

Irfan Batur, PhD

School of Sustainable Engineering and the Built Environment, Arizona State University

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CURRENT POSITION

Assistant Research Professor, Arizona State University, Tempe, AZ

July 2023 – Present

RESEARCH INTERESTS

- Travel Behavior
- Sustainable and Equitable Transportation
- Emerging Transportation Technologies
- Travel Demand Forecasting
- Smart Cities
- Machine Learning

EDUCATION

Arizona State University, Tempe, AZ, United States

PhD, Civil, Environmental and Sustainable Engineering, 2019 – 2023

Istanbul Sehir University, Istanbul, Turkey

MS, Industrial and System Engineering, 2014

TOBB Economy and Technology University, Ankara, Turkey

BS, Industrial Engineering, 2012

PROFESSIONAL EXPERIENCE

Associate Research Technologist, Arizona State University, Tempe, AZ

May 2022 – June 2023

Worked at TOMNET, a USDOT Tier 1 University Transportation Center

- Led multiple research projects, as PI or Co-PI, totaling more than \$500,000 in funding
- Engaged in proposal writings for new projects and research centers
- Mentored graduate students working at the Center
- Developed open-source software and tools for the public, planners, and policymakers

Research Communications & Technology Transfer Coordinator, TOMNET UTC, Tempe, AZ

May 2022 – Present

- Assisted PIs in compiling information needed to disseminate their research findings
- Explored innovative strategies and ways to effectively transfer technologies to the industry
- Managed internal and external communications of the Center
- Organized research seminars and public panels

Graduate Research Associate, Arizona State University, Tempe, AZ

Aug 2019 – Apr 2022

Worked at TOMNET, a US-DOT Tier 1 University Transportation Center

Involved in the following projects:

- TOMNET Transformative Transportation Technologies Survey
- Transportation System Plan 2040 for Maricopa County Department of Transportation
- Development of the Activity-Based Model for the Qatar Strategic Transportation Model
- Observing Human-Scale Urban Air Pollution and Temperature Using Low-Cost Sensors

Graduate Teaching Associate, Arizona State University, Tempe, AZ

Aug 2019 – Present

Assisted courses:

- CEE 598 Activity Travel Behavior Model (Fall 2022/Prof. Ram M. Pendyala)
- CEE 372 Transportation Engineering (Fall 2021/Prof. Ram M. Pendyala)
- SOS 546/CEE 506 Life Cycle Assessment (Spring 2021/Prof. Mikhail Chester)
- CEE 474/CEE 598 Transportation Systems Planning (Fall 2020/Prof. Mikhail Chester)
- CEE 384 Numerical Methods for Engineers (Fall 2020/Prof. Yingyan Lou)
- CEE 372 Transportation Engineering (Spring 2020/Prof. Yingyan Lou)
- CEE 372 Transportation Engineering (Fall 2019/Prof. Ram M. Pendyala)

Research Specialist, Arizona State University, Tempe, AZ Worked for Prof. Ram M. Pendyala and involved in multiple projects on travel behavior	Sep 2018 – Aug 2019
Visiting Scholar, TOMNET UTC, Arizona State University, Tempe, AZ Involved in multiple research projects on travel behavior	Apr 2018 – Aug 2018
Research Assistant, Qatar Foundation, Doha, Qatar Assisted courses: SENS 501 Research Methods and Ethics [HBKU]	Aug 2015 – Sep 2018
Graduate Teaching Assistant, Yildiz Technical University, Istanbul, Turkey Assisted courses: END 3232 Simulation	Jan 2014 – Sep 2015
Graduate Teaching Assistant, Istanbul Sehir University, Istanbul, Turkey Assisted courses: - IE 321 Deterministic Models in Operations Research - ENGR 246 Manufacturing Processes - ENGR 105 Introduction to Engineering	Sep 2012 – Jan 2014

