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EDUCATION

Texas Southern University, Houston, Texas, USA
Ph.D. in Environmental Toxicology Dec 2016
Research fields: Vehicle emissions, Transportation, public health, and Environmental Impacts

Texas Southern University, Houston, Texas, USA
MS in Transportation Planning and Management Aug 2014

EMPLOYMENT HISTORY

Texas Department of Transportation
Houston District, 7600 Washington Ave, Houston, TX, 77007, USA
Planner, Advance Transportation Planning Jun 2018 – Present

Texas Southern University
3100 Cleburne Street, Houston, TX, 77004, USA
Research Fellow, Innovative Transportation Research Institute Mar 2017 – May 2018
Research Assistant, Innovative Transportation Research Institute Jan 2013 – Dec 2016

RESEARCH INTERESTS

- Transportation safety performance analysis
- Traffic projection studies
- Transportation systems planning and modeling
- Environmental impact of transportation systems,
- Vehicle exhaust emission monitoring, testing, and modeling
- Transportation operation, management, and planning, traffic simulation, Intelligent Transportation System (ITS), sustainable transportation development, driving behavior studies
- Vehicle interior noise testing and modeling, and
- Driving behavior studies

Publications

(a) Book (1)

Q. Li and F. Qiao, "How Drivers' Smart Advisory System Improves Driving Performance? A Simulator Imitation of Wireless Warning on Traffic Signal under Sun Glare," *LAMBERT Academic Publishing*. ISBN-13: 978-3-659-57193-0, 2014.

(b) Peer-Reviewed Journal Articles (44)

J 44. **Q. Li,** A. Huerta, A. Mao, F. Qiao. "Using Random Undersampling Boosting Classifier to Estimate Mode Shift Response to Bus Local Network Expansion and Bus Rapid Transit Services". Int J Civ Eng (2021). https://doi.org/10.1007/s40999-021-00635-7.

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J41. J. Shi, L. Chen, F. Qiao, L. Yu, **Q. Li,** G. Fan. "Simulation and Analysis of the Carrying Capacity for Road Networks using a grid based approach". Special, *Journal of Traffic and Transportation Engineering*. Available online 16 November 2019. https://doi.org/10.1016/j.jtte.2019.09.002

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J38. J. Li, **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*, 8:302. DOI: 10.4172/2165-784X.1000302. vol. 8, no. 2. 1000302. Feb. 27, 2018. https://www.omicsonline.org/open-access/assessment-of-invehicle-messages-in-the-advance-warning-area-of-a-work-zone-2165-784X-1000302.pdf

J37. J. Du, **Q. Li**, F. Qiao, and L. Yu, "Vehicle Emission Estimation On Mainline Freeway Under Isolated and Integrated Ramp Metering Strategies", *Environmental Engineering and Management Journal*. Vol. 17, no. 5, May 2018.

J36. W. Li and **Q. Li**, "Effect of Environmental Salt Stress on Plants and the Molecular Mechanism of Salt Stress Tolerance" *International Journal of Environmental Sciences & Natural Resources*. ISSN: 2572-1119. Vol. 7, Issue 3. December 2017. DIO: 10.19080/IJESNR.2017.07.555714.

J35. **Q. Li,** F. Qiao, and L. Yu, "Digital Signal Processing Approach to Identify the Boundary of Vehicle Idling Status during Operation", Transportation Research Record: *Journal of Transportation Research Board*, Vol. 2672, Issue 25, Aug. 2018. DOI: 10.1177/0361198118791614.

J34. J. Shi, F. Qiao, **Q. Li,** L. Yu, and Y. Hu, "Application and evaluation of the reinforcement learning approach to eco-driving at intersections", Transportation Research Record: *Journal of Transportation Research Board*, Vol. 2672, Issue 25, Aug. 2018. DOI: 10.1177/0361198118796939

J33. F. Qiao, **Q. Li,** and L. Yu, "Particulate Matter Caused Health Risk in an Urban Area of

the Middle East and the Challenges in Reducing its Anthropogenic Emissions" *Journal of Environment Pollution and Climate Change*. 2: 145. 2018. DOI: 10.4172/2573-458X.1000145.

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J27. F. Qiao, **Q. Li**, and L. Yu, "How the Roadway Pavement Roughness Impacts Vehicle Emissions?" *Environment Pollution and Climate Change,* July 21, 2017, vol.1, no.3, 1000134.DOI: 10.4172/2573-458X.1000134.

