## Alireza Ermagun, Ph.D.

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LinkedIn



Google Scholar

EDU	$C \Lambda T$	'ION
LDU	CAI	IOI

Ph.D. in Transportation Systems Engineering, University of Minnesota Thesis: Network Econometrics and Traffic Flow Analysis Supervisor: Professor David Levinson	2016
Master of Urban and Regional Planning, University of Minnesota Thesis: Analyses of Bicycle and Pedestrian Trail Traffic Supervisor: Professor Greg Lindsey	2016
M.Sc. in Road and Transportation, Amirkabir University of Technology Thesis: A Mode Choice Model for School Trips in Tehran	2013
B.Sc. in Mechanical Engineering, K.N. Toosi University of Technology Thesis: Influence of Basalt Fibers on Concrete Strength	2010

## **PROFESSIONAL POSITIONS**

Assistant Professor, Department of Geography and Geoinformation Science, George	2022-Present
Mason University, Fairfax, VA	_
Assistant Professor, Richard A. Rula School of Civil and Environmental Engineering, Mississippi State University, Mississippi State, MS	2018-2022
Director, Mobility Observatory and Data Analytics Lab (MODAL), Mississippi State University, Mississippi State, MS	2018-Present
Co-Director, Mississippi Transportation Research Center, Mississippi State University, Mississippi State, MS	2021-2022
Board of Governors, Transportation & Development Institute (Γ&DI), American Society of Civil Engineers (ASCE), USA	2021-2022
Postdoctoral Fellow, Department of Civil and Environmental Engineering, Northwestern University, Evanston, IL	2016-2018
Graduate Research Assistant, Department of Civil, Environmental, and Geo-engineering, University of Minnesota, Minneapolis, MN	2015-2016
Graduate Research Assistant, Humphrey School of Public Affairs, University of Minnesota, Minneapolis, MN	2014-2015
Visiting Scholar, Research Centre for Integrated Transport Innovation, University of New South Wales, Sydney, NSW	2014-2014

## RESEARCH INTERESTS

Human Mobility and Travel Behavior Modeling Community Resilience and Sustainable Development Social Equity in Infrastructure Planning and Delivery Autonomous Vehicles Adaptation and Future Mobility Transport and Land Use Planning
Electrification and Mobility-as-a-Service
Emerging Technologies and Shared Mobility
Computational Social and Economic Science

## **PUBLICATIONS AND PRESENTATIONS**

List of Journals	Impact Factor	No.
Science	41.8	1
Tourism Management	7.4	1
Transport Reviews	6.7	1
Transport Reviews Transportation Research Part C: Emerging Technologies	6.0	2
Computers & Industrial Engineering	5.4	1
Landscape and Urban Planning	5.4	1
Sustainable Cities and Society	5.2	1
Cities	4.8	1
Transportation Research Part D: Transport and Environment	4.5	5
Transportation	4.0	3
Transportation Research Part A: Policy and Practice	3.9	2
Journal of Transport Geography	3.8	3
Travel Behaviour and Society	3.3	4
Transport Policy	3.3	2
Urban Studies	2.8	1
Journal of Air Transport Management	2.8	1
Environment and Planning B: Urban Analytics and City Science	2.8	2
PloS one	2.7	4
International Journal of Sustainable Transportation	2.7	1
Transportation Research Part F: Traffic Psychology and Behaviour	2.5	3
Transportmetrica A: Transport Science	2.4	2
Journal of Transport & Health	2.4	2
Journal of Urban Planning and Development	1.7	2
Geographical Analysis	1.7	1
Transportation Research Record	1.5	7
Journal of Transportation Engineering, Part A: Systems	0.7	1
International Journal of Transportation Science and Technology	-	1
Case Studies on Transport Policy	-	1
IEEE Open Journal of Intelligent Transportation Systems	-	1
Resilience Findings	-	1

