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EDUCATION

- Ph.D. Degree in Civil Engineering Specialized in Traffic/Transportation Systems Engineering, Queen's University, Kingston, Ontario, Canada, 1991-1994.

Dissertation: "A Mathematical Programming Based Approach to Macroscopic Traffic Assignment in a Dynamic Network with Queues." Supervisor: Dr. Michel Van Aerde.

- M.S. Degree in Production and Systems Engineering (Industrial Engineering), Nagoya Institute of Technology, Nagoya, Japan, 1986-1988.

Thesis: "Optimal Signal Settings of Road Networks." Supervisor: Dr. Katsuhisa Ohno.

- B.Eng. Degree in Transportation Management Engineering, Beijing Jiaotong University (Former Northern Jiaotong University), Beijing, China, 1980-1984.

AREAS OF RESEARCH INTERESTS

- Real-time Vehicle Emission Measurement and Modeling
- Urban Traffic Management and Controls
- Formation and Spreading of Traffic Congestions
- ITS Related Technologies and Applications
- Traffic Simulation for Large Urban Traffic Networks
- Travel Demand Forecasting and Transportation Planning

EMPLOYMENT HISTORY

Texas Southern University, Houston, Texas

- Director (2002-President), Innovative Transportation Research Institute (ITRI)
- Professor (2002 -Present), Department of Transportation Studies
- Dean (2009-2016), College of Science, Engineering and Technology
- Chair (2005-2009), Department of Transportation Studies
- Interim Chair (2004-2005), Department of Transportation Studies
- Chair (1998-2004), Department of Transportation Studies
- Interim Chair (1997-1998), Department of Transportation Studies
- Tenure (1999 -Present), Department of Transportation Studies
- Associate Professor (1996 -2002), Department of Transportation Studies
- Assistant Professor (1994 -1996), Department of Transportation Studies

FUNDED PROJECTS

1. CO-PI: Development and Enhancement of In Service Performance Evaluation (ISPE) Process for Roadside Safety Devices (PI: Dr. Fengxiang Qiao, TxDOT 0-7018, \$217,021.49, 2019-2021).
2. PI: Tier 1 University Transportation Center: Center for Advanced Multimodal Mobility Solutions and Education (CammSE), "Education and Workforce Development (USDOT Tier 1 UTC CammSE, Project Budget \$18,352.93, 2018-2019).
3. PI: Tier 1 University Transportation Center: Center for Advanced Multimodal Mobility Solutions and Education (CammSE), "Education and Workforce Development (USDOT Tier 1 UTC CammSE, Project Budget \$19,823.86, 2017-2018).
4. PI: Tier 1 University Transportation Center: Center for Advanced Multimodal Mobility Solutions and Education (CammSE), "Education and Workforce Development (USDOT Tier 1 UTC CammSE, Project Budget \$30,153, 2016-2017).
5. CO-PI: Transportation and Economic Impact of Texas Shortline Railroads (PI: Dr. Fengxiang Qiao, TxDOT 0-6887, \$297,252, 2015-2017).
6. PI at TSU: Quantification of the Impact of a Road's Condition on Emissions (TxDOT 0-6808, Total Project Budget \$288,879, 2013-2016, UTEP Lead, TSU: \$120,000).
7. PI at TSU (CO-PI: Fengxiang Qiao): Tier One National University Transportation Center, TransLIVE, Transportation for Livability by Integrating Vehicles and Environment (U.S. DOT, \$3,500,000, 2012-2013, Five-Institutional Consortium, #KLK900-SB-003, TSU Budget: \$600,000).
8. CO-PI: Center for Research on Complex Networks (PI: Dr. Wei Li, CO-PI: Dr. C.J. Tymczak, NSF HRD-1137732, \$5,000,000, 2011-2016).
9. CO-PI: Use of Flashing Operations to Improve Safety at Signals with Protected-Permissive Left-Turn (PPLT) Operations (PI: Dr. Yi Qi, TxDOT 0-6568, \$251,301, 2009-2011).
10. PI: An Evaluation of Mobile Source Greenhouse Gas Modeling Approaches for Traffic Management Assessment (SWUTC 161040/161142, \$115,000, 2009-2011).
11. CO-PI: Development of an Interactive Petrochemical Incident Location System (PILS) (DHS DH-08-ST-061-004, \$500,000, 2009-2010).
12. PI: Development of Maritime Transportation Management and Security program (Port of Houston Authority, \$2,000,000.00, 2009-2014).
13. PI: PEMS-based Approach to Developing and Evaluating Driving Cycles for Air Quality Assessment (SWUTC 169300, \$33,500, 2008-2009).
14. CO-PI: Development of Guidelines for Triple Left and Dual Right-Turn Lanes (PI: Dr. Yi Qi, TxDOT 0-6112, \$289,998, 2008-2010, TTI Lead, TSU: \$125,755).
15. CO-PI: Driver Understanding of Congestion-Based Pricing Messages (PI: Dr. Fengxiang Qiao, TxDOT 0-6173, \$328,641, 2008-2010).
16. Co-PI: Characterization of Exhaust Emissions from Heavy Duty Diesel Vehicles in the HGB Area (TxDOT 0-6237, Total Project Budget \$513,601, TSU Budget \$82,000, 2008-2011).
17. Key-Investigator: Bicycle & Pedestrian Friendly Crossings at Freeway Interchanges (PI: Dr. Fengxiang Qiao, TxDOT 0-6127, 2008-2010, \$260,000, TSU Lead: \$200,000, UTA: \$60,000)
18. CO-PI: Establishment of National Transportation Security Center of Excellence based on the U.S. Congress House Rule XXI, clause 9(a)(4), Section 1205, jointly with other six institutions (U.S. Congress through Department of Homeland Security, \$18,000,000 per year, 2008-2012).
19. PI: Development of Left-Turn Operations Guidelines at Signalized Intersections (TxDOT 0-5840, \$228,905, 2006-2008).

