

Eleni Christofa

Department of Civil & Environmental Engineering, University of Massachusetts
216 Marston Hall, 130 Natural Resources Road, Amherst, MA 01003
PHONE: +1 (413) 577-3016 FAX: +1 (413) 545-9596 EMAIL: christofa@ecs.umass.edu

EDUCATION

- MAY 2012 **University of California, Berkeley**
Doctor of Philosophy in Civil and Environmental Engineering
Thesis: '*Traffic Signal Optimization with Transit Priority: A Person-based Approach*'
Minors: City and Regional Planning, Industrial Engineering and Operations Research
Advisor: Prof. A. Skabardonis
- MAY 2008 **University of California, Berkeley**
Master of Science in Civil and Environmental Engineering
Program: Transportation Engineering
- JULY 2007 **National Technical University of Athens (NTUA), Greece**
Diploma in Civil Engineering with specialization in Transportation Eng. (5-year degree)
Thesis: '*Travel Time Estimation in Signalized Arterials Under Incident Conditions*'
Advisor: Prof. M.G. Karlaftis

RESEARCH INTERESTS

Traffic Operations and Control
Sustainable Traffic Management
Health & Transportation
Transportation Safety
Public Transportation Systems

RESEARCH AND WORK EXPERIENCE

University of Massachusetts Amherst

2019–PRESENT *Associate Professor*, Department of Civil and Environmental Engineering

2012–2019 *Assistant Professor*, Department of Civil and Environmental Engineering

École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

2020 *Visiting Professor*, School of Architecture, Civil and Environmental Engineering

University of California, Berkeley

2007–2012 *Graduate Student Researcher*

2010–2012 **Advanced Signal Control Algorithms** (US DOT Exploratory Advanced Research)
Partners for Advanced Transportation Technology (PATH)
Developing Connected Vehicle-based traffic signal control algorithms

2009–2010 **Traffic Signal Optimization with Transit Priority**
U.C. Berkeley Center for Future Urban Transport, A Volvo Center of Excellence
Development of signal control systems with transit priority for conflicting transit routes

2008–2009 **Integrated Corridor Management (ICM)**
Partners for Advanced Transportation Technology (PATH)
Modeling and simulation methods for Integrated Corridor Management

- 2008 **Effectiveness of Adaptive Traffic Control for Arterial Signal Management**
Partners for Advanced Transportation Technology (PATH)
 Development of signal control strategies that mitigate vehicle delays and emissions
- 2007 **Traffic Data Collection Technologies for Travel Time Estimation**
California Center for Innovative Transportation (CCIT)
 Feasibility study on innovative ways of estimating travel times (e.g., cell phones)

Cambridge Systematics, Inc., Oakland, CA

- 2008 *Summer Intern*
 Modeling traffic conditions on California corridors using simulation packages

Technical Office of S. Prokopiou, Mytilene, Greece

- 2005 *Summer Intern*
 Supervision of pavement construction and maintenance of roads in Lesvos, Greece

HONORS & AWARDS

- 2019 Greek Diaspora Fellowship, Institute of International Education, funding from the Stavros Niarchos Foundation
- 2019 Barbara H. and Joseph I Goldstein Outstanding Junior Faculty Award, College of Engineering, University of Massachusetts Amherst
- 2017 Outstanding Young Member Award, Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine
<http://www.trb.org/AboutTRB/YoungMemberAward.aspx>
- 2017 Student-Centered Teaching & Learning Fellow, University of Massachusetts Amherst
- 2016 Innovation Fellow, University of Massachusetts Amherst
- 2015 Certificate of Outstanding Contribution in Reviewing, Transportation Research Part C: Emerging Technologies
- 2014 Open Education Initiative Grant, University of Massachusetts Amherst
- 2014 Sustainability Curriculum Initiative Grant, University of Massachusetts Amherst
- 2014 ASCE ExCEEEd Fellowship, American Society of Civil Engineers
- 2013 Travel Scholarship for the Bicycle and Pedestrian Curriculum Workshop, Portland State University
- 2011 University of California Transportation Center Award
- 2009–2011 Dwight David Eisenhower Transportation Fellowship
- 2007 Gordon F. Newell Memorial Fellowship (U.C. Berkeley)
- 2007 Eugenides Foundation Scholarship for Graduate Studies

PROJECTS

Awarded Projects (external)

- 2020–2021 Christofa, E. (co-PI) with J. Oke (PI) and E. Gonzales. Energy Consumption, Cost and Emissions of MBTA Rapid Transit Vehicles. Massachusetts Department of Transportation. \$125,000
- 2020–2021 Christofa, E. (PI) with C. Ai (co-PI). Effectiveness of Bicycle Boxes in Massachusetts, Massachusetts Department of Transportation. \$100,000
- 2020–2021 Christofa, E. (co-PI) with E.J. Gonzales (PI). Flexible Transit for Rural Areas, Massachusetts Department of Transportation. \$165,000
- 2018–2019 Christofa, E. (co-PI) with E.J. Gonzales (PI). Commuter Bus Demand: Incentives for Modal Shift and Impact on GHG Emissions: Part II–Service Design Concepts, Massachusetts Department of Transportation. \$100,000

- 2018–2020 Christofa, E. (PI) with K. Pollitt, K. Goins, and S. Lemon. Public Health Assessment for Transportation Projects, Massachusetts Department of Transportation. \$166,498
- 2018 Christofa, E. (co-PI) with K. Pollitt (PI). Calibration of the Integrated Transport and Health Impact Modelling Tool (ITHIM) for Use in Massachusetts, Massachusetts Department of Public Health. \$60,560
- 2017–2022 Christofa, E. (co-PI) with M.A. Knodler (PI), and C. Fitzpatrick (PIs listed are for the UMass team). U.S. Department of Transportation through the Safety Research using Simulation (SAFER-Sim) University Transportation Center. \$283,018 (UMass Share) [Year 3]
- 2017–2022 Christofa, E. (co-PI) with M.A. Knodler (PI), C. Fitzpatrick, and S.C. Roberts. U.S. Department of Transportation through the Safety Research using Simulation (SAFER-SIM) University Transportation Center. \$237,112 (UMass Share) [Year 2]
- 2017–2022 Christofa, E. (co-PI) with M.A. Knodler (PI), E.J. Gonzales, and S. Samuel. U.S. Department of Transportation through the Safety Research using Simulation (SAFER-SIM) University Transportation Center. \$266,418 (UMass Share) [Year 1]
- 2017 Christofa, E. (PI) with K. Pollitt. Zero Emission Transit Bus and Refueling Technologies and Deployment Status, Massachusetts Department of Transportation. \$74,951
- 2017–2018 Christofa, E. (PI) with E.J. Gonzales. Commuter Bus Demand: Incentives for Modal Shift and Impact on GHG Emissions, Massachusetts Department of Transportation. \$73,988
- 2015–2018 Christofa, E. (co-PI) with M. Ben-Akiva (PI), J. Trancik (PI), and S. Gao (UMass PI). Mobility Electronic Market for Optimized Travel. U.S. Department of Energy, Advanced Research Projects Agency-Energy (ARPA-E). \$500,000 (UMass Share); \$3,990,128 (Total)
- 2014–2016 Christofa, E. (PI) with M.A. Knodler. Operational and Emission Analyses of Roundabouts under Varied Vehicle and Pedestrian Demands. U.S. Department of Transportation through the New England University Transportation Center. \$164,503
- 2014–2016 Christofa, E. (co-PI) with M.A. Knodler (PI), E.J. Gonzales, and S. Samuel. U.S. Department of Transportation through the Safety Research using Simulation (SAFER-SIM) University Transportation Center. \$282,944 (UMass Share) [Year 3]
- 2014–2016 Christofa, E. (co-PI) with M.A. Knodler (PI), D.L. Fisher, and D. Ni. U.S. Department of Transportation through the Safety Research using Simulation (SAFER-SIM) University Transportation Center. \$284,750 (UMass Share) [Year 2]
- 2014–2016 Christofa, E. (PI) with M.A. Knodler. Impact of Deflection Angle on Roundabout Driver Behavior. U.S. Department of Transportation through the Safety Research using Simulation (SAFER-SIM) University Transportation Center. \$45,000
- 2014–2016 Christofa, E. (co-PI) with M.A. Knodler (PI). Development and Evaluation of Infrastructure Strategies for Safer Cycling. U.S. Department of Transportation through the Safety Research using Simulation (SAFER-SIM) University Transportation Center. \$45,000
- 2013–2015 Christofa, E. (PI). Signal Timing Optimization for Improved Mobility and Air Quality. U.S. Department of Transportation through the New England University Transportation Center. \$99,975
- 2012–2015 Christofa, E. (PI) with J. Collura. A Person-based Comparison of Transit Preferential Treatments on Signalized Arterial Corridors. U.S. Department of Transportation through the New England University Transportation Center. \$60,068

Awarded Projects (internal)

- 2019 Christofa, E. (co-PI) with K. Peterman (PI), C. Butler, S. Gao, E. Kumpel. Fostering Inclusive Research Relationships in Civil Infrastructure, ADVANCE Mutual Mentoring Grant. \$6,000
- 2018–2019 Christofa, E. (co-PI) with K. Peterman (PI), C. Butler, S. Gao, E. Kumpel. Informal Mentoring: Navigating Mentoring Challenges when No Model Exists, Mutual Mentoring Team Grant, The Institute for Teaching Excellence and Faculty Development. \$6,000

PUBLICATIONS

* student for which I am the primary advisor.

