

## PUBLICATIONS/PRESENTATIONS BY LTRC PERSONNEL : FY 2011-12

- Xiaoduan Sun "Four-lane to Five-lane Urban Roadway Conversions for Safety" Journal of Transportation Safety and Security
- Yu X., Abu-Farsakh M., Yoon S., Tsai C., and Zhang Z., "Implementation of LRFD Design of Drilled Shafts in Louisiana, ASCE Journal of Infrastructure Systems. Vol. 18, number 2, pp. 103-112.
- Abu-Farsakh M., Souci G., Voyiadjis G., and Chen Q., 2012 "Evaluation of Factors Affecting the Performance of Geogrid-Reinforced Granular Base Material Using Repeated Load Triaxial Tests," ASCE Journal of Materials in Civil Engineering, Vol. 24, No. 1, pp.
- Chen, Qiming, and Abu-Farsakh, M., 2012 "Structural Contribution of Geogrid Reinforcement in Pavement," proceedings of the GeoCongress 2012 conference, Oakland, CA.
- Yu, Xinbao, and Abu-Farsakh, M., 2012 "Separated Resistance Factors of Drilled Shafts Based on O-cell Tests," proceedings of the GeoCongress 2012 conference, Oakland, CA.
- Wu, Z., Zhang, Z., and Abadie, C. (2012). "Determining Structural Strength of Existing Asphalt Layer Using Condition Survey Data." International Journal of Pavement Engineering, DOI:10.1080/10298436.2012.677845.
- Wu, Z., Chen, X., Yang, X., and Zhang, Z. (2011). "A Finite Element Model for Rutting Prediction of Flexible Pavement with Cementitiously-Stabilized Base/Subbase." Journal of Transportation Research Record, No. 2226, 104-110.
- Zhang, M., and Tao, M. (2011), A Finite Element Based Parametric Study on Ground Vibrations during Pile Driving, GeoRisk 2011: Risk Assessment and Management, Atlanta, GA, pp. 931-938.
- "Crash Modification Factor for an Inexpensive yet Very Cost Effective Safety Improvement: Converting Undivided Four-Lane Urban Roadways to Five-Lane Roadways" 2012 TRB meeting
- Chen, Qiming, and Abu-Farsakh, M., 2012 "Structural Contribution of Geogrid Reinforcement in Pavement," presented at the GeoCongress 2012 conference, Oakland, CA.
- Yu, Xinbao, and Abu-Farsakh, M., 2012 "Separated Resistance Factors of Drilled Shafts Based on O-cell Tests," presented at the GeoCongress 2012 conference, Oakland, CA.
- Abu-Farsakh, M., 2012, Dubai "Instrumentation and Full-Scale Lateral Load Testing of a Batter Pile Group Foundation at I-10 Twin Span Bridge," presented at the Deep Foundations

Institute Middle East Conference (DFIMEC), Dubai, UAE.

- Abu-Farsakh M., Yu X., and Zhang Z., 2012 “Calibration of Side, Tip, and Total Resistance Factors for LRFD of Drilled Shafts,” presented at the 91st TRB annual meeting, Washington, D.C.
- Abu-Farsakh M., Gu J., Voyiadjis G., and Chen Q., 2012 “Finite Element Analysis to Evaluate Geogrid Base Reinforcement in Flexible Pavement,” presented at the 91st TRB annual meeting, Washington, D.C.
- Zhang Y., Abu-Farsakh M., and Voyiadjis G., 2012 “Finite Element Analysis of a Full-scale Lateral Load Test on Batter Pile Group Foundation,” presented at the 91st TRB annual meeting, Washington, D.C.
- Ishak, S., Y. Qi\*, and P. Rayaprolu\*. (2012) Crash Analysis and Safety Evaluation of Joint and Conventional Lane Merge Configurations for Freeway Work Zones, *Journal of Traffic Injury Prevention*, Vol. 12 (2).
- Qi, Y. \*, S. Ishak, B. Wolshon, and C. Alecsandru\*. (2012) Traffic Behavior and Compliance to Truck-Restriction Policies on Four-Lane Rural Freeways, *Journal of Transportation Safety and Security*, Vol. 4(2).
- Antipova, A., and C. Wilmot, Alternative Approaches for Reducing Congestion in Baton Rouge, Louisiana. *Journal of Transport Geography*, 24, 2012. pp. 404-412.
- Alecsandru, C. \*, S. Ishak, J. Stanley\*, and Y. Qi\*. (2012) Passenger Car Equivalent of Trucks on Four-Lane Rural Freeways under Lane Restriction and Different Traffic Conditions, accepted for publication in the *Canadian Journal of Civil Engineering*, in press.
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- Dixit, V. and S. Ishak (2012) Behavioral Model for Stochastic Characteristics of Speed Transitions, Preprint CD-ROM of the 91st Annual Meeting of TRB, National Research Council, Washington D.C.
- Qi, Y. and S. Ishak. (2011) Stochastic Characteristics of Freeway Traffic Speed and Application to Short-Term Speed Prediction, Preprint CD-ROM of the 90th Annual Meeting of TRB, National Research Council, Washington D.C. #
- Qi, Y. and S. Ishak. (2011) Application of Hidden Markov Models to Short-Term Speed Prediction during Peak Periods, Preprint CD-ROM of the 90th Annual Meeting of TRB, National Research Council, Washington D.C. #
- 2012 TRB Annual meeting presentation: Crash Modification Factor for an Inexpensive yet Very Cost Effective Safety Improvement: Converting Undivided Four-Lane Urban Roadways

to Five-Lane Roadways

- Gudishala, R., and C.G. Wilmot, A comparison of time-dependent sequential logit and nested logit for modeling hurricane evacuation demand. Proceedings of the 91st Annual Meeting of the Transportation Research Board, Washington D.C., January 22-26, 2012.
- Fu, H. and C.G. Wilmot, Evaluating alternative pavement marking materials. Proceedings of the 91st Annual Meeting of the Transportation Research Board, Washington D.C., January 22-26, 2012.
- Dixit, V., C.G. Wilmot, and B. Wolshon, Modeling risk attitudes in evacuation departure choices. Proceedings of the 91st Annual Meeting of the Transportation Research Board, Washington D.C., January 22-26, 2012.
- Wilmot, C.G., Public response to time-dependent audio-visual depictions of hurricane threats. Presentation at National Hurricane Conference, Orlando, Florida, March 26-29, 2012.
- Cheng, G., and C.G. Wilmot, Development of a dynamic disaggregate hurricane evacuation destination choice model. National Evacuation Conference, Hilton Riverside, New Orleans, February 7-9, 2012.
- Gudishala, R., and C.G. Wilmot, Random coefficient time-dependent sequential logit for modeling hurricane evacuation demand, National Evacuation Conference, Hilton Riverside, New Orleans, February 7-9, 2012.
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- Rupnow, T.D. "Evaluation of the Compressive Strength and Rapid Chloride Permeability of High Replacement Ternary Mixtures." Transportation Research Board 91st Annual Meeting, January 22-25, 2012, Washington, D.C.
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- King, W., Abadie, C., Kabir, M., “New Ladotd Specifications For Asphaltic Concrete”, Louisiana Civil Engineering and Conference Show, Lafayette, La., Thursday, September 22, 2011.
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- King, W., Stringfellow, M., Kabir, M., “In-Place Recycling in Louisiana”, Southeastern States Regional In-Place Recycling Conference, August 30 – September 1, 2011, Atlanta, Georgia.
- King, W., Abadie, C., Kabir, M., “Asphalt Research”, 2012 TRB AFK 10 Committee Meeting, April 11 - 12, 2012, Baton Rouge, Louisiana.
- King, W., Mohammad, L.N., “Importance of Interface Bond Strength Through Tack Coat”, 91st Annual Meeting of the Transportation Research Board, Jan 22 - 26,2012, Washington, D.C.
- King, W., Mohammad, L.N., “Round Robin Evaluation of Automated Testing Equipment for Related Asphalt Materials”, 91st Annual Meeting of the Transportation Research Board, Jan 22 - 26,2012, Washington, D.C.
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- King, W., Kabir, M., Cooper, III, S., “Thin Lift Specs/Louisiana’s Experience with Open-Graded Friction Course (OGFC) mixtures”, 53<sup>rd</sup> LAPA Annual Meeting, Point Clear, Al, June 1, 2012.
- Kabir, M., “Update on Multiple Stress Creep Recovery (MSCR) Research”, 53<sup>rd</sup> LAPA Annual Meeting, Point Clear, Al, June 2, 2012.
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- Icenogle, P.J. and Rupnow, T.D. "Development of a Precision Statement for Concrete Surface Resistivity." Presented at the 91st Transportation Research Board Meeting, Washington, D.C., January 22-25, 2012.
- Rupnow, Tyson. "A Guide to Ternary Cementitious Mixtures and an Overview of the Proposed Changes to the 901 Specifications." Presented at the ASCE Louisiana Chapter of the Transportation and Development Institute: Pavement Engineering Seminar, Baton Rouge, LA, August 17, 2011.
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- Rupnow, Tyson. "Good curing Practices, Concrete Workshop, New Orleans, LA, October 26, 2011.
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- 1. Mohammad, L. N., Elseifi, M., Bae, A., Button, J., Patel, N., and Scherocman, J. "Optimization of Tack Coat for HMA Placement," National Cooperative Highway Research Program, Final Report, Washington, D.C., 2012.
- 2. Nazarian, S., Mohammad, L. N., and Puppala, A., "Modulus-Based Construction Specification for Compaction of Earthwork and Unbound Aggregate." National Cooperative Highway Research Program, Interim Report, Washington, D.C., 2011.
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- Mohammad, L., "A New Approach to Evaluate Moisture Damage of Asphalt Mixtures." Presented at the 2011 SEAUPG Annual Meeting, Savannah, Georgia, November 15-17, 2011.
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- "Crash Modification Factor for an Inexpensive yet Very Cost Effective Safety Improvement: Converting Undivided Four-Lane Urban Roadways to Five-Lane Roadways" 2012 TRB meeting
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