

LTRC Fiscal Year 2021-22 Outside Publications and Presentations

Publications

1. Abu-Farsakh, M., Chen, Q., Hanandeh, S., and Saghebfar, M., 2022 “Quantifying the Benefits of Geosynthetics Reinforcement in Flexible Pavement Design Using Cyclic Plate Load Testing,” accepted for publication in the Journal of Transportation Research Record.
2. Zadehmohamada, M., Luo, M., Abu-Farsakh, M., and Voyiadjisa G., 2022 “Evaluating Long-Term Benefits of Geosynthetics in Flexible Pavements Built over Weak Subgrades by Finite Element and Mechanistic-Empirical Analyses,” accepted for publication in the Geotextiles and Geomembranes Journal.
3. Rahman, M., Abu-Farsakh M., and Kameshwar, S. 2022 “The use of Bayesian Analysis for Implementing the Specific Site Variability into LRFD Design of Piles,” Proceedings of the TRB 101st Annual Meeting, January 9-13, 2022, Washington, D.C.
4. Abu-Farsakh, M., Idries, A., and Chen, S., 2022 “Evaluating the Effect of Heating-Cooling Cycle on the Clay-Concrete Pile Interface,” Proceedings of the Geo-Congress 2022 conference, March 20-23, Charlotte, North Carolina.
5. Ikbarieh, A. Izadidifar, M., Abu-Farsakh M., and Voyiadjis, G., 2022, “A Parametric Study of Embankment Supported by Geosynthetic Reinforced Load Transfer Platform and Timber Piles Tipped on Sand,” Proceedings of the TRB 101st Annual Meeting, January 9-13, 2022, Washington, D.C.
6. Idries, A., Ghaawwd, I. and Abu-Farsakh M., 2022 “Effect of One Cycle of Heating-Cooling on the Clay-Concrete pile Interface Behavior,” Proceedings of the 2nd International Conference on Energy Geotechnics, La Jolla, California, USA - April 2022.
7. Abu-Farsakh, M., and Rahman, M., 2021 “Incorporating Site Variability Into LRFD Design of Pile Foundations,” Proceedings of the 46th Annual Conference on Deep Foundation, October 12-15, 2021, Las Vegas, Nevada.
8. Elshoura, A., and Okeil, A. M. (2022) “A Study of Statistical Uncertainties for Temperature Gradients in Concrete Bridges,” J. of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, ASCE-ASME, 8(1): 04021083. DOI: 10.1061/AJRUA6.0001209).
9. Narayanan, D., Lu, Y., Okeil, A. M., and Castaneda, H. (2021) “Uniform and local corrosion characterization and modeling for long-term exposure of different rebars used for reinforced concrete (RC) elements in the presence of chloride,” 1st European Conference of the European Association on Quality Control of Bridges and Structures (EUROSTRUCT 2021), August 29 – September 1, 2021, Padova, Italy.
10. Codjoe, J., Thapa, R., & Mitran, E. (2021). Queue Analysis at Work Zones from Field-Collected Data. *Transportation Research Record*, Vol. 2675(11) 1180-1188.
11. Hossain, A., Sun, X., Thapa, R., & Codjoe, J. (2022). Applying Association Rules Mining to Investigate Pedestrian Fatal and Injury Crash patterns Under Different Lighting Conditions. *Transportation Research Record*, <https://doi.org/10.1177/03611981221076120>