GRANTS AND SCHOLARSHIPS

- TOMNET University Transportation Center, 2022-2023 | Lead PI on \$101,250 grant to study the relationship between ridehailing services usage and household vehicle availability
- TOMNET University Transportation Center, 2022-2023 | Co-lead PI on \$100,370 grant to investigate the well-being implications of changes in activity-travel during Covid-19 pandemic
- TOMNET University Transportation Center, 2022-2023 | Lead PI on \$102,510 grant to analyze the factors influencing the willingness to use AV-based ridehailing services in the future
- TOMNET University Transportation Center, 2022-2023 | Co-lead PI on \$100,620 grant to identify vulnerable groups in the context of access to food during the Covid-19 pandemic
- TOMNET University Transportation Center, 2022-2023 | Co-lead PI on \$99,930 grant to study the mode use evolution during Covid-19 pandemic in the U.S. for the future of transit
- Arizona State University 2021-2022 Graduate College Travel Grant, Mar 30, 2022
- Arizona State University 2021-2022 Graduate College Travel Grant, Jan 2, 2022
- Full Scholarship (tuition fee waiver + stipend) for M.S. studies from Istanbul Sehir University, Turkey
- Full Scholarship (tuition fee waiver + stipend) for B.S. studies from TOBB Economy and Technology University, Turkey

PROFESSIONAL SERVICE AND RECOGNITION

Honors and Awards

- Pyke Johnson Award by Transportation Research Board for the best paper in planning and environment, 2022
- Arizona State University 2021-22 GPSA Outstanding Research Award, Spring 2022
- Best Presentation Award at the 2021 ITS Arizona Students' Transportation Summit, Apr 30, 2021
- Honor Student, TOBB Economy and Technology University, 2007 – 2012
- Best Poster Award at the Senior Project Contest, TOBB Economy and Technology University, Turkey, 2011
- Ranked ~2000th among 1.7 million students in the National University Entrance Exam of Turkey, 2005

Professional Affiliations

- Member, Transportation Research Board (TRB) Standing Committee on Traveler Behavior and Values (AEP30)
- Member, International Association for Travel Behavior Research (IATBR)
- Member, American Society of Civil Engineers (ASCE)

Professional Services

Reviewer:

- Transportation Research Record
- TRB Annual Meetings
- Journal of Transport Geography
- Transportation Research Part E
- Cities
- IATSS Research
- Sustainable Cities and Society

Review Task Force, TRB Standing Committee on Travel Forecasting (AEP50), 2023

Treasurer, ASU-ITE Student Chapter 2021-2022

PUBLICATIONS

Journal Articles (Published/Forthcoming)

1. Asmussen, K. E., Mondal, A., **Batur, I.**, Dirks, A., Pendyala, R. M., & Bhat, C. R. (2024). An Investigation of Individual-level Telework Arrangements in the COVID-era. *Transportation Research Part A: Policy and Practice*, 179, 103888.

