**Tongbin Teresa Qu, Ph.D., P.E., AICP**

**Associate Professor**

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| Department of Community Sustainability**Adjunct Associate Professor** College of NursingMichigan State UniversityEast Lansing, MI 48824Email: teresaqu@msu.edu  |

**SUMMARY OF EXPERIENCE**

## Dr. Tongbin (Teresa) Qu has over 25 years of experience in the transportation field covering research, teaching, training, consulting, and engineering practice. Dr. Qu’s expertise includes sustainable transportation which includes bicycle, pedestrian, and multi-modal transportation planning and modeling, complete streets design, Big Data Analysis, shared mobility, accessible transportation, Autonomous Vehicles for people with disabilities, traffic congestion monitoring and evaluation, and vehicle emission modeling.

## More recently, Dr. Qu has been focused on active transportation, mobility for people with disabilities, Autonomous Vehicles for people with disabilities, sustainable and resilient communities. She is working with researchers in the areas of environment, health, and civil engineering to achieve sustainability and climate goals.

## During her years with Texas A&M Transportation Institute (TTI), Dr. Qu was involved with several national level Strategic Highway Research Projects (SHRP) funded by Federal Highway Administration, and many regional projects funded by several State Department of Transportation (DOT), Texas Commission on Environmental Quality, Capital Area Metropolitan Planning Organization, Houston-Galveston Area Council.

## Dr. Qu is a Fellow of the International Road Federation (IRF). She is a member in National Academies Transportation Research Board (TRB) Accessible Transportation and Mobility Committee (AME50), and Emerging and Innovative Public Transport and Technologies Committee (AP020). She is also actively involved in TRB Pedestrians, Bicycle Transportation, and Developing Countries committees.

## EDUCATION

**Ph.D.**, Urban and Regional Science, Texas A&M University, 2010

(Doctoral study in Civil Engineering, Texas A&M University, 2000 – 2005, major advisor left TAMU in 2005)

**M.S.**, Transportation Engineering, The University of Texas at Austin, 1996

**B.S.**, Civil Engineering, TongJi University, Shanghai, China, 1990

## PROFESSIONAL LICENSE

**Professional Engineer** (PE), State of Texas since 1999 (by examination, No. 85558)

**American Institute of Certified Planners** (AICP), since 2021 (APA ID is 356431)

## EMPLOYMENT HISTORY

2021.08 – present **Associate Professor**

 Department of Community Sustainability, Michigan State University

2018.01 – 2021.07 **Associate Professor**

 School of Planning, Design and Construction, Michigan State University

2018.12 – present **Adjunct Associate Professor**

 College of Nursing, Michigan State University

2016.09 – 2017.12 **Assistant Professor of Practice**

Department of Landscape Architecture and Urban Planning, Texas A&M University

2012.09 – 2016.08 **Lecturer**

Department of Landscape Architecture and Urban Planning, Texas A&M University

2010.09 – 2014.08 **Associate Research Engineer**

Texas A&M Transportation Institute

1998.10 – 2010.09 **Assistant Research Engineer**

Texas A&M Transportation Institute

1997.10 – 1998.10 **Engineering Assistant IV**

Traffic Operations Division, Texas Department of Transportation

1996.10 – 1997.10 **Engineering Assistant III**

Traffic Operations Division, Texas Department of Transportation

1994.08 – 1996.10 **Graduate Research Assistant**

The University of Texas at Austin

1995.06 – 1995.07 **Summer Intern**

The World Bank, Washington D.C.

1994.03 – 1994.07 **Engineering Assistant**

Louis Berger International, Inc., Washington D.C.

1993.04 – 1994.03 **Project Management Specialist**

The Ministry of Transport of China, Beijing, China

1990.07 – 1993.03 **Engineer**

CHELBI Engineering Consultants, Inc., Beijing, China

**Honors and Awards**

2014 **Best Student Project Award in Applied Research**,American Planning Association

For instructing the class project (PLAN 674): Demand Analysis of Bike Share on Texas A&M University Campus

2013 **Dr. Kent Butler Student Paper Award,** Central Texas Chapter of American Planning Association

For instructing class project (PLAN 674): Feasibility of Bike Share on Texas A&M University Campus

