Mostafa Elseifi, PhD, PE

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Department of Civil and Environmental Engineering
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EDUCATION

Virginia Polytechnic Institute and State University, Blacksburg, VA ▪ 2003

Ph.D. in Civil and Environmental Engineering (Transportation and Infrastructure Systems)

Virginia Polytechnic Institute and State University, Blacksburg, VA ▪ 1999

M.Sc. in Civil and Environmental Engineering (Materials)

Cairo University, Cairo, Egypt ▪ 1996

B.Sc. in Civil and Environmental Engineering – with project honors

PROFESSIONAL AND ACADEMIC EXPERIENCE

Louisiana State University – Department of Civil and Environmental Engineering

2017 to Present	Professor, Baton Rouge, LA
2015 to 2016	Associate Professor, Baton Rouge, LA
2012 to 2014	Lloyd Guillory Distinguished Associate Professor, Baton Rouge, LA
2011 to 2012	Lloyd Guillory Distinguished Assistant Professor, Baton Rouge, LA
2007 to 2011	Assistant Professor, Baton Rouge, LA

Bradley University – Department of Civil Engineering and Construction

2005 – 2007 Assistant Professor, Peoria, IL

University of Illinois at Urbana-Champaign

2004 – 2005 Research Scientist

Virginia Tech Transportation Institute

2003 Senior Research Associate, Virginia Tech Transportation Institute, VA

Virginia Polytechnic and State University

1998 Graduate Research Assistant, Virginia Tech, Blacksburg, VA

National Contractor Company

1997 Field Engineer, National Contractor Company, Cairo, Egypt
- Field engineer in the construction of an Olympic swimming pool in Cairo
- Helped prepare construction strategy for reinforced-concrete casting

Association Française pour La Formation Professionnel

1996 Assistant Manager, French Association for Professional Formation, Cairo, Egypt
- Responsible for bid preparation and assist in decision-making

TEACHING EXPERIENCE

Louisiana State University

2015 – 2018	CE 4780/4660	Infrastructure Condition Assessment
2013 – 2017	CE 4670	Fundamentals of Pavement Design
2012 – 2014	CE 7750	Graduate Seminar
2012 – 2016	CE 3300	Geotechnical Engineering
2010 – 2018	CE 7700	Advanced Pavement Design
2007 – 2011	CE 2720	Numerical Methods for Engineers
2008	CE 3600	Traffic Engineering
2008 – 2017	CE 7740	Pavement Management Systems

Bradley University

2006 – 2007 Pavement Design with Laboratory
2005 – 2006 Geotechnical Engineering with Laboratory

Virginia Polytechnic and State University

2004 Asphalt Technology
2003 Assistant Lecturer – Pavement Design
2001 Lab Instructor – Civil Engineering Materials
2001 Assistant Lecturer – Finite Element Analysis of Structures

Misr International University

1998 Teaching Assistant and Lab Instructor – Mechanical and Chemical Behavior of Materials

HONORS AND AWARDS

- Editor's Choice Award – 2017
  - Canadian Journal of Civil Engineering
- Michael R. Mangham Tiger Athletic Foundation Undergraduate Teaching Award – 2013
  - Louisiana State University
- ASCE Outstanding Reviewer Award – 2013
  - Journal of Engineering Mechanics
- ASCE Outstanding Reviewer Award – 2013
  - Journal of Nanomechanics and Micromechanics
- Research Achievement Award – 2013
  - Department of Civil and Environmental Engineering
  - Louisiana State University
- Runner-up of the W.J. Emmons Annual Award – 2010
  - Association of Asphalt Paving Technologist (AAPT)
  - Runner-up for the best paper at the AAPT 2010 Annual Meeting
- Grant D. Mickle Award – 2006
  - Transportation Research Board (TRB)
  - Best paper published in the field of operation, safety, and maintenance of transportation facilities
- Individual Heuser Research Award – 2006
  - Bradley University
- Interdisciplinary Heuser Research Award – 2006
  - Bradley University
- Caterpillar Fellowship – 2005
  - Bradley University
- The Paul E. Torgersen Research Excellence Award – 2004
  - College of Engineering – Virginia Tech
  - Top research performed by graduating Masters and Doctoral students
- Runner-up of the NAGS student awards – 2001
  - North American Geosynthetics Society
  - Best student paper
- 15th Annual Research Symposium at Virginia Tech – 1999
  - Virginia Tech

AWARDED RESEARCH GRANTS (TOTAL: $6,947,147)

2016 Transportation Consortium of South-Central States (TRAN-SET) – University Transportation Center – Agency: USDOT – Amount: $4,373,697 – Function: Co-PI

2016 Improving the Use of Crack Sealing to Asphalt Pavement in Louisiana – Agency: LTRC/LADOTD – Amount: $250,000 – Function: PI

2015 Use of Steel Fibers for Induction Heating and Self-Healing in Asphalt concrete – Agency: LTRC – Amount: $30,000 – Function: PI

2015 Lime Utilization in the Laboratory, Field, and Design of Pavement Layers – Agency: LTRC/LADOTD – Amount: $48,493 – Function: PI

2014 Assessment of Structural Capacity Indicators from Rolling Wheel Deflectometer Data Collection in Louisiana – Agency: LTRC/LADOTD – Amount: $ 170,213 – Function: PI.

