

James Mahoney
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PROFESSIONAL EXPERIENCE

January 2004 – Present

Program Director/Head Research Engineer

Connecticut Advanced Pavement Laboratory (CAP Lab)

Responsibilities include: overall program direction including all research projects, managing program personnel, resources and budgets.

March 1996 – December 2003

Operations Manager – CAP Lab

Overall management of the CAP Lab. Managed research projects sponsored by the Joint Highway Research Advisory Council, New England Transportation Consortium and various other research projects including:

- “Superpave® Implementation” -sponsored by the New England Transportation Consortium.
- North Eastern States Pooled Fund subcontract between the North East Center of Excellence for Pavement Technology (Northeastern Superpave® Center at Penn State) and the CAP Lab.
- “Application of Thermal Imaging to Bituminous Concrete Pavements” – sponsored by Connecticut Department of Transportation.
- Design Superpave® pavement sections for experimental test as part of the Federal Long-Term Pavement Performance Program, and develop modified Superpave® procedures for addition of RAP.

Courses Instructed:

- Various New England Transportation Technician Certification Program (NETTCP) courses, including Superpave® PG Binder Technician.
- National Highway Institute training courses on Superpave® technology.
- “Superpave® for Municipalities” and “All About Asphalt” courses for the Connecticut Technology Transfer Center.

Fall 1995 - Present

Adjunct Lecturer - University of Connecticut - Torrington

Courses taught include Foundations of Engineering and Applied Mechanics (I and II).

PROFESSIONAL ACTIVITIES

Co-chair, NETTCP HMA Paving Technician Committee

Member, NETTCP Board of Directors

Member, NETTCP Executive Board

Member, Connecticut DOT’s Task Force for HMA Improvements

Member, School of Engineering Outstanding Staff Member Award Committee

Member, School of Engineering Safety and Facilities Committee

EDUCATION

Master of Science: Geotechnical Engineering, University of Connecticut, August 1995.
Thesis research included the development and implementation of a laboratory testing program. Thesis entitled: *The use of dipolar alkenyl dicarboxylic acid diammonium salts in concrete and incinerator fly ash*

Bachelor of Science: Civil Engineering, University of Connecticut, May 1993.

CERTIFICATIONS

New England Transportation Technician Certification Program (NETTCP) certifications:

- HMA Plant Technician
- HMA Paving Inspector
- Soils and Aggregate Laboratory Technician
- Soils and Aggregate Inspector
- PG Binder Technician
- Quality Assurance Technologist

PUBLICATIONS & TECHNICAL REPORTS

Padlo, Patrycja, James Mahoney, Lisa Aultman-Hall and Scott Zinke, "Correlation of Nuclear Density Readings with Cores Cut from Compacted Roadways," Draft Final Report, June 2005.

Zinke, Scott, Brian Hogge, Chris O'Brien and James Mahoney, "Evaluation of Pavement Crack Treatments – Literature Review," Draft Report, March 2005.

Mahoney, James, Scott A. Zinke, Jack E. Stephens, et. al., "Application of Infrared Thermographic Imaging to Bituminous Concrete Pavements," Final Report – Draft, Connecticut DOT Report Number 2229-F-03-04, July 2003.

Dougan, Charles E., Jack E. Stephens, James Mahoney and Gilbert Hansen, "E* - DYNAMIC MODULUS Test Protocol – Problems and Solutions," Report Number CT-SPR-0003084-F-03-3, April 2003.

Mahoney, James and Jack E. Stephens, "Connecticut Superpave Gyrotory Round Robin – 2003 Final Report," CAP Lab Report Number 2003-01, April 2003.

Myers, Leslie A., James Mahoney and Jack E. Stephens, "Application of Infrared Thermographic Imaging to Bituminous Concrete Pavements," Interim Report, Connecticut Department of Transportation, August 2001.

Stephens, Jack E., James Mahoney and Cory Dippold, "Determination of PG Binder to Use in Hot Mix Containing RAP," Final Report, JHRAC Project Number 99-1, Report Number 00-278, April 2001.

Anderson, David A., M. O. Marasteanu, C. E. Antle, A. Stonex, J. M. Mahoney, J. E. Stephens, "Background Information for the Development of a Statistically Based Acceptance Plan for Performance Graded Binders," NECEPT Pooled Fund Study – Task R6, February 2000.

Stephens, Jack E., James Mahoney and Cory Dippold, "Development of a Test to Measure the Tendency for a Hot-Mix Asphalt to Segregate," JHR99-274, February 2000.

Mahoney, James and Jack E. Stephens, "Superpave Implementation of Binder Testing," NETC Project. 96-1, September 1999.

Stephens, Jack E., James Mahoney and Charles Dougan, "Early Distress of Open-Graded Friction Course," NETC Proj. 97-4, August 1999.

Mahoney, James and Jack E. Stephens, "Moisture Sensitivity for Hot Mix Asphalt Evaluation for Connecticut Department of Transportation Modified AASHTO T283 Method Versus the Strict AASHTO T283 Interpretation," Connecticut Department of Transportation, June 1999.

Anderson, David A., Mihai Marasteanu, James Mahoney and Jack E. Stephens, "Factors Affecting the Variability in the SHRP Binder Tests," The Transportation Research Board Presentation and Publication, 1999.

RESEARCH GRANTS

Year	Months	Agency, Title and PIs	Award
2005	12	Connecticut Department of Transportation, "Establishing the Connecticut Advanced Pavement Laboratory" – James Mahoney	\$164,203
2005	12	Connecticut Department of Transportation, "Evaluation of Pavement Crack Treatments – Phase I " – James Mahoney	\$27,220
2005	12	Connecticut Department of Transportation, "Development of Internet-Based Computer Databases for the Connecticut Department of Transportation – Phase 1B " – James Mahoney	\$215,036
2005	12	Connecticut Department of Transportation, "Evaluation of Long-Term Performance of Pavements Thermally Imaged During Construction" – James Mahoney	\$48,215
2005	12	Connecticut Department of Transportation, "Development of a Procedure to Improve the Correlation Between Nuclear Density Gauges and Cores Cut from Compacted Roadways" – James Mahoney	\$69,883
2004	12	Connecticut Department of Transportation, "Establishing the Connecticut Advanced Pavement Laboratory" – James Mahoney (PI) and Jack Stephens (Co-PI)	\$110,000
2004	12	Connecticut Department of Transportation, "Development of a Highway Construction Quality Assurance Program for the Connecticut Department of Transportation " – James Mahoney	\$264,812
2004	12	Connecticut Department of Transportation, "Evaluation of Long-Term Performance of Pavements Thermally Imaged During Construction" – James Mahoney (PI) and Lisa Aultman-Hall (Co-PI)	\$48,215
2004	12	Connecticut Department of Transportation, "Development of Internet-Based Computer Databases for the Connecticut Department of Transportation – Phase 1B " – James Mahoney (PI) with Lisa Aultman-Hall (Co-PI)	\$136,582