2013 Texas A&M Transportation Institute **Delta-T Leadership Program**

Selected for leadership training

2009 **Trinity Herbert H. Richardson Team Award**, Texas A&M Transportation Institute

For the Texas 2030 Transportation Needs Assessment Team

2007 **Innovative Project Award**, Texas Department of Transportation

For the work in the Texas Congestion Index project

1995 **Fellow**, International Road Federation (IRF)

To honor outstanding performance for students from developing countries

## AFFILIATIONS

Affiliated Faculty, Sociomobility / Public policy, Michigan State University. (2018-present)

Affiliate, Center for Research In Autism, Intellectual, and other Neurodevelopment Disabilities (C-RAIND), Michigan State University. (2018-present)

Affiliated Faculty, Environmental Science & Policy Program, Michigan State University. (2018-present)

Association of Collegiate Schools of Planning (2017 - present)

American Planning Association (APA) (2014 - present)

American Society of Civil Engineers (ASCE) (2000-2006)

Institute of Transportation Engineers (ITE) (2000-2006)

Research Experience

**External Competitive Grants**

2019 – 2022 (**Co-PI**) Developing a Consistent Data Driven Methodology to Multimodal, Performance Based and Context Sensitive Design. Michigan Department of Transportation. With Pete Savolainen (PI), Tim Gates, and Joh Burley, $300,000.

2019 – 2021 (**Co-PI**) Synthesis of National Best Practices on Pedestrian and Bicycle Design, Guidance and Technology Innovations. Michigan Department of Transportation. With Tim Gates (PI), Pete Savolainen, and Joh Burley, $206,101.

2013 – 2014 (Researcher) Quality Assurance for National Park Service Traffic Data. Central Federal Lands Highway Division, Federal Highway Administration. With Shawn Turner (PI), $300,000.

2012 – 2013 (Researcher) Developing Twin Cities Arterial Mobility Performance Measures Using GPS Speed Data. Minnesota Department of Transportation. With Shawn Turner (PI), $125,000.

2012 – 2013 (Researcher) Strategic Highway Research Project (SHRP) 2 L05: Incorporating Reliability Performance Measures into the Transportation Planning and Programming Processes, Federal Highway Administration. With Anita Vandervalk (PI), $1,499,500.<http://www.trb.org/Main/Blurbs/168854.aspx>.

2011 – 2012 (**Co-PI**) Estimating and Forecasting Bicycle and Pedestrian Usage for Houston-Galveston Area Council (HGAC) of Texas. With Rob Benz (PI).

2011 – 2012 (**PI**) Development of procedures to process and analyze toll data for performance evaluation of JingShen Expressway for the Ministry of Transport of China. $150,000.

2011 – 2012 (**Co-PI**) Strategic Plan for Non-Motorized Traffic Monitoring in Colorado. Colorado Department of Transportation. With Shawn Turner (PI), $100,000.

2008 – 2011 (**Co-PI**) Established procedures to process ITS data for performance evaluation and reporting for Beijing Transportation Research Center, China. With Shawn Turner (PI) and Ed Seymour, $150,000.

2009 – 2011 (Researcher) Investigate the Use of Private Sector Traffic Data on Freeways and Arterial Streets in the Maricopa Association of Government (MAG) Region of Arizona. With Shawn Turner (PI), TTI 02241, FY2007 $95,000; TTI 01461; FY2006 $56,000.

2009 – 2010 (**Co-PI**) Forecasting Bicycle and Pedestrian Usage and Researching Data Collection Equipment. Capital Area Metropolitan Planning Organization (CAMPO). With Joan Hudson (PI), $100,000.

2008 – 2009 (**PI**) Investigating the Effect of Freeway Congestion Thresholds on Decision-making Inputs, U.S. Department of Transportation University Transportation Centers Program, University Transportation Center for Mobility, $45,000.

2008 – 2010 (Researcher) Strategic Highway Research Project (SHRP) 2 L03: Analytic Procedures for Determining the Impacts of Reliability Mitigation Strategies, Federal Highway Administration. With Richard Margiotta (PI), $1,749,998. <http://www.trb.org/Main/Blurbs/166935.aspx>.

2008 – 2011 (Researcher) Mobility Monitoring Program, a national traffic congestion and reliability monitoring program that uses archived traffic operations data, Federal Highway Administration. With Shawn Turner (PI), FY2008 $315,531; FY2007 $262,000.

