



Airfield and Highway Pavements 2015

*Innovative and Cost-Effective Pavements
for a Sustainable Future*

ASCE

EDITED BY

John Harvey, Ph.D., P.E.

Katie F. Chou, Ph.D., P.E.



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AIRFIELD AND HIGHWAY PAVEMENTS 2015

*INNOVATIVE AND COST-EFFECTIVE PAVEMENTS
FOR A SUSTAINABLE FUTURE*

PROCEEDINGS OF THE 2015 INTERNATIONAL AIRFIELD AND
HIGHWAY PAVEMENTS CONFERENCE

June 7-10, 2015
Miami, Florida

SPONSORED BY
The Transportation & Development Institute
of the American Society of Civil Engineers

EDITED BY
John T. Harvey, Ph.D., P.E.
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Published by the American Society of Civil Engineers

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Published by American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, Virginia, 20191-4382
www.asce.org/bookstore | ascelibrary.org

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Errata: Errata, if any, can be found at <http://dx.doi.org/10.1061/9870784479216>

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ISBN 978-0-7844-7921-6 (E-book PDF)
Manufactured in the United States of America.

Preface

The sustainability of our pavement systems has been recognized as an “aspirational goal”, meaning that we are not quite sure if it is completely possible, we are not completely certain of the definition of sustainability, and we are still developing the means of measuring our progress towards that goal for some aspects of our different definitions. However, it is abundantly clear that we need to reduce the environmental impact of building and operating our pavement systems, that we have growing scarcity and uncertainty regarding the material and energy resources needed, and that we often have insufficient financial resources to complete that mission. The theme of this conference reflects these challenges faced by pavement engineers and managers, “Innovative and Cost-Effective Pavements for a Sustainable Future”.

The conference included both examples of current practice and the latest results of research, development and implementation of cutting edge pavement technology and practice. It brought together professionals involved in design, construction, management and research to share and discuss new ideas to meet our common challenges.

The papers in these proceedings are the result of process of abstract review, peer review by a scientific committee of more than 90 international pavement experts, with four to six reviewers for all papers. The papers cover a wide range of topics including highway and airfield pavements, all kinds of pavement materials, all phases of the pavement enterprise including design, construction, evaluation, preservation, repair, rehabilitation and recycling. Recent research was presented, including sessions on results from the FAA research and development and the SHRP2 programs, and modeling and analysis, accelerated pavement testing, instrumentation and cost analysis. Sessions covered design and management of pavements in Latin America and special sessions on large airfield and highway projects in the Miami/Fort Lauderdale area. Workshops prior to the conference presented the latest information on the FAA’s PAVAIR program and Sustainability through Pavement Preservation.

We would like to thank the members of the scientific committee who volunteered their time to evaluate the papers submitted and offer constructive critiques to the authors. We are also grateful for the work of the steering committee members in planning and organizing the conference: Imad Al-Qadi, Scott Murrell, Jeb Tingle, Shiraz Tayabji, Julie Vandenbossche and Jorge Prozzi. We are also grateful for the work of Eileen Velez-Vega, Tim Fish, Heath Jenkins and Manuel Bejarano as members of the local organizing committee, and Steve Wiesner and Oscar Gonzalez for their help with the technical tours and sessions. Finally, we would like to especially thank the ASCE T&DI staff who helped put the conference together: Muhammad Amer, Andrea Baker, Elaine Watson, Drew Caracciolo, and Sheylla Shiell.

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Contents

Performance Evaluation of More Sustainable Asphalt Mixtures

Evaluation of Semicircular Bending Test for Assessing Cracking Potential of Superpave Mixtures with High Reclaimed Asphalt Pavement Content.....1

Ananna Ahmed, Syeda R. Aziz, M. Hossain, and Blair Heptig

Investigation on the Effects of Recycled Asphalt Shingle as an Additive to Hot-Mix Asphalt9

Behnam Golestani, Hamid Maherinia, Boo Hyun Nam, and Amir Behzadan

Characterization of a Warm Mix Asphalt Containing Reclaimed Asphalt Pavements19

H. A. Rondón, C. F. Urazán, and S. B. Chávez

TiO₂-Containing Aggregates with the Function of Photocatalytic Decomposition of Nitrogen Dioxide31

D. Wang, M. Hüben, Z. Leng, M. Oeser, and B. Steinauer

Impact of Binder Modification on Asphalt Concrete and Mastic Properties

Selection of Optimum Nano-Modifier Content to Ensure Proper Performance of the Asphalt Binder.....41

Fabricio Leiva-Villacorta, José Pablo Aguiar-Moya, and Luis Loría-Salazar

Creating a Performance-Based Asphalt Mix Design to Incorporate Oil Sand...53

Michael C. Vrtis and Pedro Romero

Investigating the Aging Susceptibility of Bio-Modified Asphalts.....62

Ellie H. Fini, Daniel Oldham, Felix Smith Buabeng, and Shahrzad Hossein Nezhad

Characterization of Damage and Aging Resistance of Asphalt Mastics with Coal Combustion By-Products74