** student at UMass I had a significant contribution to research, but I am not the advisor of record.

*** student at other Universities that I supervised that I had a significant contribution to research.

Refereed Journal Publications

- J1. *Deliali, A., **Chhan, D., **Oliver, J., Sayess, R., Pollitt, K., and **Christofa, E.** Transitioning to Zero-Emission Bus Fleets: State of Practice of Implementations in the United States. *Transport Reviews: A Transnational Transdisciplinary Journal* [accepted]
- J2. ***Yu, Z., Xu, G., Gayah, V.V., and **Christofa, E.** Incorporating Phase Rotation into a Person-based Signal Timing Optimization Algorithm. *IEEE Transactions on Intelligent Transportation Systems*, DOI: 10.1109/TITS.2020.3012529. [published online]
- J3. **Ryan, A., *Page, M., **Christofa, E.**, Fitzpatrick, C., and Knodler, M. 2020. Linking geospatial crash and citation data to inform equitable enforcement decisions. *Journal of Transportation Safety & Security*, DOI: 10.1080/19439962.2020.1774020. [published online]
- J4. *Deliali, A., **Campbell, N., Knodler, M., and **Christofa, E.** 2020. Understanding the Safety Impact of Protected Intersections Design Elements-A Driving Simulation Approach. *Transportation Research Record*, DOI: 10.1177/0361198120909382.
- J5. *Fournier, N., **Christofa, E.**, Akkinepally, A., and Lima Azevedo, C. 2020. Integrated Population Synthesis and Workplace Assignment Using an Efficient Optimization-based Person-Household Matching Method. *Transportation*, 1–27.
- J6. *Fournier, N., **Bakhtiari, S., **Valluru, K., **Campbell, N., **Christofa, E.**, Roberts, S., and Knodler, M. 2020. Accounting for Drivers' Bicycling Frequency and Familiarity with Bicycle Infrastructure Treatments when Evaluating Safety. *Accident Analysis and Prevention*. 137, 105410
- J7. **Ryan, A., Fitzpatrick, C., **Christofa, E.**, and Knodler, M. 2020. Driver Performance Due to Small Unmanned Aerial System Applications in the Vicinity of Roadways. *Transportation Research Part F: Psychology and Behaviour*, 68: 118–131.
- J8. **Tainter, F., **Christofa, E.**, Knodler, M. 2020. All-Red Clearance Intervals for Use in the Left-Turn Application of Flashing Yellow Arrows. *Journal of Transportation Engineering, Part A: Systems*, 146(4), doi.org/10.1061/JTEPBS.0000298.
- J9. *Fournier, N., **Christofa, E.**, and Knodler Jr., M.A. 2019. A Mixed Methods Investigation of Bicycle Exposure in Crash Rates, *Accident Analysis & Prevention*, 130: 54–61.
- J10. **Lyman, C., **Campbell, N., Gonzales, E.J., and **Christofa, E.** 2019. Modeling the Effect of New Commuter Bus Service on Demand and Impact on GHG Emissions: Application to Greater Boston, *Transportation Research Record: Journal of the Transportation Research Board*. doi.org/10.1177/0361198119859856.
- J11. Papantoniou, P., Yannis, G., and **Christofa, E.** 2018. Which Factors Lead to Driving Errors? A Structural Equation Model Analysis through a Driving Simulator Experiment, *IATSS Research*, 43(1): 44–50.

- J12. **Tainter, F., **Ryan, A., Fitzpatrick, C., **Christofa, E.**, and Knodler Jr., M. 2018. Evaluation of Downstream Merge Behaviors Resulting from Driver Lane Choice. *Transportation Research Record; Journal of the Transportation Research Board*, 2672(37):123–131.
- J13. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2018. An Analytical Model to Conduct a Person-based Evaluation of Transit Preferential Treatments on Signalized Arterials. *Transportation Research Part C: Emerging Technologies*, 90:411–432.
- J14. ***Yu, Z., Gayah, V.V., and **Christofa, E.** 2017. Person-based Signal Timing Optimization to Account for Flexible Cycle Lengths and Uncertain Transit Vehicle Arrivals. *Transportation Research Record: Journal of the Transportation Research Board*, 2620:31–42.
- J15. Chavis, C., and **Christofa, E.**, 2017. A Real-Time Signal Control Strategy for Mitigating the Impact of Bus Stops at Urban Signalized Arterials. *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations*, 21(5): 349–363.
- J16. *Fournier, N., **Christofa, E.**, and Knodler Jr., M.A. 2017. A Sinusoidal Model for Seasonal Bicycle Demand Estimation. *Transportation Research Part D: Transport and the Environment*, 50:154–169.
- J17. *Farid, Y.Z., **Christofa, E.**, and Paget-Seekins, L. 2016. Short-Term Bus Travel Time Estimation Using Low Resolution Automated Vehicle Location Data. *Transportation Research Record: Journal of the Transportation Research Board*, 2539:113–118.
- J18. ***Wolput, B., **Christofa, E.**, and Tampère, C.M.J. 2016. Optimal Cycle Length Formulas for Intersections With or Without Transit Signal Priority. *Transportation Research Record: Journal of the Transportation Research Board*, 2558: 78-91.
- J19. **Christofa, E.**, Ampountolas, K., and Skabardonis, A. 2016. Arterial Traffic Signal Optimization: A Person-based Approach. *Transportation Research Part C: Emerging Technologies*, 66:27–47.
- J20. *Roach, D., **Christofa, E.**, and Knodler Jr., M.A. 2016. Safety Assessment before and after Implementation of Roundabouts through Microsimulation. *Advances in Transportation Studies, an International Journal*, 2016 Special Issue, Vol.2.
- J21. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2015. Dedicated Bus and Queue Jumper Lanes at Signalized Intersections with Nearside Bus Stops: Person-Based Evaluation. *Transportation Research Record: Journal of the Transportation Research Board*, 2484:182–192.
- J22. *Khalighi, F., and **Christofa, E.** 2015. Emission-based Signal Timing Optimization for Isolated Intersections. *Transportation Research Record: Journal of the Transportation Research Board*, 2487:1–14.
- J23. Argote-Cabañero, J., **Christofa, E.**, and Skabardonis, A. 2015. Connected Vehicle Penetration Rate for Estimation of Arterial Measures of Effectiveness. *Transportation Research Part C: Emerging Technologies*, 60:298–312.
- J24. Gonzales, E.J., and **Christofa, E.** 2014. Empirical Assessment of Bottleneck Congestion with a Constant and Peak Toll: San Francisco-Oakland Bay Bridge. *EURO Journal on Transport and Logistics*, 3(3&4):267–288.
- J25. **Christofa, E.**, Papamichail, I., and Skabardonis, A. 2013. Person-based Traffic Responsive Signal Control Optimization. *IEEE Transactions on Intelligent Transportation Systems*, 14(3):1278–1289.
- J26. **Christofa, E.**, Argote, J., and Skabardonis, A. 2013. Arterial Queue Spillback Detection and Signal Control based on Connected Vehicle Technology. *Transportation Research Record: Journal of the Transportation Research Board*, 2356:61–70.
- J27. Reger, D., **Christofa, E.**, Guler, I., and Madanat, S. 2013. Estimation of Pavement Crack Initiation Models by Combining Experimental and Field Data. *ASCE Journal of Infrastructure Systems*, 19(4):434–441.
- J28. Skabardonis, A., Geroliminis, N., and **Christofa, E.** 2013. Prediction of Vehicle Activity for Emissions Estimation Under Oversaturated Conditions Along Signalized Arterials. *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations*, 17(3):191-199.

- J29. **Christofa, E.**, and Skabardonis, A. 2011. Traffic Signal Optimization with Application of Transit Signal Priority to an Isolated Intersection. *Transportation Research Record: Journal of the Transportation Research Board*, 2259:192-201.

Book Chapters

- B1. **Christofa, E.**, Esenther, S.E., and Pollitt, K.J. 2020. Incorporating health impacts in transportation project decision-making in the United States. Chapter 16, *Advances in Transportation and Health: Tools, Technologies, Policies, and Developments*. Ed. Makr J. Nieuwenhuijzen and Haneen Khreis. Elsevier.

Refereed Conference Publications

- C1. *Fournier, N., Gonzales, E.J., and **Christofa, E.**, 2019. Controlling Congestion in a Neighborhood Center for Ring-Radial and Grid Networks. *2019 IEEE 22nd International Conference on Intelligent Transportation Systems*, 27–30 October, Auckland, New Zealand.
- C2. *Fournier, N., **Christofa, E.**, and Gonzales, E.J., 2019. A Continuous Model for Coordinated Pricing of Mixed Access Modes to Transit, *23rd International Symposium on Transportation and Traffic Flow Theory (ISTTT)*, 24–26 July, Lausanne, Switzerland.
- C3. **Lyman, C., **Campbell, N., Gonzales, E.J., and **Christofa, E.** 2019. Modeling the Effect of New Commuter Bus Service on Demand and Impact on GHG Emissions: Application to the Greater Boston, *Transportation Research Board 98th Annual Meeting*, 13–17 January, Washington, D.C., Paper No. 19-03945.
- C4. *Fournier, N., **Christofa, E.**, and Hamin, M., 2019. Measuring Bicycle Ridership Seasonality Relative to Associated Factors, *Transportation Research Board 98th Annual Meeting*, 13–17 January, Washington, D.C., Paper No. 19-05064.
- C5. *Khalighi, F., and **Christofa, E.**, 2019. Signal Timing Optimization for Improved Mobility and Air Quality, *Transportation Research Board 98th Annual Meeting*, 13–17 January, Washington, D.C., Paper No. 19-05255.
- C6. *Fournier, N., ***Needell, Z., ***Chen, S., ***Viegas de Lima, I.H., *Deliali, A., Araldo, A., Akkinepally, A., Lima Azevedo, C., **Christofa, E.**, Trancik, J., and Ben-Akiva, M. 2018. Integrated Simulation of Activity-based Demand and Multi-modal Dynamic Supply for Energy Assessment. *2018 IEEE 21st International Conference on Intelligent Transportation Systems*, 4–7 November, Maui, HI.
- C7. ***Yu., Z., Gayah, V., and **Christofa, E.** 2018. Implementing Phase Rotation in a Person-based Signal Timing Optimization Framework, *2018 IEEE 21st International Conference on Intelligent Transportation Systems*, 4–7 November, Maui, HI.
- C8. Gonzales, E.J., and **Christofa, E.** 2018. Evaluating the Effect of Freight Deliveries on Signalized Arterials and Optimizing Real-Time Signal Control, *Transportation Research Board 97th Annual Meeting*, 7–11 January, Washington, D.C., Paper No. 18-05141.
- C9. *Fournier, N., **Christofa, E.**, Akkinepally, A., and Lima Azevedo, C. 2018. An Integration of Population Synthesis Methods for Agent-based Microsimulation. *Transportation Research Board 97th Annual Meeting*, 7–11 January, Paper No. 18-03141.
- C10. *Fournier, N., Deliali, A., **Christofa, E.**, and Knodler, M.A. 2018. A Comparative Safety Analysis of Bicycle Infrastructure Treatments at Intersections. *Transportation Research Board 97th Annual Meeting*, 7–11 January, Washington, D.C., Paper No. 18-05896.
- C11. Lima Azevedo, C., Seshadri, R., Gao, S., Atasoy, B., Akkinepally, A., **Christofa, E.**, Zhao, F., Trancik, J., Ben-Akiva, M. 2018. TRIPOD: Sustainable Travel Incentives with Prediction, Optimization, and Personalization. *Transportation Research Board 97th Annual Meeting*, 7–11 January, Washington, D.C., Paper No. 18-06769.
- C12. *Wolfgram, J., Huang, P.X., Zhao, Y., **Christofa, E.**, and Xiao, L. 2018. A Quick and Reliable Incident Detection Methodology Using Connected Vehicle Data. *Transportation Research Board 97th Annual Meeting*, 7–11 January, Washington, D.C., Paper No. 18-05089.

- C13. ***Yu, Z., Gayah, V., and **Christofa, E.** 2018. Person-based Signal Timing Optimization with Flexible Cycle Lengths and Phase Rotation. *Transportation Research Board 97th Annual Meeting*, 7–11 January, Washington, D.C., Paper No. 18-04332.
- C14. **Ryan, A., **Tainter, F., Fitzpatrick, C., Page, M., **Christofa, E.**, and Knodler, Jr., M.A. 2017. Alternative Merge Design at Intersection Downstream Corridors: A Driving Simulation Study. *2017 Road Safety & Simulation International Conference*, 17–19 October, The Hague, Netherlands.
- C15. **Sabhanayagam, A., Knodler, Jr., M.A., **Christofa, E.**, Hajiseyedjavadi, F., and Khalighi, F. 2017. Impact of S-Curves on Speed in a Modern Roundabout. *2017 Road Safety & Simulation International Conference*, 17–19 October, The Hague, Netherlands.
- C16. *Wolfram, J., **Christofa, E.**, and Knodler, Jr., M.A. 2017. Microsimulation Safety Assessment of Continuous Flow Intersections. *2017 Road Safety & Simulation International Conference*, 17–19 October, The Hague, Netherlands.
- C17. *Fournier, and **Christofa, E.** 2017. Network work trip assignment for agent-based simulation accounting for travel time. *5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems*, 26–28 June, Naples, Italy.
- C18. Gonzales, E.J., and **Christofa, E.** 2017. Real-time Signal Control Accounting for Urban Freight Deliveries. *5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems*, 26–28 June, Naples, Italy.
- C19. ***Yu, Z., Gayah, V.V., and **Christofa, E.** 2017. Person-based Signal Timing Optimization to Account for Flexible Cycle Lengths and Uncertain Transit Vehicle Arrivals. *Transportation Research Board 96th Annual Meeting*, 8–12 January, Washington, D.C., Paper No. 17-00983.
- C20. *Fournier, N., **Christofa, E.**, and Knodler, M.A. 2017. Bicycle Infrastructure from the Driver’s Seat: Evaluating Bicycle Infrastructure Using a Driving Simulator. *Transportation Research Board 96th Annual Meeting*, 8–12 January, Washington, D.C., Paper No. 17-01981.
- C21. *Farid, Y.Z., and **Christofa, E.** 2017. Real-time Signal Control with Transit Priority Window: A Person-based Approach. *Transportation Research Board 96th Annual Meeting*, 8–12 January, Washington, D.C., Paper No. 17-05493.
- C22. *Farid, Y.Z., and **Christofa, E.** 2016. Short-Term Bus Travel Time Estimation Using Low Resolution Automated Vehicle Location Data. *Transportation Research Board 95th Annual Meeting*, 10–14 January, Washington, D.C., Paper No. 16-0166.
- C23. *Fournier, N., **Christofa, E.**, and Knodler, M. 2016. The Bicycle Cycle: A Sinusoidal Model for Predicting Bicycle Demand. *Transportation Research Board 95th Annual Meeting*, 10–14 January, Washington, D.C., Paper No. 16-4182.
- C24. ***Wolput, B., **Christofa, E.**, and Tampère, C.M.J. 2016. Optimal Cycle Length Formulas for Intersections with or without Transit Signal Priority. *Transportation Research Board 95th Annual Meeting*, 10–14 January, Washington, D.C., Paper No. 16-1804.
- C25. *Roach, D., **Christofa, E.**, and Knodler Jr., M.A. 2016. Roundabout Safety Assessment through Microsimulation. *2015 Road Safety & Simulation International Conference*, 6–8 October, Orlando, FL.
- C26. **Tainter, F., Knodler, Jr., M.A., **Fitzpatrick, C., and **Christofa, E.** 2015. Analysis of Driver Performance and Operations at Intersection Auxiliary Through Lanes. *2015 Road Safety & Simulation International Conference*, 6–8 October, Orlando, FL.
- C27. ***Wolput, B., Tampère, C.M.J., and **Christofa, E.** 2015. A New Stochastic Mesomodel for Optimizing Multi-Modal Signal Settings for Networks. *2015 IEEE 18th International Conference on Intelligent Transportation Systems*, 15–18 September, Canary Islands, Spain.
- C28. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2015. Person-Based Evaluation of Dedicated Bus Lanes and Queue Jumper Lanes at Signalized Intersections with Near-Side Bus Stops. *Transportation Research Board 94th Annual Meeting*, 11–15 January, Washington, D.C., Paper No. 15-1426.

- C29. *Khalighi, F., and **Christofa, E.** 2015. Emission-based Signal Timing Optimization for Isolated Intersections. *Transportation Research Board 94th Annual Meeting*, 11–15 January, Washington, D.C., Paper No. 15-5871.
- C30. *Roach, D., **Christofa, E.**, and Knodler Jr., M.A. 2015. Evaluating the Applicability of SSAM for Modeling the Safety of Roundabouts. *Transportation Research Board 94th Annual Meeting*, 11–15 January, Washington, D.C., Paper No. 15-5207.
- C31. ***Wolput, B., **Christofa, E.**, Carbonez, A., Skabardonis, A., and Tampère, C.M.J. 2015. Optimal Traffic Signal Settings with Transit Signal Priority. *Transportation Research Board 94th Annual Meeting*, 11–15 January, Washington, D.C., Paper No. 15-2658.
- C32. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2014. A Person-based Evaluation of Transit Preferential Treatments on Signalized Arterials. *Transportation Research Board 93rd Annual Meeting*, 12–16 January, Washington, D.C., Paper No. 14-2995.
- C33. **McKinnon, I., Knodler, M., and **Christofa, E.** 2013. Operational and Safety-based Analyses of Varied Toll Plaza Configurations. *Road Safety and Simulation–International Conference*, 22–25 October, Rome, Italy.
- C34. **Christofa, E.** and Skabardonis, A., 2013. Robust Signal Timing Optimization vs. Adaptive Control on High Volume Arterials. *mobil.TUM 2013, International Scientific Conference on Mobility and Transport*, 18–19 June, Munich, Germany.
- C35. **Christofa, E.**, Aboudolas, K., and Skabardonis, A. 2013. Arterial Traffic Signal Optimization: A Person-based Approach. *Transportation Research Board 92nd Annual Meeting*, 13–17 January, Washington, D.C., Paper No. 13-3395.
- C36. **Christofa, E.**, Argote, J., and Skabardonis, A. 2013. Arterial Queue Spillback Detection and Signal Control based on Connected Vehicle Technology. *Transportation Research Board 92nd Annual Meeting*, 13–17 January, Washington, D.C., Paper No. 13-4903.
- C37. **Christofa, E.**, Papamichail, I., and Skabardonis, A. 2012. Person-based Traffic Signal Optimization for Real-Time Applications. *Transportation Research Board 91st Annual Meeting*, 22–26 January, Washington, D.C., Paper No. 12-2228.
- C38. Argote, J., **Christofa, E.**, Xuan, Y., and Skabardonis, A. 2012. Estimation of Arterial Measures of Effectiveness with Connected Vehicle Data. *Transportation Research Board 91st Annual Meeting*, 22–26 January, Washington, D.C., Paper No. 12-1493.
- C39. Skabardonis, A., Geroliminis, N., and **Christofa, E.** 2012. Vehicle Emissions Estimation Under Oversaturated Conditions along Signalized Arterials. *Transportation Research Board 91st Annual Meeting*, 22–26 January, Washington, D.C., Paper No. 12-3899.
- C40. Argote, J., **Christofa, E.**, Xuan, Y., and Skabardonis, A. 2011. Estimation of Measures of Effectiveness based on Connected Vehicle Data. *14th International IEEE Conference on Intelligent Transportation Systems*, 5–7 October, Washington, D.C.
- C41. Skabardonis, A., and **Christofa, E.** 2011. Impact of Transit Signal Priority on Level of Service at Signalized Intersections. *6th International Symposium on Highway Capacity and Quality of Service World Congress*, June 28–July 1, Stockholm, Sweden.
- C42. Skabardonis, A., and **Christofa, E.** 2011. Evaluation of Methodologies for the Design and Analysis of Freeway Weaving Sections. *1st International Conference on Access Management*, 14–17 June, Athens, Greece.
- C43. **Christofa, E.**, and Skabardonis, A. 2011. Traffic Signal Optimization with Transit Signal Priority: Application to an Isolated Intersection. *Transportation Research Board 90th Annual Meeting*, 23–27 January, Washington, D.C., Paper No. 11-3092.
- C44. Skabardonis, A., Geroliminis, N., and **Christofa, E.** 2010. Improved Analysis Framework for Emissions Estimation Under Oversaturated Conditions Along Signalized Arterials. *5th International Congress on Transportation Research in Greece*, 27–28 September, Volos, Greece.