12. Asaduzzaman. M., Thapa, R., & Codjoe, J. (2022). Safety and Operational Effectiveness of Protected Only Versus Protected/Permitted Left-Turn Signal Phase. *Transportation Research Record*, <https://doi.org/10.1177/03611981221086631>
13. Md Mahmud Hossain, Xiaoduan Sun, Elisabeta Mitran, M. Ashifur Rahman. "Investigating fatal and injury crash patterns of teen drivers with unsupervised learning algorithms", *IATTSS Research* 45 (2021) 561-573.
14. M. Ashifur Rahman, Md. Mahmud Hossain, Xiaoduan Sun, and Elisabeta Mitran. "Understanding the contributing factors to young driver crashes: a comparison of crash profiles of three age groups". *Transp. Eng.*, vol. 5, 2021.
15. Md. Mahmud Hossain, Xiaoduan Sun, M. Ashifur Rahman, and Elisabeta Mitran. "Investigating Underage Alcohol Intoxicated Driver Crash Patterns in Louisiana". *Transp. Res. Rec.*, 2021, Vol. 2675 (11) 769-782.
16. Bian, R., P. Murray-Tuite, and B. Wolshon. Predicting Grocery Store Visits during the Early Outbreak of COVID-19 with Machine Learning. *Transportation Research Record: Journal of the Transportation Research Board*, September. 2021. (<https://doi.org/10.1177/03611981211043538>)
17. Alawadi, R., P. Murray-Tuite, and R. Bian. Determinants of Departure Timing for Hurricane Matthew and Anticipated Changes. *Natural Hazards Review*, Vol. 23, No. 2, May. 2022. ([https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000553](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000553))
18. Subasish Das, Xiaoduan Sun, Ming Sun, "Rule-based safety prediction models for rural two-lane run-off-road crashes", *International Journal of Transportation Science and Technology*, Vol. 10, 2021, pp 235-244
19. MA Rahman, X Sun, M Sun, D Shan, "Investigating characteristics of cellphone distraction with significance tests and association rule mining ", *IATSS*, Volume 45, Issue 2, July 2021, Pages 198-209
20. M Sun, X Sun, MA Rahman, M Akter, S Das, "Modeling two-way stop-controlled intersection crashes with zero-inflated models on Louisiana rural two-lane highways", *IATSS* , Volume 45, Issue 3, October 2021, Pages 303-309
21. Nirmal Dhakal, Mostafa A. Elseifi, Zia U.A. Zihan, Zhongjie Zhang, Christophe N. Fillastre, and Jagannath Upadhyay , "Classification of surface pavement cracks as top-down, bottom-up, and cement-treated reflective cracking based on deep learning methods", *Canadian Journal of Civil Engineering*, 13 August 2021, <https://doi.org/10.1139/cjce-2020-0808>, volume 49, Number 4, April 22, 2022
22. Hossam Abohamer, Mostafa A. Elseifi, Nirmal Dhakal, Zhongjie Zhang, Christophe N. Fillastre, "Field Performance and Cost-Effectiveness of Chip Seals and Asphalt Concrete Overlays with and without Asphalt Concrete Stripping Damage", *Transportation Research Record: Journal of the Transportation Research Board*, <https://doi.org/10.1177/03611981221112407>, August 1, 2022
23. Ye Ma, Mostafa A. Elseifi, Nirmal Dhakal, Mohammad Z. Bashar Mohammad Z. Bashar, Zhongjie Zhang, "Non-Destructive Detection of Asphalt Concrete Stripping Damage using Ground Penetrating Radar", *Transportation Research Record: Journal of the Transportation Research Board*, <https://doi.org/10.1177/03611981211014199>, May 22, 2021

24. Hossain, R. (2021). "Novel Methods for Determining Polymer Content and Polymer Degradation in Asphalt Binder" [Louisiana Tech University]. <https://digitalcommons.latech.edu/dissertations/944>
25. Arafat, M. S. (2020). "Louisiana Tech Digital Commons Understanding Oxidative Aging of Asphalt Binder and it's Effects on Cracking Susceptibility of Asphalt Mix" [Louisiana Tech University]. <https://digitalcommons.latech.edu/dissertations/871>
26. Ghufran Al-Dawood. "Wireless Self-Powered Vibration Sensor for Fault Detection."
27. Thu Nguyen, Philip Wortman, Zizhou He, Joshua Goulas, Hui Yan, Mehdi Mokhtari, Xiao-Dong Zhou, and Ling Fei. "Achieving Superhydrophobic Surfaces via Air-Assisted Electrospray Langmuir." 2022, 38, 9, 2852–2861.
28. Abu-Farsakh, M., Chen, Q, Hanandeh, S., and Saghebfar, M., 2022. "Quantifying the Benefits of Geosynthetics Reinforcement in Flexible Pavement Design Using Cyclic Plate Load Testing." *Transportation Research Record: Journal of the Transportation Research Board*.
29. Akentuna, M., Mohammad, L.N., Boateng, K.A. and Cooper Jr, S., 2022. Warm Mix Asphalt Demonstration Projects in Louisiana: Case Study of Five to Eight Years of Field Performance. *Transportation Research Record*, p.03611981221085521.
30. Mahdi M., Sobhani Md, Wu, Z. (2022). "Development of a Fatigue Damage Model for Roller Compacted Concrete Pavement Based on In Situ Saw-Cut Beams and Accelerated Pavement Performance." *Transportation Research Record: Journal of the Transportation Research Board*, May 2022.
31. Xie, Z., Wu, Z. Moon, F. (2022). Performance Evaluation and Prediction of Preservation Asphalt Overlay in Louisiana. *Transportation Research Record: Journal of the Transportation Research Board*, May 2022.
32. Sobhani Md Golam. (May 2022) Application of Mechanistic-Empirical Pavement Design Approach into RCC Pavement Thickness Design, MS Thesis, *LTRC Project 19-1P*.
33. Wu, Z., Emtiaz M. (March 2022). Quality Management of Cracking Distress Survey in Flexible Pavements Using LTRC Digital Highway Data Vehicle, LTRC final report FHWA/LA.21/659.
34. Barghabany, P., Zhang, J., Mohammad, L. N., Cooper III, S., and Cooper Jr, S., "Novel Model to Predict Fracture Parameter SCB Jc for Asphalt Mixtures Using an Artificial Neural Network Approach." *The National Academies of Science, Engineering, and Medicine. Transportation Research Record, Journal of the Transportation Research Record*, <https://doi.org/10.1177/03611981211036357>, 2021, pp. 1-13.

35. Akentuna, M., Mohammad, L. N., Sachdeva, S., Cooper III, S., and Cooper Jr, S., "Effectiveness of Loaded Wheel Tracking Test to Ascertain Moisture Susceptibility of Asphalt Mixtures." *The National Academies of Science, Engineering, and Medicine. Transportation Research Record, Journal of the Transportation Research Record*, <https://doi.org/10.1177/036119812111036355>, 2021, pp. 1-14
36. Luan, Y., Zhang, W., Zhao, Y., Pan, Z., Niu, Z., Zeng, K., Chen, X., and Mohammad, L. N., "Mechanical Property Evaluation for Steel Slag in Asphalt Mixture with Different Skeleton Structures Using Modified Marshall Mix Design Methodology." *ASCE Journal of Materials in Civil Engineering*, DOI: 10.1061/(ASCE)MT.1943-5533.0004014, 2021, pp. 04021382: 1-12.
37. Subedi, S., Arce, G., Noorvand, H., Hassan, M., Barbato, M., and Mohammad, L. N., "Properties of Engineered Cementitious Composites with Raw Sugarcane Bagasse Ash used as Sand Replacement." *ASCE Journal of Materials in Civil Engineering*, Vol. 33 (9), 2021, pp. 04021231: 1-17.
38. Ali, H., Mohammad, L.N., Mohammadafzali, M., Haddadi, F., Akentuna, M., and Sholar, G., "Investigating the Effect of Degree of Blending on Performance of High RAP ." *ASCE Journal of Materials in Civil Engineering*, Volume 33 (4), 2021. pp. 04021048:1-9
39. Zhang, W., Chen, X., Shen, S., Mohammad, L.N., Cui, B., Wu, S., and Khan, A., "Investigation of Field Rut Depth of Asphalt Pavements Using Hamburg Wheel Tracking Test." *ASCE Journal of Transportation Engineering, Part B: Pavements*, Vol. 147 (1), 2021, pp. 04020091: 1-10.
40. Mohammad, L. N., Cao, W., and Barghabany, P., "Design and Analysis Procedures for Asphalt Mixtures Containing High RAP Contents and/or RAS." Louisiana Transportation Research Center, Report No. FHWA/LA.17/639, Baton Rouge, Louisiana, April 2021.
41. Developing, Evaluating, and Implementing Cutting-edge Technologies, Novel Materials, and Innovative Construction Management Processes to Enhance the Durability and Service of Transportation Infrastructure, Proceedings of the Tran-SET Conference 2021, edited by Z. Hossain, M. Hassan, and L. Mohammad, June 3-4, 2021, ASCE, Reston VA.
42. Milla, J., Cavalline, T., Rupnow, T., Melugiri-Shankaramurthy, B., Lomboy, G., and Wang, K. "Methods of Test for Concrete Permeability: A Critical Review," *Advances in Civil Engineering Materials* 10, no. 1 (2021): 172-209. <https://doi.org/10.1520/ACEM20200067>
43. Arce, G., Noorvand, H., Hassan, M., Rupnow, T., and Dhakal, N. "Feasibility of Low Fiber Content PVA-ECC for Jointless Pavement Application." *Journal of Construction and Building Materials*, V. 268, No. 0, pp. 2021
44. Dhakal, Nirmal, Elseifi, Mostafa, Al-Qadi, Imad, and Rupnow, Tyson. "Effect of Pavement Responses on Fatigue Cracking and Cement-Treated Reflective Cracking Failure Mechanisms." *ASCE Journal of Transportation Engineering, Part B: Pavements*, Vol. 174, No. 4, December 2021.