20. Key-Investigator: Symbols and Warrants for Major Traffic Generator Guide Signing (TxDOT 0-5800, \$208,689, 2006-2008).
21. CO-PI: Develop Emissions, Truck Trips and Railcars Estimation Methodology for Major Texas Ports (TxDOT 0-5515, \$290,000, 2006-2008).
22. CO-PI: Vehicle Infrastructure Integration (VII) Based Road-Condition Warning System For Highway Collision Prevention (SWUTC 473700-00056, \$41,407, 2006-2008).
23. CO-PI: Computer Simulation-Based Algorithm For Optimizing Evacuation Plans In Major Trip Generator (SWUTC, \$20,000, 2006-2007).
24. Co-PI: Radio Frequency (RF) Sensor Technology Thrust: Subtask 2.3.8.1- Data Compression of Geolocation Signals (AFRL/UTC-Clarkson Aerospace Minority Leaders Program Sensors Technical Thrust, \$180,000, 2006-2008).
25. PI: Left-Turn Lane Design and Operation (TxDOT 0-5290, \$290,000, 2005-2007).
26. CO-PI: ITS Data Compression by Using Advanced Signal Processing Techniques (SWUTC 167651, \$55,200, 2004-2005).
27. PI: Analyzing Truck Idling Emission Characteristics under Altered Testing Conditions (SWUTC 167650, \$20,000, 2004-2005).
28. PM: Travel Demand Modeling for SH 249 (Consulting to Carter Burgess for TxDOT project, \$35,000.00, 2004-2005).
29. PM: Travel Demand Modeling for SH 225 Major Corridor Feasibility Study (MCFS) (Consulting to Carter Burgess for TxDOT project, \$123,190.08, 2003-2004).
30. PI: 2003 TxDOT Parking Lot Survey (TxDOT 52-4XXIA009, \$99,970, 2003-2004).
31. PI: Collection and Evaluation of On-Road Vehicle Emission Data and Activity Data (HARC H-8B, \$99,993, 2003-2004).
32. PI: Measurement and Evaluation of On-Road Vehicle Emissions at Signalized Intersections (SWUTC 473700-00049, \$35000, 2003-2004).
33. PI: How do Changes in Goods Movements Impact Disadvantaged Population (FHWA DTFH61-02-X-000112, \$100,000, 2002-2003).
34. PI: Evaluation of Highway Safety Improvement Projects (FHWA DTFH61-02-X-000106, \$37,500, 2002-2003).
35. PI: Probability Generation of Frequency and Severity of Nonrecurring Congestion due to Accidents to Improve Emissions Analysis (TxDOT 0-4073, \$87,000, 2002-2003).
36. PI: Extension of the Project Evaluation and Combined Use of TRANSYT-7F and CORSIM in Traffic Signal Optimization and Simulation (SWUTC 473700-00045, \$30,000, 2002-2003).
37. PI: Extension of Transportation Expertise Pool Project (FHWA DTFH61-00-R-00095, \$62,500, 2001-2002).
38. PI: Evaluation and Combined Use of TRANSYT-7F and CORSIM in Traffic Signal Optimization and Simulation (SWUTC 473700-00045, \$27,000, 2001-2002).
39. PI: Synthesis Report on Changeable Message Signs that Depict Symbols and Words (FHWA DTFH61-01-R-000126, \$62,500, 2001-2002).
40. PI: Pavement Smoothness Strategies (FHWA DTFH61-01-R-000111, \$56,250, 2001-2002).
41. PI: Yellow and Red Intervals to Improve Signal Timing Plans for Left-Turn Movement (TxDOT 0-4273, \$175,000, 2001-2003).
42. PI: Airport-Related Traffic and Mobile Emission Implications (TxDOT 0-4317, \$145,000, 2001-2003).
43. PI (cooperation with University of Texas at Austin): Using Real-Time Traffic Data for Transportation Planning (TxDOT 0-4054 \$245,000, 2000-2002).