2014 NCHRP Project 20-07 on Hamburg Wheel-Track Test Equipment Requirements and Improvements to AASHTO T 324 – Agency: NCHRP – Amount: $100,000 – Function: Co-PI.

2013 Mitigation Strategies for Reflective Cracking in Pavement – Agency: Southeast Transportation Consortium – Amount: $30,000 – Function: PI

2013 Use of Infrared Thermography to Control the Quality of Joints Construction and to Detect Reflective Cracking in Asphalt Pavements – Agency: Gulf Coast Center for Evacuation and Transportation Resiliency – Amount: $25,000 – Function: PI

2013 NCHRP Project 9-40A on Field Implementation of the Louisiana Interface Shear Strength Test – Agency: NCHRP – Amount: $186,407 – Function: Co-PI

2011 Evaluation of the Thixotropy of Asphalt Binder Modified with Recycled Asphalt Shingles – Agency: NSF – EPSCOR Research Infrastructure Improvement Program – Amount: $10,000 – Function: PI

2010 A New Approach to Recycle Asphalt Shingles in Hot Mix Asphalt – Agency: NSF – Amount: $163,952 – Function: PI.

2009 NCHRP Project 9-48 on Field versus Laboratory Volumetrics and Mechanical Properties – Agency: NCHRP – Amount: $600,000 – Function: Co-PI.

2009 Implementation of Rolling Wheel Deflectometer (RWD) in PMS and Pavement Preservation – Agency: LADOTD/LTRC – Amount: $134,600 – Function: PI.

2009 A Heterogeneous-Based Modeling Approach to Describe the Constitutive Behavior of Asphalt Concrete – Agency: BOR-RCS – Amount: $119,243 – Function: PI.

2008 Cost-Effective Prevention of Reflective Cracking of Composite Pavement – Agency: LADOTD/LTRC – Amount: $165,000 – Function: PI.

2008 Analysis of Seasonal Strain Measurements in Asphalt Materials under Accelerated Pavement Testing and Comparing Field Performance and Laboratory Measured Binder Tension Properties – Agency: LADOTD/LTRC – Amount: $115,000 – Function: PI.

2008 Effectiveness of Geogrid to Prevent Soil Damage during Highway Construction – Longwell Family Foundation – Amount: $19,745 – Function: PI.

2006 Determination of Usable Residual Asphalt Binder in RAP – Agency: IDOT – Amount: $190,000 – Function: Co-PI.

2006 Evaluation of HMA Sampling Techniques – Agency: IDOT – Amount: $22,100 – Function: PI.
2006 Nighttime Construction: Evaluation of Lighting Glare for Highway Construction in Illinois – Agency: IDOT – Amount: $218,684 – Function: Co-PI.
2005 Evaluation of Heavy-Equipment Induced-Damage on Soft Soil – Agency: Caterpillar Fellowship – Amount: $5,000 – Function: PI.

RESEARCH AND TEACHING INTERESTS

- Pavement Evaluation and Management
- Sustainable Asphaltic Materials
- Laboratory Characterization of Asphaltic Materials
- Tire-Pavement Interaction
- Infrastructure Condition Assessment
- Pavement Modeling and Analysis

MEMBERSHIPS, TRAINING, AND LICENSING

2017 Research Coordinator for TRB committee AFD30 on General and Emerging Pavement Design
2017 Member of the TRB committee AFD30 on General and Emerging Pavement Design
2015 Member of ASCE Highway Pavement Committee
2014 Certified Instructor – National Highway Institute
2011 Professional Engineer (VA – License Number: 0402042745)
2011 Associate Editor – ASCE Journal of Transportation Engineering
2010 – 2016 Member of the TRB committee AFD40 on Full-Scale Accelerated Pavement Testing
2009 Member of the TRB committee AFD80 on Pavement Structural Modeling and Evaluation
2009 Member of the Association of Asphalt Paving Technologists (AAPT)
2009 Faculty Development Workshop ENG2 Project, Stem Talent Expansion Program (STEP) sponsored by NSF
2008 Communication across the Curriculum Summer Institute, 4th Annual CxC Summer Institute at LSU
2003 American Society of Testing Materials (ASTM)
2002 NCAT professor training in Auburn, Alabama
1999 Friend of TRB committee on Subsurface Drainage
1999 Friend of TRB committee on Pavement Rehabilitation
1999 Friend of TRB committee on Flexible Pavement Design
1998 Friend of TRB subcommittee on Geosynthetics in Pavement Systems
1998 Member of American Society of Civil Engineering (ASCE)