#### **Peer Reviewed Publications: 59 Articles**

- 1. Janatabadi, F., Maharjan, S., & Ermagun, A. (2022). A spatiotemporal disparity of transit and automobile access gap and its impact on transit use. Environment and Planning B: Urban Analytics and City Science, 23998083221147527.
- 2. **Ermagun, A.**, & Erinne, J. (2022). A systematic exclusion induced by institutional ranking in engineering faculty hiring: Introducing a cycle of winners and losers. Plos one, 17(12), e0275861.
- 3. **Ermagun, A.**, Erinne, J., & Fan, Y. (2022). Travel duration tolerance: Examining the sensitivity of emotional well-being to trip duration. Transportation research part D: transport and environment, 102, 103137.
- 4. Nagurney, A., & **Ermagun, A.** (2022). Resilience of supply chain networks to labor disruptions. Findings, 36315.
- 5. Maharjan, S., Tilahun, N., & **Ermagun, A.** (2022). Spatial equity of modal access gap to multiple destination types across Chicago. Journal of Transport Geography, 104, 103437.
- 6. Erinne, J., **Ermagun, A.**, & Fan, Y. (2022). Just because I'm a woman: Gender happiness gap in human mobility. Travel Behaviour and Society, 29, 224-235.
- 7. Janatabadi, F., & **Ermagun, A.** (2022). "Slim down" with a ticket to ride: A systematic literature review. Journal of Transport & Health, 24, 101327.
- 8. **Ermagun, A.**, & Tajik, N. (2022). Multiple-drones-multiple-trucks routing problem for disruption assessment. Transportation Research Record, 03611981221108378.
- 9. Janatabadi, F., & **Ermagun, A.** (2022). Empirical evidence of bias in public acceptance of autonomous vehicles. Transportation Research Part F: Traffic Psychology and Behaviour, 84, 330-347.
- 10. **Ermagun, A.**, Kelarestaghi, K. B., & Heaslip, K. (2022). The Impact of Potentially Realistic Fabricated Road Sign Messages on Route Change. IEEE Open Journal of Intelligent Transportation Systems, 3, 137-145.
- 11. **Ermagun, A.** (2021). Transit access and urban space-time structure of American cities. Journal of Transport Geography, 93, 103066.
- 12. **Ermagun, A.**, & Tajik, N. (2021). Recovery patterns and physics of the network. PloS one, 16(1), e0245396.
- 13. **Ermagun, A.**, Kelarestaghi, K. B., & Heaslip, K. (2021). Drivers' self-reported responses to a potentially realistic fabricated road sign message. Transportation Research Part F: Traffic Psychology and Behaviour, 78, 103-118.
- 14. Morshedlou, N., Barker, K., González, A. D., & Ermagun, A. (2021). A heuristic approach to an interdependent restoration planning and crew routing problem. Computers & Industrial Engineering, 161, 107626.
- 15. **Ermagun, A.**, Kelarestaghi, K. B., Finney, M., & Heaslip, K. (2021). "Speed up to hit the worker": Impact of hacked road signs on work zone safety. International Journal of Transportation Science and Technology.
- 16. Sohrabi, S., & Ermagun, A. (2021). Dynamic bike sharing traffic prediction using spatiotemporal pattern detection. Transportation Research Part D: Transport and Environment, 90, 102647.
- 17. **Ermagun, A.**, & Tilahun, N. (2020). Equity of transit accessibility across Chicago. Transportation Research Part D: Transport and Environment, 86, 102461.
- 18. **Ermagun, A.**, Punel, A., & Stathopoulos, A. (2020). Shipment status prediction in online crowd-sourced shipping platforms. Sustainable Cities and Society, 53, 101950.
- 19. Kelarestaghi, K. B., **Ermagun, A.**, Heaslip, K., & Rose, J. (2020). Choice of speed under compromised dynamic message signs. PloS one, 15(12): e0243567.
- 20. Mehdizadeh, M., & Ermagun, A. (2020). "I'll never stop driving my child to school": On multimodal and monomodal car users. Transportation, 47(3), 1071-1102.