44. PI: Forecasting Traffic Characteristics for Air Quality Analyses (TxDOT 0-4142 \$204,753, 2000-2002).
45. PI: Electronic Energy Storage and Future Transportation (NIST 70NANB0H0107, \$85,250, 2000-2001).
46. PI: Using ITS Technology to Improve Highway-Rail Crossing Safety (FHWA DTFH61-00-R-00089, \$62,500, 2000-2001).
47. PI: Transportation Expertise Pool (FHWA DTFH61-00-R-00095, \$50,000, 2000-2001).
48. PI: A Comparative Study of Travel Demand Forecasting Models using Real-World Networks: EMME/2 vs. QRS II (SWUTC 167901, \$40,000, 1999-2000).
49. PI: Collection and Evaluation of Modal Traffic Data for Determination of On-Road Vehicle Emission Rates Under Certain Driving Conditions (TxDOT and FHWA, \$200,000, 1995-1997).
50. PI: Evaluation of Traffic Simulation Models for Supporting ITS Development (SWUTC167602, \$50,000, 1998-1999).
51. CO-PI (with Dr. Naomi W. Lede') in Cooperation with Dr. Ardekani of University of Texas at Arlington: Dallas Area Rapid Transit Personalized Public Transit Operational Test Evaluation (FTA and DART, \$500,000, 1997-1999).
52. PI: Modeling for Estimating the Vehicle Exhaust Emissions from the Remote Vehicle Emission Data Collection (SWUTC #467600, \$99,000, 1996-1998).
53. PI: Quantitatively Estimating Air Quality Improvements and Energy Savings of Alternative Traffic Control Strategies (SWUTC #467203, \$45,000, 1995-1996).
54. PI: Improve the Modeling Logic Of Vehicles' Progression to Optimize the Coordinated Traffic Signal Timings in ATMS Networks (SWUTC # 472840-00044, \$24,000, 1995-1996).
55. PI: New Technologies and Methodologies for Evaluating and Analyzing the Implications of Various New Transportation Objectives (SWUTC # 466060, \$55,000, 1994-1995).
56. PM: Modeling of South Missouri City Traffic Network Project (in Conjunction with Traffic Engineers, Inc., \$25,000, 1998-1999).
57. Prime Contractor: Traffic Count and Intersection Analysis of Hidalgo and Post Oak Boulevard Project (Harris County Improvement District #1, Houston, Texas, \$25,000, 1998).

SCIENTIFIC JOURNAL PAPERS

1. Wang, X., G. Song, Y. Wu, L. Yu, and Z. Zhai. NO_x Emission Model Incorporating Temperature for Heavy-duty Diesel Vehicles with Urea-SCR Systems based on Field Operating Modes. Accepted for publication in *Atmosphere – Open Access Journal*, 2019.
2. Lu, H., G. Song, and L. Yu. The “Acceleration Cliff”: An Investigation of the Possible Error Source of the VSP Distributions Generated by Wiedemann Car-following Model. *Journal of Transportation: Part D*, Vol. 65, Page 161-177, December 2018.
3. Zhai, Z., G. Song, Y. Liu, Y. Cheng, W. He, and L. Yu. Characteristics of Operating Mode Distributions for Light Duty Vehicles by Road Type, Average Speed, and Driver Type for Emissions Estimation in Beijing. *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations*, DOI: 10.1080/15472450.2018.1528447, 2018.
4. Zang, J., G. Song, R. E, J. Sun, X. Zhang, L. Yu. Experimental Findings of Wide Moving Jam: A case study in Beijing. Accepted for Publication in *Journal of Transportation Engineering, Part A: Systems*, 2018.
5. Li, Z., G. Song, L. Yu, and W. He. Developing Operating Mode Distributions from Sparse Trajectories for Emission Estimation. Accepted for Publication in *Transportation Research Record: Journal of the*

