

UNC Charlotte Civil & Environmental Engineering Department

Journal Publications

2019

1. A Soros, **JE Amburgey**, CE Stauber, MD Sobsey, LM Casanova. Turbidity Reduction in Drinking Water by Coagulation-Flocculation with Chitosan Polymers. *Journal of Water and Health*, 17 (2), 204-218, 2019.
2. Z Liu, Z Ding, T Lv, **JS Wu**, W Qiang. Financial Factors Affecting Oil-Price Change and Oil-Stock Interactions: A Review and Future Perspectives. *Natural Hazards*, 95(1-2):207-225, 2019.
3. S Mapara, UD Patel, **OS Keen**, JP Ruparelia. Significant Improvement in Biodegradability of a Real Optical Brightening Agent (OBA) Wastewater Using Small Doses of Fenton's Reagent. *Environmental Technology*, doi: 10.1080/09593330.2019.1692912, 2019.
4. NL Kennedy Neth, CM Carlin, **OS Keen**. Transformation of Common Antibiotics During Water Disinfection with Chlorine and Formation of Antibacterially Active Products. *Environmental Science: Water Research and Technology*, 5, 1222-1233, 2019.
5. NL Kennedy Neth, **OS Keen**. Using Size-Exclusion for Improved Extraction of Trace Organic Compounds from Landfill Leachate. *Waste Management and Research*, 37(6), 651-655, 2019.
6. Q Tian, **M Sun**. Analysis of GenX and Other Per- and Polyfluoroalkyl Substances in Environmental Water Samples. *Separation Science and Technology*, 11, 355-370, 2019.
7. T Kernicky, **M Whelan**, E Al-Shaer. Vibration-based Damage Detection with Uncertainty Quantification by Structural Identification using Nonlinear Constraint Satisfaction with Interval Arithmetic. *Structural Health Monitoring*, 18 (5-6), 1569-1589, 2019.
8. MS Hu, DM Pang, JJ Li, H Zhang, S Dong, **SE Chen**, Y Xu. 3D-RVSP Experimental Study above a Carbonate Outcrop for Coal Resource Exploration. *Acta Geophysica*, 67, 95-107, 2019.
9. HZ Tang, HY Yang, GY Lu, **SE Chen**, JH Yue, ZQ Zhu. Small Multi-Turn Coils Based on Transient Electromagnetic Method for Coal Mine Detection. *Journal of Applied Geophysics*, 169, 165-173, 2019.
10. YH Yang, **SE Chen**, JH Yue, FP Li, H Zhang. Transient Electromagnetic Response with a Ramp Current Excitation Using Conical Source. *Digital Object Identifier, IEEE Transactions*, 7, 63829-63836, 2019.
11. P Wang, XB Mao, **SE Chen**. CO₂ Sequestration Characteristics in the Cementitious Material Based on Gangue Backfilling Mining Method. *International Journal of Mining Science and Technology*, 29, 721-729, 2019.
12. Y Yu, KZ Deng, **SE Chen**, CL Zhao, X Cheng. Topographical Effects on Stress Distribution in Partially Mined Sites in Mountainous Areas. *ASCE Journal of Performance of Constructed Facilities*, 33(6), 04019065, 2019.
13. D Scott, **SE Chen**. Innovative Concrete Sensing Technologies for Nuclear Power Plants. *Gradevinar*, 71(1), 9-19, 2019.
14. JL Feyyisa, **JL Daniels**, **MA Pando**, **VO Ogunro**. Relationship Between Breakthrough Pressure and Contact Angle for Organo-Silane Treated Coal Fly Ash. *Environmental Technology & Innovation*, 14, 100332, 2019.

15. JL Feyyisa, **JL Daniels**. The Role of Ash Mineralogy on Breakthrough Pressure and Contact Angle: A Statistical Evaluation. *J. Coal Combust. Gasification Prod.*, 2019.
16. EM Gonzales, **MA Pando**, **M Whelan**, D Fratta, LF Ramos, R Aguilar. Structural Evaluation and Preliminary Analysis of the St. Jerome Hall of the Church of the Nativity in Bethlehem. *Structural Analysis of Historical Constructions*, 1063-1072, 2019.
17. S Dika, B Hunt, **M Pando**, **B Tempest**, M Allen. Self-Efficacy of Engineering Transfer Students: Links to Faculty Interaction and Other Forms of Capital. *International Journal on Engineering, Science and Technology*, 1 (1), 1-9, 2019.
18. XL Xu, **W Fan**, PF Cheng, LY Shan. Mechanical Characterisation of Interface Shear Strain of Multi-Layer Composite Pavement. *International Journal of Pavement Engineering*, <https://doi.org/10.1080/10298436.2019.1662905>, September 2019.
19. Z Chen, **W Fan**. Data Analytics Approach for Travel Time Reliability Pattern Analysis and Prediction. *Journal of Modern Transportation*, 27 (4), 250-265, 2019.
20. Y Li, **WD Fan**. Modelling Severity of Pedestrian-Injury in Pedestrian-Vehicle crashes with Latent Class Clustering and Partial Proportional Odds Model: A Case Study of North Carolina. *Accident Analysis & Prevention*, 131, 284-296, 2019.
21. P Liu, **W Fan**. Analysis of Head-on Crash Injury Severity using a Partial Proportional Odds Model. *Journal of Transportation Safety & Security*, 1-21, 2019.
22. Z Lin, **W Fan**. Cyclist Injury Severity Analysis with Mixed-Logit Models at Intersections and Nonintersection Locations. *Journal of Transportation Safety & Security*, 1-23, 2019.
23. Y Li, **W Fan**. Pedestrian Injury Severities in Pedestrian-Vehicle Crashes and the Partial Proportional Odds Logit Model: Accounting for Age Difference. *Transportation Research Record*, 2673 (5), 731-746, 2019.
24. Z Chen, **W Fan**. Modeling Pedestrian Injury Severity in Pedestrian-Vehicle Crashes in Rural and Urban Areas: Mixed Logit Model approach. *Transportation Research Record*, 2673 (4), 1023-1034, 2019.
25. M Yu, **WD Fan**. Optimal Variable Speed Limit Control in Connected Autonomous Vehicle Environment for Relieving Freeway Congestion. *Journal of Transportation Engineering, Part A: Systems*, 145 (4), 04019007, 2019.
26. Z Chen, **WD Fan**. A Multinomial Logit Model of Pedestrian-Vehicle Crash Severity in North Carolina. *International Journal of Transportation Science and Technology*, 8 (1), 43-52, 2019.
27. Z Lin, **W Fan**. Modeling Bicyclist Injury Severity in Bicycle-Motor Vehicle Crashes that Occurred in Urban and Rural Areas: A Mixed Logit Analysis. *Canadian Journal of Civil Engineering*, 46 (10), 924-933, 2019.
28. Z Huang, R Xu, **WD Fan**, F Zhou, W Liu, Service-Oriented Load Balancing Approach to Alleviating Peak-Hour Congestion in a Metro Network Based on Multi-Path Accessibility. *Sustainability*, 11 (5), 1293, 2019.
29. P Liu, **W Fan**. Modeling Head-on Crash Severity on NCDOT Freeways: A Mixed Logit Model Approach. *Canadian Journal of Civil Engineering*, 46 (6), 322-328, 2019.
30. Z Jiang, J Gu, **W Fan**, W Liu, B Zhu. Q-Learning Approach to Coordinated Optimization of Passenger Inflow Control with Train Skip-Stopping on a Urban Rail Transit Line. *Computers & Industrial Engineering*, 127, 1131-1142, 2019.
31. V Singh, N Gore, A Chepuri, S Arkatkar, G Joshi, **SS Pulugurtha**. Examining Travel Time Variability and Reliability on an Urban Arterial Road Using Wi-Fi Detections-A Case Study. *Journal of the Eastern Asia Society for Transportation Studies* 13, 2390-2411, 2019.