Emil G. Bautista, Ahmed F. Faheem, Rajan Saha, and Konstantin Sobolev

Characterization of Asphalt Mixtures

Moisture Susceptibility of Superpave Mixtures with Varying Binder Contents86

Kiran Kumar Uppu, M. Hossain, Lon S. Ingram, and Rick Kreider

Laboratory and Field Evaluation of Asphalt Concrete Mixture Workability and Compactability	97
Samer Dessouky	

Modeling the Effect of Filler Materials on Performance of Hot Mix Asphalt Using Genetic Programming	107
Mehran Mazari and Younes Niazi	

Performance Properties of Polymer Modified Pelletized Asphalt Mixtures.....	120
Serji N. Amirkhanian, Feipeng Xiao, and Kelly Sockwell	

Modifications of Warm and Hot Asphalt Concrete and Performance

Effect of Warm Mix Technologies and Testing Protocol on Moisture Susceptibility of Asphalt Mixtures	131
J. Richard Willis and Kristoffer Leatherman	

Low Temperature Performance of Superpave Recycled Hot Mixtures in Ontario.....	143
Xiomara Sanchez, Doubra C. Ambaiowei, and Susan L. Tighe	

Plasma Empowered Limestone Composite Structures for Asphalt Performance Applications.....	155
S. S. Karahancer, M. Kiristi, S. Terzi, M. Saltan, A. U. Oksuz, and L. Oksuz	

Developments in Tack Coat Technology

Evaluation of Nanotechnology Additive on Tack Coat Moisture Resistance and Bond Strength	167
J. Richard Willis and Adam Taylor	

Evaluation of the Bond Strength of Asphalt Overlays	179
John P. Zaniwski, Seth F. Knihtila, and Hadi N. Rashidi	

Chemical-Mechanical Interaction of Non-Tracking Tack Coat and Aggregate on Bond Strength	191
Ah Young Seo, Maryam S. Sakhaeifar, and Bryan T. Wilson	

Development of Test Procedures to Measure Tracking Resistance of Non-Tracking Tack Coat	203
B. T. Wilson, M. S. Sakhaeifar, M. Yelpale, A. Seo, and S. Shah	

Hot In-Place Recycling and Use of Recycled Materials in Asphalt Concrete

- Effect of Asphalt Rejuvenating Agent on Rutting and Creep Performance of Reclaimed Asphalt Pavement215**
Nassim Sabhafer and M. Hossain

- Sustainable Utilization of MSWI Bottom Ash as Road Construction Materials, Part I: Physical and Mechanical Evaluation225**
Jinwoo An, Behnam Golestani, Boo Hyun Nam, and Jeffrey L. Lee

Performance Specifications and Quality Control for Pavements

- Infrared Thermography Technologies for Thermal Measurement and Control of HMA Pavement Construction.....236**
Robert L. Schmitt, Tyler T. LeClair, and James O. Hedderich

- Performance Related Specifications Development of Hot Mix and Concrete Pavement Projects Using Field Data248**
P. Buddhavarapu, J. A. Prozzi, A. Fortier Smit, and P. A. Serigos

- Case Study on Premature Pavement Failure and Successful Reconstruction of a High RAP Section at the NCAT Test Track260**
Michael C. Vrtis and David H. Timm

Innovative Assessment of Pavement Smoothness

- A Pavement Longitudinal Profiler Based on Inertial Measurement and 30 KHz 3D Sensors — A Preliminary Study272**
Yang Liu, Allen Zhang, Kelvin C. P. Wang, and Joshua Qiang Li

- Measurement through Dynamic Tire Pressure Sensor inside the Tire282**
Yubo Zhao and Ming L. Wang

Quantification and Effects of Surface Texture

- Evaluation of Variability of Macrotexture Measurement with Different Laser-Based Devices294**
M. D'Apuzzo, A. Evangelisti, G. W. Flintsch, E. de L. Izeppi, D. E. Mogrovejo, and V. Nicolosi

- Simulation and Evaluation of the Seasonal Evolution of the Skid Resistance on Asphalt Surfaces Using Aachen Polishing Machine.....306**
D. Wang, X. Xie, M. Oeser, and B. Steinauer

Bicycle Ride Quality: The Effect of Pavement Treatment Texture	318
H. Li, J. Harvey, R. Wu, and D. Jones	

Airport Pavement Evaluation, Design, and Construction

Release of the French Technical Guidance for Flexible Airfield Pavement Assessment Using HWD	330
M. Broutin and D. Mounier	

Dry Mass Stabilization for Airport Taxiway and Apron Expansion in South Florida.....	342
J. D. Hussin and M. Gillis	

Case History: Concrete Pavement Reconstruction of the Intersection of Runway 18L-36R and 8-26 at Tulsa Int'l Airport.....	351
M. O. Bejarano, S. Kahle, W. McGrew, B. Aussieker, and J. Hough	

Innovative and Sustainable Runway Rehabilitation at Niagara Falls International Airport.....	363
Steve Moulton, Chris Decker, Jim Falvey, and John Diebold	