2. Magassy, T. B., **Batur, I.**, Mondal, A., Asmussen, K. E., Bhat, C. R., & Pendyala, R. M. (2023). Multidimensional Analysis of Willingness to Share Rides in a Future of Autonomous Vehicles. *Transportation Research Record*, 03611981231201111.
3. **Batur, I.**, Dirks, A. C., Mondal, A., Bhat, C. R., & Pendyala, R. M. (2023). Does Ridehailing Use Affect Vehicle Ownership or Vice Versa? An Exploratory Investigation of the Relationship Using a Latent Market Segmentation Approach. *Transportation Research Record*, 03611981231179470.
4. **Batur, I.**, Dirks, A. C., Bhat, C. R., Polzin, S. E., Chen, C., & Pendyala, R. M. (2023). Analysis of changes in time use and activity participation in response to the COVID-19 pandemic in the United States: implications for well-being. *Transportation Research Record*, 03611981231165020.
5. Magassy, T. B., **Batur, I.**, Mondal, A., Asmussen, K. E., Bhat, C. R., Salon, D., ... & Pendyala, R. M. (2023). Evolution of Mode Use During the COVID-19 Pandemic in the United States: Implications for the Future of Transit. *Transportation Research Record*, 03611981231166942.
6. **Batur, I.**, Asmussen, K. E., Mondal, A., Khoeini, S., Magassy, T. B., Pendyala, R. M., & Bhat, C. R. (2023). Understanding interest in personal ownership and use of autonomous vehicles for running errands: an exploration using a joint model incorporating attitudinal constructs. *Transportation Research Record*, 2677(2), 541-554.
7. Magassy, T. B., **Batur, I.**, Mondal, A., Asmussen, K. E., Khoeini, S., Pendyala, R. M., & Bhat, C. R. (2022). Influence of Mode Use on Level of Satisfaction with Daily Travel Routine: A Focus on Automobile Driving in the United States. *Transportation Research Record*, 03611981221088199.
8. **Batur, I.**, Markolf S.A., Chester M.V., Middel A., Hondula D. & Vanos J. (2022). Street-Level Heat and Air Pollution Exposure Informed by Mobile Sensing. *Transportation Research Part D: Transport and Environment*, 113, 103535.
9. Nair, G. S., Bhat, C. R., **Batur, I.**, Pendyala, R. M., & Lam, W. H. (2020). A Model of Deadheading Trips and Pick-Up Locations for Ride-Hailing Service Vehicles. *Transportation Research Part A: Policy and Practice*, 2020. 135:289-308.
10. **Batur, I.**, Bayram, I.S., and Koc, M. (2019). Impact Assessment of Supply-Side and Demand-Side Policies on Energy Consumption and CO2 Emissions from Urban Passenger Transportation: The Case of Istanbul. *Journal of Cleaner Production*, 219:391-410.
11. **Batur, I.**, and Koç, M. (2017). Travel Demand Management (TDM) Case Study for Social Behavioral Change Towards Sustainable Urban Transportation in Istanbul. *Cities*, 69:20-35.

Journal Articles (Under Review)

1. **Batur I.**, A. Mondal, V. O. Alhassan, K.E. Asmussen, C.R. Bhat, and R.M. Pendyala. The Induced Demand Implications of Alternative Adoption Modalities of Automated Vehicles. Submitted to *Transportation Research Part C*, 2023.
2. **Batur I.**, V. O. Alhassan, M.V. Chester, S.E. Polzin, C. Chen, C.R. Bhat, and R.M. Pendyala. Understanding How Extreme Heat Impacts Human Activity-Mobility and Time Use Patterns. Submitted to *Transportation Research Part D*, 2023.
3. Anderson, S.M., K.E. Asmussen, S. Saxena, **I. Batur**, R.M. Pendyala, and C.R. Bhat. An Investigation of Dissonance in Telework Frequency. Submitted to *Transportation Research Part C*, 2023.
4. Hwang, H., A. Haddad, **I. Batur**, S. Saxena, R.M. Pendyala, and C.R. Bhat. An Analysis of Walking Frequency Before and After the Pandemic. Submitted to *Transportation Research Record*, 2023.
5. **Batur, I.**, K.E. Asmussen, A. Mondal, S. Khoeini, R.M. Pendyala, and C.R. Bhat. Assessing the Impact of Ridehailing Service Use on Bus Ridership: A Joint Modeling Framework Accounting for Endogeneity and Latent Attitudes. Submitted to *Travel Behavior and Society*, 2023.
6. Dirks, A. C., **Batur, I.**, Mondal, A., Magassy, T. B., Haddad, A., Bhat, C. R & Pendyala, R. M. Access to Food in a Severe Prolonged Disruption: The Case of Grocery and Meal Shopping During the COVID-19 Pandemic. Submitted to *Travel Behavior and Society*, 2022.
7. Verma, V., Mondal, A., Asmussen, K. E., **Batur, I.**, Magassy, T. B., Bhat, C. R., & Pendyala, R. M. A Joint Behavioral Choice Model of Carpool Formation and Frequency. Submitted to *Transportation Research Record*, 2022.
8. **Batur, I.**, S. Sharda, T. Kim, S. Khoeini, R.M. Pendyala, and C.R. Bhat. Mobility, Time Poverty, and Well-Being: How Are They Connected and How Much Does Mobility Matter?. Submitted to *Transportation Research Record*, 2020.