32. SR Kodupuganti, **SS Pulugurtha**. Link-Level Travel Time Measures-based Level of Service Thresholds by the Posted Speed Limit. *Transportation Research Interdisciplinary Perspectives*, 3, 100068, 2019.
33. **SS Pulugurtha**, P Penmetsa, VR Duddu. Travel Time, Reliability, Additional Trip Time, Willingness to Pay and Their Values by Socio-Economic Factors. *Advances in Transportation Studies*, 49, 2019.
34. VR Duddu, **SS Pulugurtha**, P Najaf. Using Link-Level Archived Automatic Vehicle Location Data to Assess Transit System LOS at Bus-Stop Level. *Transportation in Developing Economies*, 5 (2), 11, 2019.
35. S Mathew, **SS Pulugurtha**, AS Mane. Effect of Toll Roads on Travel Time Reliability Within its Vicinity: A Case Study from the State of North Carolina. *Transportation Letters*, 1-9, 2019.
36. K Koilada, AS Mane, **SS Pulugurtha**. Odds of Work Zone Crash Occurrence and Getting Involved in Advance Warning, Transition, and Activity Areas by Injury Severity. *IATSS Research*, 2019.
37. **SS Pulugurtha**, AS Mane, VR Duddu, CM Godfrey. Investigating the Influence of Contributing Factors and Predicting Visibility at Road Link-Level. *Heliyon*, 5 (7), e02105, 2019.
38. RMZ Reza, **SS Pulugurtha**. Forecasting Short-term Relative Changes in Travel Time on a Freeway. *Case Studies on Transport Policy*, 7 (2), 205-217, 2019.
39. S Sharma, **SS Pulugurtha**. Modeling Crash Risk at Rail-Highway Grade Crossings by track Class. *Journal of Transportation Technologies*, 9 (03), 261, 2019.
40. KK Mukoko, **SS Pulugurtha**. Examining the Influence of Network, Land Use, and Demographic Characteristics to Estimate the Number of Bicycle-Vehicle Crashes on Urban Roads. *IATSS Research*, 2019.
41. VR Duddu, VM Kukkapalli, **SS Pulugurtha**. Crash Risk Factors Associated with Injury Severity of Teen Drivers. *IATSS Research*, 43 (1), 37-43, 2019.
42. P Penmetsa, **SS Pulugurtha**. Risk Factors Attributed to Fatal Fixed-Object Crashes on Noninterstate Roads. *Journal of Transportation Safety & Security*, 11 (1), 102-116, 2019.
43. **SS Pulugurtha**, SV Duvvuri, RN Jain, M Venigalla. How Accurate is the Regional Travel Demand Model in Mimicking Real-World Travel Times? *Urban, Planning and Transport Research*, 7 (1), 53-73, 2019.

2018

1. **J Bowen**, N Harrigan. Water Quality Model Calibration via a Full-Factorial Analysis of Algal Growth Kinetic Parameters. *Journal of Marine Science and Engineering*, 6 (4), 137, 2018.
2. A Alansari, **JE Amburgey**, N Madding. A Quantitative Analysis of Swimming Pool Recirculation System Efficiency. *Journal of Water and Health*, 16 (3), 449-459, 2018.
3. A Sahu, K Blackburn, K Durkin, TB Eldred, BR Johnson, R Sheikh, **JE Amburgey**, J Poler. Green Synthesis of Nanoscale Anion Exchange Resin for Sustainable Water Purification. *Environmental Science: Water Research & Technology*, 4 (10), 1685-1694, 2018.
4. PA Malinowski, **JS Wu**, **SS Pulugurtha**, AS Stillwell. Green Infrastructure Retrofits with Impervious Area Reduction by Property Type: Potential Improvements to Urban Stream Quality. *Journal of Sustainable Water in the Built Environment*, 4 (4), 04018012 1, 2018.

