

Materials Laboratory Library  
Selected New Acquisitions June 2009

**HARDCOPY BOOKS, REPORTS, MEDIA**

**WSDOT Engineering Publications**

**Design Manual.** Washington State Dept. of Transportation, 2009. M 22-01.

WSDOT M 22-01 2009 v1, v2

<http://www.wsdot.wa.gov/Publications/Manuals/M22-01.htm>

**AASHTO Publications**

**AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 4<sup>th</sup> ed., 2009 Interim Revisions.**

American Association of State Highway and Transportation Officials, 2009. LRFDUS-4-I2.

AASHTO LRFD US-4

*Available online to WSDOT staff* through IHS Standards Expert (link through either the [Library](#) or [Materials Laboratory](#) Intranet site). The IHS document number is AASHTO LRFD U.S. AMD 2.

**Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.**

American Association of State Highway and Transportation Officials, 2009. AASHTO LTS-5.

AASHTO LTS-5 2009

*Available online to WSDOT staff* through IHS Standards Expert (link through either the [Library](#) or [Materials Laboratory](#) Intranet site). The IHS document number is AASHTO LTS.

**Interdisciplinary Interest**

**Alternative Project Delivery, Procurement, and Contracting Methods for Highways.** American Society of Civil Engineers, 2007.

388.11 ALTERNA 2007

**Applied Statistics for Civil and Environmental Engineers** by N.T. Kottegoda and R. Rosso. Blackwell, 2008.

519.502 KOTTEGO 2008

**Geotechnical Engineering, Engineering Geology**

**Advances in Ground Improvement.** American Society of Civil Engineers, 2009. Geotechnical Special Publication no. 188.

624.15136 US-CHIN 2009

**Computer Simulation of Earthquake Effects.** American Society of Civil Engineers, 2000. Geotechnical Special Publication no. 110.

624.15136 GEO-DEN 2000

**Contemporary Topics in Deep Foundations.** American Society of Civil Engineers, 2009. Geotechnical Special Publication no. 185.

624.15 INTERNA 2009

**Contemporary Topics in Ground Modification, Problem Soils, and Geo-Support.** American Society of Civil Engineers, 2009. Geotechnical Special Publication no. 187.

624.15136 INTERNA 2009

**Contemporary Topics in In Situ Testing, Analysis, and Reliability of Foundations.** American Society of Civil Engineers, 2009. Geotechnical Special Publication no. 186.

624.15 INTERNA 2009b

**GeoSupport 2004: Drilled Shafts, Micropiling, Deep Mixing, Remedial Methods, and Specialty Foundation Systems.** American Society of Civil Engineers, 2004. Geotechnical Special Publication no. 124. 624.154 GEOSUPP 2004

**Geosynthetics in Foundation Reinforcement and Erosion Control.** American Society of Civil Engineers, 1998. Geotechnical Special Publication no. 76. 624.153 GEOSYNT 1998

**Geotechnical Measurements: Lab and Field.** American Society of Civil Engineers, 2000. Geotechnical Special Publication no. 106. 624.151 GEO-DEN 2000

**Pile Design and Construction Practice** by Michael Tomlinson and John Woodward. Taylor & Francis, 2008. 624.154 TOMLINS 2008

**Regional Assessment of Sand & Gravel and Crushed Rock Resources on Indian Lands in the Puget Sound and Olympic Peninsula Regions, Washington** by Charles S. Krautmann. Colorado School of Mines M.S. thesis, 2006. 553.62 KRAUTMA 2006

**Terzaghi Lectures 1974-1982.** American Society of Civil Engineers, 1986. Geotechnical Special Publication no. 1. 624.15 TERZAGH 1986

## Pavements

**Examination of Curing Criteria for Cold In-Place Recycling, Phase 2: Measuring Temperature, Moisture, Deflection and Distress from CIR Test Section.** University of Iowa, Public Policy Center, 2009. 625.85 LEE 2009  
[http://www.iowadot.gov/operationsresearch/reports/reports\\_pdf/hr\\_and\\_tr/reports/TR-590%20Final%20Report.pdf](http://www.iowadot.gov/operationsresearch/reports/reports_pdf/hr_and_tr/reports/TR-590%20Final%20Report.pdf)

**Guide for Pavement Friction: Background and Research.** Transportation Research Board, 2009. NCHRP Research Results Digest no. 321. (Final report: NCHRP Web-only Document no. 108.)  
Digest: [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rrd\\_321.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rrd_321.pdf)  
Final report: [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_w108.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_w108.pdf)  
388.4097 RES RES DIG 2009 no321

