

National Seminar on Moisture Sensitivity of Asphalt Pavements

Breakout Session 4

Construction and Field Performance



National Seminar on Moisture Sensitivity of Asphalt Pavements

Breakout Session 4: *Construction and Field Performance*

■ Identify Best Practices

■ TRAINING

- All team members (agency/contractor)

■ MATERIAL HANDLING

- Temperature, moisture & segregation management

■ PRODUCTION BALANCE & CONTROL

■ UNIFORM OPTIMUM MAT & JOINT DENSITY

■ PROPER DRAINAGE: Surface & Sub surface

■ PRE-PLANNING (WHO IS RESPONSIBLE?)



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Breakout Workshop 4: *Construction and Field Performance*

- Identify Gaps and Barriers
 - CRISIS MODE FOR TRAINING
 - PERSONNEL TURNOVER
 - JOINT TRAINING
 - TIME LAG OF PROCESS CONTROL
 - LACK OF CONTINUOUS TEST RESULTS
 - COMPLEXITY OF PROJECT LOGISTICS
 - INACCURATE DENSITY MEASUREMENTS
 - EQUIPMENT CONSTRAINT
 - PROJECT CONTROL BY FUNDING



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■ Identify Research Needs

- CONTINUOUS DENSITY / STIFFNESS MEASUREMENTS
- REAL TIME AUTOMATED PLANT CONTROL
- AUTOMATED PAVER CONTROL / FEEDBACK
- EFFECT OF TEMPERATURE ON ADHESION
- RELATIONSHIP OF PERMEABILITY TO PERFORMANCE



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Elements of a Strategic Plan

- DEVELOPMENT / IMPLEMENTATION OF JOINT TRAINING COURSES
 - VIRTUAL TRAINING FOR EQUIPMENT OPERATORS
 - BASIC MATERIALS UNDERSTANDING
 - SELF DIRECTED TRAINING
- PRE-CONSTRUCTION (PARTNERING)
 - ROLES DEFINED
 - RESPONSIBILITY ASSIGNED
 - AUTHORITY DELEGATED



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Elements of a Strategic Plan

- **MINIMIZATION OF SEGREGATION**
 - IMPLEMENTATION OF STANDARD DEFINITION OF SEGREGATION (ie NCHRP)
 - ACCURATE MEASUREMENT TOOL
 - INCENTIVE / DISINCENTIVE
- **BALANCED PRODUCTION**
 - IMPLEMENT CONSTRUCTION BEST PRACTICES
 - SUBMITTAL AND IMPLEMENTATION OF A PRODUCTIVITY PLAN



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Elements of a Strategic Plan

- **UNIFORM OPTIMUM DENSITY**
 - OPTIMIZE JOINT DENSITY
 - ACCURATE MEASUREMENT TOOL
 - INCENTIVE / DISINCENTIVE