2008 – 2009 (Researcher) Archived traffic data management and analysis for monitoring congestion in Dallas, Texas, Texas Department of Transportation. With Shawn Turner (PI).

2008 – 2010 (Researcher) Texas Congestion Index (TCI) project which uses outputs from travel demand model to forecast congestion on the state highways for all urban areas in Texas, Texas Department of Transportation. With Tim Lomax (PI).

**Internal Competitive Grants**

2019 – 2020 (**PI**) Incorporating Autonomous Vehicles in Walkable/Bikeable Community Design at Crescent Road Redevelopment. School of Planning, Design, and Construction, SPDC Built, Natural and Virtual Environment Mini-Grant Program, MSU. $5,000.

2019 – 2020 (**PI**) Development of an Assistive App to Improve Mobility for People with Hearing, Vision, and Developmental Disabilities, School of Planning, Design, and Construction, SPDC Director's Interdisciplinary Research, MSU. $15,000.

2019 – 2020 (**Co-PI**) Design and Research for Safe, Active and Friendly School Environments (DrSAFE): An Assessment of Safe, Walkable and Bikeable School Environments and Suggestions for Public Policy and Design Guidelines, School of Planning, Design, and Construction SPDC Director's Interdisciplinary Research, MSU. $14,500.

2018 – 2019 (**Co-PI**) Promotion of a Healthy Lifestyle through Identifying Needs and Designing Solutions for Persons with Disabilities in Autonomous Vehicle (AV) Transportation Systems. Trifecta Initiative for Interdisciplinary Health Research, MSU. With Tamara Bush (PI) and Shelia Cotten, $4,000.

2018 – 2019 **(Co-PI)** Autonomous Future: Pre & post study of MSU’s Autonomous Busses. College of Business, MSU. With Eva Kassens-Noor (PI), Zeenat Kotval-K., Mark Wilson, $33,780.

2018 – 2019 (**Co-PI**) Crime Preventions through Environmental Design of Public Schools, Michigan Applied Public Policy Research (MAPPR) Program, MSU. With Suk-Kyung Kim (PI), Jun-Hyung Kim, Linda Nubani, $25,000.

2018 – 2019 (**PI**) Assessment on Community’s Mobility Needs on Shared Autonomous Vehicles. Urban Collaborator, MSU. $3,500.

2018 – 2018 (**PI**) Anticipating the Impact of Autonomous Vehicle on Vulnerable Road Users. Provost’s Undergraduate Research Initiative (PURI), College of Social Science, MSU. Summer $1,500 and Fall $1,000.

**Contracts**

1999 – 2007 (Researcher) Mobile source emissions modeling and estimation for air quality nonattainment areas in Texas. Texas Commission on Environment Quality and Texas Department of Transportation. My portion of the funding: FY2000 $50,000; FY2001 $53,000; FY2002 $57,000; FY2003 $59,000; FY2004 $61,000; FY2005 $65,000; FY2006 $68,000; FY2007 $70,000.

CONSULTING Experience

2018.01 – 2018.04 **Project Consultant**

North America commuter rails case studies, New Development Bank

2014.09 – 2016.05 **Chief Technology Officer**

Mobile phone Traffic APP, Autopia (Beijing) Mobile Technology Co., Ltd.

https://chetuobang.com/

2014.03 – 2014.04 **Project Consultant**

Establishment of congestion index in China, China Academy of Transportation Science (CATS)

2011.06 – 2011.12 **Project Consultant**

Non-motorized transportation planning for tourism in Yangzhou, City of Yangzhou, Jiangsu Province

# PUBLICATIONS AND PRESENTATIONS

**Book**

**Qu, T.** and T. Lomax. *Traffic Congestion: Definition, Threshold, Performance Measurement and Investment Decisions.* LAP LAMBERT Academic Publishing GmbH & Co. KG Heinrich-Böcking-Str. 6-8 66121, Saarbrücken, Germany. March 26, 2012. ISBN: 978-3-8473-3151-3.

**Peer-reviewed Journal Articles**

(In review) Kotval-K, Z., S. Khandelwal, E. Kassens-Noor, **T. Qu**, and M. Wilson. Are New Campus Mobility Trends Causing Health Concerns? *Journal of Travel Behaviour and Society*. Submitted September 2021.