5. IT Okioga, **JS Wu**, Y Sireli, H Hendren. Renewable Energy Policy Formulation for Electricity Generation in the United States. *Energy Strategy Reviews*, 22:365-384, 2018.
6. **JS Wu**, C Allan. Vegetated Swales for Managing Stormwater runoff from secondary roads. *Journal of Environmental Engineering, ASCE*, 144(10). DOI: 10.1061/(ASCE)EE.1943-7870.0001447, 2018.
7. KC Lambirth, MCB Tsilimigras, J Johnson, A Al-shaer, O Wynblatt, S Sypolt, C Brouwer, S Clinton, **O Keen**, M Redmond, A Fodor, C Gibas. Impact of Treated Wastewater Release on Antibiotic Concentrations and Antibiotic Resistance Markers in Urban Stream Microbial Communities. *Water (special issue)*, 10(11), 1539-1560, 2018.
8. **O Keen**, J Bolton, M Litter, K Bircher, T Oppenlaender. Standard Reporting of Electrical Energy per Order (EEO) for UV/H₂O₂ Reactors. *Pure and Applied Chemistry*, 90(9), 1487-1499, 2018.
9. F Barancheshme, **M Munir**. Strategies to Combat Antibiotic Resistance in the Wastewater Treatment Plants. *Frontiers in Microbiology*, 8, 2603, 2018.
10. Z Lou, J Zhou, **M Sun**, J Xu, K Yang, D Lv, Y Zhao, X Xu. MnO₂ Enhances Electrocatalytic Hydrodechlorination by Pd/Ni Foam Electrodes and Reduces Pd Needs. *Chemical Engineering Journal*, 352, 549-557, 2018.
11. ZR Hopkins, **M Sun**, JC DeWitt, DRU Knappe. Recently Detected Drinking Water Contaminants: GenX and Other Per- and Polyfluoroalkyl Ether Acids. *Journal-American Water Works Association*, 110 (7), 13-28, 2018.
12. TL Cavalline, **BQ Tempest**, EH Blanchard, CD Medlin, RR Chimmula, ... Impact of Local Calibration Using Sustainable Materials for Rigid Pavement Analysis and Design. *Journal of Transportation Engineering, Part B: Pavements*, 144 (4), 04018044, 2018.
13. E Palta, H Fang, **DC Weggel**. Finite Element Analysis of the Advanced Combat Helmet under Various Ballistic Impacts. *International Journal of Impact Engineering*, 112, 125-143, 2018.
14. **DT Young**, **SE Chen**. Improving Grid Resiliency with Big and Small Steps. *T&D World, Transmission Reliability*, December 19, 2018.
15. T Kernicky, **M Whelan**, E Al-Shaer. Dynamic Identification of Axial Force and Boundary Restraints in Tie Rods and Cables with Uncertainty Quantification using Set Inversion Via Interval Analysis. *Journal of Sound and Vibration*, 423, 401-420, 2018.
16. **M Whelan**, NS Zamudio, T Kernicky. Structural Identification of a Tied Arch Bridge using Parallel Genetic Algorithms and Ambient Vibration Monitoring with a Wireless Sensor Network. *Journal of Civil Structural Health Monitoring*, 8 (2), 315-330, 2018.
17. HY Yang, FP Li, **SE Chen**, JH Yue, FS Guo, X Chen, H Zhang. An Inversion of Transient Electromagnetic Data from a Conical Source. *Applied Geophysics*, DOI: 10.1007/s11770-018-0691-8, 2018.
18. Y Wang, WS Lu, KS Dai, MM Yuan, **SE Chen**. Dynamic Study of a Rooftop Vertical Axis Wind Turbine Tower Based on an Automated Vibration Data Processing Algorithm. *Energies*, 11(11), 3135, doi:10.3390/en11113135, 2018.
19. J Hu, Q Sun, **SE Chen**, W Zhang. The Thermodynamic Properties Variation of Cemented Clay after Treatment at High Temperatures. *Construction and Building Materials*, 182, 523-529, 2018.
20. DF Cao, B Shi, GW Wei, **SE Chen**, HH Zhu. An Improved Distributed Sensing Method for Monitoring Soil Moisture Profile Using Heated Carbon Fibers. *Measurement*, 123, 175-184, 2018.