Presentations

1. Abu-Farsakh, M., Idries, A., and Chen, S., 2022 “Evaluating the Effect of Heating-Cooling Cycle on the Clay-Concrete Pile Interface,” Presented at the Geo-Congress 2022 conference, March 20-23, Charlotte, North Carolina.
2. Abu-Farsakh, M., 2022, “Evaluating the Performance of Embankment Supported by Geosynthetic Load Transfer Platform and Piles Tip on Sand,” presented at the 2022 Louisiana Transportation Engineering Conference, Baton Rouge, Louisiana, March 15-16, 2022.
3. Abu-Farsakh, M., 2022 “Evaluation of Pile-Cone Penetration Test (CPT) Methods Using Multidimensional Unfolding Technique and Evaluating the Ultimate Pile Capacity from CPT Data Using the Artificial Neural Network,” presented at the TRB Workshop 1436 on exploring the role of data interchange and artificial intelligence in future bridge and foundation design, performance, and resiliency, 101st Annual Meeting, Washington, D.C., January 13, 2022.
4. Rahman, M., Abu-Farsakh M., and Kameshwar, S. 2022 “The use of Bayesian Analysis for Implementing the Specific Site Variability into LRFD Design of Piles,” presented at the TRB 101st Annual Meeting, Washington, D.C., January 9-13, 2022.
5. Abu-Farsakh, M., Chen, Q., Hanandeh, S., and Saghebfar, M., 2022 “Quantifying the Benefits of Geosynthetics Reinforcement in Flexible Pavement Design Using Cyclic Plate Load Testing,” presented at the TRB 101st Annual Meeting, Washington, D.C., January 9-13, 2022.
6. Ikbarieh, A. Izadidifar, M., Abu-Farsakh M., and Voyiadjis, G., 2022, “A Parametric Study of Embankment Supported by Geosynthetic Reinforced Load Transfer Platform and Timber Piles Tipped on Sand,” presented at the TRB 101st Annual Meeting, Washington, D.C., January 9-13, 2022.
7. Abu-Farsakh, M., and Rahman, M., 2021 “Incorporating Site Variability Into LRFD Design of Pile Foundations,” Proceedings of the 46th Annual Conference on Deep Foundation, October 12-15, Las Vegas, Nevada.
8. Structural Health Monitoring (SHM) Applications on Bridge Projects : Experience from Louisiana,” (April 20, 2022) State-of-the-Field: A series focusing on one of today’s pressing transportation and mobility challenges, C2SMART UTC, April 20, 2022, Virtual.
9. Flexural (and Shear) Resistance Factors,” (August 4, 2021) Third International Workshop on FRP Bars for Concrete Structures (IW-FRPCS3), August 3 – 4, 2021, Virtual.
10. Uniform and local corrosion characterization and modeling for long-term exposure of different rebars used for reinforced concrete (RC) elements in the presence of chloride,” (August 31, 2021) 1st European Conference of the European Association on Quality Control of Bridges and Structures (EUROSTRUCT 2021), August 29 – September 1, 2021, Padova, Italy.
11. Codjoe, J. (2021). Overview of LTRC ITS Research Activities. LTRC ITS Summit. Gulf Region ITS 2021 Annual Meeting, Baton Rouge, LA
12. Codjoe, J. (2022). LTRC Efforts in Establishing Automated Video Counting Systems. Regional Planning Commission-LTRC Multimodal Count Workshop, New Orleans, LA