J26. F. Qiao, B. You, **Q. Li**, L. Yu, "Mitigation Measures and Recommendations in the USA to Reduce Environmental Impacts of Transportation Infrastructure on Wildlife" *Environment Pollution and Climate Change,* July 25, 2017, vol.1, no.3, 1000135. DOI: 10.4172/2573-458X.1000135.

J25. **Q. Li**, F. Qiao, J. Shi, and L. Yu, "Modeling Vehicle Interior Noise Exposure Dose on Freeways: Considering Weaving Segment Designs and Engine Operation" *Journal of Air & Waste Management,* https://doi.org/10.1080/10962247.2017.1350213, https://www.ncbi.nlm.nih.gov/pubmed/28679084. July 5, 2017.

J24. **Q. Li**, F. Qiao, L. Yu, S. Chen, "Impact of Freeway Weaving Segment Design on Light-duty Vehicle Exhaust Emissions" *Journal of Air & Waste Management,* DOI: 10.1080/10962247.2017.1344744, https://www.ncbi.nlm.nih.gov/pubmed/28636482. Jun 21, 2017.

J23. **Q. Li**, 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.

J22. F. Qiao, **Q. Li**, and L. Yu, "Status and Research Topics in Developing Ecological Transportation System within Connected Vehicle Age with Knowledge Discovery in Database Techniques" *Environment Pollution and Climate Change,* vol.1, no.2, 1000124, 2017.

J21. S. Liu, **Q. Li**, F. Qiao, J. Du, and L. Yu, "Characterizing the Relationship Between

Carbon Dioxide Emissions and Vehicle Operating Modes on Roundabouts --A Pilot Test in a Single Lane Entry Roundabout" *Journal of Environment Pollution and Climate Change*, vo.1, no. 2, 1:120, 2017.

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J13. F. Qiao, P.-H. Kuo, **Q. Li,** L. Yu, Q. Zhu, and Y. Li, "Designing Right-Turn Vehicle Box as a Supplemental Treatment to Eliminate Conflicts with Pedestrians and Bicycles," *Journal of Transportation Technologies* (JTTs), DOI: 10.4236/jtts.2016.61005. vol. 6, no.1, pp. 43-59, January 2016.

J12. **Q. Li**, F. Qiao, and L. Yu, "Calibration of Car-Following Models Considering the Impacts of Warning Message from Smartphone Application," *Journal of Transportation Technologies*, DOI: 10.4236/jtts.2016.62006. vol. 6, no. 2, pp.61-75, 2016.

J11. F. Qiao, R. Rahman, **Q. Li**, and L. Yu, "Identifying Smartphone Based Intelligent Messages for Worker's Crossing in Work Zone," *Journal of Transportation Technologies* (JTTs), DOI: 10.4236/jtts.2016.62007. vol. 6 no. 2. pp.76-85, 2016.

J10. F. Qiao, R. Rahman, **Q. Li**, and L. Yu, "Identifying demographical effects on speed patterns in work zones using smartphone based audio warning message system," *Journal of Ergonomics*, DOI: 10.4172/2165-7556.1000153, vol. 6, no. 153, pp.1-3, 2016.

J09. **Q. Li**, F. Qiao, and L. Yu, "Vehicle Emission Implications of Drivers Smart Advisory System for Traffic Operations in Work Zones," *Journal of Air & Waste Management*, DOI:10.1080/10962247.2016.1140095. vol. 66, no. 5, pp.446-455, 2016.

J08. **Q. Li**, F. Qiao, and L. Yu, "Clustering Pavement Roughness Based on the Impacts on

Vehicle Emissions and Public Health." *Journal of Ergonomics*, DOI:10.4172/2165-7556.1000146. vol. 6, no. 1, pp. 1-4, 2016.

J07. **Q. Li**, F. Qiao, and L. Yu, "Fuzzy lane-changing models with socio-demographics and Vehicle-to-Infrastructure system based on a simulator test," *Journal of Ergonomics*, DOI:10.4172/2165-7556.1000144. vol.5, no.4, 1000144, November 2015.

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J04. **Q. Li**, 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), DOI: http:10.1016/j.jtte.2015.08.003. vol. 2, no. 5, October 2015.

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J01. F. Qiao, J. Jia, L. Yu, **Q. Li**, and D. Zhai, "Drivers' Smart Assistance System Based on Radio Frequency Identification," *Journal of Transportation Research Board* Transportation Research Board of the National Academies. DOI: 10.3141/2458-05. vol. 2458, pp.37-46, 2014.