Case History: New South Runway Design and Construction at Fort Lauderdale International Airport: Geotechnical and Pavement Considerations.....	375
M. O. Bejarano, J. Duarte, D. Larson, and T. Roda	

Instrumentation and Accelerated Testing of Pavement Sections

Aircraft Lateral Wander Characterization on a Runway using Optical Sensors—Instrumentation and Methodology	386
D. Mounier, M. Broutin, and M. F. Espie	

Performance Evaluation Method and Indexes for Asphalt Pavement Strain Gauges.....	396
Hongduo Zhao, Songyuan Gu, Can Wu, and Jie Yuan	

Dynamic Load Testing in an Instrumented Experimental Short Continuously Reinforced Concrete Pavement	406
L. Salles, J. T. Balbo, and D. S. Pereira	

Roller Compacted Concrete over Soil Cement under Accelerated Loading.....	418
Zhong Wu and Moinul Mahdi	

Permeable and Roller Compacted Concrete Pavements

Roller Compacted Concrete Pavement in Virginia	429
M. Shabbir Hossain and H. Celik Ozyildirim	
Low Fines Content Roller-Compacted Concrete	441
J. LaHucik and J. Roesler	
Residual Strength of Pervious Concrete under Static and Impact Loading	453
Nicholas A. Brake, Hamid Allahdadi, Fatih Adam, Nicholas Carillo, and Murphy Mason	

Concrete Pavement Technology Topics

Fatigue Testing of High Strength Concrete Beams at the National Airport Pavement Test Facility	465
Jeffrey Stein, David R. Brill, and Qiang Li	
CRCP Design for Guided Bus Route in the UK.....	477
M. O. Bejarano	
Investigation of ESALs versus Load Spectra for Rigid Pavement Design	488
A. C. Bordelon, J. E. Hiller, J. R. Roesler, and V. G. Cervantes	
Impact of Diamond Grinding on Rigid Pavement Performance.....	500
Syed Waqar Haider, Karim Chatti, Imen Zaabar, Ronell Joseph Eisma, and Tyler Frederick	
Experimental Evaluation of Erosion Processes in Rigid Pavements	512
Silvia Caro, Bernardo Caicedo, Daniel Varela, Julieth Monroy, Jaime Wills, Maria A. Hernandez, Oscar Velasquez, and Diana Beltran	

Life Cycle Use Phase: Thermal Properties of Pavements and Their Effects

Modeling of Asphalt Pavement Temperature under Various Seasons: Impact of Thermochromic Materials.....	524
Jianying Hu and Xiong (Bill) Yu	
Influence of Sustainable Technologies on In-Place Thermal Properties of Asphalt Pavements.....	536
M. A. Díaz-Sánchez and D. H. Timm	
Calibration of HDM-4 Fuel Consumption Model to Field Measurement on I-95 in Florida	548
Michael Bienvenu and Xin Jiao	

Distress Measurement and Pavement Evaluation Techniques

Accuracy and Precision Assessment of High-Speed Measurements of Pavement Surface Cracking	560
P. A. Serigos, P. Buddhavarapu, J. A. Prozzi, A. de Fortier Smit, and M. R. Murphy	
Condition Evaluation of General Aviation Airport Runway Pavements	572
Jose Villarreal and M. Hossain	
Evaluation of Nontraditionally Surfaced Airfield Pavements	581
Lucy P. Priddy and Jeb S. Tingle	

Sustainable Materials in Pavement Applications

Sustainable Utilization of MSWI Bottom Ash as Road Construction Materials, Part II: Chemical and Environmental Characterization	593
Kazi M. Tasneem, Boo Hyun Nam, and Jongwan Eun	
Pavement Subgrade Stabilization Using Recycled Materials	605
Nishantha Bandara, Tarik Habib Binoy, Haithem S. Aboujrad, and Juliana Sato	
Long-Term Aging of Recycled Asphalt Binders: A Laboratory Evaluation Based on Performance Grade Tests	617
M. Mohammadafzali, H. Ali, J. A. Musselman, G. A. Sholar, S. Kim, and T. Nash	

Cost Effectiveness of Structural Alternatives, Materials, Maintenance, and Rehabilitation

Maximizing the Use of Local, Polish Susceptible Aggregates to Minimize Costs and Environmental Impacts	628
Rebecca S. McDaniel, Ayesha Shah, and Karol Kowalski	
Research of Different Perpetual Pavement Structures Based on Performance Comparison and LCCA in Jiangsu Province, China	640
Yuqin Zhu and Fujian Ni	

Innovative Crack Sealing Analysis and Cost Estimation for Airport Runway Shoulders Using 3D Laser Technology and Automatic Crack Detection Algorithms	652
Yichang Tsai, Zhaohua Wang, Chenglong Jiang, Bob Mahfood, and John Rone	

Pavement Consumption and Cost Analysis

A Rational Framework for Determination of Tariff Rates for Overweight Trucks	662
Ambarish Banerjee and Jorge A. Prozzi	