- C45. **Christofa, E.M.**, and Skabardonis, A. 2010. Traffic Signal Optimization with Conditional Transit Signal Priority for Conflicting Transit Routes. *12th World Conference on Transportation Research*, 11–15 July, Lisbon, Portugal.
- C46. **Christofa, E.M.**, and Madanat, S.M. 2010. Development of Pavement Crack Initiation Models by Combining Experimental and Field Data. *Transportation Research Board 89th Annual Meeting*, 10–14 January, Washington, D.C., Paper No. 10-1096.
- C47. **Christofa, E.M.**, and Vlahogianni, E.I. 2008. Incident Impacts on Travel Time on Urban Signalized Arterials. *10th ASCE International Conference on Application of Advanced Technologies in Transportation (AATT)*, 27–31 May, Athens, Greece.

Other Conference Proceedings

- CP1. *Deliali, A., **Tainter, F., **Christofa, E.**, and Knodler, M.A. 2018. Using Driver Simulation to Assess Conflicts between Drivers and Bicyclists at Intersections. *European Transport Conference*, 10–12 October, Dublin Ireland.
- CP2. *Page, M., **Christofa, E.**, Fitzpatrick, C., and Knodler, M.A. 2018. Over-citing or Under citing? A GIS-based Analysis of the Relationships between Crashes and Citations, *European Transport Conference*, 10–12 October, Dublin Ireland.
- CP3. **Tainter, F., **Christofa, E.**, and Knodler, M.A. 2018. Impact on Safety from Clearance Intervals in Left Turn Signal Phasing, *European Transport Conference*, 10–12 October, Dublin Ireland.
- CP4. **Lyman, C., Gonzales, E., and **Christofa, E.**, 2018. Commuter Bus Demand, Incentives for Modal Shift, and Impact on GHG Emissions: Example for Greater Boston, *European Transport Conference*, 10–12 October, Dublin Ireland.
- CP5. Chavis C., **Christofa, E.**, 2014. A Real-Time Signal Control Strategy for Mitigating the Impact of Bus Stops on Urban Arterials. *Symposium Celebrating 50 Years of Traffic Flow Theory*, 11–13 August, Portland, OR.
- CP6. Kopelias, P., Papadimitriou, F., Skabardonis, A., and **Christofa, E.**, 2010. Applications of Advanced Analysis Tools for Freeway Performance Measurement. *12th World Conference on Transportation Research*, 11–15 July, Lisbon, Portugal.

Project Reports

- R1. Fitzpatrick, C., Ryan, A., Knodler, M., and **Christofa, E.** 2020. *The Influence of Unmanned Aerial Systems on Driving Performance*. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R2. **Christofa, E.**, Pollitt, K., Goins, K.V., Lemon, S., Frisard, C., Deliali, A., Esenther, S., and Page, M. 2020. *Public Health Assessment for Transportation Projects*. Massachusetts Department of Transportation, Office of Transportation Planning.
- R3. Gonzales, E.J., **Christofa, E.**, **Lyman, C., **Sipetas, C. 2019. *Commuter Bus Demand, Incentives for Modal Shift, and Impact on GHG Emissions: Part II – Service Delivery Concepts*. Massachusetts Department of Transportation, Office of Transportation Planning.
- R4. **Christofa, E.**, Knodler, M., and Deliali, A. 2019. Using Simulation to Assess Conflicts Between Bicyclists and Right-Turning Vehicles. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R5. **Christofa, E.**, Knodler, M., Campbell, N., and Deliali, A. 2019. Dissecting the Safety Benefits of Protected Intersection Design Features. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R6. Knodler, M., **Christofa, E.**, Fitzpatrick, C., and Parthasarthy, A.R. 2019. Driver Behavior and Performance with In-Vehicle Display Based on Speed Compliance. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.

- R7. **Christofa, E.**, Gonzales, E.J., **Lyman, C., **Campbell, N., and *Fournier, N. 2018. *Commuter Bus Demand, Incentives for Modal Shift, and Impact on GHG Emissions*. Massachusetts Department of Transportation, Office of Transportation Planning.
- R8. **Christofa, E.**, and Knodler, M.A. 2018. *Operational and Emission Analyses of Roundabouts under Varied Vehicle and Pedestrian Demands*. New England University Transportation Center Report, Project Number: UMAR25-24.
- R9. Knodler, M.A., **Tainter, F., **Christofa, E.**, Santiago-Chaparro, K.R., Bill, A.R., and Noyce, D.A. 2018. *A Field and Simulator Evaluation of All-Red Clearance Intervals for Use in Left-Turn Applications*. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R10. **Christofa, E.**, Knodler, M.A., **Sabhanayagam, A., **Hajiseyedjavadi, F., *Khalighi, F., and **Campbell, N. 2018. *Impact of S-Curves on Speed in a Modern Roundabout*. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R11. **Christofa, E.**, Pollitt, K., **Chhan, D., *Deliali, A., **Gaudreau, J., and El Sayess, R. 2017. *Zero-Emission Transit Bus and Refueling Technologies and Deployment Status*. Massachusetts Department of Transportation, Office of Transportation Planning.
- R12. **Christofa, E.**, Ganz, A., Knodler, M.A., *Wolfgram, J., and *Fournier, N. 2017. *Visually Impaired Pedestrian Safety at Roundabout Crossings*. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R13. **Christofa, E.**, Knodler, M.A., and *Fournier, N. 2017. *Development and Evaluation of Infrastructure Strategies for Safer Cycling*. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R14. **Gongalla, B., Fitzpatrick, C., Knodler, M.A., **Christofa, E.**, and Samuel, S. 2017. *A Driving Simulator Evaluation of Cross-Sectional Design Elements and the Resulting Driving Behaviors*. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R15. Knodler, M.A., **Christofa, E.**, and **Tainter, F. 2016. *Analysis of Driver Behavior and Operations at Intersection Short Lanes*. Safety Research using Simulation (SAFER-SIM) University Transportation Center Report.
- R16. **Christofa, E.** 2016. *Signal Timing Optimization for Improved Mobility and Air Quality*. New England University Transportation Center Report, Project Number: UMAR24-14B.
- R17. **Christofa, E.**, and Collura, J. 2016. *A Person-based Comparison of Transit Preferential Treatments on Signalized Arterial Corridors*. New England University Transportation Center Report, Project Number: UMAR24-15.
- R18. Skabardonis, A., Shladover, S., **Christofa, E.**, et al. 2013. *Advanced Traffic Control Signal Algorithms*. Final Report for Interagency Agreement #65A0376, FHWA Exploratory Advanced Research Program Cooperative Agreement DTFH61-10-H-00002.

Other Publications

- P1. Campbell, R., **Christofa, E.**, Argote, J., Gayah, V., Guler, I., and Skabardonis, A. 2012. *Operating a Diverging Diamond Interchange: A Signal Timing Optimization Strategy*. Report submitted to the Transportation Research Board Traffic Signal Systems Committee.
- P2. **Christofa, E.** 2012. *Traffic Signal Optimization with Transit Priority: A Person-based Approach*. PhD Dissertation, University of California, Berkeley.
- P3. **Christofa, E.** 2007. *Travel Time Estimation in Signalized Arterials Under Incident Conditions*. Diploma Thesis, National Technical University of Athens [In Greek].

