

MULTI-REGIONAL TRAINING AND CERTIFICATION
M-TRAC WORKSHOP

June 19 – 21, 2001
Holiday Inn – Des Moines, IA

Hosted by:
Iowa Department of Transportation

Sponsored by:
Federal Highway Administration

Report Provided by:
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WORKSHOP SUMMARY

The annual M-TRAC workshop was held on June 19-21, 2001 at the Holiday Inn in Des Moines, Iowa. There was an excellent attendance with almost every M-TRAC state represented, as well as, representation from states, organizations, and Federal Highway offices around the country. This is a continuing effort that began in 1994 and has progressed with many accomplishments over the past years. M-TRAC task groups have developed training materials and a Quality Control/Quality Assurance informational manual. M-TRAC states have been making a constant effort toward reciprocity and sharing information among the states. This group has been an asset to the quality of highway construction by helping to provide competent technicians.

Since the development of M-TRAC there have been several regional groups formed across the country. These groups include the New England Transportation Technician Certification Program (NETTCP), Mid-Atlantic Region Technician Certification Program (MARTCP), Southeast Task Force on Technician Training and Certification (SETFTTC), and Western Alliance for Quality Transportation Construction (WAQTC). Representatives from these groups have been working together with industry organizations, and the FHWA in a group effort called the Transportation Curriculum Coordination Council (TCCC). The TCCC is working to find out what training materials are needed by the states and what materials have already been developed. If materials are needed in any area, the group is overseeing development of such new materials. This group will have a web site developed soon to list training materials available for states to use in their training and certification programs.

The meeting began at 1:00 P.M. on Tuesday, June 19th with opening remarks by Kevin Mahoney, the Director of Operations for the Iowa DOT, Chris Anderson, Iowa DOT, and Lee Gallivan, FHWA, Indiana Division. Lee was the FHWA representative for the Midwest Resource Center and assisted with the workshop, as well, as taking notes.

KANSAS STATE UNIVERSITY PRESENTATION – JOE KRAUSE

Joe Krause with KSU gave a presentation on KSU's work with the Kansas DOT training program. The university started with a one-week training that included a day each on soils, aggregate, concrete, asphalt, and a test on Friday. They are now using the M-TRAC training materials on soils. They are using ACI for concrete and aggregate field-testing. They have expanded their soils training and have introduced profilograph training. KSU has produced a manual for certified inspector/technician training courses. Their web page is www.sal.ksu.edu and includes information on technician training. Kansas formed an advisory committee represented by KSU, KDOT, consultants, contractors, Asphalt Paving Association, Portland Cement Concrete Association, ACI committee, and the FHWA to administer the program. KSU will also be training four ACI classes this year.

DES MOINES AREA COMMUNITY COLLEGE PRESENTATION – RENEE WHITE

Renee White with DMACC discussed the partnership DMACC has made with the Iowa DOT. DMACC is doing much of the instruction of the certification courses for the Iowa Technical Training and Certification Program. Iowa has always instructed all their own courses in the past but with more and more classes needed and the constant decline of instructors the DOT needed assistance. Renee presented a power point on this topic, which is included in this report.

CIVIL ENGINEERING TECHNICIAN PROGRAMS – RENEE WHITE/ART PEROUTKY

There are states that are recruiting technicians from Civil Engineering Technician Programs. Iowa and Minnesota are two states that have been using the community colleges for hiring technicians. Art Peroutky spoke about Minnesota's recruitment effort in Minnesota and Renee White covered Iowa's effort with DMACC. Renee had a power point presentation that showed how the DOT and DMACC are working together in this effort. The presentation is included in this report.

TRANSPORTION WORKER/SUMMER HELP TRAINING PROBLEMS – ART PEROUTKY/CHRIS ANDERSON

With the cutbacks that many DOT's are facing some states have been implementing programs that have maintenance employees performing highway inspection and testing in the summer months and construction/materials employees plowing snow in the winter months. According to the Code of Federal Regulations, these individuals and part time help need to be qualified to perform such testing. These individuals have made an extra burden on training programs. Art discussed how Minnesota was handling the part time help by allowing an individual to get certified on a temporary basis but must go through the training and testing after the first year. Iowa had to run 150 new people through spring Level I Aggregate and Level I PCC classes to get them prepared to do testing this summer. It appears with budget shortages in several states new methods are being introduced to meet qualifications of technicians.

ADULT LEARNING TECHNIQUES – DEDRA JONES

Dedra Jones is with the Louisiana Department of Transportation and Development and has been an active part of the M-TRAC group for the past several years. Dedra gave a presentation on Adult Learning Strategies for Course Design. With the challenges developing courses for adults and the training of adults, this presentation was very appropriate for the group. Dedra gave a power point presentation, which is included in this report.

MISCELLANEOUS ITEMS – LEE GALLIVAN

Lee reported that the FHWA had filled the position in the Midwest Resource Center that had been vacated by Tom Bryan. Bryan Cawley from the North Dakota FHWA Division Office is the new person. Bryan will be reporting sometime in late September to early October. In the meantime, he can be reached at 701-250-4342. His new number at the MRC will be 708-283-3570. His E-mail will remain the same at: Bryan.Cawley@fhwa.dot.gov.

EVENING PROGRAM

There was a dinner and program following the first afternoon's meeting. The program was in honor of the two individuals that had founded the M-TRAC group, Tom Bryan and Ken Archuleta. Tom worked with the FHWA in Chicago and Ken had worked with the FHWA in Kansas City. Both have retired. These gentlemen worked very hard with the M-TRAC group and their constant efforts were greatly appreciated.

TRANSPORTATION CURRICULUM COORDINATION COUNCIL – JOHN PERRY

John Perry with the FHWA in Washington, D.C. delivered a presentation on the Transportation Curriculum Coordination Council (TCCC). John handed out the briefing papers, included in this report, from the TCCC's last meeting in Williamsburg, VA in June. John explained that the goal of the TCCC is to reduce duplication efforts and to share resources. John talked about the original meeting of the TCCC in St. Louis, Missouri and about the latest meeting in Williamsburg, Virginia. At the Williamsburg meeting the TCCC work plan was discussed and the items were to be completed during the next year. John distributed a handout on the work plan and each issue was discussed. The TCCC is developing a web page to include training materials available. This will include generic core/national, regional, and state courses. He reminded us that NHI course materials are available on CD-ROM. You also don't always need NHI to teach the materials but you can obtain the materials and train them yourself. NAPA gave a presentation at Williamsburg and they will poll resources to identify national training gaps. There will be another meeting with NICET, NHI, and FHWA. NICET wants to work more with the DOT's on providing training materials. They will be incorporating computer type testing. They are willing to look at hands on training. The Mid-Atlantic group has developed a generic pavement marking training manual. The NHI Hot Mix Asphalt course is being revised to provide update changes. John sent out a survey on the status of technician certification nationally. The results will be consolidated and sent out. Obtaining core-training materials is a major goal of the TCCC.

GEOTECHNICAL MATERIAL DEVELOPMENT – PETER OSBORN

Peter Osborn with the FHWA had a presentation on the development of the new Geotechnical course. The power point presentation is included later in this report. A summary of his report is also included in the briefing papers that have been included in this report. Peter told us that a pooled fund request would be coming out soon to help support the course development.

QUALITY ASSURANCE TECHNOLOGIST – GREG DOYLE, NETTCP

Greg Doyle with the FHWA in Massachusetts talked about the Quality Assurance Technologist course being developed by the NETTCP. Greg had a power point covering this topic and it is included in this report. There is also information on this effort in the briefing papers included in the report. Greg said the first draft should be completed near the end of the year.

NRMCA CERTIFICATION PROGRAMS – MARK DEETZ

Mark Deetz had been asked to talk with the group about the new Concrete Production Control Technician course being developed by the National Ready Mixed Concrete Association. The course is detailed in Mark's power point presentation, which is included in this report. Mark reported the NRMCA has a benchmark program that has been out into the industry market for nearly 25 years.

PCC MIX DESIGN COURSE – CHRIS ANDERSON

Chris gave a brief report on the Portland Cement Concrete Mix Design course that is being developed by Kenneth Hover. Ken has completed the pilots for the course and the train-the-trainer presentation. The materials are to be completed by late summer, early fall and will be distributed at that time.

M-TRAC WEB PAGE & MWPPP – LEE GALLIVAN

Lee reported that the FHWA is to be spear heading the development of a Web page for the M-TRAC group. All the other regional groups have a web page and the national TCCC group has a web page under development. The purpose of the site is to have a location for everything that the region does and tying into national activities. Lee indicated that the FHWA will fund the development and the goal is to have the site completed by this fall. An M-TRAC Web Page Taskforce will coordinate the initial development. Taskforce members are Lee Gallivan – FHWA, John Hinrichsen – Iowa DOT, Pat Jacomet – OAIMA, Bruce Loesch – MODOT, and a MNDOT representative to be named later. Iowa State University and Purdue University will be providing independent estimated costs to produce the M-TRAC web page.

Lee also provided the group with information regarding the Mid-Western Partnership for Pavement Preservation (MWPPP). This group met in Grand Rapids, MI this past spring and is a spin off of the AASHTO Lead States program in pavement preservation. The group is made up of the states, industry, and the DOT's. Five groups were established which include materials, research, specifications, policy, and training. These groups will work independently on various pavement preservation issues and then come together to unify the activities. Along with the MWPPP, the Federation of Pavement Preservation (FPP) was present and announced their second meeting to be held in San Diego. Lee was requested to ask the following questions:

1. Does any DOT have PP training materials?
2. Does any DOT have any certification for PP?
3. Any maintenance training activity videos?

All responses from the M-TRAC group to these questions were no.

TEST STANDARDIZATION FOR HMA – RICH WOLTERS

Rich Wolters, Director of Engineering/Training for the Minnesota Asphalt Pavement Association represented the North Central Asphalt Users Producers Group in giving a presentation on HMA Test Standardization. A summary of Rich's presentation is included in this report. Mike Heitzman of the Iowa DOT continued with a summary for the NCAUPG test standardization efforts. His power point presentation is included in this report.

