

Appendix B

ii. Publications

- Aleadelat, Waleed and Khaled Ksaibati: A comprehensive approach for quantifying environmental costs associated with unpaved roads dust, *Journal of Environmental Economics and Policy*, 2017. DOI: 10.1080/21606544.2017.1374214
- Czyzyk, K.A., "A nonlinear synthetic unit hydrograph method that accounts for channel network type," Master of Science Thesis, Colorado State University, Fort Collins, Colorado
- Eadelat, W.A., Ksaibati, K., Wright, H.G.C., and Saha, P. (2017) "Relationship between the International Roughness Indices determined by Android-based Smartphone Application and Inertial Profiler for Local Roads." *ASCE Journal of Transportation Engineering: Part B, Pavements* (accepted for publication).
- Ferenchak, N. and Marshall, W. Age-Specific Bicycling Safety Trends, 1985-2015. *Transportation Research Board*; Washington, D.C.; Jan. 2018.
- Ferenchak, N. and Marshall, W. Redefining the Child Pedestrian Safety Paradigm: Identifying High Fatality Concentrations in Urban Areas. *Injury Prevention*, Vol. 23: 364-369, 2017 (doi: 10.1136/injuryprev-2016-042115).
- Ghadban, Ahmad, Nadim Wehbe and Todd Pauly. Seismic Performance of Self-Consolidating Concrete Bridge Columns. *Engineering Structures*, Vol. 160, April 2018. pp 461-472.
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- Hafez, M., Ksaibati, K., & Atadero, R. A. (2018). Applying Large-Scale Optimization to Evaluate Pavement Maintenance Alternatives for Low-Volume Roads Using Genetic Algorithms. In Press: *Transportation Research Record: Journal of Transportation Research Board*.
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- Henao, A. and Marshall, W. "A Framework for Understanding the Impacts of Ridesourcing on Transportation" in *Disrupting Mobility* by Editors S. Shaheen and G. Meyer, Springer Publishing, 2017.
- Henao, A. and Marshall, W. Impacts of Ridesourcing - Lyft and Uber - on Mode Replacement, Transportation Efficiency, and VMT. *Transportation Research Board*; Washington, D.C.; Jan. 2018.
- Katti, D., Sharma, A., Katti, K. (2017). Chapter 10 - Predictive Methodologies for Design of Bone Tissue Engineering Scaffolds A2 - Bose, Susmita. In A. Bandyopadhyay (Ed.), *Materials for Bone Disorders* (pp. 453)
- Katti, Dinesh, Thapa, Keshab and Katti, Kalpana, The Role of Fluid Polarity in the Swelling of Na-Montmorillonite Clay: A Molecular Dynamics and Fourier Transform Infrared Spectroscopy Study, *Journal of Rock Mechanics and Geotechnical Engineering*, under-review, 2018.

- Kim, Y.J. and Alqurashi, A. 2018. Thermomechanical relaxation of RC beams strengthened with CFRP, *ACI Structural Journal*, American Concrete Institute (ACI) , 115(1), 259-268 (support acknowledged)
- Kim, Y.J. and Bumadian, I. 2017. Chemicoelectrical response of concrete bonded with CFRP sheets in a corrosive environment, *ACI Materials Journal*, American Concrete Institute (ACI), 114(4), 549-558 (support acknowledged)
- Kim, Y.J. and Ibraheem, A. Functional periodicity for debonding-control of CFRP-concrete interface, *ACI Structural Journal*, American Concrete Institute (ACI) (submission number-S-2017-426: accepted) (support acknowledged)
- Leonard Chia, Bhavana Bhardwaj, Pan Lu, and Raj Bridgelall. Railroad Track Condition Monitoring Using Inertial Sensors and Digital Signal Processing: A Review, *IEEE Transactions on Intelligent Transportation Systems*, 2018 (under review)
- Liu, Z., Song, Z., and Yi, H. (2017) Optimal deployment of dynamic wireless charging facilities for an electric bus system. *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2647, 100-108.
- Liu, Z., Song, Z., and Yi, H. (2018) Planning of fast-charging stations for a battery electric bus system under energy consumption uncertainty. *Transportation Research Board 97th Annual Meeting Compendium of Papers*.
- Marshall, W., Coppola, N., and Golembek, Y. Urban Clear Zones, Street Trees, and Road Safety. *Research in Transportation Business & Management* (accepted).
- Monghasemi, S.; Abdallah, M.; Tawfik, A.; and Clevenger. C. "Time-Environmental Impacts Tradeoff Analysis for Businesses Commuters," *Construction Research Congress*, American Society of Civil Engineers, New Orleans, Louisiana, April, 2018.
- Monghasemi, S.; Abdallah, M.; Tawfik, A.; and Clevenger. C. "Time-Environmental Impacts Tradeoff Analysis for Businesses Commuters," *Construction Research Congress*, American Society of Civil Engineers, New Orleans, Louisiana, April, 2018.
- Okok, Mohammed Ali, Promotes Saha and Khaled Ksaibati: Developing performance models for treated gravel roads to evaluate the cost-effectiveness of using dust chemical treatments, *International Journal of Pavement Engineering*, 2017. DOI:10.1080/10298436.2017.1298105
- Pan Lu, and Denver Tolliver. Accident Prediction Model for Public Highway-Rail Grade Crossings, *Accident Analysis & Prevention*, 90, 73-81, 2016 (forgot to report earlier)
- Pan, H., Gui, G., Zhibin Lin*, and Yan, C. (2018) "Deep Bayesian Belief Network Learning for Structural Diagnostics and Health Assessment toward Better Decision-Making on Civil Engineering Structures under Uncertainties." *KSCE Journal of Civil Engineering*, In press
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- Pei, Shiling, Nadim I. Wehbe, and Melissa McMullen. Implementation Guidance for Accelerated Bridge Construction in South Dakota, MPC-17-331. North Dakota State