- 21. Vahedifard, F., **Ermagun, A.**, Mortezaei, K., & AghaKouchak, A. (2019). Integrated data could augment resilience. Science, 363(6423), 134-134.
- 22. **Ermagun, A.**, Shamshiripour, A., & Stathopoulos, A. (2019). Performance analysis of crowd-shipping in urban and suburban areas. Transportation, 1-31.
- 23. Punel, A., Hassan, L. A. H., & **Ermagun, A.** (2019). Variations in airline passenger expectation of service quality across the globe. Tourism Management, 75, 491-508.
- 24. **Ermagun, A.**, & Levinson, D. (2019). Spatiotemporal short-term traffic forecasting using the network weight matrix and systematic detrending. Transportation Research Part C: Emerging Technologies, 104, 38-52.
- 25. Carlson, K., **Ermagun, A.**, Murphy, B., Owen, A., & Levinson, D. (2019). Safety in numbers for bicyclists at urban intersections. Transportation Research Record, 2673(6), 677-684.
- 26. Kelarestaghi, K. B., **Ermagun, A.**, & Heaslip, K. P. (2019). Cycling usage and frequency determinants in college campuses. Cities, 90, 216-228.
- 27. Biehl, A., **Ermagun, A.**, & Stathopoulos, A. (2019). Utilizing multi-stage behavior change theory to model the process of bike share adoption. Transport Policy, 77, 30-45.
- 28. Punel, A., **Ermagun, A.**, & Stathopoulos, A. (2019). Push and pull factors in adopting a crowdsourced delivery system. Transportation Research Record, 2673(7), 529-540.
- 29. **Ermagun, A.**, & Levinson, D. M. (2019). Development and application of the network weight matrix to predict traffic flow for congested and uncongested conditions. Environment and Planning B: Urban Analytics and City Science, 46(9), 1684-1705.
- 30. **Ermagun, A.**, Lindsey, G., & Loh, T. H. (2018). Bicycle, pedestrian, and mixed-mode trail traffic: A performance assessment of demand models. Landscape and Urban Planning, 177, 92-102.
- 31. **Ermagun, A.**, & Stathopoulos, A. (2018). To bid or not to bid: An empirical study of the supply determinants of crowd-shipping. Transportation Research Part A: Policy and Practice, 116, 468-483.
- 32. **Ermagun, A.**, Lindsey, G., & Loh, T. H. (2018). Urban trails and demand response to weather variations. Transportation Research Part D: Transport and Environment, 63, 404-420.
- 33. Biehl, A., **Ermagun, A.**, & Stathopoulos, A. (2018). Modelling determinants of walking and cycling adoption: A stage-of-change perspective. Transportation Research Part F: Traffic Psychology and Behaviour, 58, 452-470.
- 34. Punel, A., **Ermagun, A.**, & Stathopoulos, A. (2018). Studying determinants of crowd-shipping use. Travel Behaviour and Society, 12, 30-40.
- 35. Punel, A., & **Ermagun, A.** (2018). Using Twitter network to detect market segments in the airline industry. Journal of Air Transport Management, 73, 67-76.
- 36. **Ermagun, A.**, & Levinson, D. (2018). Spatiotemporal traffic forecasting: review and proposed directions. Transport Reviews, 38(6), 786-814.
- 37. Abasahl, F., Kelarestaghi, K. B., & Ermagun, A. (2018). Gender gap generators for bicycle mode choice in Baltimore college campuses. Travel Behaviour and Society, 11, 78-85.
- 38. Biehl, A., **Ermagun, A.**, & Stathopoulos, A. (2018). Community mobility MAUP-ing: A socio-spatial investigation of bikeshare demand in Chicago. Journal of Transport Geography, 66, 80-90.
- 39. Sohrabi, S., & Ermagun, A. (2018). Optimum capacity of freeways: A stochastic approach. Journal of Transportation Engineering, Part A: Systems, 144(7), 04018032.
- 40. **Ermagun, A.**, & Samimi, A. (2018). Potential cost savings of promoting active travel to school. Case Studies on Transport Policy, 6(1), 167-177.
- 41. **Ermagun, A.**, Fan, Y., Wolfson, J., Adomavicius, G., & Das, K. (2017). Real-time trip purpose prediction using online location-based search and discovery services. Transportation Research Part C: Emerging Technologies, 77, 96-112.
- 42. **Ermagun, A.**, & Levinson, D. (2018). An introduction to the network weight matrix. Geographical Analysis, 50(1), 76-96.

- 43. **Ermagun, A.**, Chatterjee, S., & Levinson, D. (2017). Using temporal detrending to observe the spatial correlation of traffic. PloS one, 12(5), e0176853.
- 44. **Ermagun, A.**, & Samimi, A. (2018). Mode choice and travel distance joint models in school trips. Transportation, 45(6), 1755-1781.
- 45. **Ermagun, A.**, & Levinson, D. (2017). Public transit, active travel, and the journey to school: a cross-nested logit analysis. Transportmetrica A: Transport Science, 13(1), 24-37.
- 46. **Ermagun, A.**, & Levinson, D. (2017). "Transit makes you short": On health impact assessment of transportation and the built environment. Journal of Transport & Health, 4, 373-387.
- 47. Sun, B., **Ermagun, A.**, & Dan, B. (2017). Built environmental impacts on commuting mode choice and distance: Evidence from Shanghai. Transportation Research Part D: Transport and Environment, 52, 441-453.
- 48. Cao, J., & Ermagun, A. (2017). Influences of LRT on travel behaviour: A retrospective study on movers in Minneapolis. Urban Studies, 54(11), 2504-2520.
- 49. Ji, Y., Fan, Y., Ermagun, A., Cao, X., Wang, W., & Das, K. (2017). Public bicycle as a feeder mode to rail transit in China: The role of gender, age, income, trip purpose, and bicycle theft experience. International Journal of Sustainable Transportation, 11(4), 308-317.
- 50. **Ermagun, A.**, & Levinson, D. (2016). Intra-household bargaining for school trip accompaniment of children: A group decision approach. Transportation Research Part A: Policy and Practice, 94, 222-234.
- 51. **Ermagun, A.**, Hajivosough, S., Samimi, A., & Rashidi, T. H. (2016). A joint model for trip purpose and escorting patterns of the disabled. Travel Behaviour and Society, 3, 51-58.
- 52. **Ermagun, A.**, & Lindsey, G. (2016). Differences in spending by local trail users: Two-part model of expenditures. Transportation Research Record, 2598(1), 58-66.
- 53. **Ermagun, A.**, Samimi, A., & Rashidi, T. H. (2016). How far is too far? Providing safe and comfortable walking environments. Transportation Research Record, 2586(1), 72-82.
- 54. Kamali, M., **Ermagun, A.**, Viswanathan, K., & Pinjari, A. R. (2016). Deriving truck route choice from large GPS data streams. Transportation Research Record, 2563(1), 62-70.
- 55. **Ermagun, A.**, & Samimi, A. (2015). Promoting active transportation modes in school trips. Transport Policy, 37, 203-211.
- 56. **Ermagun, A.**, Hossein Rashidi, T., & Samimi, A. (2015). A joint model for mode choice and escort decisions of school trips. Transportmetrica A: Transport Science, 11(3), 270-289.
- 57. **Ermagun, A.**, & Samimi, A. (2016). How are children accompanied to school? Journal of Urban Planning and Development, 142(3), 04016002.
- 58. Ermagun, A., Rashidi, T. H., & Lari, Z. A. (2015). Mode choice for school trips: long-term planning and impact of modal specification on policy assessments. Transportation Research Record, 2513(1), 97-105.
- 59. Samimi, A., & Ermagun, A. (2013). Students' tendency to walk to school: case study of Tehran. Journal of Urban Planning and Development, 139(2), 144-152.