PRESENTATIONS

Conference & Workshop Presentations

- P1. **Ryan, A., Fitzpatrick, C., Knodler, M., and **Christofa, E.** 2019. The Influence of Unmanned Aerial Systems on Driving Performance, *SaferSim Webinar*, 21 July.
- P2. Ron, S. Keppard, B., Pollitt, K., and **Christofa, E.** 2020. Healthy Connections: Quantifying Health Impacts of Regional Transportation Planning. *Prepared for the Central Transportation Planning Staff*, 2 June [online].
- P3. **Christofa, E.**, *Deliali, A., and Knodler, M. 2020. Driver Performance in the Presence of Bicycle Infrastructure. *20th Swiss Transport Research Conference*, 13–14 May [online].
- P4. *Deliali, A., **Campbell, N., Knodler, M., and **Christofa, E.** 2020. Understanding the Safety Impact of Protected Intersections Design Elements-A Driving Simulation Approach. *Transportation Research Board 99th Annual Meeting*, 12–16 January, Washington, D.C., Paper No. 20-05955.
- P5. **Ryan, A., *Page, M., **Christofa, E.**, Fitzpatrick, C., and Knodler, M. 2020. Linking Geospatial Crash and Citation Data to Optimize the Deployment of Enforcement Resources in Speed Management. *Transportation Research Board 99th Annual Meeting*, 12–16 January, Washington, D.C., Paper No. 20-05266.
- P6. *Fournier, N., and **Christofa, E.** 2020. On the Impact of Income, Age, and Travel Distance on the Value of Time. *Transportation Research Board 99th Annual Meeting*, 12–16 January, Washington, D.C., Paper No. 20-02064.
- P7. *Deliali, A., Esenther, S., Frisard, C., Goins, K.V., Lemon, S., Pollitt, K., and **Christofa, E.** 2020. Assessing the Impact of Transportation on Health: a Review of Performance Measures, *Transportation Research Board 99th Annual Meeting*, 12–16 January, Washington, D.C., Paper No. 20-06123.
- P8. *Deliali, A., and **Christofa, E.** 2019. Multi Modal Traffic Signal Timing Coordination for Isolated Intersections. *2019 INFORMS Annual Meeting*, October 20-23, Seattle, WA.
- P9. *Deliali, A., **Campbell, N., Knodler, M., and **Christofa, E.** 2019. Does the Existence and Configuration of Protected Intersections Affect Bicycle Safety? A Driving Simulator Approach. *Road Safety & Simulation Conference*, 14–17 October, Iowa City, IA.
- P10. **Ryan, A., Fitzpatrick, C., Knodler, M., and **Christofa, E.** 2019. A Simulator Study on the Impact of Driver Distraction due to Drones Based on Prior Experiences and Perspectives of Drones. *Road Safety & Simulation Conference*, 14–17 October, Iowa City, IA.
- P11. Pollitt, K., Esenther, S., **Christofa, E.**, Goins, K.V. 2019. Healthy Connections: Exploring ITHIM's Use in Regional Transportation Planning in Massachusetts, *Training Workshop, Metropolitan Area Planning Council (MAPC)*, 17 September, Worcester, MA.
- P12. **Campbell, N., *Deliali, A., **Christofa, E.**, and Knodler, M., 2019. Dissecting the Safety Benefits of Protected Intersection Design Features, *SaferSim Webinar*, 27 August.
- P13. Pollitt, K., Esenther, S., **Christofa, E.**, Goins, K.V. 2019. Healthy Connections: Emerging Practice to Quantify Health Impacts of Regional Transportation Planning: Implementation of ITHIM in Massachusetts, *Training Webinar, Metropolitan Area Planning Council (MAPC)*, 25 June.
- P14. *Deliali, A., **Tainter, F., **Campbell, N., **Christofa, E.**, and Knodler, M. 2019. Assessing the Impact of Protected Bicycle Infrastructure on Driver Behavior, *2019 International Conference on Transportation & Development (ICTD 2019)*, 9–12 June, Alexandria, VA.
- P15. *Deliali, A., **Christofa, E.**, and Knodler, M.A. 2019. Using Driving Simulation to Assess and Reduce Conflicts between Right-Turning Drivers and Bicyclists. *SaferSim Webinar*, 26 March.

- P16. **Christofa, E.**, *Deliali, A., **Esenther, S., Frisard, C., Goins, K.V., Lemon, S., Page, M., Pollitt, K., and Sperling, E. 2019. Incorporating Health Impacts in Transportation Project Decision Making, *2019 Transportation, Air Quality, and Health Symposium*, 18–20 February, Austin, TX.
- P17. **Bakhtiari, S., *Fournier, N., **Campbell, N., **Valluru, K., *Wolfgram J., **Christofa, E.**, Knodler, M.A., and Ganz, A. 2018. Dynamic Signage for Visually Impaired Pedestrian Safety at Roundabout Crossings, *SaferSim Webinar*, 21 August.
- P18. *Deliali, A., **Tainter, F., **Christofa, E.**, Fitzpatrick, C., and Knodler, M.A. 2018. Using Driving Simulation to Assess and Reduce Conflicts between Right-Turning Drivers and Bicyclists. *2018 Institute of Transportation Engineers International and Midwestern/Great Lakes Districts Annual Meeting and Exhibit*, 21–23 August, Minneapolis, MN.
- P19. Gonzales, E.J., *Fournier, N., and **Christofa, E.**, 2018. Controlling Congestion in a Neighborhood Center through Parking and Pedestrianization Policies, *Traffic Flow Theory and Characteristics Midyear Meeting*, 7–9 August, Woods Hole, MA.
- P20. **Sabhanayagam, A., Knodler, M., and **Christofa, E.**, 2018. Impact of Deflection Angle on Roundabout Driver Behavior, *SaferSim Webinar*, 24 July.
- P21. *Deliali A., *Fournier, N., **Christofa, E.** 2018. A Comparative Analysis of Bicycle Infrastructure Treatments: At Intersections in Cambridge, Massachusetts and Road Segments in Portland, Oregon. *2018 Institute of Transportation Engineers Northeastern District Annual Meeting*, 21–23 May, Lake George, NY.
- P22. **Tainter, F., **Ryan, A., Fitzpatrick, C., **Christofa, E.**, and Knodler, M. 2018. Evaluation of Downstream Merge Behaviors Resulting From Driver Lane Choice: A Driving Simulator Study, *New England Chapter of the Human Factors and Ergonomics Student Research Conference*, 20 April, Cambridge, MA.
- P23. *Khalighi, F., **Hajiseyedjavadi, F., **Christofa, E.**, and Knodler, M.A., 2017. Emission Impact of Pedestrians at Roundabouts, *5th International Conference on Roundabouts*, 8–10 May, Green Bay, WI.
- P24. Knodler, M., **Christofa, E.**, Samuel, S., and **Gongalla, B., 2017. A Driving Simulator Evaluation of Cross Section Design Elements and the Resulting Driver Behaviors, *SaferSim Webinar*, 2 May.
- P25. **Tainter, F., Knodler, M., and **Christofa, E.**, 2017. Analysis of Driver Performance and Operations at Intersections Auxiliary Through Lanes, *SaferSim Webinar*, 21 March.
- P26. **Christofa, E.** and Guler, S.I., 2017. Transit Priority for Improved Person Mobility, *MassDOT Innovation & Tech Transfer Exchange*, 7–8 March, Worcester, MA.
- P27. **Yu, Z., Gayah, V.V., and **Christofa, E.** 2016. Person-based Signal Timing Optimization to Account for Flexible Cycle Lengths and Uncertain Transit Vehicle Arrivals. *Transportation Engineering and Safety Conference*, 7–9 December, State College, PA.
- P28. *Fournier, N., **Christofa, E.**, and Knodler, M.A., 2016. Evaluating Driver Behavior at Bicycle Infrastructure Using a Driving Simulator, *10th University Transportation Centers Spotlight Conference: Pedestrian and Bicycle Safety*, 1–2 December, Washington, DC.
- P29. *Fournier, N., **Christofa, E.**, and Knodler, M.A., 2016. Development and Evaluation of Infrastructure Strategies for Safer Cycling, *SaferSim Webinar*, 13 September.
30. *Fournier, N., **Christofa, E.**, and Knodler, M.A., 2016. Bicycle infrastructure at intersections: An evaluation of driver behavior, *2016 Northeast Transportation Safety Conference*, 7–8 June, Worcester, MA
- P31. **Christofa, E.** and Gonzales, E.J., 2016. Reliability of Transit Vehicle Arrival Prediction Using Connected Vehicle Data, *1st Symposium on Management of Future Motorway and Urban traffic Systems*, 2–3 June, Chania, Crete. [by invitation only]
- P32. *Fournier, N., **Christofa, E.**, and Knodler, M.A., 2016. Bicycle infrastructure at intersections: An evaluation of driver behavior, *4th SAFER-SIM Symposium*, 2–4 June, Madison, WI.