(In review) **Qu, T**., C. Xu, D. Seguin, J. Kay, and T. J. Gates. The Impact of COVID-19 Pandemic on Walking and Biking Behaviors. *Transportation Research Record: Journal of the Transportation Research Board.* Submitted July 2021.

Bush, T., P. Cordts; S. Cotten; and **T. Qu**. Mobility Challenges and Perceptions of Autonomous Vehicles for Individuals with Physical Disabilities. *Disability and Health Journal*. Available online June 2021. <https://doi.org/10.1016/j.dhjo.2021.101131>

Kassens-Noor, E., D. Dake, Z. Kotval-K, **T. Qu**, M. Wilson, and B. Pentland. Sociomobility of the 21st century: autonomous vehicles, planning, and the future city. *Transport Policy*. Volume 99, December 2020, Pages 329-335. <https://doi.org/10.1016/j.tranpol.2020.08.022>

**Qu, T.**, D. Li, and J.P. Wikander. Mobility Performance Evaluation Using Toll Data
for the Jingshen Expressway in China. In *Transportation Research Record: Journal of the Transportation Research Board, No.2451*, Transportation Research Board of the National Academies, Washington, D.C. 2014, pp. 77-87. <https://doi.org/10.3141/2451-09>

**Qu, T.** and T. Lomax. The Worst Are Always the Worst: Why Congestion Threshold Speeds Don’t Matter as a Decision-making Input. In *Transportation Research Record: Journal of the Transportation Research Board, No.2242*, Transportation Research Board of the National Academies, Washington, D.C. 2011, pp. 81-89. <https://doi.org/10.3141/2242-10>

Fontaine**,** M., **T. Qu**, K. Zimmerman and C. Spiegelman. Discussion of article “*Assessing the Impact of Speed-Limit Increases on Fatal Interstate Crashes*” by Sandy Balkin and J. Keith Ord., *Journal of Transportation and Statistics*, Volume 4 Number 1, April 2001.

<https://www.researchgate.net/publication/245508230_Assessing_the_Impact_of_Speed-Limit_Increases_on_Fatal_Interstate_Crashes>

**Peer-reviewed Conference Proceedings (Papers and Abstracts)**

**Qu, T.,** H. Huang, and W. McConnell. *Examining the role of E-scooters as the first and last mile solution*. 18th International Road Federation World Meeting & Exhibition, Dubai, November 7-10, 2021.

**Qu, T.,** H. Huang, M. Wilson, and Z., Kotval-K. *The Impact of Shared Electric Scooters and Ride Hailing on Travel Behaviors, A case study of Michigan State University*. 99th Annual Meeting of the Transportation Research Board, National Academies, Washington, D.C. January 2020.

**Qu, T.,** C. Cusack, and P. Dunstone. *Assessment of Receptivity on Autonomous Vehicles among People with Disabilities*. Association of Collegiate of Schools of Planning (ACSP) 59th Annual Conference, Greenville, South Carolina. October 24-27, 2019.

**Qu, T.** and W. Wang. *When Bikeshare Meets Rail Transit: An Ideal Place For Complete Streets*. *Compendium of Papers*, 99th Annual Meeting of the Transportation Research Board, National Academies, Washington, D.C. January 2019.

Kalakuntla, Sai, W. Li, A. Talebpour, **T. Qu,** and K. Sinha. *Is It Wise for Transit Agencies to Adopt* ***Autonomous Buses****? A Cost-Benefit Analysis in Austin, Texas*. ACSP 57th Annual Conference, Denver, Colorado. October 12-15, 2017.

Li, M.-H., **Qu, T.**, and T. Petersenn. Digital storytelling: effectiveness on study abroad experiential learning. *Landscape Research Record* No.5*,* Council of Educators in Landscape Architecture, 20–27, 2016.

**Qu, T.**, M.-H. Li, and T. Petersenn. Effectiveness of Using Digital Storytelling on Abroad Experiential Learning. *Dilemma: Debate, CELA 2016*, the Council of Educators in Landscape Architecture annual meeting in Salt Lake City, UT, 59. March 2016.

**Qu, T.**, and T. Lomax. The Use of Speed Limit as Congestion Threshold for Performance Measures*.* *Compendium of Papers*, 1st International Road Federation Asia Regional Congress, Bali, Indonesia. November 2014.