PUBLICATIONS AND PAPERS

Refereed Journal Publications (90 Journal Publications) – Asterisks indicate Graduate Students Supervised as Main Advisor – Hirsch's h Index = 26 – 1985 Citations

1. Elseifi, M.A., Al-Qadi, I.L., Loulizi, A., and Wilkes, J. (2001). "Performance of a geocomposite membrane as a pavement moisture barrier," Journal of the Transportation Research Board 1772, National Research Council, Washington, D.C., 168-173.
2. Elseifi, M.A., Al-Qadi, I.L., Flintsch, G.W., and Masson, J.F. (2002). "Viscoelastic modeling of straight and modified binders using the matching function approach," International Journal of Pavement Engineering, ISSN 1029-8436, Vol. 3, No. 1, 53-61.
3. Elseifi, M.A., Al-Qadi, I.L., and Flintsch, G.W. (2003). "Quantitative effect of elastomeric modification on binder performance at intermediate and high temperatures," Journal of Materials in Civil Engineering, American Society of Civil Engineering, Vol. 15, No. 1, 32-40.
4. Al-Qadi, I.L., Elseifi, M.A., and Leonard, D. (2003). "Development of an overlay design model for reflective cracking with and without steel reinforcement," Journal of the Association of Asphalt Pavement Technologists, Vol. 72, 388-423.
5. Al-Qadi, I.L., Lahouar, S., Loulizi, A., Elseifi, M.A., and Wilkes, J.A. (2004). "Quantifying the benefits of a geocomposite membrane as a pavement moisture barrier using ground penetrating radar and falling weight deflectometer," Journal of Transportation Engineering, American Society of Civil Engineering, Vol. 130, No. 5, 658-664.
6. Elseifi, M.A., and Al-Qadi, I.L. (2004). "A simplified overlay design model against reflective cracking utilizing service life prediction," International Journal on Road Materials and Pavement Design, Vol. 5, No. 2, 169-191.
7. Al-Qadi, I.L., Loulizi, A., Elseifi, M.A., and Lahouar, S. (2004). "The Virginia Smart Road: The impact of pavement instrumentation on understanding pavement performance," Journal of the Association of Asphalt Pavement Technologists, Vol. 73, 427-465 **(Cited 95 times)**.
8. Elseifi, M.A., and Al-Qadi, I.L. (2005). "Effectiveness of steel reinforcing nettings in combating fatigue cracking in new pavement systems," Journal of Transportation Engineering, American Society of Civil Engineers, Vol. 131, No. 1, 37-45.
9. Elseifi, M.A., and Al-Qadi, I.L. (2005). "Modeling and validation of strain energy absorbers for rehabilitated cracked flexible pavements," Journal of Transportation Engineering, American Society of Civil Engineers, Vol. 131, No. 9, 653-661.
10. Al-Qadi, I.L., Hassan, M., and Elseifi, M.A. (2005). "Field and theoretical evaluation of thermal fatigue cracking in flexible pavements," Journal of the Transportation Research Board 1919, National Research Council, Washington, D.C., 84-95.
11. Elseifi, M.A., Al-Qadi, I.L., Yoo, P.J., and Janajreh, I. (2005). "Quantification of pavement damage due to dual and wide-base tires," Journal of the Transportation Research Board 1940, National Research Council, Washington, D.C., 125-135.
12. Al-Qadi, I.L., Yoo, P.J., Elseifi, M.A., and Janajreh, I. (2005). "Effects of tire configurations on pavement damage," Journal of the Association of Asphalt Pavement Technologists, Vol. 74, 921-962.