- Transportation Research Board, Transportation Research Board of the National Academies, Washington, 2019.
6. Wang, J., L. Yu, G. Song, Cheng, Y., W. He, and H. Lu. Macroscopic Relationship between Traffic Condition and Fuel Consumption for an Urban Road Network: A Case Study of Beijing. Accepted for Publication in Transportation Research Record: Journal of the Transportation Research Board, Transportation Research Board of the National Academies, Washington, 2019.
 7. Han, X., X. Chen, X. Jia, and L. Yu. Capacity Modeling of Weaving Areas on an Urban Expressway with the Exclusive Bus Lanes Based on Gap Acceptance Theory. Accepted for Publication in Transportation Research Record: Journal of the Transportation Research Board, Transportation Research Board of the National Academies, Washington, 2019.
 8. Zang, J., G. Song, Y. Wu, and L. Yu. A Method for Evaluating Eco-driving Behaviors Based on Vehicle Specific Power Distributions. Accepted for Publication in Transportation Research Record: Journal of the Transportation Research Board, Transportation Research Board of the National Academies, Washington, 2019.
 9. Zhai, Z., G. Song, and L. Yu. How Much Vehicle Activity Data is Needed to Develop Robust Vehicle Specific Power Distributions for Emission Estimates? A Case Study in Beijing. *Journal of Transportation: Part D*, Vol. 65, Page 540-550, December 2018.
 10. Sun, X., X. Chen, Y. Qi, B. Mao, L. Yu, and P. Tang, "Effects of advanced traffic signal status warning systems on vehicle emission reduction at signalized intersections," Journal of the Air & Waste Management Association, <https://www.tandfonline.com/doi/full/10.1080/10962247.2018.1506834>, 2018.
 11. Kou, W., X. Chen, L. Yu, and H. Gong, "Multiobjective Optimization Model of Intersection Signal Timing Considering Emissions Based on Field Data: A Case Study of Beijing," Journal of the Air & Waste Management Association, <https://doi.org/10.1080/10962247.2018.1454355>, 2018.
 12. Li, Q., F. Qiao, L. Yu, and J. Shi, "Modeling Vehicle Interior Noise Exposure Dose on Freeways: Considering Weaving Segment Designs and Engine Operation," Journal of the Air & Waste Management Association, DOI: 10.1080/10962247.2017.1350213, 2018.
 13. Li, Q., F. Qiao, L. Yu, S. Chen, and T. Li, "Impact of Freeway Weaving Segment Design on Light-Duty Vehicle Exhaust Emissions," Journal of the Air & Waste Management Association, DOI: 10.1080/10962247.2017.1344744, 2018.
 14. Li, J., Q. Li, F. Qiao, and L. Yu, "Assessment of In-Vehicle Messages in the Advance Warning Area of a Work Zone," Journal of Civil & Environmental Engineering, Volume 8, Issue 2, 2018, doi:10.4172/2165-784X.1000302.
 15. Li, Q., J. Du, F. Qiao, and L. Yu, "Characterizing Particulate Matter 2.5 Concentration Pattern within a Transportation Network: A Case Study in the Port of Houston Region," Journal of Pollution, Vol. 2, Issue 1, 2018.
 16. Qi, Y., Y. Wang, X. Chen, R. Cheu, L. Yu, and H. Teng. Methods of Dropping Auxiliary Lanes at Freeway Weaving Segments. *Journal of Transportation Planning and Technology*. 2018, 41(4).
 17. Liao, R., X. Chen, L. Yu, and X. Sun. Analysis of Emission Effects Related to Drivers' Compliance Rates for Cooperative Vehicle-Infrastructure System at Signalized Intersections. *International Journal of Environmental Research and Public Health*. 2018, 15(1), 122; doi:10.3390/ijerph15010122 (registering DOI).
 18. Zhang, J., G. Song, D. Gong, Y. Gao, L. Yu, and J. Guo. Analysis of Rainfall Effects on Road Travel Speed in Beijing, China. *IET Intelligent Transport Systems*. DOI: 10.1049/iet-its.2017.0039 , Online ISSN 1751-9578 Available online: 08 November 2017.