21. Y Yu, KZ Deng, Y Luo, **SE Chen**, HF Zhuang. An Improved Method for Long-Term Stability Evaluation of Strip Mining and Pillar Design. *International Rock Mechanics and Mining Sciences*, 107, 25-30, 2018.
22. KS Dai, A Li, HX Zhang, **SE Chen**, Y Pan. Surface Damage Quantification of Post-Earthquake Building Based on Terrestrial Laser Scan Data. *Structural Control and Health Monitoring*, 25(8), e2210, DOI: 10.1002/stc.2210, 2018.
23. Y Yu, **SE Chen**, KZ Deng, P Wang, HD Fan. Subsidence Mechanism and Stability Assessment Methods for Partial Extraction Mines for Sustainable Development of Mining Cities – A Review. *Sustainability*, DOI:10.3390/su10010113, 2018.
24. X Wang, B Shi, G Wei, **SE Chen**, H Zhu, T Wang. Monitoring the Behavior of Segment Joints in a Shield Tunnel Using Distributed Fiber Optic Sensors. *Structural Control and Health Monitoring*, 25(1), DOI: 10.1002/stc.2056, 2018.
25. **JJ Daniels**, GP Das. Influence of Flowrate on Leachability. *Coal Combustion and Gasification Products*, 10, pp. 34-40, 2018.
26. MI Keatts, **JL Daniels**, WG Langley, **MA Pando**, **VO Ogunro**. Apparent Contact Angle and Water Entry Head Measurements for Organo-Silane Modified Sand and Coal Fly Ash. *Journal of Geotechnical and Geoenvironmental Engineering*, 144 (6), 04018030, 2018.
27. SL Dika, **MA Pando**, **BQ Tempest**, ME Allen. Examining the Cultural Wealth of Underrepresented Minority Engineering Persisters. *Journal of Professional Issues in Engineering Education and Practice*, 144 (2 ...), 2018.
28. R Aguilar, **MA Pando**, C Briceño, G Zavala, B Castañeda, R Perucchio, Structural and Geotechnical Engineering Assessment of Huaca de la Luna—A Massive Earthen Moche Culture Pyramid in Northern Peru. *Journal of Cultural Heritage* 34, 83-94, 2018.
29. M Yu, **W Fan**. Accessibility Impact of Future High Speed Rail Corridor on the Piedmont Atlantic Megaregion. *Journal of Transport Geography*, 73, 1-12, 2018.
30. Z Jiang, J Gu, Y Han, **W Fan**, J Chen. Modeling Actual Dwell Time for Rail Transit using Data Analytics and Support Vector Regression. *Journal of Transportation Engineering, Part A: Systems*, 144 (11), 04018071, 2018.
31. M Yu, **W Fan**. Optimal Variable Speed Limit Control at a Lane Drop Bottleneck: Genetic Algorithm Approach. *Journal of Computing in Civil Engineering* 32 (6), 04018049, 2018.
32. Y Li, **W Fan**. Modelling the Severity of Pedestrian Injury in Pedestrian—Vehicle Crashes in North Carolina: A Partial Proportional Odds Logit Model Approach. *Journal of Transportation Safety & Security*, 1-22, 2018.
33. Z Chen, **W Fan**. Extracting Bus Transit Boarding Stop Information using Smart Card Transaction Data. *Journal of Modern Transportation*, 26 (3), 209-219, 2018.
34. M Yu, **W Fan**. Tabu Search Strategies for Variable Speed Limit Control at a Lane Drop Bottleneck. *Journal of Transportation Engineering, Part A: Systems*, 144 (7), 04018033, 2018.
35. L Gong, **W Fan**. Developing a Systematic Method for Identifying and Ranking Freeway Bottlenecks using Vehicle Probe Data. *Journal of Transportation Engineering, Part A: Systems*, 144 (3), 04017083, 2018.
36. Z Jiang, **W Fan**, W Liu, B Zhu, JJ Gu. Reinforcement Learning Approach for Coordinated Passenger Inflow Control of Urban Rail Transit in Peak Hours. *Transportation Research Part C: Emerging Technologies*, 88, 1-16, 2018.
37. F Liu, R Xu, **W Fan**, Z Jiang. Data Analytics Approach for Train Timetable Performance Measures using Automatic Train Supervision Data. *IET Intelligent Transport Systems*, 12 (7), 568-577, 2018.

38. A Chepuri, J Ramakrishnan, S Arkatkar, G Joshi, **SS Pulugurtha**. Examining Travel Time Reliability-based Performance Indicators for Bus Routes using GPS-based Bus Trajectory Data in India. *Journal of Transportation Engineering, Part A: Systems*, 144 (5), 04018012, 2018.
39. P Penmetsa, **SS Pulugurtha**, VR Duddu. Factors Associated with Crashes due to Overcorrection or Oversteering of Vehicles. *IATSS research* 42 (1), 24-29, 2018
40. P Penmetsa, **SS Pulugurtha**. Modeling Crash Injury Severity by Road Feature to Improve Safety. *Traffic Injury Prevention*, 19 (1), 102-109, 2018.
41. P Najaf, VR Duddu, **SS Pulugurtha**. Predictability and Interpretability of Hybrid Link-level Crash Frequency Models for Urban Arterials Compared to Cluster-based and General Negative Binomial Regression Models. *International Journal of Injury Control and Safety Promotion*, 25 (1), 3-13, 2018.
42. M Venigalla, S Dixit, **SS Pulugurtha**. A Methodology to Derive Land Use Specific Auto-Trip Emission Footprints from Household Travel Survey Data. *Urban, Planning and Transport Research*, 6 (1), 111-128, 2018.
43. VM Kukkapalli, **SS Pulugurtha**. Effect of Detector Placement, Train and Traffic Characteristics on Operational Performance of At-grade Railroad Crossing. *Transportation in Developing Economies* 4 (2), 2018.
44. **SS Pulugurtha**, VM Kukkapalli, AS Mane. Pedestrian Hybrid Beacon Signals: Identifying Characteristics Associated with Negative Consequences to Reduce Danger at Mid-block Locations. *Journal of Transport & Health*, 10, 225-235, 2018.
45. VR Duddu, **SS Pulugurtha**, P Penmetsa. Illustrating the Monetary Impact of Transportation Projects/Alternatives using the Values of Travel Time and Travel Time Reliability. *Transportation Research Record* 2672 (51), 88-98, 2018.
46. AS Mane, **SS Pulugurtha**. Influence of On-Network, Traffic, Signal, Demographic, and Land Use Characteristics by Area Type on Red Light Violation Crashes. *Accident Analysis & Prevention*, 120, 101-113, 2018.
47. VR Duddu, P Penmetsa, **SS Pulugurtha**. Modeling and Comparing Injury Severity of At-Fault and Not At-Fault Drivers in Crashes. *Accident Analysis & Prevention*, 120, 55-63, 2018.

2017

1. P Lu, **JE Amburgey**, VR Hill, JL Murphy, CL Schneeberger, MJ Arrowood, ... Removals of *Cryptosporidium Parvum* Oocysts and *Cryptosporidium*-sized Polystyrene Microspheres from Swimming Pool Water by Diatomaceous Earth Filtration and ... *Journal of Water and Health*, 15 (3), 374-384, 2017.
2. **JS Wu**, HK Tseng, JC Ferrell, X Liu. Transforming Waste Management Operations to Green Energy Initiatives: Opportunities and Challenges. *International Journal of Energy Economics and Policy*, 7(3):50-57, 2017.
3. Z Liu, Z Ding, R Li, X Jiang, **JS Wu**, T Lv. Research on Differences of Spillover Effects between International Crude Oil Price and Stock Markets in China and America. *Natural Hazards*, DOI 10.1007/s11069-017-2881-8, 2017.
4. D Lucas, SM Petty, **O Keen**, B Luedeka, M Schlummer, R Weber, M Barlaz, R Yazdani, B Riise, J Rhodes, D Nightingale, ML Diamond, J Vijgen, A Lindeman, A Blum, CP Koshland. Methods of Responsibly Managing End-of-Life Foams and Plastics Containing Flame Retardants: Part I. *Environmental Engineering Science*, 35(6), 573-587, 2017.