13. Elseifi, M.A., Al-Qadi, I.L., and Yoo, P.J. (2006). "Viscoelastic modeling and field validation of flexible pavements," Journal of Engineering Mechanics, American Society of Civil Engineers, Vol. 132, No. 2, 172-178 **(Cited 124 times)**.
14. Yoo, P.J., Al-Qadi, I.L., Elseifi, M.A., and Janajreh, I. (2006). "Flexible pavement responses to different loading amplitudes considering layer interface condition and lateral shear forces," International Journal of Pavement Engineering, Vol. 7, No. 1, 73-86.
15. Al-Qadi, I.L., Fini, E.H., Elseifi, M.A., Masson, J-F., and McGhee, K.M. (2006). "Viscosity determination of hot-poured bituminous sealants," Journal of the Transportation Research Board 1958, National Research Council, Washington, D.C., 74-81.
16. Elseifi, M.A., Al-Qadi, I.L., Dessouky, S., and Yang, S-H. (2006). "A viscoelastic model to describe the mechanical response of bituminous sealants at low temperature," Journal of the Transportation Research Board 1958, National Research Council, Washington, D.C., 82-89 **(BEST TRB PAPER AWARD)**.
17. Loulizi, A., Al-Qadi, I.L., Elseifi, M.A. (2006). "Difference between in situ flexible pavement measured and calculated stresses and strains," Journal of Transportation Engineering, ASCE, Vol. 132, No. 7, 574-579.
18. Al-Qadi, I.L., and M.A. Elseifi. (2006). "Mechanism and modeling of Transverse cracking development in continuously reinforced concrete pavement," International Journal of Pavement Engineering, 7:4, pp. 341-349.
19. Fini, E.H., Elseifi, M.A., Masson, J-F., McGhee, K.M., and Al-Qadi, I.L. (2007). "Development of a viscosity specification for hot-poured bituminous sealants," Journal of Testing and Evaluation, ASTM, Vol. 35, No. 4.
20. Al-Qadi, I.L., and Elseifi, M.A. (2007). "New generation of wide-base tire and its impact on trucking operations, environment, and pavements," Journal of the Transportation Research Board 2008, National Research Council, Washington, D.C., 100-109.
21. Elseifi, M.A., I.L. Al-Qadi, S-H. Yang, and S. Carpenter. (2008). Validity of Asphalt Binder Film Thickness Concept in Hot-Mix Asphalt. Transportation Research Record: Journal of the Transportation Research Board, No. 2057, Washington, D.C., 37-45.
22. Hassan, M.M., Elseifi, M.A., Wakim, J., and Elrayes, K. (2008). Measurement of Pavement Surface Reflectance for a Balloon Lighting System. ASCE, Journal of Transportation Engineering, Vol. 134, No. 10, 432-437.
23. Al-Qadi, I.L, Elseifi, M.A., Yoo, P.J., Dessouky, S.H., Gibson, N., Harman, T., D' Angelo, J., and Petros, K. (2008). Accuracy of Current Complex Modulus Selection Procedure from Vehicular Load Pulse in NCHRP 1-37A Mechanistic-Empirical Pavement Design Guide. Transportation Research Record: Journal of the Transportation Research Board, No. 2087, Washington, D.C., 81-90.
24. Al-Qadi, I.L., Xie, W., and Elseifi, M.A. (2008). Frequency Determination from Vehicular Loading Time Pulse to Predict Appropriate Complex Modulus in MEPDG. Journal of the Association of Asphalt Paving Technologists, Vol. 77, 739-772.
25. Mohammad, L.N., A. Bae, M.A. Elseifi, J.W. Button, and J.A. Scherocman. (2009). Development of Pull-off Test Device and Methodology to Evaluate Bond Strength of Tack Coat Materials in the Field. Journal of the Transportation Research Board, No. 2126, Washington, D.C., 1-11.

26. Mohammad, L.N., A. Bae, M.A. Elseifi, J.W. Button, and J.A. Scherocman. (2009). Interface Shear Strength Characteristics of Emulsified Tack Coats. Journal of the Association of Asphalt Paving Technologists, Vol. 78, 249-279 **(2nd Best AAPT Paper Award)**.
27. Al-Qadi, I.L, P.J. Yoo, M.A. Elseifi, and S. Nelson. (2009). Creep Behavior of Hot-Mix Asphalt Due to Heavy Vehicular Loading. Journal of Engineering Mechanics, ASCE, Vol. 135, No. 11, pp. 1265-1273.
28. Elseifi, M.A., L.N. Mohammad, I. Glover, I. Negulescu, W.H. Daly, and C. Abadie. (2010). Relationship between Molecular Compositions and Rheological Properties of Neat Asphalt Binder at Low and Intermediate Temperatures. Journal of Materials in Civil Engineering, ASCE, Vol. 22, No. 12, pp. 1288-1294.
29. Mohammad, L.N., A. Bae, M.A. Elseifi, J.W. Button, and N. Patel. (2010). Effects of Pavement Surface Type and Sample Preparation Method on Tack Coat Interface Shear Strength. Transportation Research Record: Journal of the Transportation Research Board, 2180, Washington, D.C., pp. 93-101.
30. Bae, A., L.N. Mohammad, M.A. Elseifi, J.W. Button, and N. Patel. (2010). Effects of Temperature on the Interface Shear Strength of Emulsified Tack Coats and Its Relationship to Rheological Properties. Transportation Research Record: Journal of the Transportation Research Board, 2180, Washington, D.C., pp. 102-109.
31. Elseifi, M.A., Trepanier, J., Wakefield, H., Pine, W.J., and Dahhan, A. (2011). The State of Practice in Hot-Mix Asphalt Sampling. International Journal of Pavement Engineering, Vol. 12, No. 2, pp. 111-119.
32. Cooper, S.B., L.N. Mohammad, and M.A. Elseifi. (2011). Laboratory Performance Characteristics of Sulfur-Modified Warm-Mix Asphalt. Journal of Materials in Civil Engineering, ASCE, Vol. 23, No. 9, pp. 1338-1345.
33. Elseifi, M.A., L.N. Mohammad, and S.B. Cooper*. (2011). Laboratory Evaluation of Asphalt Mixtures Containing Sustainable Technologies. Journal of the Association of Asphalt Paving Technologists, Vol. 80, pp. 227-254.
34. Elseifi, M.A., R. Bandaru*, Z. Zhang, and S. Ismail. (2011). Field Evaluation and Cost Effectiveness of the Saw and Seal Method to Control Reflection Cracking in Composite Pavements. Transportation Research Record: Journal of the Transportation Research Board, 2227, Washington, D.C., pp. 33-42.
35. Mohammad, L.N., S.B. Cooper, and M.A. Elseifi. (2011). Characterization of HMA Mixtures Containing High Reclaimed Asphalt Pavement Content with Crumb Rubber Additives. ASCE Special Edition, Vol. 23, No. 11, 1560-1568.
36. Elseifi, M.A., L.N. Mohammad, E. Kassem, H. Ying*, and E. Masad. (2011). Quantification of Damage in the Dynamic Complex Modulus and Flow Number Tests Using X-Ray Computed Tomography. Journal of Materials in Civil Engineering, ASCE, Vol. 23, No. 12, 1687-1696.
37. Elseifi, M.A., A. Abdel-Khalek*, K. Gaspard, Z. Zhang, and S. Ismail. (2012). Evaluation of Continuous Deflection Testing Using the Rolling Wheel Deflectometer in Louisiana. Journal of Transportation Engineering, ASCE, Vol. 138, No. 4, 414-422.
38. Cooper, S.B., M.A. Elseifi, and L.N. Mohammad. (2012). Parametric Evaluation of Design Input Parameters in the Mechanistic-Empirical Pavement Design Guide Predicted Performance. International Journal of Pavement Research and Technology, Vol. 5, No. 4, 218-224.