List of Conferences	
91st-99th Annual Meeting of the Transportation Research Board	52
56th, 57th, and 59th Annual Meeting of the Association of Collegiate Schools of Planning	5
7th International Symposium on Transport Network Reliability	1
13th World Conference on Transport Research	2
2017 INFORMS Transportation Science and Logistics Conference	1

2017 INFORMS Annual Meeting	4
20th International Conference on Intelligent Transportation Systems	1
2 <sup>nd</sup> International Conference on Transport & Health	3
International Choice Modelling Conference	1
Walk21 International Conference on Walking and Liveable Communities	1
14th International Conference on Competition and Ownership in Land Passenger Transport	1
56th Annual Meeting of the Western Regional Science Association	1
Active Living Research Conference	2

#### Peer Reviewed Presentations: 75 Articles

- 1. **Ermagun, A.** & Tilahun, N. (2020). Equity of Transit Accessibility Across Chicago. 99th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2020.
- 2. **Ermagun, A.** & Jamalzadeh, S. (2020). Forty Years of Women's Issues in Transportation: A Systematic Literature Review. 99th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2020.
- 3. **Ermagun, A.**, Baksh Kelarestaghi, K., & Heaslip, K. "Shunt Traffic": Impact of Compromised Dynamic Message Signs on Route Divergence. 99th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2020.
- 4. **Ermagun, A.**, Baksh Kelarestaghi, K., Finney, M., & Heaslip, K. "Speed Up to Hit the Worker": Impact of Hacked Road Signs on Work Zone Safety. 99th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2020.
- 5. **Ermagun, A.**, Baksh Kelarestaghi, K., & Heaslip, K. Travel Behavior Under Terrorist Attack Bluff. 99<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2020.
- Baksh Kelarestaghi, K., Ermagun, A., Heaslip, K, & Rose, J. Choice of Speed Under Compromised Dynamic Message Signs. 99th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2020.
- 7. Baksh Kelarestaghi, K., **Ermagun, A.**, & Heaslip, K. Compromised Dynamic Message Signs and Driver Distraction. 99th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2020.
- 8. **Ermagun, A.** & Finney, M. A Monster on Our Campus: Assessing Parking Choice and Commuting Behavior. 59th Annual Meeting of the Association of Collegiate Schools of Planning (ACSP), Greenville, South Carolina, October 2019.
- 9. **Ermagun, A.**, Baksh Kelarestaghi, K., & Heaslip, K. Does Forged DMS Information Undermine Common Planning Practices? 59th Annual Meeting of the Association of Collegiate Schools of Planning (ACSP), Greenville, South Carolina, October 2019.
- 10. Carlson, K., **Ermagun, A.**, Murphy, B., Owen, A., & Levinson, D. Safety in Numbers for Bicyclists at Urban Intersections. 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2019.
- 11. Punel, A., Hassan, L. A. H., & **Ermagun, A.** Variations in Airline Passenger Expectation of Service Quality across the Globe. 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2019.

- 12. **Ermagun, A.** & Stathopoulos, A. Analyzing the Crowd-Shipping Delivery Performance from Bidding to Delivering. 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2019.
- 13. **Ermagun, A.** & Levinson, D. Using Network Structure to Assess Traffic Flow Variation and Network Reliability. 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2019.
- 14. