI encourages that new courses be developed in modules that could also stand alone.</p>		
Action items:	Person responsible:	Deadline:
Send copies of agreement to the TCCC members and post on web	Laura Lawndy – FHWA HQ	08/30/04
Measuring the Effectiveness of Technical Training		Chris Anderson (IA DOT), M-TRAC
<p>Discussion: Chris Anderson (IA DOT) briefed the group on the initiative undertaken by a TCCC task group to develop a problem statement for a possible NCHRP study on “Measuring the Effectiveness of Technical Training”. The AASHTO Subcommittee on Construction submitted this statement to TRB for funding an NCHRP study. It was a late submittal but was supported by NTTD and the AASHTO Subcommittees on Materials, Construction, and Maintenance. Unfortunately the proposal was not selected for funding; it ranked 106 out of the 139 new problem statements submitted. However, there continues to be strong interest in pursuing this effort and the question was raised as to whether or not to continue pursuing the issue. The task group is not aware of any state that currently has a method to measure the effect that training has upon transportation system performance.</p>		
<p>The group decided the issue should be pursued and that the task group should go back to AASHTO Subcommittee on Construction and the Subcommittee on Materials for a champion and to gain further support for the project. It is important to demonstrate that training is saving the States money and improving the long-term performance of their transportation investment. Further, it was determined that each State should pursue support from their research or RAC member in an effort to demonstrate wide support.</p>		

Action items:	Person responsible:	Deadline:
Organize conference call with the task group and Lee Onstott (NM DOT), Ben Gribbon (FHWA HQ), Bob Peda (PA DOT), and Paula McGee (NM DOT) to discuss how to proceed.	Chris Anderson – IA DOT Chris Newman – FHWA HQ	
Make presentation to the AASHTO SOC meeting about why this study is important	Chris Newman	
Discussion of Reciprocity		Tom Malerk, FL DOT/AASHTO
<p>Discussion: Douglas Townes (FL DOT) briefed the group on behalf of Tom Malerk (FL DOT) on the issue of reciprocity. If an engineer is trained using the AASHTO training courses then ideally they could be certified in other states by simply taking a test individual to the state or perhaps a regional/national test could be established if standards are common between states. Per Leo Stevens (NETTCP), the NETTCP has agreed that the AASHTO standards and tests will be universal to that region, which might be used as a model for other States to consider. The AASHTO copyright of test methods/standards was presented as a significant barrier to a State adopting reciprocity. The feeling is that States do not want to adopt AASHTO’s methods because they do not want to have to pay for reproduction of the materials.</p> <p>According to Garth Newman (ID TD), the only way to start a reciprocity relationship is to agree on the test methods. He also pointed out that another benefit of reciprocity is that when States agree together on a test method then there is power to make changes to current AASHTO test methods, whereas before when one state approached AASHTO they were denied.</p>		
Action items:	Person responsible:	Deadline:
No Action Required		

TCCC Website/Database Status	Chris Newman – FHWA HQ
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Discussion: Chris Newman (FHWA HQ) briefed the group on the TCCC website. There have been a few issues over the last couple of months due to NHI’s website being hacked. As a result the web designer was no longer able to access the website. Chris Newman has negotiated with those in control of the website and TCCC’s web designer now has access again. The database for training courses has not been updated. It was hoped that States would provide information on their courses to be added in the database. It looks like the TCCC will need more assistance from the regional group in encouraging the States to put information on the web.

Howe Crockett (FHWA - WFLHD) raised the issue about needing clear instructions for how to include course information on the website. He also posed the question of how to get the States to provide information for inclusion. It was recommended that the division offices and regional groups coordinate with the technical representatives.

Ideally the database would be linked to the curriculum, which would provide all of the information on the competencies and the courses that will support them. It was suggested that links be established to the individual State information from the database. An interested party would then be able to search the database for courses associated with a specific competency and then link to a specific State’s course as available.

Action items:	Person responsible:	Deadline:
Develop clear instructions for how to include course information on the website and for which courses TCCC is looking	Chris Newman – FHWA HQ Laura Lawndy – FHWA HQ	08/15/04
Look into including a “hit counter” on the website to track traffic	Laura Lawndy – FHWA HQ	08/15/04
Contact the member states of each regional group to develop list of training courses for each region.	Leo Stevens – NM DOT Cathy Betts – MN DOT Douglas Townes – FHWA/NRC (Atlanta) Garth Newman - ITD	
Create list of States participating in the database program to include how many courses each State has	Laura Lawndy – FHWA HQ	
Office of Safety will include their training courses	Ben Gribbon – FHWA HQ	

Overview of Matrices Development Process and Guidelines for Evaluating Matrices

Marlene Patterson - ADNET

Discussion: Marlene Patterson (ADNET) reviewed the process for developing the matrices and what she looked at in evaluating each matrix. Marlene tried to identify as many courses/vendors as possible that correlate to each area. She asked that each group review this information for completeness and for any missing courses/vendors. However, there are no evaluations of the courses as to effectiveness, quality or value attached to the listing. A disclaimer will need to be included so that the list cannot be viewed as an endorsement.

Marlene Patterson requested that each group evaluate their matrix with regard to redundancy with/relationship to other matrices and questioned whether or not it is appropriate to have the redundant material separated from the matrix and made into a separate discipline with a narrative explaining its use. Following extensive group discussion it was decided that the redundancy should remain as is with a narrative explaining the overlap. It was suggested that each matrix stand almost alone with a “see also” specific section for other areas where there are similar requirements.

Marlene Patterson encouraged the 5 matrix teams to brainstorm ideas for what other areas or issues need to be included so that colleagues will actually use the matrices for their development programs, while also coming to consensus on the generic role of personnel definitions to be included in the narrative as example of level for which the competency was developed. It was also suggested that there be an example of how to use the matrices for various roles.

Marlene Patterson then questioned whether or not the new format of the matrices is ideal for presentation to new audiences or is there a method of delivery that would be more appropriate? Who are the end-user groups? According to Chris Anderson (IA DOT), the matrices may need to be a bit more user friendly to the trainer who is expected to be the ultimate end-user. Perhaps a user’s guide could accomplish this need or the group may need a couple of different delivery methods to be end user specific (i.e. trainer vs. supervisor). One idea for a delivery method is to separate the listing of courses/vendors available from the matrices and make it available as a supplemental guide. Another suggestion is to make everything available electronically so that the disciplines would link to competencies which would link to training courses, etc. The electronic version would also include an area for user review of courses that are listed with the competency.

Action items:	Person responsible:	Deadline:
Review construction and materials matrices for redundant disciplines. As well as construction and maintenance for contract administration redundancy. Should there be cross over?	Garth Newman - ITD Allan Samuels – AZ DOT Bud Darby - NICET	

Group Breakout Session – Discussion of the Construction/Materials Matrix

Five Discipline Teams

Discussion: In reviewing the Materials Matrix it appears that there is a disconnect between East Coast and West Coast methods and the team questioned whether or not there should be two different matrixes? After some discussion, the group decided that there should only be one matrix, but that it should encompass both styles. It is recommended that the materials group reevaluate pg. 73 of the matrix to ensure that the levels are correct and that the competencies correlate with the levels. Further, the group decided that the materials team should further scrutinize the entire matrix in an effort to come to a consensus on it. It is possible that the materials matrix does not need to have 4 levels of competencies. This should also be evaluated. It was also recommended that the name of the matrix be changed to “Materials Testing and Evaluation” instead of just “Materials”.

The group then reviewed the Construction Matrix for redundancies and to ensure that competencies are level appropriate. In the process the team identified a few areas for updating and change.

Action items:	Person responsible:	Deadline:
Review materials matrix and update/change	Chris Newman – FHWA HQ Linda Hughes – WS DOT Garth Newman - ITD Leo Stevens - NETTCP Woody Hood – MD DOT Serji Amirkhanian Mike Arasteh – FHWA NRC (Baltimore) Tom Malerk – FL DOT	
Coordinate with Rich Barrows and Peter Osborn about Geotechnical (pg. 53) aspects of the Construction Matrix	Chris Newman – FHWA HQ	
Expand the Construction Surveying Discipline in the Construction Matrix	Bill Beuter – VA DOT Marty Flores	

Discussion of Group Break-out Sessions and Refinement of Matrices Consistency

Marlene Patterson - ADNET

Discussion: Marlene Patterson (ADNET) discussed the findings of the group break out sessions and indicated some of the changes that will need to be made. Marlene encouraged teams with any matrices that still require work to schedule conference calls and walk through the matrix point by point.

Each team was also to review the list of training courses that Marlene Patterson had included with each matrix and weed out ones that they had concerns about. In addition, the courses reviewed by or developed through TC3 would be listed first in all cases.