39. Cooper, S.B., L.N. Mohammad, M. Nazzal , and M.A. Elseifi. (2012). Evaluation of the Influence of Variation of Superpave HMA Mixtures Physical Properties on Pavement Performance. International Journal of Pavement Research and Technology, Vol. 5, No. 4, 267-276.
40. Cooper, S., M.A. Elseifi, L.N. Mohammad, and M.M. Hassan. (2012). Performance and Cost-Effectiveness of Sustainable Technologies in Flexible Pavements Using Mechanistic-Empirical Pavement Design Guide. Journal of Materials in Civil Engineering, ASCE, Vol. 23, No. 2, pp. 239-247.
41. Elseifi, M.A., S. Salari*, L.N. Mohammad, M. Hassan, W. Daly, and S. Dessouky. (2012). A New Approach to Recycle Asphalt Shingles in Hot Mix Asphalt. Journal of Materials in Civil Engineering, ASCE, Vol. 24, No. 11, 1403-1411.
42. Elseifi, M.A., L.N. Mohammad, W. King, and Z. Zhang. (2012). Assessment of Stress and Strain Instrumentation in Accelerated Pavement Testing. International Journal of Pavement Research and Technology, Vol. 5, No. 2, 121-127.
43. Mohammad, L.N., M.A. Elseifi, S. Cooper, and A. Raghavendra. (2012). Evaluating Effects of Volumetric and Mechanistic Test Variability on Predicted Performance of Asphalt Pavement: Applying the Mechanistic-Empirical Pavement Design Guide. Transportation Research Record: Journal of the Transportation Research Board, 2268, Washington, D.C., 43-49.
44. Elseifi, M.A., L.N. Mohammad, H. Ying*, and S. Cooper. (2012). Modeling and Evaluation of the Semi-Circular Bending Test for Intermediate Temperature Cracking of Asphalt Mixtures. Road Materials and Pavement Design, Vol. 13, No. 1, 124-139.
45. Kim, M., L.N. Mohammad, and M.A. Elseifi. (2012). Characterization of Fracture Properties of Asphalt Mixtures as Measured by Semi-Circular Bend Test and Indirect Tension Test. Transportation Research Record: Journal of the Transportation Research Board, No. 2296, Washington, D.C., 115-124.
46. Abdel-Khalek*, A., M.A. Elseifi, K. Gaspard, and Z. Zhang. (2012). A Model to Assess Pavement Structural Conditions at the Network Level. Transportation Research Record: Journal of the Transportation Research Board, No. 2304, Washington, D.C., 142-149.
47. Elseifi, M.A., K. Dasari*, A. Abdel-Khalek*, K. Gaspard, and Z. Zhang. (2013). Development of the Structural Capacity Triangular Model for Pavement Evaluation Using the Rolling Wheel Deflectometer. Journal of Transportation Engineering, ASCE, Vol. 139, No. 3, 313-320.
48. Gaspard, K., P. Icenogle, C. Abadie, Z. Zhang, and M.A. Elseifi. (2013). Historical Performance of Rubblized Jointed Portland Cement Concrete Pavement Overlaid with Asphaltic Concrete in the State of Louisiana. International Journal of Pavement Research and Technology, Volume 6, No. 3, 165-174.
49. Gaspard, K., Z. Zhang, and M.A. Elseifi. (2013). Integration of Rolling Wheel Deflectometer Deflection Measurements into Pavement Management Systems: Use of Multivariate Statistical Methods and Fuzzy Logic. Transportation Research Record: Journal of the Transportation Research Board, No. 2366, Washington, D.C., 25-33.
50. Mohammad, L.N., M.A. Elseifi, S. Cooper, A. Raghavendra. (2013). Levels of Variability in Volumetric and Mechanical Properties of Asphalt Mixtures. Journal of Materials in Civil Engineering, ASCE, Vol. 25, No. 10, 1424-1431.
51. Mohammad, L.N., M.A. Elseifi, S. Cooper, H. Challa, and P. Naidoo. (2013). Laboratory Evaluation of Asphalt Mixtures Containing Bio-Binder Technologies. Transportation Research Record: Journal of the Transportation Research Board, No. 2371, Washington, D.C., 58-65.

