



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

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Miami, Florida

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EDITED BY
John T. Harvey, Ph.D., P.E.
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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 Vandebossche 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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