Conference Proceedings

1. Garcia, C., Armoogum, J., **Batur, I.**, & Pendyala, R. (2022). Immobility and Activity Levels: A Comparison of USA and France (No. hal-03683166).
2. Sharda, S., T. Kim, S. Khoeini, **I. Batur**, D.C. Silva, and R.M. Pendyala (2019) Development of an Integrated Model System of Transport and Residential Energy Consumption. Proceedings of the 15th World Conference on Transport Research, World Conference on Transport Research Society, Leeds, UK.
3. S. Sharda, S. Astroza, S. Khoeini, **I. Batur**, R.M. Pendyala, and C.R. Bhat (2019) Do Attitudes Affect Behavioral Choices or Vice Versa? Uncovering Latent Segments Within a Population. Proceedings of the 98th Annual Meeting of the Transportation Research Board, National Academies, Washington, D.C.
4. **Batur, I.**, I. S. Bayram, and M. Koç. The Role of Plug-in Electric Vehicles in Reducing Energy and CO₂ Emissions in Istanbul: A System Dynamics Approach. Presented at the IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering, Doha, Qatar, April 10-12, 2018.

5. **Batur, I.**, and M. Koc. A Review of System Dynamics Applications in Sustainable Urban Transportation. Presented at The European Conference on Sustainability, Energy and the Environment 2017, Brighton, UK, 7-9 July 2017.
6. **Batur, I.**, and M. Koc. Sustainable Urban Transportation with Travel Demand Management Methods: A Case Study for Istanbul. Paper presented at The Asian Conference on Sustainability, Energy and the Environment 2015, Kobe, Japan, 11-14 June 2015.
7. Yildiz, U., **I. Batur**, S.A. Alumur, and H. Gultekin. A Bi-Criteria Machine Location Problem with Pick-up and Drop-off Points. Paper presented at the 20th European Working Group on Locational Analysis Meeting (EWGLA 2013), Ankara, Turkey, 17-19 April, 2013.

Research Reports

1. Khoeini, S., Pendyala, R. M., Baker, D. S., Magassy, T. B., Stopher, P., & **Batur, I.** (2022). Interaction of Familiarity, Safety Perceptions, and Willingness to Use Autonomous Vehicles in A Structural Equation Modeling Framework. ~21 p
2. Pendyala, R.M., Khoeini, S., & **Batur, I.** (2022). How Will Use of Autonomous Vehicles for Running Errands Affect Future Autonomous Vehicle Adoption and Ownership?. ~23 p
3. Pendyala, R.M., Sharda, S., Kim, T., Khoeini, S., & **Batur, I.** (2021). Development of an Integrated Model System of Transport and Residential Energy Consumption. ~22 p
4. Pendyala, R.M., S. Sharda, **I. Batur**, and S. Khoeini (2020). Attitudes and Behaviors Causal Relationships: Uncovering Latent Segments Within A Heterogeneous Population. ~28 p
5. Da Silva, D.C., Astroza, S., **Batur, I.**, Khoeini, S., Magassy, T.B., Pendyala, R. M., & Bhat, C. R. (2019). Are Millennials really all that different than Generation X? An analysis of factors contributing to differences in vehicle miles of travel. ~29 p
6. Magassy, T., S. Sharda, T. Kim, D.C. da Silva, **I. Batur**, and R.M. Pendyala (2019) Population Synthesis for the Qatar Activity-based Travel Model: Final Results and User Documentation. Final Report Submitted to the University of California at Santa Barbara and ItalConsult, Santa Barbara, CA. ~200 p
7. **Batur, I.**, D.C. da Silva, S. Sharda, T. Kim, and R.M. Pendyala (2019) Estimation of CEMSELTS Model Components for the Qatar Activity-based Travel Model. Final Report Submitted to the University of California at Santa Barbara and ItalConsult, Santa Barbara, CA. ~40 p

Thesis/Dissertation

1. **Batur, I.** (2023). *Understanding and Modeling the Nexus of Mobility, Time Poverty, and Wellbeing* (Doctoral dissertation, Arizona State University).
2. **Batur, I.** (2015). *Social Behavioral Change for Sustainable Urban Transportation under TDM Concept: A Case Study of Istanbul* (Master's thesis, Istanbul Sehir University).