19. Li, Z., L. Yu, Y. Gao, Y. Wu, G. Song, and D. Gong. Identifying Temporal and Spatial Characteristics of Residents' Trips from Cellular Signaling Data: A Case Study in Beijing, China. Accepted for Publication in Transportation Research Record, Transportation Research Board of the National Academies, Washington, DC, Jan 2018.
20. Li, Q., F. Qiao, and L. Yu. Digital Signal Processing Approach to Identify the Boundary of Vehicle Idling Status during Operation. Accepted for Publication in Transportation Research Record, Transportation Research Board of the National Academies, Washington, DC, Jan 2018.
21. Shi, J., F. Qiao, Q. Li, L. Yu, and Y. Hu. Application and Evaluation of the Reinforcement Learning Approach to Eco-driving at Intersections. Accepted for Publication in Transportation Research Record, Transportation Research Board of the National Academies, Washington, DC, Jan 2018.
22. Lu, H., G. Song, Q. Zhao, and L. Yu. An Investigation of the Uncertainty of HBEFA Greenhouse Gas Emission: Case Study in Beijing. Accepted for Publication in Transportation Research Record, Transportation Research Board of the National Academies, Washington, DC, Jan 2018.
23. Li, Q., F. Qiao, X. Wang, and L. Yu, "Drivers' smart advisory system improves driving performance at STOP sign intersections" *Journal of Traffic and Transportation Engineering*. Volume 4, Issue 3, June 2017. Pp. 262-271. DOI: 10.1016/j.jtte.2017.05.006.
24. Li, Q., F. Qiao, and L. Yu, "Non-linear Models of Light-duty Vehicle Emission Factors Considering Pavement Roughness," *Journal of Civil and Environmental Engineering*, vol. 7, no.1, December, 2016, 7: 268. DOI: 10.4172/2165-784X.1000268. 2017.
25. Qiao, F., R. Rahman, Q. Li, and L. Yu. Safe and Environmental-Friendly Forward Collision Warning Messages in the Advance Warning Area of a Construction Zone. *International Journal of Intelligent Transportation Systems Research*, Vol. 15, Issue 3, September 2017, pp. 166-179.
26. Zhai, Z., G. Song, H. Lu, W. He, and L. Yu (2017). Validation of Temporal and Spatial Consistency of Facility- and Speed-specific Vehicle Specific Power Distributions for Emission Estimation: A Case Study in Beijing, China. *Journal of Air & Waste Management Association*, Vol. xx: xx-xx.
27. Li, Q., F. Qiao, L. Yu, and J. Shi (2017). Modeling Vehicle Interior Noise Exposure Dose on Freeways Considering Weaving Segment Designs and Engine Operation. *Journal of Air & Waste Management Association*, Vol. xx: xx-xx.
28. Li, Q., F. Qiao, L. Yu, S. Chen, and T. Li (2017). Impact of Freeway Weaving Segment Design on Light-duty Vehicle Exhaust Emissions. *Journal of Air & Waste Management Association*, Vol. xx: xx-xx.
29. Li, M., L. Yu, and G. Song. Quantification of Road Grade to Improve the Estimation of Fuel Consumptions Using the Global Positioning System. Accepted for Publication in *IET Intelligent Transport Systems*, 2017.
30. Liu, S., Q. Li, F. Qiao, J. Du, and L. Yu (2017). Characterizing the Relationship between Carbon Dioxide Emissions and Vehicle Operating Modes on Roundabout – A Pilot Test in a Single Lane Entry Roundabout. *Environment Pollution and Climate Change*. Vol. 1, Issue 2: 1:120.
31. Kou, W., X. Chen, L. Yu, Y. Qi, and Y. Wang (2017). Urban Commuters' Valuation of Travel Time Reliability based on Stated Preference Survey: A Case Study of Beijing. *Journal of Transportation Research Part A*. Vol. 95: 372-380.
32. Li, Q., F. Qiao, and L. Yu. (2017). Risk Assessment of In-vehicle Noise Pollution from Highways. *Journal of Environment Pollution and Climate Change*, Volume 1, Issue 1, January 2017. <https://www.omicsonline.org/open-access/risk-assessment-of-invehicle-noise-pollution-from-highways.php?aid=84738>
33. Li, Q., F. Qiao, and L. Yu. (2017). A Machine Learning Approach for Light-Duty Vehicle Idling Emission Estimation Based on Real Driving and Environmental Information. *Journal of Environment Pollution and Climate Change*, Volume 1, Issue 1, January 2017. <https://www.omicsonline.org/open-access/a-machine->

learning-approach-for-lightduty-vehicle-idling-emission-estimation-based-on-real-driving-and-environmental-information.php?aid=84735

