

PUBLICATIONS:

(* peer-reviewed)

1. *M. Akhter, Hossain, M, Boyer, J. and Parcels, W. Factors Affecting Roughness Progression on PCC Pavements in Kansas. **Forthcoming in the Transportation Research Record (in press)**, Journal of the Transportation Research Board, National Research Council, 2002.
2. *Hossain, M., Hancock, J. and Wu, Z. Cross -Tensioned Concrete Pavement. **Forthcoming in the ASCE Journal of Transportation Engineering**, American Society of Civil Engineers, Reston, Va.
3. *Hossain, M. and Chen, J. Optimization of Superpave Mixture Volumetric Properties. **Forthcoming in the International Journal of Pavement Engineering (in press)**, Gordon and Breach Science Publishers, U.K.
4. *Hossain, M. and Nabors, D. Testing and Evaluation of Used Automobile Tires and Recycled Tire-Derived Materials for Low-Cost Crash Cushions. **Accepted for Publication in the ASCE Journal of Materials in Civil Engineering**, American Society of Civil Engineers, Reston, Va.
5. *Z. Wu, M. Hossain and A. Gisi. Estimation of Lives of Mill-and-Inlay Rehabilitation Strategies. **Accepted for Publication in the International Journal of Pavement Engineering**, Gordon and Breach Science Publishers, U.K.
6. Hossain, M., T. Chowdhury and A. Gisi. Bayesian Regression Methodology for Network-Level Pavement Project Prioritization. **Accepted for Publication in the International Journal of Pavement Engineering**, Gordon and Breach Science Publishers, U.K.
7. Hossain, M. and Zhong W. Finite Element Simulation of Rutting on Superpave Pavements. **Published in the Proceedings of the 9th International Conference on Asphalt Pavements**, Copenhagen, Denmark, August 17-22, 2002.
8. Siddique, Z, Hossain, M, Devore, J. and Parcels, W. Effect of Curling on As-Constructed Smoothness of PCC Pavement. **Published in the 81st Transportation Research Board Annual Meeting Preprint CD-ROM**, January 2002.
9. Dumitru, N., Hossain, M. and Wojakowski, J. Construction and Performance of Ultra-Thin White Topping in Kansas. **Published in the 81st Transportation Research Board Annual Meeting Preprint CD-ROM**, January 2002.
- *10. Akhter, M, Hancock, J, **Hossain, M.**, Boyer, J. and Parcels, B. As-Constructed Smoothness Measurement of Portland Cement Concrete Pavements Using Lightweight Profilometers." **In Transportation Research Record No. 1764**, Journal of the Transportation Research Board, National Research Council, pp. 189-200, 2001.

- *11. **Hossain, M.** and S. Uddin. "Evaluation of General Aviation Airport Condition in Kansas - Results and Implications." **Proceedings** of the 5th International Conference on Managing Pavements, August 11-14, Seattle, Wash., 2001 (**CD-ROM**).
- *12. M. Akpinar, J. Hancock, **M. Hossain** and A. Gisi. "Theoretical Investigation of Cross-Tensioned Concrete Pavement." Published in the Proceedings of the 7th International Conference on Concrete Pavements, September 11-14, Orlando, Fl., 2001, pp. 939-952.
13. Nelson, R. and **M. Hossain**. "An Energetic and Economic Analysis of Using Scrap Tires for Electricity Generation and Cement Manufacturing," **Proceedings** of the International Symposium on Recycling and Reuse of Used Tyres, University of Dundee, Dundee, U.K., March 19-20, 2000, pp. 119-127.
14. J. Hancock, **M. Hossain** and W. Parcells.. "An Update on Kansas Experience With PCCP Smoothness Specifications and Incentives." **Proceedings** of the Mid-Continent Transportation Symposium, Ames, Iowa, May 15-16, 2000, pp. 156-159.
15. J. Hancock and **M. Hossain**. "Cross Tensioned Concrete Pavement, an Alternative Modern PCCP Design." **Proceedings** of the Mid-Continent Transportation Symposium, Ames, Iowa, May 15-16, 2000, pp. 207-210.
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17. ***Hossain, M.**, S. Romanoschi and A. Gisi. "Seasonal and Spatial Variation of Asphalt Pavement Subgrade Response." **Published in Geotechnical Special Report No. 98: Pavement Subgrade, Unbound Materials, and Nondestructive Testing**, M. Mamlouk, Ed., ASCE, 2000, pp. 87-97.
18. ***Russell, H.** and **M. Hossain**. "Estimation of Design Resilient Modulus of Fine-Grained Subgrade Soil from Falling Weight Deflectometer Tests." **Published in Geotechnical Special Report No. 98: Pavement Subgrade, Unbound Materials, and Nondestructive Testing**, M. Mamlouk, Ed., ASCE, 2000, pp. 199-207.
19. ***Z. Wu, M. Hossain and A. Gisi**. "Performance of Superpave Mixtures Under Accelerated Load Testing." In the Transportation Research Record No. 1716, Journal of the Transportation Research Board, National Research Council, Washington, D.C., 2000, pp. 126-134.
20. ***Hossain, M., T. Chowdhury, S. Chitrapu and A. Gisi**. "Network-Level Pavement Structural Evaluation." *In the ASTM Journal of Testing and Evaluation, Vol. 28, No. 3, 2000, pp. 199-207.*
21. ***Hossain, M., T. Chowdhury and A. Gisi**. "Bayesian Regression Methodology for Network-Level Pavement Project Rating." *Preprint #991006* in **CD-ROM** for the 79th Annual Meeting of the Transportation Research Board, National Research Council, Washington, D.C., January 1999.

22. ***B.K. Vijayanath, Z. Wu, M. Hossain and A. Gisi.** "Instrumentation of the Superpave Test Sections at the Kansas Accelerated Testing Laboratory." In ***the Proceedings of the International Conference on Accelerated Pavement Testing***, Reno, Nev., Oct 18-20, 1999 (CD-ROM).
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26. ***Hossain, M., A. Habib and K. C. Clowers.** "Response of Class C Fly Ash Concrete in the SHRP Rapid Immersion Test." ***Supplementary Paper of the 6th CANMET/ACI Intl. Conf. on Fly Ash, Silica Fume, Slag and Natural Pozzolans in Concrete***, Bangkok, Thailand, May 31 - June 5, 1998, pp. 239-252.
27. ***Hossain, M., A. Habib, B. Long and A. Gisi.** "On the Evaluation of Concrete Pavement Response with a Falling Weight Deflectometer." ***Proceedings of the 6th International Purdue Conf. on Concrete Pavement***, 1997, Indianapolis, IN, pp. 155 -174.
28. ***M. Hossain, A. Habib and T. LaTorella.** "Structural Layer Coefficients of Crumb Rubber-Modified Asphalt Concrete Mixtures." In ***Transportation Research Record No. 1583***, Journal of the Transportation Research Board, National Research Council, Washington, D.C., 1997, pp. 62-70.
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37. ***Devore, J., Hossain, M. and Parcels, W.** "An Automated System for Determination of Pavement Profile Index and Location of Bumps for Grinding from the Profilograph Traces." In ***Transportation Research Record No. 1505***, Transportation Research Board, National Research Council, Washington, D.C., 1996, pp. 47-56.
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55. ***Hossain, M., Metcalf, D. and Scofield, L** "Performance of Recycled Overlays in Southwestern Arizona". In **Transportation Research Record No. 1427**, Transportation Research Board, National Research Council, Washington, D.C. 1993, pp. 30-37.
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