5. D Lucas, SM Petty, **O Keen**, B Luedeka, M Schlummer, R Weber, M Barlaz, R Yazdani, B Riise, J Rhodes, D Nightingale, ML Diamond, J Vijgen, A Lindeman, A Blum, CP Koshland. Methods of Responsibly Managing End-of-Life Foams and Plastics Containing Flame Retardants: Part II. *Environmental Engineering Science*, 35(6), 588-602, 2017.
6. NL Kennedy Neth, CM, Carlin, **OS Keen**. Doxycycline Transformation and Emergence of Antibacterially Active Products During Water Disinfection with Chlorine. *Environmental Science: Water Research and Technology*, 3, 1086-1094, 2017.
7. A Oun, Z Yin, **M Munir**, I Xagorarakis. Microbial Pollution Characterization of Water and Sediment at Two Beaches in Saginaw Bay, Michigan. *Journal of Great Lakes Research*, 43 (3), 64-72, 2017.
8. C Gu, P Gao, F Yang, D An, **M Munir**, H Jia, G Xue, C Ma. Characterization of Extracellular Polymeric substances in Biofilms under Long-term Exposure to Ciprofloxacin Antibiotic using Fluorescence Excitation-Emission Matrix and ... *Environmental Science and Pollution Research*, 24 (15), 13536-13545, 2017.
9. E O'Brien, **M Munir**, T Marsh, M Heran, G Lesage, VV Tarabara, ... Diversity of DNA Viruses in Effluents of Membrane Bioreactors in Traverse City, MI (USA) and La Grande Motte (France). *Water Research* 111, 338-345, 2017.
10. Z Hao, **M Sun**, JJ Ducoste, CH Benson, S Luettich, MJ Castaldi, ... Heat Generation and Accumulation in Municipal Solid Waste Landfills. *Environmental Science & Technology*, 51 (21), 12434-12442, 2017.
11. **B Tempest**, T Cavalline, J Gergely. Predicting Corrosion-Related Bridge Durability with Laboratory Measured Permeability Results. *Journal of Performance of Constructed Facilities*, 31 (5), 04017069, 2017.
12. C Snell, **B Tempest**, T Gentry. Comparison of the Thermal Characteristics of Portland Cement and Geopolymer Cement Concrete Mixes. *Journal of Architectural Engineering*, 23 (2), 04017002, 2017.
13. TL Cavalline, JT Calamusa, AM Kitts, **BQ Tempest**. Field-observed cracking of paired lightweight and normal weight concrete bridge decks. *International Journal of Concrete Structures and Materials*, 11 (1), 85-97, 2017.
14. MV Gangone, **MJ Whelan**, KD Janoyan. Effect of Sensor System Noise and Load Positioning on the Precision of Load Testing and Rating of Highway Bridges: A Case Study. *Journal of Structural Integrity and Maintenance*, 2 (4), 234-248, 2017.
15. T Kernicky, **M Whelan**, U Rauf, E Al-Shaer. Structural Identification using a Nonlinear Constraint Satisfaction Processor with Interval Arithmetic and Contractor Programming. *Computers & Structures*, 188, 1-16, 2017.
16. R Goyal, **MJ Whelan**, TL Cavalline. Characterising the Effect of External Factors on Deterioration Rates of bridge Components using Multivariate Proportional Hazards Regression. *Structure and Infrastructure Engineering*, 13 (7), 894-905, 2017.
17. MS Hu, JJ Li, DM Pan, **SE Chen**. Numerical Simulation of Ultrasonic Detection for Concrete Structure Based on Equivalent Offset Migration. *The Civil Engineering Journal*, 4-2017, 40, 497-506, DOI 10.14311/CEJ.2017.04.0040, 2017.
18. RB Murugan, E Rama Sai, C Natarajan, **SE Chen**. Flexural Fatigue Performance and Mechanical Properties of Rubberized Concrete. *Gradevinar*, doi.or/10.14256/JCE.1427.2015, 2017.
19. **SE Chen**, H Bian, Y Tong. BrIM and Scanning LiDAR – Tools for Bridge Long Term Management in the Very Near Future. *BIM视界*, 3 (in Chinese), 2017.

20. Y Yu, **SE Chen**, KZ Deng, HD Fan. Long-Term Stability Evaluation and Pillar Design Criterion for Room-and-Pillar Mines. *Energies*, SP on Mathematical and Computational Modeling in Geothermal Engineering 10, 1644, DOI:10.3390/en10101644, 2017.
21. KS Dai, **SE Chen**, G Loflin, M Luo. A Framework for Holistic Designs of Power Line Systems Based on Lessons Learned from Super Typhoon Haiyan. *Sustainable Cities and Society*, 35, pp. 50-364, 2017.
22. X Wang, B Shi, G Wei, **SE Chen**. An Energy Demodulation Based Fiber Optic Sensing System for Landslide Early-Warning. *Applied Science*, 7, 699, DOI: 10.3390/app7070699, 2017.
23. Q Sun, **SE Chen**, Q Gao, WQ Zhang, J Geng, Y Zhang. Analyses of the Factors Influencing Sandstone Thermal Conductivity. *Acta Geodynamica et Geomaterialia*, 14(2), 173-180, 2017.
24. KS Dai, J Wang, R Mao, Z Lu, **SE Chen**. Experimental Investigation on Dynamic Characterization and Seismic Control Performance of a TLPD System. *Structural Design of Tall and Special Buildings*, 26(7), 2017.
25. MK Haridharan, C Natarajan, **SE Chen**. Evaluation of Residual Strength and Durability Aspect of Concrete Cube Exposed to Elevated Temperature. *Journal of Sustainable Cement-Based Materials*, 6(4), 231-253, dx.doi.org/10.1080/21650373.2016.1230898, 2017.
26. JL Feyyisa, **JL Daniels**, **MA Pando**. Contact Angle Measurements for Use in Specifying Organosilane-Modified Coal Combustion Fly Ash. *Journal of Materials in Civil Engineering*, 29 (9), 04017096, 2017.
27. CS Jordan, **JL Daniels**, W Langley. The Effects of Temperature and Wet-Dry Cycling on Water-Repellent Soils. *Environmental Geotechnics*, 4 (EG4), 299-307, 2017.
28. KR Reddy, HS Kulkarni, RK Giri, **MV Khire**. Horizontal Trench System Effects on Leachate Recirculation in Bioreactor Landfills. *Geomechanics and Geoengineering*, 12 (2), 115-136, 2017.
29. L Gong, **W Fan**. Applying Travel-Time Reliability Measures in Identifying and Ranking Recurrent Freeway Bottlenecks at the Network Level. *Journal of Transportation Engineering, Part A: Systems*, 143 (8), 04017042, 2017.
30. M Yu, **WD Fan**. Calibration of Microscopic Traffic Simulation Models using Metaheuristic Algorithms. *International Journal of Transportation Science and Technology*, 6 (1), 63-77, 2017.
31. L Gong, **WD Fan**. Modeling Single-Vehicle Run-Off-Road Crash Severity in Rural Areas: Accounting for Unobserved Heterogeneity and Age Difference. *Accident Analysis & Prevention*, 101, 124-134, 2017.
32. **W Fan**. Social Welfare Maximization by Optimal Toll Design for Congestion Management: Models and Comprehensive Numerical Results. *Transportation Letters* 9 (2), 81-89, 2017.
33. Z Pu, Z Li, Y Wang, M Ye, **WD Fan**. Evaluating the Interference of Bicycle Traffic on Vehicle Operation on Urban Streets with Bike Lanes. *Journal of Advanced Transportation*, 2017, 2017.
34. RH Xu, FB Liu, **W Fan**. Train Operation Adjustment Strategies in Metro Based on Transfer Capacity Coordination, *Journal of Transportation Systems Engineering and Information Technology*, 17(6), 164-170, 2017.
35. YL Xu, XY Xia, **W Fan**. Thermal Stability Analysis of High Modulus Asphalt Admixture with DSC Test, *Journal of Building Materials*, 6, 2017.
36. HH Zhang, **W Fan**, ZH Liao, J Jiang. Impacts of Parallel Runway Operation Modes on Air Traffic Flow Characteristics in Terminal Areas, *Journal of Transportation Systems Engineering and Information Technology*, 17(3), 2017.

37. **SS Pulugurtha**, MS Imran. Modeling Basic Freeway Section Level-of-Service based on Travel Time and Reliability. Case Studies on Transport Policy, 2017.
38. VR Duddu, **SS Pulugurtha**. Modeling Link-Level Crash Frequency Using Integrated Geospatial Land Use Data and On-Network Characteristics. Journal of Transportation Engineering, Part A: Systems, 143 (8), 04017030, 2017.
39. P Penmetsa, **SS Pulugurtha**. Methods to Rank Traffic Rule Violations Resulting in Crashes for Allocation of Funds. Accident Analysis & Prevention, 99, 192-201, 2017.
40. P Penmetsa, **SS Pulugurtha**. Risk Drivers Pose to Themselves and Other Drivers by Violating Traffic Rules. Traffic Injury Prevention, 18 (1), 63-69, 2017.
41. **SS Pulugurtha**, VR Duddu, S Tagar. Cost of Independent Bicycle and Pedestrian Projects: Data, Challenges, and Variations. Transportation Research Record 2644 (1), 111-118, 2017.
42. P Penmetsa, **SS Pulugurtha**, VR Duddu. Examining Injury Severity of Not-At-Fault Drivers in Two-Vehicle Crashes. Transportation Research Record 2659 (1), 164-173, 2017.

Conference Publications

2019

1. R Goyal, **MJ Whelan**, T Cavalline. Duration-based Forecasting of Bridge Condition with Non-Parametric Kaplan-Meier Survival Function. Fifth Conference on Smart Monitoring, Assessment, and Rehabilitation of Civil Structures, Potsdam, Germany, August 27-29, 2019.
2. **JL Daniels**. Engineered Water Repellency for Applications in Environmental Geotechnology. Paper Associated with Keynote Presentation, 2nd International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE 2019), June 16-20, 2019, University of Illinois-Chicago.
3. **JL Daniels**, **VO Ogunro**, **MA Pando**, L Dumenu, JL Feyyisa. Engineered Water Repellency: An Evolving Approach to Infiltration Control. World of Coal Ash Conference, St. Louis, MO, May 2019.
4. C Akgüner, N Huvaj, A Ekici, JT Coe, **MA Pando**, SS Kumar, CL Meehan. Index Properties and Classification of Marginal Fills or Coarse-Fine Mixtures. American Society of Civil Engineers (ASCE), 2019.
5. R Aguilar, D Torrealva, S Moreira, **MA Pando**, LF Ramos. Structural Analysis of Historical Constructions. 2019.
6. X Brioso, C Calderón, R Aguilar, **MA Pando**. Preliminary Methodology for the Integration of Lean Construction, BIM and Virtual Reality in the Planning Phase of Structural Intervention in Heritage Structures. Structural Analysis of Historical Constructions, 484-492, 2019.
7. EM Gonzales, **MA Pando**, M Whelan, D Fratta, LF Ramos, R Aguilar. Structural Evaluation and Preliminary Analysis of the St. Jerome Hall of the Church of the Nativity in Bethlehem. Structural Analysis of Historical Constructions, 1063-1072, 2019.
8. A Chaudhari, N Gore, SS Arkatkar, G Joshi, **SS Pulugurtha**. Deriving Pedestrian Risk Index by Vehicle Type and Road Geometry at Mid-block Crosswalks Under Heterogeneous Traffic Conditions. 5th Conference of Transportation Research Group of India (CTRG), Bhopal, India, December 18-21, 2019.
9. **SS Pulugurtha**, RN Jain. Truck Passenger Car Equivalent Value from a Travel Time Perspective. 5th Conference of Transportation Research Group of India (CTRG), Bhopal, India, December 18-21, 2019.
10. A Chepuri, SS Arkatkar, G Joshi, **SS Pulugurtha**. Assessing and Improving Schedule Reliability of Bus Route Under Mixed Traffic Environment. 2019 East Asia Society for Transportation Studies (EASTS) Conference, Colombo, Sri Lanka, September 9-12, 2019.

2018

1. M Strynar, J McCord, J Lang, S Newton, D Knappe, Z Hopkins, **M Sun**, ... Investigations of per-and polyfluorinated compounds in environmental samples and contemporary products. The American Chemical Society, 255, 2018.
2. D Knappe, Z Hopkins, C Zhang, N Kotlarz, **M Sun**, M Strynar, A Lindstrom, ... Impacts of air emissions and wastewater discharges from a fluorochemical manufacturing plant on nearby and distant communities. The American Chemical Society, 255, 2018.
3. **M Sun**, E Arevalo, M Strynar, A Lindstrom, D Knappe. Update on occurrence and control of legacy and emerging perfluoroalkyl substances in North Carolina. The American Chemical Society, 255, 2018.

4. D Knappe, LA Dudley, A Rossner, **M Sun**. Factors controlling the adsorption of ionizable compounds to activated carbon. The American Chemical Society, 255, 2018.
5. D Knappe, **M Sun**, C Lopez. Rapid and sensitive method for the determination of 1, 4-dioxane analysis in a wide range of aqueous matrices. The American Chemical Society, 255, 2018.
6. R Goyal, **MJ Whelan**, T Cavalline. Predictive Fidelity of Bridge Deterioration Models: Probabilistic vs. Deterministic. 9th International Conference on Bridge Maintenance, Safety, and Management, Melbourne, Australia, July 9-13, 2018.
7. MV Gangone, **MJ Whelan**. The Impact of Measurement Uncertainty from Experimental Load Distribution Factors on Bridge Load Rating. Proceedings of SPIE Smart Structures and Materials + Nondestructive Evaluation and Health Monitoring, Denver Colorado. March 27, 2018.
8. R Whitney, **N Braxtan**, H Alsayed. Recommendations for Improving Fire Performance of Steel Bridge Girders. Structures Congress, 2018, 2018.
9. L Wang, T Zhao, **SE Chen**, D Cook. An Inductive Power Transfer System Design for Rail Applications. 2018 IEEE Transportation Electrification Conference and Expo (ITEC), 2018.
10. EM Gonzales, **MA Pando**, **MJ Whelan**, D Fratta, L Ramos, R Aguilar. Structural Evaluation and Preliminary Analysis of the St. Jerome Hall of the Church of the Nativity in Bethlehem. 11th International Conference on Structural Analysis of Historical Constructions, Cusco, Peru, September 11-13, 2018.
11. F Liu, R Xu, Z Jiang, **WD Fan**. Demand-Driven Coordinated Train Rescheduling for Delay Management of Urban Rail Transit Line. Transportation Research Board 97th Annual Meeting, 2018.
12. F Liu, R Xu, **WD Fan**, Z Jiang, Z Zhao. Train Timetable Performance Measures Using Automatic Train Supervision Data: Data Analytics Approach and a Case Study of Shanghai Metro. Transportation Research Board 97th Annual Meeting, 2018.
13. K Koilada, **SS Pulugurtha**, AS Mane. Risk Factors Affecting Crash Injury Severity by Work Zone Area. Transportation Research Board 97th Annual Meeting, , 2018.
14. **SS Pulugurtha**, VR Duddu, P Penmetsa, VM Kukkapalli, S Tagar, ... Monetary Value of Travel Time Reliability and Thresholds based on Random Participants Perceptions. Transportation Research Board 97th Annual Meeting, , 2018.
15. **SS Pulugurtha**, KK Mukoko. Modeling Bicycle–Vehicle Crash Frequency on Urban Roads Using Demographic, Land Use, and Network Characteristics. Transportation Research Board 97th Annual Meeting, , 2018.
16. N Teketi, **SS Pulugurtha**, AS Mane. Modeling Pedestrian Crashes at Midblock Locations. Transportation Research Board 97th Annual Meeting, , 2018.
17. LP Srirangam, **SS Pulugurtha**. Modeling Pedestrian Crashes at Intersections Near Light Rail Transit Stations and Comparing Before–After Patterns. Transportation Research Board 97th Annual Meeting, , 2018.
18. S Tagar, **SS Pulugurtha**. Travel Time Based Performance Measures to Assess the Effect of Crashes by Severity. ASCE International Conference on Transportation & Development (ICTD 2018), Pittsburgh, PA, July 15-18, 2018.
19. VM Kukkapalli, **SS Pulugurtha**. Effect of Road Construction Projects on Travel Time Reliability. ASCE International Conference on Transportation & Development (ICTD 2018), Pittsburgh, PA, July 15-18, 2018.