52. Cooper, S.B., L.N. Mohammad, and M.A. Elseifi. (2013). Evaluation of Asphalt Mixtures Containing Renewable Binder Technologies. International Journal of Pavement Research and Technology. Vol. 6, No. 5, 570-575.
53. Ying*, H., M.A. Elseifi, and L.N. Mohammad. (2014). Heterogeneous Finite Element Modeling of the Dynamic Complex Modulus Test of Asphalt Mixture Using X-ray Computed Tomography. ASCE Journal of Materials in Civil Engineering, Vol. 26, No. 9, 04014052-1 to 04014052-7.
54. Alvergue*, A., M.A. Elseifi, L.N. Mohammad, S.B. Cooper, and S. Cooper III. (2014). Laboratory Evaluation of Asphalt Mixtures with Reclaimed Asphalt Shingle Prepared Using the Wet Process. 89th Association of Asphalt Paving Technologists' Annual Meeting, Road Materials and Pavement Design, Vol. 15, No. 1, 62-77.
55. Cooper, S.B., L.N. Mohammad, and M.A. Elseifi. (2014). Laboratory Performance of Asphalt Mixtures Containing Recycled Asphalt Shingles. Transportation Research Record: Journal of the Transportation Research Board, No. 2445, Washington, D.C., 94-102.
56. Kim, M., L.N. Mohammad, and M.A. Elseifi. (2015). Effects of Various Extrapolation Techniques for Abbreviated Dynamic Modulus Test Data on the MEPDG Rutting Predictions. Journal of Marine Science and Technology. Vol. 23, No. 3, 353-363.
57. Elseifi, M.A., K. Gaspard, P.W. Wilke, Z. Zhang, and A. Abdel-Khalek*. (2015). Evaluation and Validation of a Model to Predict Pavement Structural Number Using Rolling Wheel Deflectometer (RWD) Data. Transportation Research Record: Journal of the Transportation Research Board, No. 2525, Washington, D.C., 13-19.
58. Cooper, S.B., L.N. Mohammad, M.A. Elseifi, and A. Raghavendra. (2015). Dynamic Modulus of Asphalt Mixtures: Evaluation of Effects on Pavement Performance Prediction. Transportation Research Record: Journal of the Transportation Research Board, No. 2507, Washington, D.C., 67-77.
59. Cooper, S.B., L.N. Mohammad, M.A. Elseifi, and A. Raghavendra. (2015). Laboratory-Measured Dynamic Modulus and Predicted Performance of Asphalt Mixtures: Effects of Specimen Orientation. Transportation Research Record: Journal of the Transportation Research Board, No. 2507, Washington, D.C., 78-89.
60. Cooper, S., L.N. Mohammad, M.A. Elseifi, and M.S. Medeiros. (2015). Effect of Recycling Agents on the Laboratory Performance of Asphalt Mixtures Containing Recycled Asphalt Shingles. Transportation Research Record: Journal of the Transportation Research Board, No. 2506, Washington, D.C., 54-61.
61. Kim, M., L.N. Mohammad, H. Challa, and M.A. Elseifi. (2015). A Simplified Performance-Based Specification for Asphalt Pavements. Journal of Road Materials and Pavement Design, Vol. 16, No. 2, 168-196.
62. Dhakal*, N., and M.A. Elseifi. (2016). Use of Infrared Thermography to Detect Thermal Segregation in Asphalt Overlay and Reflective Cracking Potential. ASCE Journal of Materials in Civil Engineering, Vol. 28, No. 2.

63. Elseifi, M.A., A. Alvergue*, L.N. Mohammad, S. Salari*, J.P. Aguiar-Moya, and S.B. Cooper. (2016). Rutting and Fatigue Behaviors of Shingle-Modified Asphalt Binders. ASCE Journal of Materials in Civil Engineering, Vol. 28, No. 2.

64. Zhang, Z., K. Gaspard, and M.A. Elseifi. (2016). Evaluating Pavement Management Treatment Selection Utilizing Continuous Deflection Measurements in Flexible Pavements. International Journal of Pavement Engineering, Volume 17, No. 5, 414-422.