The team discussed the pros and cons of conducting an in-depth review of the vendor/course listing associated with each matrix and providing a mechanism for rating the courses/vendors. It was decided that the TCCC should not endorse a particular course. Douglas Townes (FL DOT) recommended that a method be set-up for the student to review the course/vendor so that the grading does not come from TCCC, but rather the end-user of the product. After a period of time there would be clear tracking of the success and value of a course/vendor. Lee Onstott (NM DOT) recommended two lists – one list of courses that the TCCC has developed/approved and another list with the other vendors/courses. Linda Hughes (WSDOT) suggested that the team populate the course database from the opposite direction. Her idea was to include courses that the team has experience with and would recommend. At this time the team decided that they would list the courses/vendors with which they have experience. Bud Darby (NICET) mentioned NICET’s mutli-thousand certification test scores each year will be analyzed against the TCCC curricula competencies and NICET will provide feedback on the TCCC competencies that may need additional training or may need to be adjusted.

Construction Matrix – The document is a living document that will constantly be changed, but the team identified that a section on bridge rehabilitation should be included in the matrix now. The team will continue to have conference calls every 3 weeks to review the matrix and update as needed. All current changes should be submitted to Marlene by August 15, 2004.

Employment Development Matrix – Completed

Materials Matrix – The team needs to review the current matrix and further edit competencies/disciplines

Safety Matrix – The team needs to include 4 disciplines that were overlooked and refine the competencies

Maintenance Matrix – Completed

Action items:

Review the training lists and vendors associated with each of the matrices. Should the vendor or course be included in the final version of the matrices or are there vendors/courses that should be included.

Person responsible:

TCCC Members

Deadline:

Coordinate team to update construction matrix with changes identified and include 2 new subject areas that have been suggested.	Allan Samuels – AZ DOT	August 15, 2004
Set-up and facilitate conference call to review Materials Matrix. Team is to develop final version and submit to Marlene.	Chris Newman – FWWA HQ	August 15, 2004
Set-up and facilitate conference call to continue updating the Safety Matrix. Team is to develop final version and submit to Marlene.	Ben Gribbon – FHWA HQ	August 15, 2004
Create memo and request AASHTO representative from the Subcommittee on Safety and Traffic Operations to participate on the team. Possible participant is Anker Winter from New Jersey. Also contact division/resource center to get another representative.	Ben Gribbon – FHWA HQ	
Update Construction Matrix with changes identified and send out to team for review	Marlene Patterson – ADNET	June 25, 2004
Review corrections and have comments back to Marlene	Construction Team	July 23, 2004
Conference Call to finalize Construction Matrix	Construction Team	July 30, 2004

**TCCC Business Initiative and
Obtaining AASHTO Concurrence**

Chris Newman, FHWA
HQ

Discussion: The team discussed how to use the matrices to determine what training needs to be created to fulfill the matrix and to determine which course might be prioritized to obtain pooled funds for development. Need to develop a 1-2 year plan for development.

Linda Hughes (WS DOT) suggested that the first step is to review current courses to determine level specificity and then apply attention/funds to areas that are lacking (i.e. courses for levels III and IV). A large gap is developing between levels of employee expertise due to a large round of retiring. This is a problem experienced by most states and needs to be addressed as a priority. If this method is followed, Marlene questioned how often the team would review the matrix to evaluate whether or not the competencies have changed.

Leo Stevens (NETTCP) addressed the issue of needing to consider private entities in how the team develops the programs as the States move more toward privatization of inspection and other areas of the construction process. This is an audience that will need to be included in the marketing of the TCCC program.

Garth Newman (ITD) sees the TCCC program as a tool for use when an entity needs to respond to a new CFR or initiative. The matrix can assist the entity in breaking down a short term or long term training

program already in place to respond to the needs.

Cathy Betts (MN DOT) recommended that the individual teams evaluate what changes are in the pipeline for their areas and then prioritize requirements and courses to meet that demand.

The team decided to continue to discuss this issue and develop a plan of action in the near future. A meeting will be established when the CEO can be present and the team can write a business plan together.

Once the matrix has been completed and a business plan has been established it is important to determine how the final product is going to be verified for delivery. The team discussed the possibility of obtaining AASHTO’s concurrence with the product and/or the possibility that the TCCC is enough for the States to begin using it. There is currently no committee on training within AASHTO to champion this cause, so it will be important to get the Subcommittee on Highways to endorse the TCCC Matrices.

Action items:	Person responsible:	Deadline:
Set-up meeting between AASHTO rep and TCCC Management Team	Chris Newman – FHWA HQ	09/01/04

Exam Test Scores	Leo Stevens, NETTCP
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Discussion: Leo Stevens (NETTCP) made a presentation to the group describing the exam results for various disciplines with percentages of people above the 80 percentile. The question of where the cut-off should be is one that the NETTCP is struggling to answer. The NETTCP is looking for other methods and standards of evaluation.