**Qu, T.**, and M. Martin. Demand analysis for a Bike Share System on the Texas A&M University Campus. *Compendium of Papers*, 93rd Annual Meeting of the Transportation Research Board, National Academies, Washington, D.C. January 2014.

**Qu, T.**, D. Li, and J.P. Wikander. Quality Control of Toll Data for Mobility Performance Measures on the JINGSHEN Expressway in China. *Compendium of Papers*, 92nd Annual Meeting of the Transportation Research Board, National Academies, Washington, D.C. January 2013.

**Qu, T.**, L. Rilett and J. Zietsman. Estimating the Impact of Freeway Speed Limits on Automobile Emissions. *Compendium of Papers CD-ROM*, 82nd Annual Meeting of the Transportation Research Board, National Academies, Washington, D.C. January 2003.

<http://www.ltrc.lsu.edu/TRB_82/TRB2003-001972.pdf>

**Research Reports**

Kim, S., L. Nubani, J. Kim, **T. Qu,** and J. Son. Crime-Prevention through Environmental Design for Public Schools in Michigan: An Assessment of Safe School Environments and Suggestions for Public Policy, Michigan Applied Public Policy Research (MAPPR) report, East Lansing, MI. January 2020.

**Qu, T.**, Kassens-Noor, E., Kotval-K, Z., and Wilson, M. (2019). Spartans Sociomobility Centennial Survey. East Lansing, MI: Michigan State University.

Turner, S. and **T. Qu**. *Developing Twin Cities Arterial Mobility Performance Measures Using GPS Speed Data*. May 2013. <http://www.dot.state.mn.us/research/TS/2013/201314.pdf>, http://www.lrrb.org/media/reports/201314.pdf

Benz, R., S. Turner and **T. Qu**. *Pedestrian-Bicyclist Counting and Demand Study*. Project 6000051, Houston-Galveston Area Council, January, 2013. <https://www.h-gac.com/getmedia/ca929fce-3266-482f-8fe7-b6bc69b5864b/Pedestrian-and-Bicyclist-Counts-and-Demand-Estiimation-Study-TTI-2013.pdf>

**Qu, T.** *The Use of Toll Data for Mobility Performance Measurement on The JINGSHEN EXPRESSWAY.* Texas Transportation Institute, TTI Proposal No. P2011147. November 2011.

Turner, S., **T. Qu**. and P. Lasley. Strategic Plan for Non-Motorized Traffic Monitoring in Colorado. Colorado Department of Transportation, June 2012. <https://trec.pdx.edu/sites/default/files/CDOT%20Strategic%20Plan.pdf>

Turner, S. and **T. Qu**. *Investigate the Use of Private Sector Traffic Data on Freeways and Arterial Streets in the Maricopa Association of Government (MAG) Region of Arizona,* Texas Transportation Institute, September 2011

<https://www.azmag.gov/Documents/ITS_2011-10-27_Private-Probe-Vehicle-Data-for-RealTime-Applications-Final-Report.pdf>

Hudson, J., **T. Qu**, and S. Turner. *Forecasting Bicycle and Pedestrian Usage and Research Data Collection Equipment*. Report TTI P2009330, Capital Area Metropolitan Planning Organization, December 2010. <https://static.tti.tamu.edu/tti.tamu.edu/documents/TTI-P2009330.pdf>

**Qu, T.** *Investigating the Effect of Freeway Congestion Thresholds on Decision-making Inputs*, University Transportation Center for Mobility, Texas Transportation Institute, Report UTCM 09-12-11, May 2010. <http://utcm.tamu.edu/publications/final_reports/Qu_09-12-11.pdf>

**Qu, T.**, D.G. Perkinson M. Boardman, and L.D. White. *2018 and 2020 On-Road Episode Specific Emissions Inventories for All 254 Counties in Texas*, Texas Transportation Institute Research Report, February 2007.

Perkinson, D.G., **T. Qu**, M. Boardman, and L.D. White. *Austin EAC Region On-Road Mobile Source Emissions Inventories: 2007, 2015, and 2030.* Texas Transportation Institute Research Report, February 2007.