65. Dhakal, N.*, M.A. Elseifi, and Z. Zhang. (2016). Mitigation Strategies for Reflection Cracking in Rehabilitated Pavements – A Synthesis. International Journal of Pavement Research and Technology, Vol. 9, No. 3, 228–239.

66. Cooper, S.B., S. Cooper, L.N. Mohammad, and M.A. Elseifi. (2016). Development of a Predictive Model Based on Artificial Neural Network for the Semi-Circular Bend Test. Transportation Research Record: Journal of the Transportation Research Board, No. 2576, Washington, D.C., DOI 10.3141/2576-09.

67. Elbagalati*, O., M.A. Elseifi, K. Gaspard, and Z. Zhang. (2016). Prediction of In-Service Pavement Structural-Capacity Based on Traffic-Speed Deflection Measurements. ASCE Journal of Transportation Engineering, 10.1061/(ASCE)TE.1943-5436.0000891, 04016058, Vol. 142, No. 11.

68. Elbagalati*, O., M.A. Elseifi, K. Gaspard, and Z. Zhang. (2016). Development of the Pavement Structural Health Index Based on Falling Weight Deflectometer Testing. International Journal of Pavement Engineering, DOI 10.1080 /10298436.2016.1149838.

69. Cooper, S.B., L.N. Mohammad, and M.A. Elseifi. (2016). Laboratory Performance of Asphalt Mixtures Containing Recycled Asphalt Shingles, Reclaimed Asphalt Pavement, and Recycling Agents. ASCE, Journal of Materials in Civil Engineering, Volume 29, No. 3, DOI 10.1061/(ASCE)MT.1943-5533.0001658.

70. Pamulapati*, Y., M.A. Elseifi, S.B. Cooper, L.N. Mohammad, and O. Elbagalati*. (2017). Evaluation of Self-Healing of Asphalt Concrete Through Induction Heating and Metallic Fibers. Construction and Building Materials, Vol. 146, No. 15, 66-75.

71. Kim, M., L.N. Mohammad, P. Phaltane, and M.A. Elseifi. (2017). Density and SCB Fracture Resistance of Temperature Segregated Asphalt Mixtures. International Journal of Pavement Research and Technology, Vol. 10, No. 2, 112-121.

72. Elbagalati*, O., M.A. Elseifi, K. Gaspard, and Z. Zhang. (2017). Development of an Artificial Neural Network Model to Predict Subgrade Resilient Modulus from Continuous Deflection Testing. Canadian Journal of Civil Engineering, NRC Research Press, Vol. 44(9), DOI 10.1139/cjce-2017-0132, 700–706 **(Editor's Choice Award)**.

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14. Elseifi, M.A. (2017). Continuous Pavement Deflection Testing and Its Implementation in Pavement Management. ASCE T&DI, University of New Orleans, New Orleans, LA.

Webinars

1. Elseifi, M.A. (2015). "Traffic-Speed Pavement Structural Evaluation as a Critical Component of Pavement Management System." Pavinars: Webinars for the Pavement Community, 50 attendees.
2. Elseifi, M.A., I.L. Al-Qadi, and J. Green. (2015). "Mechanisms and Mitigation Strategies for Reflective Cracking in Rehabilitated Pavements." The National Academies of Sciences, Transportation Research Board, 559 attendees.
3. Elseifi, M.A., and I.L. Al-Qadi. (2015). "Cost-effective Treatment Methods to Control Reflective Cracking in Pavement." American Society of Civil Engineers, 125 attendees.
4. Elseifi, M.A. (2017). Continuous Pavement Deflection Testing and Its Implementation in Pavement Management." American Society of Civil Engineers, 25 attendees.

REVIEW ACTIVITIES

Construction Building Materials (2015 to present)
The International Journal of Pavement Engineering (2004 to present)
The International Journal of Pavement Research and Technology (2011 to present)
ASCE Journal of Materials in Civil Engineering (2006 to present)
ASCE Journal of Transportation Engineering (2004 to present)
ASCE Journal of Engineering Mechanics (2007 to present)

ASCE Journal of Nanomechanics and Micromechanics
The Canadian Journal of Civil Engineering (2009 to present)
Polymer Composites (2012 to present)
Annual Meeting of the Transportation Research Board (2002 to present)
Annual Meeting of the Association of Asphalt Paving Technologists (2010 to present)
ASCE Journal of Infrastructure Systems
5th RILEM International Conference on Pavement Cracking (France, 2004)
6th RILEM International Conference on Pavement Cracking (Chicago, 2008)
2nd International Conference on Accelerated Pavement Testing (Minneapolis, 2004)
ASCE International Conference on Transportation and Development (Houston, 2016)

UNDERGRADUATE AND GRADUATE STUDENTS ADVISING

PhD Students

1. Hao Ying – PhD Dissertation Title: Finite Element Modeling of Hot-Mix Asphalt Performance in the Laboratory – May 2013.
2. Omar Elbagalati – PhD Dissertation Title: A Framework for the Analysis and Implementation of Rolling Wheel Deflectometer Deflection Data at the Network Level – May 2017.
3. Momen Mousa – PhD Dissertation Title: Integration of Risk and Uncertainty into Highway Construction Projects – In Progress.
4. Nirmal Dhakal – PhD Dissertation Title: Evaluation of Methods to Detect Stripping – In Progress.

