

VIRGINIA EDUCATION CENTER FOR ASPHALT TECHNOLOGY (VECAT)

*A Virginia Asphalt Association, Germanna Community College
and Virginia Department of Transportation
Partnership*

Trenton M. Clark
Director of Engineering
Fall Asphalt Conference
October 6, 2015



VECAT

Potential Changes to Asphalt-Related MCS Classes



Materials Certification Schools

- Focused on asphalt-related classes only
- Provide a revised certification program
- Adaptable with changing environments
 - New equipment
 - New processes
 - New materials
- Ability to secure experts for training modules



Which Classes Will Be Revised?

➤ Current MCS Classes

- Asphalt Field Level 1 and 2
- Asphalt Plant Level 1 and 2
- Asphalt Mix Design
- Slurry Seal and Latex
- Surface Treatment



How About Future Certifications?

➤ Future Classes

- Full-Depth Reclamation Mix Design and Construction
- Cold Central Plant Recycling Mix Design and Construction
- CIR Mix Design and Construction



Potential Changes to Current Classes

➤ Restructure Each Class

- Expand instruction time (up to 50%)
- Reformat and update existing VDOT training materials
- Where applicable, use industry subject matter experts to teach modules
- Add more hands-on instruction
- Increase rigor of exam where needed
- Incorporate more technology and adult learning techniques into classes



Instruction Room



Lab and Classroom



Proposed MCS Timeline

➤ October 2015 – February 2016

- Develop revised format for Asphalt Plant, Mix Design and Asphalt Field
- Identify and contract with industry SME's to deliver portions of the classes (Asphalt Plant 1 and Asphalt Field 1)
- Update Asphalt Field and Plant Level 2 Classes



Proposed MCS Timeline

➤ February – March 2016

- Pilot Asphalt Field Level 1 and 2 Classes at Culpeper, Locust Grove and Fredericksburg Campuses
- Class presented live at one site and streamed to other two locations
- Electronically record all sessions for future use on Blackboard
- Provide Asphalt Plant Level 1 and 2 at Fredericksburg Campus (Level 2 includes lab instruction and hands-on participation)



Proposed MCS Timeline

➤ March 2016 – January 2017

- Secure lab equipment for Asphalt Mix Design
- Install lab equipment at Germanna's Fredericksburg Campus
- Revise all class material – textbooks and presentations
- Modify program administration and delivery based on 2016 Pilot Classes
- Identify and contract with industry SME's for other MCS classes
- Begin development of new Classes (i.e., CCPR and FDR)
- Go Live with new MCS Program in January 2017



Benefits to New Program

- On-line MCS certifications for Asphalt Field 1 and 2, Asphalt Plant 1, Surface Treatment and Slurry Seal will allow for year round certification
- Administering certification exams will be handled by VCCS
- VCCS will be providing facilities and infrastructure



Other Benefits

- Most MCS Students Will Not Have to Travel
 - ✓ 22 VCCS colleges across Virginia
 - ✓ Overall cost to agency/company/individual reduced
- Time Commitments for VDOT Instructors Greatly Reduced
 - ✓ Instruction from Germanna Fredericksburg campus for live stream and recorded training modules
 - ✓ Instruction from Germanna Fredericksburg campus for lab related classes
- VDOT's Ownership of Certification Cards, Test Approval, Specification Presentations, etc.



Final Thoughts

- VDOT, Consultants and Companies can get new employees certified virtually anytime throughout the year
- Dedicated lab will allow for more Asphalt Plant 2 and Mix Design Schools throughout the year
- Training materials and presentations can be updated quickly to cover new technologies