34. Fei, W., G. Song, F. Zhang, Y. Gao, and L. Yu. Practical Approach to Determining Traffic Congestion Boundary Due to Traffic Incidents. *Journal of Central South University*, 24(2), 2017.
35. Khan, M., F. Qiao, and L. Yu. Wavelet Analysis to Characterize the Dependency of Vehicular Emission on Road Roughness. Accepted for Presentation at the 96th Transportation Research Board Annual Meeting and in Review for Publication in *Transportation Record*, Transportation Research Board of the National Academies, Washington, DC, Jan 2017.
36. Li, C., L. Yu, and G. Song. Improved Binning of Operating Modes in MOVES for Transit Buses: Case Study in Beijing. Accepted for Presentation at the 96th Transportation Research Board Annual Meeting and in Review for Publication in *Transportation Record*, Transportation Research Board of the National Academies, Washington, DC, Jan 2017.
37. Wang, J., L. Yu, Y. Gao, J. Zhang, and G. Song. Analysis of Speed Differences between Remote Traffic Microwave Sensor and Floating Car Data on Expressways: Case Study of Beijing. Accepted for Presentation at the 96th Transportation Research Board Annual Meeting and in Review for Publication in *Transportation Record*, Transportation Research Board of the National Academies, Washington, DC, Jan 2017.
38. Li, C., L. Yu, W. He, Y. Cheng, and G. Song. Development of a Local Emission Rate Model Based on Limited Field Data of Beijing and Regularity of Emission Rates in MOVES. Accepted for Presentation at the 96th Transportation Research Board Annual Meeting and in Review for Publication in *Transportation Record*, Transportation Research Board of the National Academies, Washington, DC, Jan 2017.
39. Zhang, S., L. Yu, and G. Song. Emission Characteristics under Different Loads for Heavy-Duty Diesel Trucks based on Vehicle-Specific Power. Accepted for Presentation at the 96th Transportation Research Board Annual Meeting and in Review for Publication in *Transportation Record*, Transportation Research Board of the National Academies, Washington, DC, Jan 2017.
40. Wang, Y., X. Chen, L. Yu, and Y. Qi. Calibration of the Platoon Dispersion Model by Considering the Impact of the Percentage of Buses at Signalized Intersections. Accepted for Presentation at the 96th Transportation Research Board Annual Meeting and in Review for Publication in *Transportation Record*, Transportation Research Board of the National Academies, Washington, DC, Jan 2017.
41. Gong, H., X. Chen, L. Yu, and L. Wu. Application-Oriented Model of Passenger Waiting Time Based on Bus Departure Time Intervals. *Transportation Planning and Technology*, Vol. 39, Issue 4, 2016, pp. 424-437.
42. Li, Q., F. Qiao, and L. Yu. (2016). Clustering Pavement Roughness Based on the Impacts on Vehicle Emissions and Public Health. *Journal of Ergonomics*. Vol. 6 Issue 1. Pp. 1000146. doi:10.4172/2165-7556.1000146.
43. Qiao, F., Rahman, R., Li, Q., & Yu, L. (2016). Safe and Environment-Friendly Forward Collision Warning Messages in the Advance Warning Area of a Construction Zone. *International Journal of Intelligent Transportation Systems Research*, 1-14.
44. Li, Q., Qiao, F., and L. Yu. Implications of Advanced Warning Messages on Eliminating Sun Glare Disturbances at Signalized Intersections. *Journal of Traffic and Transportation Engineering (English Edition)*. 3 (2016), pp. 296-307, DOI information: 10.1016/j.jtte.2016.07.002..
45. Hill K, F. Qiao, M. Azimi, and L. Yu An Evaluation of the Effects of Drive- Through Configurations on Air Quality at Fast Food Restaurants. *J Civil Environ Eng.*, 2016. 6:235. doi:10.4172/2165-784X.1000235.