13. Codjoe, J. (2022). LTRC: Developing Louisiana's Transportation Infrastructure. LES Baton Rouge Chapter Luncheon Series, Baton Rouge, LA
14. Codjoe, J. (2022). An Evaluation of Louisiana's Roundabouts. 6th International Conference on Roundabouts, Monterey, CA
15. E. Mitran, "Young Driver Crashes in Louisiana: Understanding the Contributing Factors to Decrease the Numbers," 2022 Louisiana Transportation Conference
16. Kofi Kakyire Ampofo-Twumasi, "Evaluation of Traffic Crash Characteristics on Elevated Sections of Interstates in Louisiana", GRITS Annual Conference, November 15-18, 2021. Baton Rouge, LA
17. Bian, R. (2022). Contextual Adjustment of the ITE Trip Generation Rates for Small and Medium Urban Areas in Louisiana. Transportation Research Board 101st Annual Meeting, Washington, D.C.
18. Bian, R. (2022). Evaluating the Impacts of the Complete Streets Policy in Louisiana: A Review of Practices and Projects in the Last 10 Years. Transportation Research Board 101st Annual Meeting, Washington, D.C.
19. Bian, R. (2022). Evaluating the Impacts of the tr Policy in Louisiana. Louisiana Transportation Conference (Virtual)
20. Andrew J. Peters, Aniruddha Chowdhury, S.M. Rahat Rahman, Anwar Shafe, Roksana Hossain and Nazimuddin Wasiuddin (2021). Use of Waste Plastic in Asphalt Binder: Theoretically and Experimentally Justified Identification of Compatible Blends. American Institute of Chemical Engineers Annual Conference 2021, Boston, MA, November 2021.
21. SM Rahat Rahman, Roksana Hossain, Nazimuddin M. Wasiuddin, Andrew J. Peters. Understanding Phase Separation, Aging Characteristics and SARA Fractions of HDPE, LDPE, and PP Modified Asphalt Binder. Transportation Research Board Annual Meeting, Washington D.C., January 2021.
22. Wesley Hong, Rauf Mahmudzade, Dilip Depan, AIM-REU Symposium (2021). "Fabrication of Graphene-oxide Functionalized with Poly (carboxylate) for Cement Composites."
23. Thu Nguyen, Joshua J Goulas , ZiZhou He , Xiao-dong Zhou , Ling Fei (2022). "Fabrication of Superhydrophobic Surface via a Novel Air-assisted Electrospray Method." MRS Spring meeting. University of Louisiana at Lafayette, Lafayette, LA, United States.
24. Fernando Torres, Rebecca Willis, Jorge Villa, Wayne Sharp, Dhan Fortela, Mark Zappi and Sheila Holmes. (2022) "Louisiana Highways Right-of-Way CO2 Sequestration."
25. Gavin Gautreau, P.E., (2022) "Geotechnical Asset Management."
26. Nick Ferguson, P.E., (2022) "Dynamic Cone Penetration (DCP) Quality Control/Assurance."
27. Gavin Gautreau, P.E., (2022) Transportation Research Center (TRB) Peer Exchange, "Geotechnical Asset Management (GAM)".
28. Ebenezer Essel, Langston Fogg, and Yasser Ismail, (2022), PAC MODELS Conference, "Driver Drowsiness Detection using Machine Learning Models."