- P33. *Fournier, N., **Christofa, E.**, and Knodler, M.A., 2016. Bicycle infrastructure at intersections: An evaluation of driver behavior, *2016 ITE Northeastern District Annual Meeting*, 11-13 May, Portsmouth, NH.
- P34. *Fournier, N., **Christofa, E.**, and Knodler, M.A., 2016. Estimating Seasonal Bicycle Demand Using a Sinusoidal Model, *Data Science Research Symposium*, 22 April, Center for Data Science, University of Massachusetts, Amherst, MA.
- P35. *Farid, Y.Z. and **Christofa, E.**, 2016. Bus Travel Time Prediction Using Low Resolution Automated Vehicle Location Data, *Data Science Research Symposium*, 22 April, Center for Data Science, University of Massachusetts, Amherst, MA.
- P36. Guler, S.I., and **Christofa, E.** 2015. Bus Lanes and Pre-signals with Transit Signal Priority: Domains of Application, *2015 MASITE Annual Meeting*, 4–5 October, King of Prussia, PA.
- P37. **Christofa, E.**, and Guler, S.I. 2015. Bus Lanes and Signal Priority, *2015 Northeastern District Annual Meeting*, 13-15 May, Albany, NY.
- P38. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2015. Tools to Assess the Impacts of Transit Preferential Treatments: Analytical Techniques and Simulation Model. *ITS Massachusetts 20th Annual Meeting*, 5–6 May, Boston, MA.
- P39. Rahimi, M., Gonzales, E.J., **Christofa, E.**, Knodler, M., Riessman, R., and Gazillo, J. 2015. Uses of Data for Transportation System Analysis, *Data Science Launch Symposium*, University of Massachusetts, Amherst, 9 April, Amherst, MA.
- P40. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2015. Person-Based Evaluation of Dedicated Bus Lanes and Queue Jumper Lanes at Signalized Intersections with Near-Side Bus Stops. *16th UMass Annual Technical Day and Student Research Symposium*, March 26, Amherst, MA.
- P41. *Khalighi, F, and **Christofa, E.** 2015. A Real-Time Signal Control System to Minimize Emissions at Isolated Intersections. *16th UMass Annual Technical Day and Student Research Symposium*, March 26, Amherst, MA
- P42. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2014. Person-Based Evaluation of Queue Jumper Lanes and Transit Signal Priority Strategies, *2014 Northeastern District Annual Meeting*, 14-16 May, Long Branch, NJ.
- P43. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2014. Evaluating the Impact of Transit Preferential Treatments on the Person Delay and Person Discharge Flow of Signalized Arterial Corridors. *10th Annual Transportation Student Research Symposium*, 2 April, University of Connecticut, Storrs, CT.
- P44. *Khalighi, F., and **Christofa, E.** 2014. Real-Time Signal Control System to Minimize Person Delay and Emissions. *10th Annual Transportation Student Research Symposium*, 2 April, University of Connecticut, Storrs, CT.
- P45. *Roach, D., **Christofa, E.**, and Knodler, M. 2014. Before and After Study of Double Roundabout: Queue Length, Gap Availability, and Gap Acceptance. *15th UMass Annual Technical Day*, March 27, Amherst, MA.
- P46. *Khalighi, F., and **Christofa, E.** 2014. Real-Time Signal Control System to Minimize Person Delay and Emissions. *15th UMass Annual Technical Day*, March 27, Amherst, MA.
- P47. *Farid, Y.Z., **Christofa, E.** and Collura, J. 2014. A Person-based Evaluation of Transit Preferential Treatments on Signalized Arterials. *15th UMass Annual Technical Day*, March 27, Amherst, MA.
- P48. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2014. Person-based Evaluation of Queue Jumper Lanes and Transit Signal Priority Strategies on Urban Arterials. *Institute of Transportation Engineers (ITE) 2014 Technical Conference and Exhibit*, 9-12 March, Miami, FL.
- P49. *Farid, Y.Z., **Christofa, E.**, and Collura, J. 2013. Person-Based Transit Preferential Treatments on Signalized Arterials. *Institute of Transportation Engineers (ITE) Northeastern District Annual Meeting*, 22-24 May, Northampton, MA.

- P50. **Christofa, E.**, and Campbell, R.J. 2013. Impact of Bus Stops on the Capacity of Signalized Intersections. *Institute of Transportation Engineers (ITE) Northeastern District Annual Meeting*, 22-24 May, Northampton, MA.
- P51. Gonzales, E.J., and **Christofa, E.** 2012. Bottleneck Congestion with a Fixed and Peak Toll: San Francisco - Oakland Bay Bridge. *1st European Symposium on Quantitative Methods in Transportation Systems*, 4-7 September, Lausanne, Switzerland.
- P52. Campbell, R., **Christofa, E.**, Argote, J., Gayah, V., Guler, I., and Skabardonis, A. 2012. Contest: Can You Operate a Diverging Diamond? *Transportation Research Board Traffic Signal Systems Committee Midyear Meeting*, 23-24 July, Irvine, CA.
- P53. Campbell, R., **Christofa, E.**, and Skabardonis, A. 2012. Impact of Transit Operations on Intersection Capacity. *Innovations in Traffic Flow Theory and Characteristics, and Highway Capacity and Quality of Service Symposium*, 19-22 June, Fort Lauderdale, FL.
- P54. Argote, J., **Christofa, E.**, and Skabardonis, A. 2012. Minimum Connected Vehicle Penetration Rate for Accurate Arterial Measures of Effectiveness Estimation. *18th University of California Transportation Center Student Conference*, 20 April, Berkeley, CA.
- P55. **Christofa, E.** 2012. Traffic Signal Optimization with Transit Priority. *Institute of Transportation Studies Seminar Series*, University of California, Berkeley, 16 March, Berkeley, CA.
- P56. **Christofa, E.** 2012. Network Traffic Signal Optimization with Transit Priority. *Workshop for Doctoral Student Research in Transportation Operations and Traffic Control, Transportation Research Board 91st Annual Meeting*, 22-26 January, Washington, D.C.
- P57. **Christofa, E.** 2011. Advanced Traffic Signal Control Algorithms with Connected Vehicle. *U.C. Berkeley Transportation Engineering Open House*, 1 April, Berkeley, CA.
- P58. **Christofa, E.** 2011. Traffic Signal Optimization with Transit Signal Priority: Application to an Isolated Intersection. *17th University of California Transportation Center Student Conference*, 24-25 February, Berkeley, CA.
- P59. **Christofa, E.** 2011. Network Traffic Signal Control with Transit Priority. 2011 Eisenhower Research Showcase, *Transportation Research Board 90th Annual Meeting*, 23-27 January, Washington, D.C.
- P60. **Christofa, E.** 2010. Traffic Signal Control Optimization with Transit Priority for Conflicting Transit Routes. *16th University of California Transportation Center Student Conference*, 1-2 April, Irvine, CA.
- P61. **Christofa, E.M.**, and Skabardonis, A. 2009. System-wide Signal Timing Optimization with Transit Priority for Conflicting Bus Routes. *INFORMS Annual Meeting 2009*, 11-14 October, San Diego, CA.

Invited Talks

- I1. **Christofa, E.** 2019. In-class Article Discussion, *Institute of Transportation Engineers (ITE) Instructional Practices Webinar*, ITE Educational Council, 22 October.
- I2. **Christofa, E.** 2019. Sustainable Design and Management of Multimodal Transportation Systems, *Faculty Promotion Lecture Series*, Civil and Environmental Engineering, University of Massachusetts Amherst, 18 October, Amherst, MA.
- I3. **Christofa, E.** 2019. Methods and Measures to Evaluate Driver Performance in the Presence of Innovative Bicycle Infrastructure, *Panel on Infrastructure Design for Bicyclist and Pedestrians, Road Safety & Simulation Conference*, 15 October, Iowa City, IA.
- I4. *Khalighi, F., and **Christofa, E.** 2019. Signal Timing Optimization for Improved Mobility and Air Quality, *T3e Webinar, ITS PCB Program, Volpe National Transportation Systems Center*, 10 April.
- I5. **Christofa, E.**, 2019. Teaching AVs and Impacts on Bicycles and Pedestrians, *Virtual panel discussion hosted by the TRB Joint Subcommittee on Pedestrian and Bicycle University*, 8 February.

- I6. **Christofa, E.**, 2018. Transportation Electrification, *Public Listening Sessions for Governor's Commission on the Future of Transportation*, 11 June, Worcester, MA.
- I7. **Christofa, E.**, 2018. Leadership Panel, *Northeastern/Mid Colonial Institute of Transportation Engineers Student Leadership Summit*, 14 April, Amherst, MA.
- I8. **Christofa, E.**, 2017. Safety Assessment of Alternative Intersection Designs and Infrastructure Treatments, *Highway Engineering Invited Lecture, Transportation & Urban Infrastructure Studies, Morgan State University*, 13 September, Baltimore, MD.
- I9. **Christofa, E.**, 2017. Addressing Data Challenges for Bicycle Crash Analysis, *Transportation Research and Education Center for Portland State University Friday Transportation Seminar Series*, 10 March, Portland, OR.
- I10. **Christofa, E.**, 2016. Advanced Signalization and Control Strategies for Multimodal Networks, *Seminar at the Department of Civil and Environmental Engineering, University of Cyprus*, 7 June, Nicosia, Cyprus.
- I11. **Christofa, E.**, Farid, Y.Z., and Khalighi, F. 2016. Sustainable Urban Traffic Management using Advanced Technologies, *T3e Webinar, ITS PCB Program, Volpe National Transportation Systems Center*, 26 May.
- I12. **Christofa, E.**, 2016. Real-time Signal Control for Sustainable Traffic Management, *Meet the Jury Seminar, University of Leuven*, 25 May, Leuven, Belgium.
- I13. **Christofa, E.**, 2016. My Academic Life: Lessons Learned from Grad school and Tenure-Track Career, *UMass Women's Transportation Seminar Student Chapter*, 13 April, Amherst, MA.
- I14. **Christofa, E.**, 2015. Signal Control Strategies for Improved Person Mobility and Air Quality in Multimodal Transportation Systems, *Seminar at the Department of Transportation Planning and Engineering, School of Civil Engineering, National Technical University of Athens*, 16 December, Athens, Greece.
- I15. **Christofa, E.**, 2015. Assessing the Accuracy of SSAM for Modeling Roundabout Safety, *Research to Practice SAFER-SIM Symposium*, 25-27 February, San Juan, Puerto Rico.
- I16. **Christofa, E.**, 2014. Transit Preferential Treatments: Person-based Evaluation and Control. *Penn State Transportation Seminar*, 1 May, State College, PA.
- I17. **Christofa, E.**, 2014. Transit Priority in Urban Traffic: Real-time Signal Control and Person-based Evaluation. SincroBUS International Project, Real-time Information and Control Systems for Buses, *ZAPTA*, 3 April, Florianopolis, Brazil
- I18. **Christofa, E.**, 2014. The Future of Transportation (Panel). *15th UMass Annual Technical Day*, March 27, Amherst, MA
- I19. **Christofa, E.**, 2014. Incorporating Pedestrian and Bicycle Transportation in a Transportation Sustainability Course. Pedestrian and Bicycle University Education Joint Subcommittee of Bicycle Transportation and Pedestrians Committees, *Transportation Research Board 93rd Annual Meeting*, 12–16 January, Washington, D.C.
- I20. **Christofa, E.**, 2013. Graduate School Academic Panel: I'm interested in pursuing a career in academics or research. What do I need to know and do? Engineering and Computer Science Women faculty Group, University of Massachusetts, Amherst, 9 October, Amherst, MA.
- I21. **Christofa, E.**, 2013. Sustainable Management of Multimodal Traffic. Landscape Architecture and Regional Planning Zube Seminar Series, University of Massachusetts, 14 February, Amherst, MA.
- I22. **Christofa, E.**, 2011. Network Traffic Signal Optimization with Transit Priority. Sensys Networks, 6 December, Berkeley, CA.
- I23. **Christofa, E.**, 2010. Transportation and Technology. General Meeting of Cal Institute of Transportation Engineers (ITE), 30 September, Berkeley, CA.