Policy Briefs

1. Polzin, S., **Batur, I.**, and Pendyala, R.M. COVID Recovery? Changing Travel Behaviors? Insights From the 2022 ACS, ATUS, and CE Data Sets. Policy Brief, TOMNET & TBD University Transportation Centers. December 2023.
2. Polzin, S., **Batur, I.**, and Pendyala, R.M. Changing Travel Behavior Insights from the 2021 ACS, ATUS, and CE Surveys. Policy Brief, TOMNET University Transportation Center. March 2023.

PRESENTATIONS AND TALKS

Conference Presentations

1. **Batur I.**, A. Mondal, V. O. Alhassan, K.E. Asmussen, C.R. Bhat, and R.M. Pendyala. *The Induced Demand Implications of Alternative Adoption Modalities of Automated Vehicles*. Presented at the 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 7-11, 2024.
2. **Batur I.**, V. O. Alhassan, M.V. Chester, S.E. Polzin, C. Chen, C.R. Bhat, and R.M. Pendyala. *Understanding How Extreme Heat Impacts Human Activity-Mobility and Time Use Patterns*. Presented at the 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 7-11, 2024.
3. Anderson, S.M., K.E. Asmussen, S. Saxena, **I. Batur**, R.M. Pendyala, and C.R. Bhat. *An Investigation of Dissonance in Telework Frequency*. Presented at the 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 7-11, 2024.
4. Hwang, H., A. Haddad, **I. Batur**, S. Saxena, R.M. Pendyala, and C.R. Bhat. *An Analysis of Walking Frequency Before and After the Pandemic*. Presented at the 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 7-11, 2024.
5. **Batur, I.**, Dirks, A. C., Mondal, A., Pendyala, R. M., & Bhat, C. R. *Does Ridehailing Use Affect Vehicle Ownership or Vice Versa? An Exploratory Investigation of the Relationship Using a Latent Market Segmentation Approach*. Presented at the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 8-12, 2023.
6. **Batur, I.**, Dirks, A. C., Pendyala, R. M., Bhat, C. R., Polzin, S. E., & Chen, C. *An Analysis of Changes in Time Use and Activity Participation in Response to the COVID-2019 Pandemic in the United States: Implications for Well-being*. Presented at the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 8-12, 2023.