46. Yi, Q., A. Padiath, Q. Zhao, and L. Yu. Development of Operating Mode Distributions for Different Types of Roadways under Different Congestion Levels for Vehicle Assessment Using MOVES. *Journal of the Air & Waste Management Association*, Vol. 66, Issue 10, pp. 1003-1011, 2016.
47. You, B., F. Qiao, and L. Yu (2016), Implications of Left-turn Warning Messages in Work Zone Termination Areas. *Journal of Transportation Technologies*. Vol. 6, Issue 2, April, 2016.
48. Qiao, F., R. Rahman, Q. Li, and L. Yu. Identifying Smartphone Based Intelligent Messages for Worker's Crossing in Work Zones. *Journal of Transportation Technologies*, 2016, 6, pp. 76-85.
49. Li, Q., F. Qiao, and L. Yu. Calibration of Car-Following Models Considering the Impacts of Warning Messages from Tablet/Smartphone Application. *Journal of Transportation Technologies*, 2016, 6, pp. 61-75.
50. Qiao, F., P. Kuo, Q. Li, Q. Zhu, and L. Yu. Design Right-Turn Vehicle Box as a Supplemental Treatment to Eliminate Conflicts with Pedestrians and Bicycles. *Journal of Transportation Technologies*, 2016, 6, pp. 43-59.
51. Nabi, M., F. Qiao, Y. Boya, and L. Yu. Developing Framework to Test Driving Performance at Left-Turn Movement with In-Vehicle Advance Collision Warning Message. *Journal of Transportation Technologies*, 2016, 6, pp. 30-42.
52. Li, M., L. Yu, Z. Zhai, W. He, and G. Song. Development of Emission Factors for an Urban Road Network based on Speed Distributions. *ASCE Journal of Transportation Engineering*, Vol. 142, No. 9, pp. 1-9, 2016.
53. Li, Q., F. Qiao, and L. Yu (2016): Vehicle Emission Implications of Drivers Smart Advisory System for Traffic Operations in Work Zones. *Journal of the Air & Waste Management Association*, Vol. xx, Issue x, pp. xx-xx.
54. Li, Q., F. Qiao, and L. Yu (2016): Impacts of Pavement Types on In-vehicle Noise and Human Health, *Journal of the Air & Waste Management Association*, Vol. 66, Issue 1, pp. 87-96.
55. Zhang, J., L. Yu, J. Guo, Y. Cheng, W. He, and G. Song. Optimized Adjustment of Speed Resolution and Time Alignment Data for Improving Emission Estimations. In *Transportation Research Record: Journal of Transportation Research Board*, No. 2570, Transportation Research Board of the National Academies, Washington, DC, Jan 2016, pp. 77-86.
56. Chen, X, L. Yu, X. Jia, and H. Gong. Capacity Modelling for Weaving, Merge, and Diverge Sections with Median Exclusive Bus Lanes on the Urban Expressway: a Micro-simulation Approach. In *Transportation Research Record: Journal of Transportation Research Board*, No. 2553, Transportation Research Board of the National Academies, Washington, DC, Jan 2016.
57. Song, G., L. Yu, and Y. Wu. Development of Speed Correction Factors based on Speed-Specific VSP Distributions for Urban Restricted Access Roadways. *Journal of Transportation Engineering*, Volume 142, No. 3, March 2016, pp. 1-8.
58. Li, Q., Qiao, F., and L. Yu. Socio-demographic impacts on lane-changing response time and distance in work zone with drivers' smart advisory system. *Journal of Traffic and Transportation Engineering (English Edition)*. 2015, 2(5): 313-326.
59. Song, G., F. Zhang, J. Liu, L. Yu, Y. Gao, and L. Yu. Floating car data-based method for detecting flooding incident under grade separation bridges in Beijing. *IET Intelligent Transport Systems*. 2015, 9(8): 817-823.
60. Song, G. X. Zhou, and L. Yu. Delay correction model for estimating bus emissions at signalized intersections based on vehicle specific power distributions. *Science of the Total Environment*. 2015, 514 (2015) 108–118.
61. Li, M., G. Song, Y. Cheng, and L. Yu. Identification of Prior Factors Influencing the Mode Choice of Short Distance Travel [J]. *Discrete Dynamics in Nature and Society*. 2015, 2015(1):1-9.
62. Li, Q., F. Qiao and L. Yu. Will Vehicle and Roadside Communications Reduce Emitted Air Pollution? *International Journal of Science and Technology*, Vol. 5, No. 1, 2015, pp. 17-23.

63. Li, Q., F. Qiao and L. Yu. Socio-demographic Impacts on Lane-changing Response Time and Distance in Work Zone with Drivers' Smart Advisory System, *Journal of Traffic and Transportation Engineering (English Edition)* (2015), Vol. 2, No. 5, October 2015, pp. 313-326.
64. Song, G. and L. Yu. Optimization of Wiedemann and Fritzsche Car-Following Models for Emission Estimation. *Journal of Transportation Research Part D*, Vol. 34, pp. 318-329, 2015.
65. Li, Q., F. Qiao and L. Yu. Data Dependent Modeling of New Contamination Cases from Urban Historic Groundwater Records. *Journal of Environmental Science and Engineering*, A 3, pp. 250-256, 2014.
66. Qiao, F., L. Liu and L. Yu. Quantifying Changes of Mobile Source Air Pollution in Metropolitan Areas Using Vehicle Emission Model MOVES. *Journal of Environmental Science and Engineering*, A 3, pp. 250-256, 2014.
67. Wu, Y, G. Song, and L. Yu. Sensitive Analysis of Emission Rates in MOVES for Developing Site-specific Emission Database. *Journal of Transportation Research Part D*, Volume 32, pp. 336-340, October 2014.
68. Chen, X, L. Yu, X. Jia, and H. Gong. Analytical Procedures for Estimating Capacity of the Urban Expressway Section near Off- and On-Ramps with a Median Exclusive Bus Lane. *Journal of Transportation Engineering*, ASCE, Vol. 140, No. 3, pp. 1-9, March 2014.
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TEACHING EXPERIENCE