MEDIA

- M1. **Christofa, E.** 2020. *Transit Signal Priority*. University of Massachusetts Transportation Center Transportation Take Aways. <https://vimeo.com/395002011>
- M2. **Christofa, E.** 2019. *Intersections and Bicycle Safety*, University of Massachusetts Transportation Center Transportation Take Aways. <https://vimeo.com/359597358>.
- M3. **Christofa, E.,** and Guler, S.I. 2016. *Pre-signals for Transit Priority*. One Center Research, University of Massachusetts Transportation Center. <https://umtcresearch.wordpress.com/2016/05/17/pre-signals-for-transit-priority/>

TEACHING EXPERIENCE

University of Massachusetts Amherst

SPRING 2014 **Transportation (CEE 310)**

SPRING 2016 *Course Instructor*

SPRING 2018 This junior level course introduces students to transportation operations, planning, and design, traditionally with an emphasis on the highway mode, while drawing parallels on other modes. Topics include: vehicle, operator, and roadway characteristics, traffic control, capacity, geometric design, and demand forecasting.

INSTRUCTOR EVAL.: 4.3/5.0 (SPRING 2014; 2016); 4.7/5.0 (SPRING 2018)

SPRING 2013 **Public Transportation Systems (CEE 410/510)**

SPRING 2017 *Course Instructor*

SPRING 2019 This undergraduate/graduate level course covers the concepts of designing fixed-route transit systems, fleet and crew management methods and the evaluation and financing of transit projects.

INSTRUCTOR EVAL. (CEE 410): 3.9/5.0 (2013); 3.9/5.0 (2017); 4.2/5.0 (2019)

INSTRUCTOR EVAL. (CEE 510): 4.8/5.0 (2013); 4.1/5.0 (2017); 4.3/5.0 (2019)

FALL 2012 **Traffic Flow Theory and Simulation I (CEE 520/697E)**

FALL 2014 *Course Instructor*

FALL 2017 This senior/graduate level course covers the fundamentals of traffic flow theory, macro and microscopic mathematical models, capacity analysis, and queueing.

SPRING 2019

INSTRUCTOR EVAL. (CEE 520): 5.0/5.0 (2012); 4.1/5.0 (2014); 5.0/5.0 (2017)
5.0/5.0 (2019)

INSTRUCTOR EVAL. (CEE 697E): 5.0/5.0 (2012); 4.6/5.0 (2014); 4.6/5.0 (2017)

FALL 2013 **Transportation Sustainability (CEE 597S/697G)**

SPRING 2015 *Course Instructor*

FALL 2016 This senior/graduate level course covers concepts of sustainable transportation management strategies and policies. Such topics include: life-cycle assessment for transportation infrastructure systems, vehicle emission estimation models, alternative fuel vehicles, non-motorized modes, and transit preferential treatments.

INSTRUCTOR EVAL. (CEE 597S): 4.8/5.0 (2013); 5.0/5.0 (2015); 4.4/5.0 (2016)
4.0/5.0 (2019)

INSTRUCTOR EVAL. (CEE 697G): 4.9/5.0 (2013); 4.5/5.0 (2015); 4.5/5.0 (2016)
5.0/5.0 (2019)

SPRING 2017 **Transportation Doctoral Seminar (CEE 793D)**

FALL 2019 *Course Instructor*

This seminar aims to provide an opportunity for PhD students to practice presenting in front of audiences and providing as well as receiving constructive feedback.

INSTRUCTOR EVAL.: 5.0/5.0 (2019)

École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, SwitzerlandSPRING 2020 **Public Transportation Systems***Course Instructor*

Historical overview of public transportation and a summary of existing and future transit and paratransit systems and technologies; Planning: shuttle (point-to-point), corridor, two-dimensional networks; Optimization of headway, stop spacing, and route spacing for non-hierarchical and hierarchical systems; performance and costs evaluation; transit preferential treatments

Federal University of Santa Catarina, Florianopolis, BrazilAUGUST 2014 **Public Transportation Systems (short course)***Course Instructor*

Taught a 5-day course on public transportation systems to faculty and graduate students of the Department of Automation and Systems

University of California, BerkeleyFALL 2010 **Intelligent Transportation Systems (CEE 253)***Graduate Student Instructor; Prof. Skabardonis*

Developed course assignments; Taught lab section; Held office hours

SPRING 2010, 2012 **Highway Traffic Operations (CEE 255)***Graduate Student Instructor; Prof. Skabardonis*

Developed & graded course assignments; Taught discussion section; Held office hours

ADVISING**PhD Students**

SEPT.2016–NOW Aikaterini Deliali

Dissertation Title: Assessing the Safety Impact of Different Bicycle-Specific Infrastructure Treatments and Control Devices

Awards:

- American Road and Transportation Builders Association (ARTBA) Future Industry Leader Spotlight Award (2019)
- WTS Ann Hershfang Scholarship (2018)
- UMass Graduate School Fellowship (2016)

MAY 2019 Nicholas Fournier (now Postdoctoral Researcher, University of California, Berkeley)

Dissertation Title: Equity and Efficiency in Multi-Modal Transportation Systems

Awards:

- ENO Fellow (2018)
- New England University Transportation Center Outstanding Student of the Year (2017)
- SaferSim University Transportation Center Outstanding Student of the Year (2016)
- Institute of Transportation Engineers (ITE) Daniel B. Fambro Student Paper Award for paper titled: “A Seasonal Bicycle Demand Model Using A Sinusoidal Function” (2016)
- Best Student Research Paper, Institute of Transportation Engineers Northeastern District for paper titled: “A Seasonal Bicycle Demand Model Using A Sinusoidal Function” (2016)
- Dwight D. Eisenhower Graduate Fellowship (2015; 2016; 2017; 2018)
- People’s choice award for poster at the 16th UMass Annual Technical Day and Student Research Symposium (2015)

- MAY 2018 Farnoush Khalighi (now at Aimsun, Inc.)
Dissertation Title: Intersection Signal Control and Design for Improved Person Mobility and Air Quality in Urban Multimodal Transportation Systems
Awards:
 – WTS Boston Chapter Claire Barrett Memorial Graduate Scholarship (2016)
 – 2nd position for best poster at the 16th UMass Annual Technical Day and Student Research Symposium (2015)
- SEPT. 2016 Yashar Zeinyali Farid (now Postdoctoral Scholar, University of California, Berkeley)
Dissertation Title: Transit Preferential Treatments at Signalized Intersections: Person-based Evaluation and Real-Time Signal Control
Awards:
 – International Road Federation Road Scholar Fellowship (2013)

MSc Students

- FEBRUARY 2019 Mitchell Page (now at Vanasse & Associates, Inc.)
Thesis Title: Over-citing or Under citing? A GIS-based Analysis of the Relationship Between Crashes and Citations
- FEBRUARY 2019 Nicholas Fournier (now Postdoctoral Researcher, University of California, Berkeley)
Thesis Title: Evaluating Driver Behavior at Bicycle Infrastructure Treatments Using a Driving Simulator
- MAY 2018 Xiang Wang (now at China Overseas Land & Investment LTD)
Thesis Title: Impact of Bus Stops on the Capacity of Signalized Intersections
- MAY 2018 Aikaterini Deliali (now PhD student at UMass)
Thesis Title: An Overview of Zero Emission Bus Implementations in the United States
- FEBRUARY 2017 Joshua Wolfgram (now at Sabra, Wang & Associates, Inc./ A Mead & Hunt Company)
Thesis Title: A Safety and Emission Analysis of Continuous Flow Intersections
Awards:
 – Dwight D. Eisenhower Graduate Fellowship (2016)
- SEPT. 2015 Farnoush Khalighi (now at Aimsun, Inc.)
Thesis Title: A Real-Time Signal Control System to Minimize Emissions at Isolated Intersections
- FEBRUARY 2014 Derek Roach (now at Vanasse & Associates, Andover, MA)
Thesis Title: Towards Sustainable Roundabouts: An Evaluation of Driver Behavior, Emissions, and Safety
- MAY 2014 Ethan Minott (now at the Massachusetts Department of Transportation)

Undergraduate Students

- SUMMER 2015 Jin Rui Yap (Smith College; co-advised with Eric Gonzales)
 SPRING 2015 Nathan Ziegler (UMass; now at Metro North Railroad, New York, NY)

Committee Member

Undergraduate Students

- SPRING 2018 James McCarthy (Honors Thesis Committee Member, UMass)
 SPRING 2016 Francis Tainter (Honors Thesis Committee Member, UMass; now PhD student at UMass)