29. Xie, Z., Wu, Z. and Moon, F. January 2022. "Performance Evaluation and Prediction of Preservation Asphalt Overlay in Louisiana." Poster Presentation, *101th Transportation Research Board Annual Meeting, Washington, DC.*
30. Mahdi M., Sobhani Md, and Wu, Z. January 2022. "Development of a Fatigue Damage Model for Roller Compacted Concrete Pavement Based on In Situ Saw-Cut Beams and Accelerated Pavement Performance." Poster Presentation, 101th Transportation Research Board Annual Meeting, Washington, DC.
31. Abufarsakh, R., Arce, G., Hassan, M., Subedi, S., Huang, S., Radovic, M., Sang, Z., Sukhishvili, S., and Mohammad, L. N., "Highly Pseudo Ductile Metakaolin Based Engineered Geopolymer Composites Using Low UHMWPE Fiber Content." Proceedings of the 2021 Tran-SET Conference, Virtual, June 3-4, 2021, edited by Z. Hossain, M. Hassan, and L. Mohammad, ASCE, Reston, VA., pp. 240-352.
32. Game, Daniel, Arce, Gabriel, Hassan, Marwa, Noorvand, Sujata, and Rupnow, Tyson. "Development of Practical and Cost-Effective UHP-ECC Using Natural Sand and No Silica Fume." Presented at the Transportation Research Board 101st Annual Meeting, Washington, D.C., January 9-13, 2022.
33. Hungria, Ricardo, Mousa, Momen, Hassan, Marwa, Omar, Omar, Gavilanes, Andrea, Arce, Gabriel, King, Gary, Milla, Jose, and Rupnow, Tyson. "Optimizing the Self-Healing Efficiency of Hydrogel-Encapsulated Bacteria in Concrete." Presented at the Transportation Research Board 101st Annual Meeting, Washington, D.C., January 9-13, 2022.
34. Rupnow, Tyson. "Best Practices for Assessing Roadway Damages Caused by Flooding." AASHTO Sweet 16 Award. Presented at the 101st Annual Transportation Research Board Meeting, Washington, D.C., January 9-13, 2022.
35. Rupnow, Tyson. "Department of Transportation's Perspective Southeast and Gulf Coast." Presented at the TRB Workshop: Progress Toward More Resilient Pavements. Presented at the 101st Annual Transportation Research Board Meeting, Washington, D.C., January 9-13, 2022.
36. Rupnow, Tyson. "Department of Transportation's Perspective Southeast and Gulf Coast." Presented at the FHWA Workshop on Resilient Pavements. Presented at the 2022 ICMPE Meeting, Chicago, IL, June 8-10, 2022.
37. Rupnow, Tyson and Coco, Mary Leah. "2021-2022 Work Program." Presented to the LTRC Policy Committee, Baton Rouge, LA, June 22, 2021.

38. Subedi, S., Arce, G., Hassan, M., and Mohammad, L. N., "Feasibility of Engineered Cementitious Composites Implementing Combined Systems of Post-Processed Bagasse Ash and Fly Ash as SCMs." Proceedings of the 2021 Tran-SET Conference, Virtual, June 3-4, 2021, edited by Z. Hossain, M. Hassan, and L. Mohammad, ASCE, Reston, VA., pp. 353-364.
39. Mohammad, L.N., "Rejuvenators for Durable Flexible Pavements." Presented at the Southeast Asphalt User Producer Group Meeting, November 16 – 18, 2021, Knoxville, Tennessee. (Invited Presentation).
40. Mohammad, L.N., "WMA Demonstration Projects in Louisiana: Case Study of Five to Eight Years of Field Performance." Presented at the Southeast Asphalt User Producer Group Meeting, November 16 – 18, 2021, Knoxville, Tennessee. (Invited Presentation).
41. Mohammad, L.N., "Effects of Tack Coat Material Type and Application Rate on Pavement Performance." Presented at the 7th International Symposium on Asphalt Emulsion Technology, October 26-28, 2021. (Virtual invited Presentation)
42. Mohammad, L. N., "Asphalt Mixtures Moisture Damage: Conditioning and Testing Protocols." Presented at the 5th International Conference on Transportation Infrastructure and Materials, October 21 – 22, 2021, Changsha University of Science and Technology, Changsha, China (Virtual Keynote Lecture).
43. Mohammad, L. N., "Increased RAP Contents in Asphalt Mixtures: Fundamental Assessments." Presented at the 5th International Symposium on Frontiers of Road and Airport Engineering (iFRAE), July 12-14, 2021, Delft University of Technology, Delft, Netherlands. (Virtual Keynote Lecture).
44. Mohammad, L.N., "Assessments of Asphalt Mixtures' Cracking Tests at Intermediate Temperature: A Case Study." Presented at the International Conference on Civil and Environmental Engineering Technologies, April 21-22, 2021, Kufa, Iraq. (Virtual Keynote Lecture).
45. Mohammad, L. N., "Effect of Tack Coat Materials on Durability of Asphalt Pavement." Transportation Research Board Webinar on Evaluating Tack Coat Materials' Durability in Asphalt Pavements. March 31, 2021. (Invited Webinar Speaker).
46. Barghabany, P., Zhang, J., Mohammad, L. N., Cooper III, S, and Cooper Jr., "Effect of Laboratory Aging Levels on Asphalt Binder Chemical/Rheological Properties and Fracture Resistance of Asphalt Mixture." Poster presentation at the 100th Annual Meeting of Transportation Research Board, Washington, D.C., January 24-28, 2021.
47. Hungria, R., Arce, G., Hassan, M., Mohammad, L. N., Rupnow, T., and Moinul Mahdi, "Interface Bond Strength of Engineered Cementitious Composites (ECC) in Pavement Applications." Poster presentation at the 100th Annual Meeting of Transportation Research Board, Washington, D.C., January 24-28, 2021.
48. Subedi, S., Arce, G., Hassan, M., Barbato, M., and Mohammad, L. N., "Effect of Raw Sugarcane Bagasse Ash as Sand Replacement on the Fiber-Bridging Properties of Engineered Cementitious Composites." Poster presentation at the 100th Annual Meeting of Transportation Research Board, Washington, D.C.,