- Urban Traffic Management and Control
- Highway Traffic Operations
- Travel Demand Forecasting and Analysis
- Computer Applications in Transportation
- Transportation Systems Analysis
- Principles of Transportation Design and Engineering
- Seminar in Transportation
- ITS Technologies and Applications
- Operations Research

PROFESSIONAL SERVICES AND AFFILIATION

- Executive Committee Member, Southwest Region University Transportation Center (SWUTC), 1999-2016.
- Member of TRB Committee on Transportation and Air Quality (ADC20)
- Member of Editorial Board, Transportation Research Part D.
- Registered Professional Engineer (#88414) in Texas, U.S.
- 2001 Eisenhower Graduate Transportation Fellowships Panelist, Universities & Grants Programs, U.S. Department of Transportation, 2001.
- Editorial Advisory Board member of Asian Transport Studies, November 2013-Present.
- Invited Editorial Board Member, Journal of Transportation Systems Engineering and Information Technology, 2001-Present.

- Guest Editor, Special Issue of The Open Transportation Journal on “Traffic Safety and Driving Behavior Studies,” 2010, <http://www.bentham.org/open/totj/>.
- Advisor to Editorial Board, Journal of ITS, Tsinghua University, China, 1998-Present.
- Chair of Organizational Committee, 2012 International Workshop on Mobile Source PM2.5 Emission Controls, December 18-19, 2012, Beijing, China.
- Chair of Organizational Committee, 2011 International Workshop on Mobile Source Emission Inventory and Transportation Conformity, December 16-17, 2011, Beijing, China.
- Chair of Organizational Committee, 2010 International Workshop on Emission Testing and Modeling, December 17-19, 2010, Xiamen, China.
- Chair of Organizational Committee, 2009 International Workshop on Emission Models, December 17-18, 2009, Beijing, China.
- Chairman of Organization Committee, The 2005 International Workshop on Urban Road Network Reliability, Beijing, China, December 19-20, 2005.
- Invited Member of Scientific Committee, MOE Key Laboratory for Transportation Complex Systems Theory and Technology, Beijing Jiaotong University, 2004-Present.
- Board Member, Transportation Engineering Committee, China Systems Engineering Association, 2004-2008.
- Member of Committee on ITS Technology Applications, Information Committee of China Transportation Association, 2007-Present.
- Technical Assistance Panel in Traffic Operations Committee of TxDOT (RMC 4)
- TSU Representative on Consortium for ITS Training & Education (CITE)
- Member of Institute of Transportation Engineers (# 21803) and Five of Its Councils
- Member of American Society of Civil Engineers (# 35150) and Six of Its Councils
- Member of Transportation Research Board (# 042504-00)
- Member of American Society for Engineering Education (#78711)
- Reviewer for Transportation Research Record: Journal of the Transportation Research Board, Transportation Science, ASCE Journal of Transportation Engineering, Journal of Transportation Research Part A, C, D, IEEE ITS Transactions, Journal of Air & Waste Management Association, Journal of Intelligent Transportation Systems, Journal of Advanced Transportation, Applied Energy, International Journal of Sustainable Transportation, Atmospheric Chemistry and Physics, Journal of Transportation Systems Engineering and Information Technology, Advances in Transportation Studies.
- Steering Committee Member of ITS: Incorporating the Consumer Conference, Feb 19 & 20, 1998, Houston, Texas.
- International Scientific Committee member of the 1998 International Conference on Traffic and Transportation Studies (ICTTS'98), July 27-29, Beijing, China.
- Member of Technical Committee and Chair of One Technical Session of The 2nd Technical Symposium on Important Issues of Transportation Development in China, NACOTA in Association with TRB Annual Meeting, January 10, 1999, Washington, DC.
- Member of Technical Committee and Chair of One Technical Session of The 3rd Technical Symposium on Important Issues of Transportation Development in China, NACOTA in Association with TRB Annual Meeting, January 9, 2000, Washington, DC.
- Chair of The 4th Technical Symposium on Important Issues of Transportation Development in China, NACOTA in Association with TRB Annual Meeting, January 7, 2001, Washington, DC.
- Chair of The 5th Technical Symposium on Important Issues of Transportation Development in China, NACOTA in Association with TRB Annual Meeting, January, 2002, Washington, DC.

- President-Elect of North America Chinese Overseas Transportation Association (NACOTA), 2001-2003.
- Vice-President of North America Chinese Overseas Transportation Association (NACOTA), 2000-2001.