MSc Students

MAY. 2020	Rana Eslamifard (UMass)
SEPT. 2019	Hossein Ghafourian (UMass)
MAY 2019	Alyssa Ryan (UMass)
MAY 2019	Aamani Ramanathan Parthasarthy (UMass)
SEPT. 2018	Nicholas Fournier (UMass; Regional Planning)
MAY 2018	Akshaey Sabhanayagam (UMass)
MAY 2018	Francis Tainter (UMass)
MAY 2018	Adewale Oduwale (UMass)
MAY 2018	Elizabeth Casola (UMass)
MAY 2017	Chelsea Bouchard (UMass)
MAY 2017	Balazs Martai (UMass)
MAY 2017	Brett Gallagher (UMass; Regional Planning)
FEB. 2016	Foroogh Hajiseyedjavadi (UMass)
SEPT. 2015	Jonathan Freeman (UMass)
FEB. 2014	Christina Dube (UMass)
AUGUST 2014	Ralph Burgener (École Polytechnique Fédérale de Lausanne)
MAY 2013	Ian McKinnon (UMass)

PhD Students

IN PROGRESS	Alyssa Ryan (UMass)
IN PROGRESS	Charalambos Sipetas (UMass)
MAY 2019	Foroogh Hajiseyedjavadi (UMass)
SEPT. 2018	Xiaolan Wang (UMass; Computer Science)
SEPT. 2017	Mahour Rahimi (UMass)
MAY 2017	Marie Louis (UMass)
FEB. 2017	Cole Fitzpatrick (UMass)
MAY 2016	Bart Wolput (Katholieke Universiteit Leuven, Belgium)
MAY 2015	Rooholamin Shabihkhani (Rutgers University)
SEPT. 2014	Elizabeth Ebacher (UMass)

UNIVERSITY & PROFESSIONAL SERVICE

University Service

2020–PRESENT	Sustainability Curriculum Hub Working Group
2020–PRESENT	CEE Department Diversity, Equity, and Inclusion Committee
2019–PRESENT	CEE Department Personnel Committee
2019	CEE Pathways Position Ad-Hoc Committee
2018–2019	Co-advisor of the American Society of Civil Engineers Student Chapter at UMass
2018	CEE Professor of Practice Search Co-Chair
2018–2020	Organizer of UMass Transportation Center Reception at the TRB Annual Meeting
2017	College of Engineering and Computer Science Graduate Student Orientation: Participant in Panel Titled: “Thriving in Graduate School: Achieving Academic Success”
2017–PRESENT	CEE Open House Committee
2015; 2018	PhD Comprehensive Written Exam Coordinator
2014–2015	CEE Structural Engineering and Mechanics Faculty Search Committee
2014	CEE Scholarship Committee
2013–2015	CEE Faculty Meeting Recorder
2012–PRESENT	Participant in Departmental & College Open Houses
2012–PRESENT	Undergraduate Advising

Professional Service

- 2020–Present Transportation Research Record Editorial Board Task Force
- 2020 Scientific Committee of the Mobil.TUM2020 – 12th International Scientific Conference on Mobility and Transport, 26–27 October, Singapore
- 2020 Scientific Committee of the 3rd Symposium on Management of Future Motorway and Urban Traffic Systems, 6–8 July, Luxembourg, Luxembourg
- 2019–Present Transportation Research Record Handling Editor
- 2019 Scientific committee for the 9th International Congress on Transportation Research (ICTR), 24–25 October, 2019, Athens, Greece
- 2019 Scientific Review Committee for Road Safety and Simulation Conference
- 2018–2019 Guest Editor for Transportation Research Part C: Emerging Technologies Special Issue on “Trajectory-based Modeling, Design, Operation and Assessment of Road Transportation Systems”
- 2018 Member of the Phasing Subcommittee for the New England Institute of Transportation Engineers (ITE) Technical Committee Project “Guidelines for Design & Implementation of Advanced Traffic Signal Functions”
- 2018 Presiding officer for session titled: “Traffic Signal Timing for Multimodal Operations” at the Transportation Research Board 97th Annual Meeting
- 2017–2018 Transit Cooperative Research Program (TCRP) Synthesis Project J-07/Topic SA-43: Transit Service Evaluation Standards Panel Member
- 2017 Co-organizer of a TRB call for papers on “Multimodal System Analysis and Modeling”
- 2017 Participant at the 5th ITS University Workshop organized by the USDOT and ITS America [invited]
- 2016–2017 Scientific committee for the 8th International Congress on Transportation Research (ICTR), 28–29 September, 2017, Thessaloniki, Greece
- 2016 Participant at the 4th ITS University Workshop organized by the USDOT and ITS America [invited]
- 2016 FHWA/U.S. DOT Work Zone Model expert panel member
- 2016 Co-organizer of a TRB call for papers on “Multimodal System Analysis and Modeling”
- 2016 Co-organizer of the 17th UMass Annual Technical Day, 24–25 March, Amherst, MA
- 2016 Presiding officer for session titled: “Signal Control with Priority for Multimodal Transportation Systems” at the Transportation Research Board 95th Annual Meeting
- 2015–2016 Scientific review committee for the 19th EURO Working Group on Transportation, (EWGT), 5–6 September, 2016, Istanbul, Turkey
- 2015–2019 Member of TADD55 Task Force on Arterials and Public Health
- 2013–PRESENT Paper Review Chair for the TRB AHB25 Traffic Signal Systems Committee
- 2015 Presiding officer for session titled: ‘Multimodal Traffic Control’ at the Transportation Research Board 94th Annual Meeting
- 2014 Chaired session titled: “What’s new in University ITS Research?” at the ITS Massachusetts/New England Meeting and Conference
- 2014 Presiding officer for session titled: “Traffic Signals for Multimodal Systems” at the Transportation Research Board 93rd Annual Meeting
- 2014 Participant at the 2nd ITS University Workshop organized by the USDOT and ITS America [invited]
- 2013–PRESENT Member of AHB25 Traffic Signal Systems Committee
- 2013–PRESENT Associate Editor for the International IEEE Annual Conference on Intelligent Transportation Systems

Journal Referee Work

Accident Analysis and Prevention
Advances in Mechanical Engineering
Applied Sciences
ASCE Journal of Infrastructure Systems
ASCE Journal of Transportation Engineering
ASCE Journal of Transportation Engineering: Part A
EURO Journal on Transport and Logistics
IATSS Research
IEEE Transactions on Intelligent Transportation Systems
IEEE Intelligent Transportation Systems Magazine
IET Intelligent Transport Systems
International Journal of Transportation
Journal of Advanced Transportation
Journal of Intelligent Transportation Systems: Technology, Planning, and Operations
Journal of Professional Issues in Engineering Education and Practice
Journal of Traffic and Transportation Engineering
Transport Policy
Transportation Letters
Transportation Research Record
Transportation Science
Transportmetrica A: Transport Science
Transportmetrica B: Transport Dynamics
Transportation Research Part A: Policy and Practice
Transportation Research Part B: Methodological
Transportation Research Part C: Emerging Technologies
Transportation Research Part D: Transport and Environment

Conference Referee Work

ASCE International Conference on Transportation & Development
European Symposium on Quantitative Methods in Transportation Systems
19th EURO Working Group on Transportation
International IEEE Annual Conference on Intelligent Transportation Systems
International Congress on Transportation Research (ICTR)
International Symposium of Enhancing Highway Performance
Road Safety & Simulation International Conference
Transportation Research Board
World Conference on Transport Research (WCTR)

Book Referee Work

Ni., D. 2015. *Traffic Flow Theory: A Unified Perspective*. John Wiley & Sons
Schiller, P.L., Bruun, E.C., and Kenworthy, J.R. 2015. *Introduction to Sustainable Transport*, 2nd Edition, Routledge, Taylor & Francis Group

Proposals, Problem Statements & Report Referee Work

Collaborative Sciences Center for Road Safety University Transportation Center
Freight Mobility Research Institute
Luxembourg National Research Fund (FNR) for its CORE Program
Region 2 University Transportation Research Center
National Institute for Transportation and Communities (NITC)
New England Transportation Consortium (NETC)
Southeastern Transportation Research, Innovation, Development and Education Center (STRIDE)
University of California Center on Economic Competitiveness in Transportation (UC-CONNECT)

Scholarships/Fellowships Referee Work

German Academic Exchange Service (DAAD) (UMass Selection Committee)
Dwight David Eisenhower Transportation Fellowship

MEMBERSHIPS

Transportation Research Board:

- AME70 Transportation and Public Health, member (2020–2023)
- ACP25 Traffic Signal Systems Committee, member (2013–2023)
- TADD55 Task Force on Arterials and Public Health, member (2015–2019)
- ACP40 Highway Capacity and Quality of Service Committee, friend
- ACP50 Traffic Flow Theory and Characteristics, friend

Hellenic Institute of Transportation Engineers

OUTREACH ACTIVITIES

- 2019 Co-Host of Eureka! Workshop, Girls Inc., Holyoke
2018 Host of two Eureka! Externs, Girls Inc., Holyoke
2016 Participant in the UMass Graduate Women in STEM (GWIS) Graduate Student/Faculty Luncheons
2016 UMass Summer Transportation Institute Co-organizer
2016 New England Future City Competition: Presentation Judge
2014 Participant at the Museum of Science Climate Education Symposium, Boston, MA
2014 & 2015 New England Future City Competition: Judge for the Best Transportation System
2013 & 2014 Lecturer at the Summer Engineering Institute (UMass Amherst)