The team provided input from their individual organization for consideration. Oregon provides the opportunity to take a pre-test to determine areas of deficiency so that the individual person can spend more time in the course to obtain the information needed. The first test is free, but the retest is at a cost.

Washington requires 70% for passing by State law. For the 4 Midwestern States the level is 80%. Virginia is 70%. Florida’s program is passing at 70%. FL DOT coordinated with the associations and private sector to determine what is an acceptable passing rate. NICET uses 70%.

Leo Stevens advised that agencies may want to consider a written policy on the use of electronic recording of performance exams.

WAQTC allows two times through an exam like ACI.

Action items:	Person responsible:	Deadline:
No Action Required		

Train-the-Trainer for Technical Trainers	Chris Anderson (IA DOT), M-TRAC
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Discussion: Chris Andersen (IA DOT) briefed the group on a train the trainer course that was developed by the TCCC as an abbreviated course for the technical trainers. The group has separated two sections and is developing the new text for instruction. The course is being fast tracked by NHI, but will not be an NHI course. Whoever uses the course will need to supply their own instructor. Iowa DOT is developing a video, through a local college, of “dos” and “don’ts” for labs. NHI will then take the video and make it 508 compliant for mass distribution. The target audience for this course will be State DOT employees, contractors, producers, etc.

The coordinating group will be conducting the pilot later this summer and are requesting funding to bring a representative from each of the regions in for the training to evaluate the 2 ½ day training course. Chris Andersen is requesting \$10,000 - \$12,000 from FHWA to help fund the expenses of participants to pilot test and evaluate the training.

FHWA/NHI will consider supporting this conference and has requested that Chris provide a cost estimate for this training course.

Action items:	Person responsible:	Deadline:
Provide estimated expense listing for participation in training	Chris Anderson – IA DOT	
Write article following the training that can be included in various publications	Chris Anderson – IA DOT	

Workforce Retention Through Certification	Bud Darby, NICET
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Discussion: Bud Darby (NICET) made a presentation to the group on Workforce Retention through Professional Certification. Bud walked the group through Maslow’s Hierarchy of Human Needs as key issues that need to be satisfied in all people and Fredrick Herzberg’s study on Motivators, which identified 6 key motivators for employees. The Construction Certification Coalition developed a listing of values of a certification program which incorporate the same points that Maslow and Herzberg had identified.

The primary topic of Bud’s presentation was on certification, but he noted the definitions for three other levels of credentialing. What is national certification? It requires a reliable and repeatable written assessment of skills and knowledge; documented work history; proficiency verification; and ethical practice. There are a number of certification standard makers, including public/private/and education entities, who determine the certification standards. All of the organizations have adopted most of the same standards for certification including examination activities being completely separated from the training activities; non-governmental, independent, third party governing body, and periodic recertification program.

Bud further explained the value of having national certification for the employee and the employer. For

the employee it means increased professional stature; increased opportunities for job advancement; quicker entry into new job assignments or responsibilities; opportunities for assignments where national certification is required; and a marketable credential to an employer, prospective employer or client. For the employer it means linkage between the standards of the profession and individual practice; assurance of the technician competency, commitment to maintenance and improvement of individual and company/agency professional capabilities and ethical standards, respect and recognition of individuals and firms who demonstrate high levels of knowledge and experience, and efficient use of company/agency workforce.

NICET is a not-for-profit certification organization established in 1961 that provides nationally-applicable, voluntary certification programs covering many engineering technology fields and several specialized subfields. NICET certifies individuals with appropriate engineering technician or engineering technologist work experience; partial credit given for relevant work experience as craftsman, scientist, engineer, etc.; residents of the United States and territories and certain others living abroad. NICET has established reciprocity with Canada in some programs.

The NICET Certification Model requires written exam, work experience, work element verification, and character reference for levels III and IV. For recertification NICET requires certificants to maintain professional activity and continued professional development in the field of certification. The activity is represented through the accumulation of 90 continued Professional Development Points (CPD) which are accumulated over three year certification/recertification cycles. The written exams are normally given on Saturdays, one per quarter up to one per month, per center. Exams are open-book and questions are based on nationally recognized codes, standards, and practices. Program detail manuals provide descriptions of work elements. Various associations and organizations offer preparatory materials, but NICET does not. Pocket calculators are permitted in the exam, but laptops and palmtop computers are not. NICET is moving toward computer based testing in the very near future.