Master Students

1. Wanggan Yang – Project Title: Viscoelastic modeling of straight asphalt binder at low temperature – May 2010.
2. Rakesh Bandaru – Thesis Title: Cost Effective Prevention of Reflective Cracking in Composite Pavements – Dec 2010.
3. Hao Ying – Thesis Title: Using X-Ray Computed Tomography to Quantify Damage of Hot-Mix Asphalt in the Dynamic Complex Modulus and Flow Number Tests – May 2011.
4. Ahmed Abdel-Khalek – Thesis Title: Pavement Structural Evaluation Using the Rolling Wheel Deflectometer – Dec 2011.
5. Saman Salari – Thesis Title: Effects of Recycled Asphalt Shingle on the Rheological and Molecular Composition Properties of Asphalt Cement – Dec 2012.
6. Karthik Dasari – Thesis Title: Deflection-Based Condition Assessment for Rolling Wheel Deflectometer at Network Level – May 2013.
7. Alejandro Alvergue – Thesis Title: Laboratory Evaluation of Asphalt Mixtures and Binders with Reclaimed Asphalt Shingle Prepared Using the Wet Process – June 2014.

8. Nirmal Dhakal – Thesis: Use of Infrared Thermography to Control the Quality of Joints Construction and to Detect Reflective Cracking in Asphalt Pavements – June 2016.
9. Yashwanth Pamulapati – Thesis: Use of Steel Fibers for Induction Heating and Self-Healing in Asphalt – Fall 2016.
10. Ramendra Das (Co-Chair) – Thesis: Effects of Tack Coat Application on Interface Bond Strength and Short-Term Pavement Performance – Fall 2017.
11. Mohammad Bashar – Thesis: Performance and Cost-Effectiveness of Chip Seal in Louisiana – In Progress.
12. Zia Zihan – Thesis: Prediction of Pavement Structural Capacity Based on Traffic Speed Deflectometer Measurements – In Progress.
13. Patrick Icenogle – Thesis: Prediction of Dynamic Complex Modulus Based on Traffic Speed Deflectometer Measurements – In Progress.
14. Tanvir Ahmed – Thesis: Evaluation of Chip Seal with Crumb Rubber – In Progress.

PhD and Master Committee Membership

2015 Samuel B. Cooper, Jr. – Main advisor: Louay N. Mohammad
2015 Samuel B. Cooper, III – Main advisor: Louay N. Mohammad
2015 JungYeon Jang – Main advisor: Jongwon Jung
2015 Yogendra Subedi – Main advisor: Zhong Wu
2014 Harshavardhan Challa – Main advisor: Louay N. Mohammad
2014 Raju Thapa – Main advisor: Sherif Ishak

Undergraduate Students Involved in Research

2011 Steven Robins, Jr.
2011 Melissa Vaughn
2007 Terry Naidoo
2007 Seth Bradley

PROFESSIONAL LEADERSHIP AND SERVICE ACTIVITIES

2018 2018 International Society for Asphalt Pavements, Scientific Committee, Member, Fortaleza, Brazil
2017 Pavement LCA Symposium, Scientific Committee, Member
2017 International Conference on Highway Pavements and Airfield Technology, Member, Scientific Committee, Philadelphia
2014 3rd Middle East Society of Asphalt Technologists Conference, Dubai, International Technical Committee, Member
2014 East Baton Rouge (EBR) Parish Engineer and Surveyor Selection Board, Member
2014 College of Engineering Scholarship Committee – Lead Reviewer, LSU
2014 Construction Research Congress (CRC), ASCE, Program Committee Member

2013 LSU Faculty Senate – Benefits Advisory Committee, Member
2013 Graduate Student Research Conference – Department of Civil and Environmental Engineering, Organizer
2013 TRB Session 619: Best Papers from 4th International Conference on Accelerated Pavement Testing, Presiding Officer
2013 TRB Session 554: Strength and Deformation Characteristics of Pavement Sections, Presiding Officer
2013 2013 ASCE Airfield and Highway Pavement Conference, Member, Scientific Committee,
2012 Member, Educational Curriculum Committee for MS&E, LSU
2012 TRB Session 617: Analysis of Pavement Section Response, Presiding Officer
2012 TRB Session 514: Accelerated Pavement Testing, Part 2, Presiding Officer
2010 CEE Graduate Program Committee, LSU, Department of Civil and Environmental Engineering, Member
2007 Scientific Committee, 6th RILEM International Conference on Cracking in Pavements, Member
2005 Illinois Asphalt Pavement Association (IAPA) Student Advisor