- January 24-28, 2021.
49. Subedi, S., Arce, G., Hassan, M., Mohammad, L. N., Rupnow, T., and Barbato, M., "Feasibility of Engineered Cementitious Composites with High Volumes of Post-Processed Bagasse Ash as Partial Cement Replacement." Poster presentation at the 100th Annual Meeting of Transportation Research Board, Washington, D.C., January 24-28, 2021.
 50. AbuFarsakh, R., Arce, G., Hassan, M., Huang, O., Radovic, O., Rupnow, T., Mohammad, L. N., and Sukhishvili, "Novel Metakaolin Based Engineered Geopolymer Composites." Poster presentation at the 100th Annual Meeting of Transportation Research Board, Washington, D.C., January 24-28, 2021.
 51. Barghabany, P., Zhang, J., Mohammad, L. N., Cooper III, S, and Cooper Jr., "Novel Model to Predict Fracture Parameter SCB Jc for Asphalt Mixtures Using an Artificial Neural Network Approach." Poster presentation at the 100th Annual Meeting of Transportation Research Board, Washington, D.C., January 24-28, 2021.
 52. Akentuna, M., Mohammad, L. N., Sachdeva, S., Cooper, III, S., and Cooper, Jr., S., "Effectiveness of Loaded Wheel Tracking Test to Ascertain Moisture Susceptibility of Asphalt Mixtures." Poster Presentation. Transportation Research Board 100th Annual Meeting, Washington D.C., January 24-28, 2021.
 53. Rupnow, Tyson and Coco, Mary Leah. "DOTD Construction Inspection: Moving in the E-Direction." Presented at the ACPA Pipe School, Frisco, TX, February 1, 2022.
 54. Rupnow, Tyson. "Department of Transportation's Perspective Southeast and Gulf Coast." Presented at the TRB Workshop: Progress Toward More Resilient Pavements. Presented at the 4th Virtual Meeting for Concrete P&M-TFG, October 13-14, 2021.

Dissertations/Theses

1. Md Habibur Rahman, Dissertation: "*Evaluating and Incorporating Site Variability in Different Geotechnical Engineering Applications*," LTRC Project No. 16-6GT.
2. Salman S. Abusalman, Thesis: "*Effect of Silt and Fine Sand Contents on the Empirical Correlation of SPT and Internal Friction Angle of Sand*," LTRC Project No. 21-1GT.
3. "*Temperature Gradient Effects on Behavior of Continuous Prestressed Concrete Girder Bridges*," (August 2020), Ph.D. Dissertation, Louisiana State University, Baton Rouge, LA.
4. Asaduzzaman. M., (2021). Safety and Operational Effectiveness of Protected Only over Protected/Permitted Left-turn Phasing in Louisiana associated with LTRC project 21-3SS: Evaluating Permitted/Protected versus Protected Left Turn Signals in Louisiana.
5. "Investigating Complexity of Pedestrian Crashes for Effective Countermeasures" by Malek Abuhijleh, M.S. degree thesis.
6. Thu Nguyen (2022) "Fabrication of Superhydrophobic Surfaces via Air-assisted Electrospay Method." Master Thesis. University of Louisiana at Lafayette.