Lomax, T., **T. Qu**, K.M. Hall, D. Ellis, D.G. Perkinson, J.D. Benson, L.D. White, B.S. Bochner. *Development of a Texas Congestion Index.* Project No. 0-4853-S. Texas Transportation Institute, October 2006. <http://library.ctr.utexas.edu/hostedpdfs/txdot/psr/4853.pdf>

Perkinson, D.G., B. S. Bochner, M. Boardman, and **T. Qu**. *Developing an Emissions Index for the Texas Metropolitan Mobility Plan*. Project No. 5-4853. Texas Transportation Institute, April 2004. <http://tti.tamu.edu/documents/5-4853-01-P4.pdf>

Perkinson, D.G., M. Boardman, **T. Qu**, and L.D. White. *2005 On-Road Mobile Source Air Toxics Emissions Inventories for All Texas Counties in Texas*, Texas Transportation Institute Research Report, August 2006.

Perkinson, D.G., **T. Qu**, L.D. White, M.E. Boardman. *IAC-A: Beaumont-Port Arthur 8-hour Ozone Nonattainment County Emissions Estimates for Conformity Analysis of the Jefferson, Orange, and Hardin Regional Transportation Study Area Metropolitan Transportation Plan*. Texas Department of Transportation, TX. November 2004.

Dresser, G., **T. Qu**, and C. Bell, *Gridded Mobile Source Emissions Estimates for the Houston-Galveston Nonattainment Counties to Support the Attainment Demonstration SIP,* Texas Transportation Institute Research Report, December 2000.

**Qu, T.**, J. Borowiec and C. Bell. *1996, 1999, and 2007 Airport Emission Inventory,* Texas Transportation Institute Technical Note, March 2000.

**Qu, T.**, C.E. Lee and L. Huang. *Traffic-load forecasting using weigh-in-motion data.* Center for Transportation Research, The University of Texas at Austin, March 1997.

<https://ctr.utexas.edu/wp-content/uploads/pubs/987_6.pdf>

**PRESENTATIONS**

Invited Speeches

**Qu. T.** Complete Street Design, National Chung Hsing University, Taiwan, June 2019.

**Qu, T.** *Sociomobility RESEARCH ON AUTONOMOUS VEHICLES* Autonomous Vehicles workshop sponsored by National Science Foundation, Michigan State University, May 17, 2019.

**Qu. T.** Disruptive Technology, Transportation Bonanza, February 2019. Michigan Department of Transportation

**Qu, T.** Congestion Research and Applications, China Academy of Transportation Science, Beijing, China, March 2014.

**Qu, T.** Monitoring Highway Performance and Mobility Performance Measures, National Intelligent Transportation System Center of China Research Institute of Highway, Beijing, China, December 2013.

**Qu, T.** Development of Congestion Measures, Beijing Transportation Research Center, Beijing, China, December 2013.

**Qu, T.** TTI Mobility Work in China, The World Bank Beijing Office, Beijing, China June 2013.

**Qu, T.** Urban Mobility Analysis, Beijing University of Technology, Beijing, China, June 2013.

**Qu, T.** Non-motorized Transportation Planning and Research, Nanjing Forestry University, Nanjing, China, June 2013.

**Qu, T.** and S. Turner. Investigating Freeway Congestion Thresholds, Southeast University, Nanjing, China, November 2011.

**Qu, T.** and S. Turner. Investigating Freeway Congestion Thresholds, Hehai University, Hangzhou, China, November 2011.

**Qu, T.** and S. Turner. Introduction of Freeway Performance Measures, ZheJiang University, Hangzhou, China, June 2011.

**Qu, T.** and S. Turner. Toll Data for Mobility Performance Measures, CECI Engineering Consultants, Inc. Taiwan, March 2011.

**Qu, T.** and S. Turner. Pedestrian and Bicycle Planning in the US, TongJi University, Shanghai, China, June 2010.

Conference Podium/Poster Presentations

**Qu, T.** Equitable and Inclusive Autonomous Future for People with Disabilities. *Lectern Session 1151* *Equity of Innovative Mobility Services and Technologies*, TRB 100th Annual Meeting - A Virtual Event, National Academies, Washington, D.C. January 2021.

