The Concrete Pavement Technology Program

(continued from page 1)

Improved pavement performance, in turn, minimizes traffic congestion by reducing the need for work zones for repair and rehabilitation.

Technology transfer of products resulting from the CPTP is being accomplished under CPTP Task 65. This 5-year activity was initiated in September 2003 and is overseen by an Executive Expert Task Group (ETG) that includes State DOT chief engineers and representatives from industry and academia.

An Engineering ETG, made up of pavement and materials engineers from State DOTs, FHWA field offices, plus representatives from industry and academia, reviews the technical aspects of CPTP products. These products include:

- Guidelines / Technical briefs
- Test protocols / Draft specifications
- Software
- Workshops / Conferences
- Presentations / Videos
- Field demonstrations
- Equipment loans (available from FHWA's Mobile Concrete Laboratory)

The delivery of CPTP products, in workshops and other formats, is tailored to meet the needs of each State DOT and its related industry groups. For more information, please contact:

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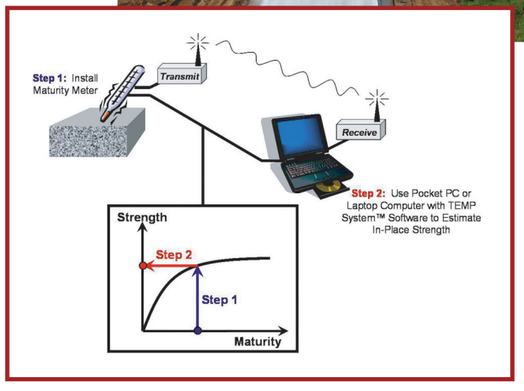

CONCRETE PAVEMENT CPTP TECHNOLOGY PROGRAM

Safer
Quieter
Smoother
Longer Lasting

Products to Improve Concrete Pavement Performance

The **Concrete Pavement Technology Program** (CPTP) is a national program of research, development, and technology transfer that operates within the Federal Highway Administration (FHWA) Office of Pavement Technology.

The CPTP includes some 30 research and demonstration projects, each of which is delivering products for improved design, construction, repair, and rehabilitation of concrete pavements (see page 2). The focus of the program is on cost-effective designs and procedures for long-life performance of Federal-aid highways.

FHWA established goals for the CPTP, reflecting critical needs, as follows:

- Reduce user delays.
- Reduce costs.
- Improve performance.
- Foster innovation.

These goals address the needs of the State departments of transportation (DOTs), the concrete pavement industry, and the highway user, while supporting FHWA's strategic goals to improve the mobility, productivity, and safety of the Nation's highway system. The CPTP supports these goals with products that result in longer lasting, better performing pavements with safer and smoother rides.

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U.S.Department of Transportation
Federal Highway Administration

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CONCRETE PAVEMENT CPTP TECHNOLOGY PROGRAM

U.S.Department of Transportation
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Concrete Pavement Technology Program Products

CONCRETE PAVEMENT CPTP TECHNOLOGY PROGRAM

PRODUCTS	ADVANCED DESIGNS	OPTIMIZED CONCRETE MATERIALS	IMPROVED CONSTRUCTION PROCESSES	RAPID REPAIR AND REHABILITATION	USER SATISFACTION
GUIDELINES AND TECH BRIEFS	– Cost/Benefit of Design Features – Best Practices for Joint Sealing – High-Performance Concrete Pavement (HPCP) Features	– Guidelines to Identify Compatible Concrete Materials – Optimized Mix Design Procedure/COMPASS	– Guidelines for Construction Traffic Management – Dowel Bar Alignment Testing Using MIT Scan-2 – Case Studies of Construction Traffic Management – Early Age Cracking/HIPERPAVE II – Curing Best Practices – Nondestructive Testing (NDT) related topics	– Strategy Selection for Portland Cement Concrete Rehabilitation – Precast Applications for Repairs – Precast Applications for Rehabilitation, Reconstruction, and New Construction – Guidelines for Fast-Track Repair and Rehabilitation	– Guidelines for Texturing Concrete Pavement Surfaces – Smoothness Requirements for Concrete Pavements
TEST PROTOCOLS AND DRAFT SPECIFICATIONS	– Coefficient of Thermal Expansion – Joint Sealing	– Test Protocols to Identify Compatible Concrete Materials	– Maturity Testing for Early Opening to Traffic – Dowel Bar Alignment Testing/MIT Scan-2 – Curing Best Practices – NDT-related topics		– Profile Measurement
SOFTWARE	– Cost/Benefit of Design Features – Colorado Department of Transportation Worksheet for Thin Whitetopping Design	– COMPASS—Optimized Mix Design Procedure	– TEMP System (maturity system) – Performance-Related Specifications (PRS) – Curing Timing/HIPERPAVE II	– SAPER—Strategy Selection for Portland Cement Concrete Rehabilitation	
WORKSHOPS (1–2 days)	– Best Practices for Concrete Pavements (Overall—Design, Materials, Construction, and Rehabilitation) – Best Practices for Thin Whitetopping and Ultrathin Whitetopping – Cost/Benefit of Design Features – Best Practices for Joint Sealing	– Concrete Materials and Mix Design – Guidelines to Identify Compatible Concrete Materials	– Best Practices for Concrete Pavement Construction—Recent Advances – Construction Traffic Management/Best Practices – PRS – HIPERPAVE II – NDT-related topics	– Best Practices for Rapid Repair and Rehabilitation of Concrete Pavements – Precast Applications for Repair, Rehabilitation, Reconstruction, and New Construction	– Surface Characteristics Workshop anticipated in 2006
PRESENTATIONS (30–60 minutes)	– Long Life Portland Cement Concrete Pavement Design and Construction Features – Best Practices for Thin Whitetopping and Ultrathin Whitetopping – Optimizing Pavement Joint Details – Best Practices for Joint Sealing – Other/customized	– High-Performance Concrete for Pavements – Concrete Durability Issues – Optimized Mix Design Procedure/COMPASS – Other/customized	– Best Practices for Concrete Pavement Construction – Construction Management Tools – Construction Traffic Management Best Practices – Best Practices for Curing – Applications of HIPERPAVE II – NDT-related topics – PRS Update – Other/customized	– Rapid Repair and Rehabilitation—Conventional Fast Track – Rapid Repair and Rehabilitation—Precast Pavement Applications – Other/customized	– Pavement Texturing Recommendations – Measuring Pavement Smoothness for Acceptance – Other/customized
VIDEOS			– Air Void Analyzer (AVA) Testing	– Ultrathin Whitetopping Repair – California Precast Pavement – Washington State Department of Transportation Intersection Rehabilitation	
FIELD DEMONSTRATIONS/ EQUIPMENT LOAN PROGRAM (Test equipment is available on loan from FHWA.)	– Coefficient of Thermal Expansion Test (Mobile Concrete Laboratory) – Joint Sealing	– Various possibilities	– MIT Scan-2 – Maturity/TEMP – HIPERPAVE II – Curing Best Practices – AVA – PRS – NDT—various – Mobile Concrete Laboratory	– Precast Paving—Repairs – Precast Paving—Post-Tensioned – Fast-Track Repairs	– Friction Testing (Dynamic Friction Tester, Circular Track Meter)
CONFERENCES, WORKSHOPS, AND FORUMS	– Long Life Portland Cement Concrete Pavements Conference—2006 – CP Road Map Forum—2006			– Precast Paving Forum—August 2005 – State workshops – National conferences—2006, 2009	