20. A Mane, **SS Pulugurtha**. Effect of Land Use Developments on Travel Time Reliability. ASCE International Conference on Transportation & Development (ICTD 2018), Pittsburgh, PA, July 15-18, 2018.
21. P Penmetisa, **SS Pulugurtha**, VR Duddu. Evaluating the Feasibility of Imposing Restriction on the Use of Older Vehicles. ASCE International Conference on Transportation & Development (ICTD 2018), Pittsburgh, PA, July 15-18, 2018.
22. **SS Pulugurtha**, VR Duddu, K Elangovan. Visualizing the Effect of a Crash Over Space and Time Using Historical Travel Time and Crash Data. ASCE International Conference on Transportation & Development (ICTD 2018), Pittsburgh, PA, July 15-18, 2018.
23. S Mathew, **SS Pulugurtha**, A Mane. Effect of Toll Roads on Travel Time Reliability within its Vicinity. Third National Conference on Recent Advances in Traffic Engineering (RATE 2018), Surat, India, August 11-12, 2018.
24. AS Mane, **SS Pulugurtha**. Link-level Travel Time Prediction Using Artificial Neural Network Models. 2018 21st International Conference on Intelligent Transportation Systems ..., 2018.
25. **SS Pulugurtha**, RN Jain. Influencing Travel Patterns Through Real-time Dissemination of Parking Facility Occupancy. 2018 21st International Conference on Intelligent Transportation Systems ..., 2018.
26. SS Arkatkar, A Chepuri, G Joshi, **SS Pulugurtha**. Assessment of Segment Based Bus Travel Time Reliability Under Mixed Traffic Conditions. The 23rd International Conference of Hong Kong Society for Transportation Studies: Transportation Systems in the Connected Era, Hong Kong, December 8-10, 2018.

2017

1. D Knappe, **M Sun**, LA Dudley, E Arevalo, M Strynar, A Lindstrom. Perfluoroalkyl ether carboxylic acids: Occurrence in the Cape Fear river watershed and fate in drinking water treatment processes. The American Chemical Society, 253, 2017.
2. MV Gangone, **MJ Whelan**. Damage Identification in Highway Bridges using Distribution Factors. Proceedings of SPIE 10169, Nondestructive Characterization and Monitoring of Advanced Materials, Aerospace, and Civil Infrastructure 2017, 1016921, April 19, 2017.
3. H Bian, P Sumitro, **SE Chen**. LiDAR Bridge Inspection Process Analysis and Recommendations for Operation. Proceedings, 8th International Conference on Structural Health Monitoring of Intelligent Infrastructures, Brisbane, Australia, Dec 2017.
4. H Bian, **SE Chen**, W Liu. Error Sources in Processing LiDAR-Based Bridge Inspection. ISPRS-International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 455-459, 2017.
5. MB Sylvain, **MA Pando**, CD Rice, **MJ Whelan**, **VO Ogunro**, Y Park, T Koch. Case History of a Full Scale Axial Load Test of Sheet Piles. Geotechnical Frontiers 2017, Orlando, Florida, March 12-15, 2017.
6. L Dumenu, **MA Pando**, **VO Ogunro**, **JL Daniels**, MI Moid, C Rodriguez. Water Retention Characteristics of Compacted Coal Combustion Residuals. ASCE Geotechnical Special Publication, 276 (Geotechnical Frontiers 2017), 403-413, 2017.
7. L Gong, **WD Fan**. Modeling Single-Vehicle Run-Off-Road Crash Severity in Rural Areas: A Mixed Logit Model Approach. Transportation Research Board 96th Annual Meeting, 2017.

8. VRSS Yesantarao, **SS Pulugurtha**. Evaluating the Influence of a Freeway Capacity Improvement Project on Travel Time Based Performance Measures Within Its Vicinity. 4th Conference of Transportation Research Group of India (CTRG), Mumbai, India, December 17-20, 2017.
9. N Teketi, **SS Pulugurtha**. Effect of Pedestrian Hybrid Beacon Signal on Operational Performance Measures at the Mid-block Location and Adjacent Signalized Intersections. 4th Conference of Transportation Research Group of India (CTRG), Mumbai, India, December 17-20, 2017.
10. VM Kukkapalli, **SS Pulugurtha**. Effect of Detector Placement; Train and Traffic Characteristics on Operational Performance of At-grade Railroad Crossings. 4th Conference of Transportation Research Group of India (CTRG), Mumbai, India, December 17-20, 2017.
11. AS Mane, **SS Pulugurtha**. Applicability of Unconventional Intersection Designs Over Pretimed Signalized Intersection Design Along a Coordinated Corridor. 4th Conference of Transportation Research Group of India (CTRG), Mumbai, India, December 17-20, 2017.
12. VR Duddu, **SS Pulugurtha**, P Najaf. Using Link Level Archived Automatic Vehicle Location Data to Assess Transit System LOS at Bus-stop Level. 4th Conference of Transportation Research Group of India (CTRG), Mumbai, India, December 17-20, 2017.
13. **SS Pulugurtha**, SR Kodupuganti. Travel Time and Reliability Thresholds for Freeway Links from Planning Perspective. 4th Conference of Transportation Research Group of India (CTRG), Mumbai, India, December 17-20, 2017.
14. A Chepuri, SS Arkartkar, G Joshi, **SS Pulugurtha**. Examining Bus Travel Time Reliability- A Case Study of Surat and Indore BRT. 4th Conference of Transportation Research Group of India (CTRG), Mumbai, India, December 17-20, 2017.
15. **SS Pulugurtha**, AS Mane, VM Kukkapalli. Crashes Due to Red Light Violation: Locations and Geospatial Influential Factors. Transportation Research Board 96th Annual Meeting, 2017.
16. P Penmetsa, **SS Pulugurtha**, AS Mane. Risk Perceptions of Drivers: Does It Change with Crash History or Prior Convictions? Transportation Research Board 96th Annual Meeting, 2017.
17. P Penmetsa, **SS Pulugurtha**, VR Duddu. Examining Injury Severity of Not At-Fault Drivers in Two-Vehicle Crashes. Transportation Research Board 96th Annual Meeting, 2017.
18. **SS Pulugurtha**, VR Duddu, S Tagar. Cost of Independent Bicycle and Pedestrian Projects: Data, Challenges and Variations. Transportation Research Board 96th Annual Meeting, 2017.