The areas that NICET certifies are as follows: Transportation Engineering Technology; Geotechnical Engineering Technology, Construction Materials Testing, Underground Utilities Construction, and Building Construction.

NICET is currently reviewing and updating programs to reflect current standards. Additionally, NICET is has entered into an alliance with FHWA, which will provide identity and the opportunity to publicize education, training workforce development and credentialing in various career paths. NICET would further like to partner with the TCCC to increase the awareness of NICET certification programs within the engineering and construction communities; update existing programs to satisfy current industry standards and needs; develop and implement new programs; provide credible Training Resources to compliment the NICET certification programs; and to alert NICET of pending state/local regulation and legislation for certificants.

Action items:	Person responsible:	Deadline:
No Action Required.		

TCCC's Construction Survey Course	Bill Beuter, VA DOT/AASHTO
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Discussion: Bill Beuter (VA DOT) briefed the group on the construction survey course activities. VDOT has received very positive feedback on this course, which is attributable to conducting a survey of student competency and abilities to make sure the course is taught at the appropriate level. At the initial introduction of each class the instructors try to assess the each student’s background, experience with surveying (if any) and what type of work each person is currently involved in. Each instructor must also remember that regardless of their survey experience level, they are NOT surveyors.

There are 3 instructors for this course including a construction manager from VDOT. The course encompasses a field exercise which helps drive home the training. Each instructor has 3-4 students and they work together as a crew so that students have direct dialogue and access to the instructor.

Lee Onstott (NM DOT) provided high praise for this course and commented that the course was superior to others that they had reviewed due to the “hands on” component and says that the course has very good potential. VA DOT is willing to share this course with FHWA/NHI for everyone to use. However, prior to it being distributed nationally the course may need to be tweaked to be distributed as a 90% complete course to be specialized to the State. However, VA DOT’s logo will be included with FHWA and NHI when distributed nationally.

The group agreed to distribute course nationally with disclaimer that examples are VDOT specific and the individual States should enter their own examples. The group also agreed that there needs to be listing of areas where the examples need to be changed.

Action items:	Person responsible:	Deadline:
Review the course and flag areas where examples need to be changed and creating an errata sheet	Lee Onstott – NM DOT	June 30, 2004
Coordinate copies being made of the course for distribution at the Subcommittee on Construction in August	Chris Newman – FHWA HQ	August 11, 2004

Course/Publications Updates	Chris Newman, FHWA John Taylor, NHI
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Discussion: Chris Newman (FHWA HQ) and John Taylor (FHWA – NHI) reviewed the current status of the training course development activities. The **Bridge Construction Inspection** course (NHI #130088) had its kick-off meeting in May and will include four days of material. The walk through should be September/October with pilot available in November/December.

Managing Construction Workmanship (NHI #134055) funding is in place and has been awarded to Applied Pavement Technologies. The kick-off meeting will be scheduled in the near future.

Quality Assurance Technologist Certification course (NHI #134050) has incorporated the comments provided by TCCC and is nearing completion.

Coming down the pipeline: **Inspection of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes** – the scope of work has been written and the RFP will be issued shortly. TCCC will be funding this course development at \$100,000.00. **Subsurface Investigation Inspection** is currently being developed and the RFP should be put out within the next couple of weeks; at this time, there is no TCCC involved.

The Caltrans “MTAG” (Maintenance Tech Guide), a self directed web based course on **preventive maintenance**, is being considered for development as a TCCC/ FHWA/ NHI course. It would be very easy to duplicate this course and distribute it nationally either digitally or as a web based course. The course is modular in design and could be self taught/tested after each module. For web based course NHI would like to coordinate the effort and recommends that OPM’s vehicle is used as it is extremely cost effective. http://www.dot.ca.gov/hq/maint/MTA_Guide.htm

Partnering for Improved Construction Quality (Course #134060) course RFP will be launched in September. The team is working on the statement of work for this “hands on” course, which will include charters, scenarios, etc. This will be an interactive course that can be easily modified for each individual State. The courses’ technical panel is being chaired by Bobby Templeton, NPHQ.

The NHI course #134001, **Principles of Writing Highway Construction Specification Course** now has an instructor. The delivery contract was awarded to Trauner consulting Services.

Action items:	Person responsible:	Deadline:
Review the Work Zone Traffic Control Short Course and update information on the course description/status	Ben Gribbon – FHWA HQ	

The next TCCC meeting will be held in Kansas City, Missouri October 31 – November 3, 2004