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- Rimal, S., Tazarv, M., Seo, J., and Wehbe, N. "Methodology for Load Rating Double-Tee Bridge," South Dakota Department of Transportation, Interim Report 1, Oct. 31, 2017.
- Sadia Sharmin, and Mohamed Ahmed, Safety Effectiveness Evaluation of Adding Left-turn Lanes at Signalized Intersections: Fixed and Random Effect Negative Binomial Models, accepted in the International Road Federation, 2017
- Saha, Promoth, Khaled Ksaibati, and Rebecca Atadero. (2017). "Developing Pavement Distress Deterioration Models for Pavement Management System Using Markovian Probabilistic Process." *Advances in Civil Engineering* 2017
- Seo, Junwon, Torres, Eduardo, Schaffer, William, and Wehbe Nadim. Self-Consolidating Concrete for Prestressed Bridge Girders. MPC 17-334, North Dakota State University - Upper Great Plains Transportation Institute, Fargo: Mountain-Plains Consortium, 2017.
- Sherif Gaweesh, Irfan Ahmed, Mohamed Ahmed, Ali Ghasemzadeh, "Evaluating The Safety Effectiveness Of Variable Speed Limit: Before-After Study Utilizing Multivariate Adaptive Regression Splines", presented at the Transportation Research Board 97th Annual Meeting, 2018.
- Thapa, Keshab, Oil Shale and Swelling Clays, NDSU College of Graduate and Interdisciplinary Studies, 3-minute presentation and poster competition, Won: Showcase People's Choice Award.
- Torres, Eduardo, Seo, Junwon, and Lederle, R. Experimental and Statistical Investigation of Self-Consolidating Concrete Mixture Constituents for Prestressed Bridge Girder Fabrication. *ASCE Journal of Materials in Civil Engineering*, 29(9), 04017141, 2017.
- Under Review: Bohn, L., Tazarv, M., and Wehbe, N., "Rehabilitation of Longitudinal Joints in Double-Tee Bridge Girders." South Dakota Department of Transportation, Report No. SD2014-20, March 2018.
- Under Review: Carnahan, Z., Mingo, M., Tazarv, M., and Wehbe, N. "Development of Alternative Superstructure Bridges for South Dakota Local Roads." South Dakota Department of Transportation, Report No. 2014-14, 143, March. 2018.
- Wehbe, Nadim and Abdullah Boudaqa. "Estimation of Vehicular Collision Force for Bridge Columns using Computational Methods." *Proceedings of the 9th International Structural Engineering and Construction Conference (ISEC-9)*. Valencia, Spain. July 24 – 29, 2017.
- Wehbe, Nadim I., and Michael Konrad. Precast Bridge Girder Details for Improved Performance, MPC-17-340. North Dakota State University - Upper Great Plains Transportation Institute, Fargo: Mountain-Plains Consortium, 2017.
- Wehbe, Nadim I., Xiao Qin, Brett Tigges, Zhao Shen, and Abdullah Boudaqa. Evaluation and Mitigation of Vehicle Impact Hazards for Overpasses, MPC-397. North Dakota State University - Upper Great Plains Transportation Institute, Fargo: Mountain-Plains Consortium, 2017.
- Wehbe, Nadim, Ahmad Ghabban, and Todd Pauly. Seismic Performance of Self-Consolidating Concrete Bridge Columns, MPC-17-329. North Dakota State University - Upper Great Plains Transportation Institute, Fargo: Mountain-Plains Consortium, 2017.

- Wen, H. and Mahmoud, H. (2018) “A New Approach to Predict Cyclic Response and Fracture of Shear Links and Eccentrically Braced Frames”, *Frontiers in Built Environment – Earthquake Engineering*; <https://www.frontiersin.org/articles/10.3389/fbuil.2018.00011/full>, 4(11).
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- Zijian Zheng, and Pan Lu, An Alternative Approach to Predict Train-Vehicle Crashes at Highway-Rail Grade Crossings: Neural Networks, *Journal of Safety Research*, 2018 (under review)
- Zohreh Raghebi and Farnoush Banaei-Kashani, Efficient Processing of Exact Single and Batch Reachability Queries on Uncertain Graphs, Submitted to DASFAA 2018 (under review)
- Zohreh Raghebi and Farnoush Banaei-Kashani, Reach Me If You Can! Reachability Query in Uncertain Contact Networks, Submitted to GeoRich 2018 in conjunction with ACM SIGMOD 2018 (under review)