SUPERPAVE GYRATORY COMPACTOR COMPARISON – JOHN HINRICHSSEN

John Hinrichsen of the Iowa DOT gave a presentation at the Transportation Research Board this past winter on studies the Iowa DOT had performed comparing gyratory compactors. John presented a power point show covering the results from Iowa's studies. The power point presentation is included in this report. The Iowa DOT tested four gyratory compactors using the same materials and operators. The following are two conclusions from that research:

1. There are real measurable differences between gyratory compactors from different manufacturers, as evidenced by the constant differences in the test results.
2. There appears to be variables that effect compaction that are not yet controlled in the specifications.

AMERICAN CONCRETE INSTITUTE TRAINING ANNUAL MEETING – BRUCE LOESCH

ACI had requested that a representative from each of the regional groups attend their annual meeting to give input to ACI about their region's training needs. The representative from M-TRAC was Bruce Loesch with the Missouri DOT. Bruce brought

back some very good information, which he shared with us. The cost of ACI was discussed and concluded there is no way to get around it. At this time ACI is training ASTM standards but may be willing to look at using AASHTO standards. A summarization of that meeting is included with the FHWA briefing papers in this report. M-TRAC thanked Bruce for taking the time and effort to attend that meeting as our representative.

M-TRAC ITEMS – LEE GALLIVAN

Funding of various activities of M-TRAC is at a bottleneck since funding to do anything as a group does not exist. The TCCC will be going to the AASHTO Subcommittee on Materials and Subcommittee on Construction meetings this summer. They hope to get support for various activities in the future. Part of the program is to go out to the DOT's for funding as part of a pool funded project. Other regional groups have either a pool-funded project or directed funds from specific training activities. The M-TRAC group doesn't have any finances at this time. Lee proposed to develop a white paper to address the management and funding support for the group. There will be a need for a DOT to coordinate activities and sponsor the M-TRAC group as the lead state.

Over the past several years M-TRAC task groups have completed training materials covering soils, aggregates, HMA, and are working on PCC materials. The materials need to be updated and the PCC material needs to be finished. These materials could be distributed again by CD or there is the possibility of distributing them on our web page. Funding to get the groups together is supported by the FHWA Midwest Resource Center. The group leaders will be contacting the groups to set up meetings and to work on the updates and completion.

OHIO AGGREGATE TECHNICIAN TRAINING – PAT JACOMET

Pat Jacomet of the Ohio Aggregates and Industrial Minerals Association gave a presentation on Ohio's aggregate training effort. Pat discussed the video that the FHWA sponsored on the segregation of stockpiles. Some states are currently using that video as part of their training program. Pat's power point presentation is included in this report. Pat suggested that Ohio be the location for next years M-TRAC workshop.

OPEN SESSION

Thursday morning's session was a time for all states to ask questions, discuss problems, or cover any items that any state may want to discuss that didn't get covered earlier in the program.

Items covered include:

- Art Peroutky is retiring this winter. Art has been involved with the M-TRAC group for a number of years and has been an active part of the task groups. Art is also one of the representatives to the TCCC from the Midwest. M-TRAC will miss the knowledge and skills he has shared with us in the past. Good luck, Art.

- Chris Anderson is looking for an updated copy of “Working Safely with Nuclear Gauges”. If anyone knows where that might be available, please let her know.
- Wisconsin was not able to send an individual this year. One of their employees had requested information on penalizing contractors for not performing the sampling and testing required. Indiana responded that they had a situation where the contractor is now paying for all the testing for a year. Kansas says they won’t pay for the materials.
- Iowa wanted to know if anyone had considered a Binder Certification Program. New England has a program for this. The North Central Superpave Center has shown an interest in participating with M-TRAC in this. The response from the group indicated there wasn’t much interest in this.
- Kansas asked if other states notify students and/or supervisors if the students fail the tests. Iowa notifies students right away but does not notify supervisors. Massachusetts does notify supervisors. Other New England states vary. ACI places all passing tests on the web. New Mexico does send results to the technician’s employer.
- Kansas wanted to know how students received their test results. Most states have computer programs that track student’s status and training records.
- Kansas asked what states sent out to the technicians. Iowa sends out a card and certification. New Mexico lists what tests the individual can perform on the certification.
- Georgia wanted to know what offices the DOT training and certification folks work from. The answers varied and consisted of materials, construction, materials/construction, and human resources.
- Iowa asked if there are any other training and/or certification courses anyone was interested in. Iowa suggested paver operator and roller operator. The other states were going to check and get back to Iowa of any interest.
- Pat Jacomet offered to host the next meeting in Ohio. Kansas offered to host in 2003.
- The M-TRAC group wanted Chris to follow-up on getting the other Regional Training Groups to join M-TRAC for a National meeting. The intent of M-TRAC was to go national but once the other groups developed everyone went their own way.
- Chris was thanked by the group for hosting the meeting.
- Iowa, Nebraska, Kansas, and Missouri met after the regular meeting to discuss reciprocity in aggregate. They currently have reciprocity in HMA. A meeting in St. Joseph, Missouri would be arranged to discuss this in more detail.