**Qu. T.** Autonomous Vehicles for People with Disabilities, Automated Vehicles Symposium, Orlando, Florida, July 2019.

**Qu, T.** and W. Wang. When Bikeshare Meets Rail Transit: An Ideal Place for Complete Streets. *Compendium of Papers*, 98th Annual Meeting of the Transportation Research Board, National Academies, Washington, D.C. January 2019.

**Qu, T.** Connected and Autonomous Vehicles in Society: An Agenda for Social and Policy Research. 98th Annual Meeting of the Transportation Research Board, National Academies, Washington, D.C. January 2019.

**Qu, T.** *Can Bike Sharing Help Transit Ridership?* 5th Annual Summer Conference on Livable Communities, Western Michigan University, June 21-22, 2018.

**Qu, T.** *Can* ***Autonomous Vehicles*** *Substitute for* ***Paratransit****?* (poster) Autonomous Vehicles workshop sponsored by National Science Foundation, Michigan State University, May 18-19, 2018.

**Qu, T.**, M.-H. Li and T. Petersenn. *The Application of Digital Storytelling on Study aboard Learning* (poster)*.* European Council of Landscape Architecture Schools Conference, Rapperswil, Switzerland, September 2016.

**Qu, T.**, M.-H. Li and T. Petersenn. *Digital Storytelling, Effectiveness on Study aboard Experiential Learning* (poster). Council of Educators in Landscape Architecture Conference, Utah, March 2016.

**Qu, T.** *The Use of Speed Limit as Congestion Threshold for Performance Measures*. 1st International Road Federation Asia Regional Congress. Bali, Indonesia. November 2014.

**Qu, T.** *Demand analysis for a Bike Share System on the Texas A&M University Campus* (poster). 93rd Annual Meeting of the Transportation Research Board, Washington, D.C. January 2014.

**Qu, T.** *Quality Control of Toll Data for Mobility Performance Measures on The JINGSHEN Expressway in China*. 92nd Annual Meeting of the Transportation Research Board, Washington, D.C. January 2013.

**Qu, T.** *Processing and Evaluation of Toll Data for Travel Time Estimation on Chinese Tollways*. North American Travel Monitoring Exposition and Conference (NATMEC), Dallas, Texas. June 4–7, 2012.

<http://onlinepubs.trb.org/onlinepubs/conferences/2012/NATMEC/FinalProgram.pdf>

**Qu, T.** *Investigating the Effect of Freeway Congestion Thresholds on Decision-making Inputs* (poster). 90th Annual Meeting of the Transportation Research Board, Washington, D.C. January 2011.

**Media Mention**

The Chronicle of Higher Education “E-Scooters Have Taken Over Many College Campuses. Now Scholars Are Studying the Phenomenon.” [https://www.chronicle.com/article/E-Scooters-Have-Taken-Over/247197](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.chronicle.com_article_E-2DScooters-2DHave-2DTaken-2DOver_247197&d=DwMGaQ&c=nE__W8dFE-shTxStwXtp0A&r=VCuummn6b1WoEYaEhYDdHw&m=zl4YKluXizxmqmUgWUO1Uxa7FXw-l529REUGneosSSU&s=5OpWkgpSFr1R1zP19aawo_ivBjf9hnEzAPjtZtRGizM&e=). 2019

# TEACHING EXPERIENCE

Michigan State University

* ISS310/UP488 Sustainable and Climate Resilient Communities, 2021- present
* PDC100 Introduction to Built Environment, 2019 – 2021
* UP400 Complete Streets Design, 2019 - present
* UP478 Urban Transportation Planning, 2018 – present
* UP100 The Cities, 2018 – 2019
* UP494 and UP894 Urban Planning Practicum, 2018
* NUR423 Transitional Needs of Adults with Intellectual and/or developmental disabilities Lecture “Mobility for People with Disabilities”

Texas A&M University

* URPN 460 (study abroad) Sustainable Communities (2015 in Germany, 2017 in China and Taiwan).
* URPN310 Urban Analytical Methods, 2016 – 2017
* PLAN674 Transportation System Analysis, 2012 – 2017
* CVEN676 Urban Transportation Planning Lab, 2003

Invited Guest Lectures

* UP801 Concepts and Issues in Urban Development, Fall of 2018
* URPN 460 Germany Sustainable Community, May 2015
* STAT 684 Statistics in Transportation, Fall of 2011 and Spring of 2012