7. Dirks, A. C., **Batur, I.**, Mondal, A., Magassy, T. B., Haddad, A., Bhat, C. R. ... & Pendyala, R. M. *Access to Food in a Severe Prolonged Disruption: The Case of Grocery and Meal Shopping During the COVID-19 Pandemic*. Presented at the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 8-12, 2023.
8. Magassy, T. B., **Batur, I.**, Mondal, A., Asmussen, K. E., Bhat, C. R., ... & Pendyala, R. M. *Evolution of Mode Use Due to COVID-19 Pandemic in the United States: Implications for the Future of Transit*. Presented at the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 8-12, 2023.
9. Magassy, T. B., **Batur, I.**, Mondal, A., Asmussen, K. E., Pendyala, R. M., & Bhat, C. R. *A Multidimensional Analysis of Willingness to Share Rides in a Future of Autonomous Vehicles*. Presented at the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 8-12, 2023.
10. Verma, V., Mondal, A., Asmussen, K. E., **Batur, I.**, Magassy, T. B., Bhat, C. R., & Pendyala, R. M. *A Joint Behavioral Choice Model of Carpool Formation and Frequency*. Presented at the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 8-12, 2023.
11. Asmussen, K. E., Mondal, A., **Batur, I.**, Dirks, A., Bhat, C. R., & Pendyala, R. M. *An Investigation of Evolving COVID-Era Remote Work Arrangements*. Presented at the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 8-12, 2023.
12. **Batur, I.**, T.B. Magassy, A. Dirks, and R.M. Pendyala. *Future of Autonomous Vehicles: A Self-driving Revolution or Disaster?*. Presented at the ITS World Congress 2022, Sep 21-25, 2022.
13. **Batur, I.**, A. Dirks, and R.M. Pendyala. *Changes in Time Use and Activity Participation During the COVID-2019 Pandemic in the US: Implications for Wellbeing and Time Poverty*. Presented at the WCTRS 2022 Virtual Meeting, July 27, 2022.
14. **Batur, I.**, K.E. Asmussen, A. Mondal, S. Khoeini, R.M. Pendyala, and C.R. Bhat. *Sending Autonomous Vehicles to Pick-up, Deliver, and Run Errands: Sustainability Implications*. Presented at the Conference on Sustainability and Emerging Transportation Technology, Irvine, CA, May 31 – June 2, 2022.
15. Magassy, T.B., S. Sharda, **I. Batur**, A. Dirks, S. Khoeini, and R.M. Pendyala. *How Does Adoption of Emerging Transportation Technologies Vary by Residential Preferences?*. Presented at the ASCE International Conference on Transportation & Development, Seattle, WA, May 31 – June 3, 2022.
16. Sharda, S., T.B. Magassy, **I. Batur**, R.M. Pendyala, and V.M. Garikapati. *Differences in Utilization Patterns Between Electric and Gasoline Vehicles: Implications for Household Energy Consumption*. Presented at the ASCE International Conference on Transportation & Development, Seattle, WA, May 31 – June 3, 2022.
17. **Batur, I.**, K. E. Asmussen, A. Mondal, S. Khoeini, R. M. Pendyala, and C. R. Bhat. *Assessing the Impact of Ridehailing Service Use on Bus Ridership: A Joint Modeling Framework Accounting for Endogeneity and Latent Attitudes*. Presented at the 101st Annual Meeting of the Transportation Research Board, Washington, DC, January 9-13, 2022.
18. **Batur, I.**, K. E. Asmussen, A. Mondal, S. Khoeini, R. M. Pendyala, and C. R. Bhat. *Understanding Interest in Personal Ownership and Use of Autonomous Vehicles for Running Errands: An Exploration Using a Joint Model Incorporating Attitudinal Constructs*. Presented at the 101st Annual Meeting of the Transportation Research Board, Washington, DC, January 9-13, 2022.
19. Magassy, T., **I. Batur**, A. Mondal, K. E. Asmussen, S. Khoeini, R. M. Pendyala, and C. R. Bhat. *The Influence of Mode Use on Level of Satisfaction with Daily Travel Routine: A Focus on Automobile Driving in the United States*. Presented at the 101st Annual Meeting of the Transportation Research Board, Washington, DC, January 9-13, 2022.
20. Baker, D., T. Magassy,, S. Khoeini, P. Stopher, **I. Batur**, and R. M. Pendyala. *Autonomous Vehicles: The Role of Familiarity and Perceptions in Expected Adoption*. Presented at the 101st Annual Meeting of the Transportation Research Board, Washington, DC, January 9-13, 2022.
21. **Batur, I.**, D.C. da Silva, S. Khoeini, and R. M. Pendyala. *How Will Use of Autonomous Vehicles for Running Errands Affect Future Autonomous Vehicle Adoption and Ownership?*. Presented at the 18th IRF World Meeting & Exhibition, Dubai, Nov 7-10, 2021.
22. **Batur, I.**, S. Khoeini, and R. M. Pendyala. *Ridehailing Services Mode Substitution Patterns and Sustainability Implications: A Focus on Transit*. Presented at the How We Move Matters: Exploring the Connections Between New Transportation and Mobility Options and Environmental Health Virtual Workshop, July 13, 16, and 21, 2021.
23. **Batur, I.** *Sending Autonomous Vehicles for Pick-up, Delivery and Running Errands: An Attitudinal Based Analysis*. Presented at the Arizona Students Transportation Summit, April 30, 2021.
24. **Batur, I.**, S. Sharda, T. Kim, S. Khoeini, R. M. Pendyala, and C. R. Bhat. *Mobility, Time Poverty, and Well-Being: How Are They Connected and How Much Does Mobility Matter?*. Presented at the 99th Annual Meeting of the Transportation Research Board, Washington, DC, January 12-16, 2020.
25. da Silva, D. C., S. Astroza, **I. Batur**, S. Khoeini, T. B. Magassy, R. M. Pendyala, and C. R. Bhat. *Are Millennials Really All That Different Than Generation X? An Analysis of Factors Contributing to Differences in Vehicle Miles of Travel*. Presented at the 99th Annual Meeting of the Transportation Research Board, Washington, DC, January 12-16, 2020.
26. Sharda, S., T. Kim, S. Khoeini, **I. Batur**, and R. M. Pendyala. *Development of an Integrated Model System of Transport and Residential Energy Consumption*. Presented at the 99th Annual Meeting of the Transportation Research Board, Washington, DC, January 12-16, 2020.
27. Garcia, C., J. Armoogum, and **I. Batur**. *Immobility and Activity Levels: A Comparison of the United States and France*. Presented at the 99th Annual Meeting of the Transportation Research Board, Washington, DC, January 12-16, 2020.