## Materials, Testing, Inspection

**Corrosion Resistant Alloys for Reinforced Concrete.** Federal Highway Administration, 2009. FHWA-HRT-09-020. 620.16 CORROSI 2009  
<http://www.tfhr.gov/structur/pubs/09020/09020.pdf>

**Gages and Gaging for Unified Inch Screw Threads.** American Society of Mechanical Engineers, 1984. STD ASME B1.2-1983 (Reaffirmed 2007)

**Screw Thread Gaging Systems for Acceptability: Inch and Metric Screw Threads (UN, UNR, UNJ, M, and MJ).** American Society of Mechanical Engineers, 2007. STD ASME B1.3-2007

# ELECTRONIC BOOKS, REPORTS & NEWSLETTERS

## AASHTO Publications

**Laboratory Results of Evaluations on Geotextiles (June 2005 to April 2009 Cycles).** American Association of State Highway and Transportation Officials, 2009. NTPEP Report no. 8001.36.

[http://www.ntpep.org/ProfileCenter/Uploads/GTX\\_Rpt\\_8001.36\\_06-2009.pdf](http://www.ntpep.org/ProfileCenter/Uploads/GTX_Rpt_8001.36_06-2009.pdf)

**Report of Field Performance and Laboratory Evaluation of Select Flexible Delineators (Summer 2008-Winter 2008 Testing Cycle).** American Association of State Highway and Transportation Officials, 2009. NTPEP Report no. 6024.1.

[http://www.ntpep.org/ProfileCenter/Uploads/TTCD\\_Rpt\\_6024.1\\_2009.pdf](http://www.ntpep.org/ProfileCenter/Uploads/TTCD_Rpt_6024.1_2009.pdf)

**Laboratory Results of Evaluations on Geotextiles (June 2005 to April 2009 Cycles).** American Association of State Highway and Transportation Officials, 2009. NTPEP Report no. 8001.36.

[http://www.ntpep.org/ProfileCenter/Uploads/GTX\\_Rpt\\_8001.36\\_06-2009.pdf](http://www.ntpep.org/ProfileCenter/Uploads/GTX_Rpt_8001.36_06-2009.pdf)

## Interdisciplinary Interest

**Guidance for Transportation Project Management.** Transportation Research Board, 2009. NCHRP Web-only Document no. 137.

[http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_w137.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_w137.pdf)

## Geotechnical Engineering, Engineering Geology

**Characterization of the Swelling Properties of Highly Plastic Clays Using Centrifuge Technology.** Texas Dept. of Transportation, 2009.

[http://www.utexas.edu/research/ctr/pdf\\_reports/0\\_6048\\_1.pdf](http://www.utexas.edu/research/ctr/pdf_reports/0_6048_1.pdf)

**Geoengineer.org Newsletter**, no. 54, June 2009. [includes new additions to the Online Geoengineering Library: free books and papers in geoengineering]

<http://www.geoengineer.org/geonews54.htm>

**Implementation Status for Geotechnical LRFD in State DOTs.** Transportation Research Board, 2009. Circular no. E-C 136.

<http://onlinepubs.trb.org/onlinepubs/circulars/ec136.pdf>

**Proceedings of the 59<sup>th</sup> Annual Highway Geology Symposium**, Santa Fe, New Mexico, May 6-9, 2008.

[http://www.highwaygeologysymposium.org/past\\_proceedings.asp](http://www.highwaygeologysymposium.org/past_proceedings.asp)

## Pavements

**Asphalt Technology News** [Newsletter], v. 21, no. 1, Spring 2009.

<http://eng.auburn.edu/files/file1550.pdf>

**Bridge Deck Resurfacing Using Rosphalt 50: Final Report.** Maine Dept. of Transportation, 2009.

<http://www.state.me.us/mdot/transportation-research/pdf/report0301f.pdf>

**CP<sup>2</sup> Center News: Newsletter of the California Pavement Preservation Center**, no. 10, June 2009.

[http://www.ecst.csuchico.edu/depts/cp2c/documents/JUN\\_09\\_CP2\\_NWSLTR\\_FINAL.pdf](http://www.ecst.csuchico.edu/depts/cp2c/documents/JUN_09_CP2_NWSLTR_FINAL.pdf)

**Developing a Sustainable Flexible Pavement Database in Texas.** University of Texas at Austin, Center for Transportation Research, 2009.

[http://www.utexas.edu/research/ctr/pdf\\_reports/0\\_5496\\_1.pdf](http://www.utexas.edu/research/ctr/pdf_reports/0_5496_1.pdf)

**Implementation of the MEPDG for New and Rehabilitated Pavement Structures for Design of Concrete and Asphalt Pavements in Minnesota.** Minnesota Dept. of Transportation, 2009.  
<http://www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=1734>

**Investigation of Automated and Interactive Crack Measurement Systems.** Florida Dept. of Transportation, 2009.  
[http://www.dot.state.fl.us/research-center/Completed\\_Proj/Summary\\_SMO/FDOT\\_BD544\\_36\\_rpt.pdf](http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_SMO/FDOT_BD544_36_rpt.pdf)

**LTPP Newsletter**, v. 5, no. 2, Spring 2009.  
<http://www.fhwa.dot.gov/pavement/ltp/09043.pdf>

**A Method for Predicting Asphalt Mixture Compactability and Its Influence on Mechanical Properties.** Texas Transportation Institute [for] Texas Dept. of Transportation, 2009.  
<http://tti.tamu.edu/documents/0-5261-2.pdf>

**Nonwoven Geotextile Interlayers for Separating Cementitious Pavement Layers: German Practice and U.S. Field Trials.** Federal Highway Administration, 2009.  
[http://www.international.fhwa.dot.gov/pubs/geotextile/geotextile.pdf?utm\\_medium=email&utm\\_source=Transportation%20Research%20Board&utm\\_campaign=TRB+E-Newsletter++06-02-2009&utm\\_content=Customer&utm\\_term=](http://www.international.fhwa.dot.gov/pubs/geotextile/geotextile.pdf?utm_medium=email&utm_source=Transportation%20Research%20Board&utm_campaign=TRB+E-Newsletter++06-02-2009&utm_content=Customer&utm_term=)

**Pilot Implementation of Optimized Aggregate Gradation for Concrete Paving.** Texas Dept. of Transportation, 2009.  
[http://www.utexas.edu/research/ctr/pdf\\_reports/5\\_9026\\_01\\_1.pdf](http://www.utexas.edu/research/ctr/pdf_reports/5_9026_01_1.pdf)

**Subbase and Subgrade Performance Investigation for Concrete Pavement.** Texas Transportation Institute [for] Texas Dept. of Transportation, 2009.  
<http://tti.tamu.edu/documents/0-6037-1.pdf>

**Type III Micro Surfacing to Extend the Life of Concrete Pavement on I-70 in Region Four: Experimental Feature No. X(06)02.** Utah Dept. of Transportation, 2009.  
<http://www.udot.utah.gov/main/uconowner.gf?n=5236515559652682>

**Use of Micro-Surfacing for Pavement Preservation: Final Report.** Maine Dept. of Transportation, 2009.  
<http://www.state.me.us/mdot/transportation-research/pdf/report0203f.pdf>

**Using Foamed Asphalt on a Stabilizing Agent in Full Depth Reclamation of Route 8 in Belgrade: Final Report.** Maine Dept. of Transportation, 2009.  
<http://www.state.me.us/mdot/transportation-research/pdf/report0202f.pdf>

## **Materials, Testing, Inspection**

**Effects of Texas Fly Ash on Air-Entrainment in Concrete: Comprehensive Report.** Texas Dept. of Transportation, 2009.  
[http://www.utexas.edu/research/ctr/pdf\\_reports/0\\_5207\\_1.pdf?utm\\_medium=email&utm\\_source=Transportation%20Research%20Board&utm\\_campaign=TRB+E-Newsletter++06-02-2009&utm\\_content=Customer&utm\\_term=](http://www.utexas.edu/research/ctr/pdf_reports/0_5207_1.pdf?utm_medium=email&utm_source=Transportation%20Research%20Board&utm_campaign=TRB+E-Newsletter++06-02-2009&utm_content=Customer&utm_term=)

**Investigation into Freezing-Thawing Durability of Low-Permeability Concrete with and without Air Entraining Agent.** Iowa State University, Center for Transportation Research and Education, 2009.  
<http://www.intrans.iastate.edu/reports/low-permeability-concrete.pdf>

**Reactive Solutions, an FHWA Alkali-Silica Reactivity News Publication.** Spring 2009, v. 2, no. 2.  
<http://www.fhwa.dot.gov/pavement/concrete/reactive/v02issue02.cfm>

**SELECTED NEW TITLES ON CivilENGINEERINGnetBASE**

<http://www.civilengineeringnetbase.com/>

[Advances in Transportation Geotechnics](#)

[Computational Structural Dynamics and Earthquake Engineering](#)

[Creep, Shrinkage and Durability Mechanics of Concrete and Concrete Structures](#)

[Deep Foundations on Bored and Auger Piles - BAP V](#)

[Geotechnics of Soft Soils: Focus on Ground Improvement](#)

[GIS Cartography](#)

[Rapid Load Testing on Piles](#)