Professional Training Workshops

* “Demand Analysis of Non-motorized Transportation” Peking University, June 2014. <http://www.cala.pku.edu.cn/index.php?m=content&c=index&a=show&catid=12&id=347&from=message&isappinstalled=0>

Graduate Committees

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Student Name** | **Faculty Role** | **Degree Sought** | **Topic/Title** | **Graduation Date** |
| **Michigan State University** |
| Chang Xu | Chair | PHD | Autonomous Vehicles and Disabilities |  |
| William Anderson | Member | PHD | Autonomous Vehicles and Disabilities |  |
| Gulraiz Sufyan | Member | PHD | Autonomous Vehicles and Gender |  |
| Harprinderjot Singh | Member | PHD (Civil Engineering) | Shared Mobility |  |
| Dan Seguin | Chair | MURP | Walkability  |  |
| Megat Johari  | Member | PHD (Civil Engineering) | Speed Limit Policy Impact |  |
| Anshu Bamney | Member | PHD (Civil Engineering) | Active Transportation Operation |  |
| Alex Huizen | Member | MED | Bicycle Planning for East Lansing | August 2020 |
| Huiqing Huang | Member | MURP | Spatial Analysis of Informal Housing in Colonias Texas | December 2019 |
| **Texas A&M University** |
| Qikun Chen | Chair | MUP | Relationship between Bike Share and Public Transit | August 2017 |
| Yige Tang | Chair | MUP | Aggie Bus Performance Evaluation | May 2017 |
| Siqing Yi | Chair | MUP | Park & Ride along BART | May 2017 |
| Gopika V. Nair | Chair | MUP | Campus Walkability and Design | May 2017 |
| Pranjal Dixit | Co-Chair | MUP | Transportation Modeling  | May 2017 |
| Qiao Zhao | Member | MUP | Transit Oriented Development and Rail-based Accessibility | May 2017 |
| Sai Kalakuntla | Member | MUP | Electric and Autonomous Vehicle | May 2017 |
| Rachel Prelog | Member | MUP | Bicycle Equity | May 2016 |
| Xi Chen\* | Member | MUP | How Do Graduate Students Travel?  | May 2016 |
| Yi Meng | Member | MUP | Mapping Bikeability of College Towns | May 2016 |
| A K M. Abir | Member | MS in Transportation Engineering | Travel Time Reliability Value | May 2016 |
| Bret T. Liberatore | Member | MS in Statistics | NYC Bike Share Program: Citi Bike | May 2016 |
| Shuang Guo | Member | MUP | Bike Friendly Index | December 2015 |
| Siyang Zhang | Member | MUP | Effect of Land use on Light Rail ridership in Los Angeles | May 2015 |
| Alex Marler | Member | MUP | Bayou in Houston  | May 2014 |
| Boya Dai | Mentor | MUP | GIS application in Travel Survey | May 2013 |
| Allison Hyde | Mentor | MUP | Active Living/Bikeability  | May 2013 |

**Service Experience**

**National / International**

2021 – 2023 **Track Chair**, Track 14 Regional Planning, Association of Collegiate Schools of Planning (ACSP) Annual Conference

2019 – present **Member**, Accessible Transportation and Mobility Committee (AME50), Transportation Research Board of the National Academies.

2019 – present **Member**, Emerging and Innovative Public Transport and Technologies Committee (AP020), Transportation Research Board of the National Academies.

2010 – present **Friend**, Committees on Developing Countries, Pedestrians, Bicycle Transportation, and Performance Measurements, Transportation Research Board of the National Academies.

**State**

2019 – present **Member**, Michigan 2045 State Long-Range Transportation Plan (MM2045) Planning Committee, representing Michigan State University.

**University**

2018 – present **Member**, Bicycle Advisory Committee, Michigan State University.

2015 – 2017 **Advisor**, Texas A&M University Recreational Sports Center

**College/Department**

2019 – present **Member**, Diversity, Equity and Inclusion (DEI) standing committee, School of Planning, Design and Construction, MSU

2016 – 2017 **Co-manager**, Building Vibrant and Resilient Cities - the Visiting Scholar Program, LAUP TAMU.

2016 – 2017 Urban Planning Program Committee, LAUP TAMU.

**Community**

2013 – 2014 **Member**, Long range planning committee of College Station ISD