28. Sharda, S., T. Kim, S. Khoeini, **I. Batur**, D. C. da Silva, and R. M. Pendyala. *Development of an Integrated Model System of Transport and Residential Energy Consumption*. Presented at the 15th World Conference on Transport Research, World Conference on Transport Research Society, Indian Institute of Technology-Bombay, Mumbai, India, May 2019.
29. Sharda S., S. Astroza, S. Khoeini, **I. Batur**, R. M. Pendyala, and C. R. Bhat. *Do Attitudes Affect Behavioral Choices or Vice-Versa: Uncovering Latent Segments within a Population*. Presented at the 98th Annual Meeting of the Transportation Research Board, Washington, DC, January 13-17, 2019.
30. Sharda, S., **I. Batur**, S. Khoeini, T. Kim, and R. M. Pendyala. *An Integrated Model System of Household Transport and Residential Energy Consumption*. Presented at the 7th TRB Innovations in Travel Modeling Conference, Atlanta, GA, June 25, 2018.
31. **Batur, I.**, I. S. Bayram, and M. Koç. *The Role of Plug-in Electric Vehicles in Reducing Energy and CO₂ Emissions in Istanbul: A System Dynamics Approach*. Presented at the IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering, Doha, Qatar, April 10-12, 2018.
32. **Batur, I.**, and M. Koc. *A Review of System Dynamics Applications in Sustainable Urban Transportation*. Presented at the European Conference on Sustainability, Energy and the Environment, Brighton, UK, July 7-9, 2017.
33. **Batur, I.**, and M. Koc. *Sustainable Urban Transportation with Travel Demand Management Methods: A Case Study for Istanbul*. Presented at the Asian Conference on Sustainability, Energy and Environment, Kobe, Japan, June 11-14, 2015.
34. Yildiz, U., **I. Batur**, S. A. Alumur, and H. Gultekin. *A Bi-Criteria Machine Location Problem with Pick-up and Drop-off Points*. Presented at the 20th European Working Group on Locational Analysis Meeting, Ankara, Turkey, 17-19 April, 2013.

Invited Talks

1. "Impact of Covid-19 on Travel Behavior". Tran-Set Webinar Series, Louisiana State University. August 3, 2023. [Link](#).

SOFTWARE AND TOOLS

TOMNET Wellbeing Platform ([link](#))

- Contributed to the development of this interactive activity-based wellbeing assessment tool to track wellbeing in society, serving as the primary developer

PopGen: A Synthetic Population Generator for Advanced Travel Demand Model Deployment ([link](#))

- Assisted with the maintenance of the software and contributed to the development of a newer version, PopGen2.3

SKILLS (Technical)

Data analysis and modeling:	Phyton, R, SPSS, Gauss
Simulation:	PTV-Vissim, Vensim, Arena
Optimization:	GAMS, CPLEX
GIS:	Folium, ArcGIS
Other:	MATLAB, Git, CSS, JavaScript

REFERENCES

Ram M. Pendyala, PhD

Professor and Director
School of Sustainable Engineering and the Built Environment, Arizona State University
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Chandra R. Bhat, PhD

Joe J. King Endowed Chair Professor in Engineering
Department of Civil, Architectural and Environmental Engineering, The University of Texas at Austin
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Steven E. Polzin, PhD

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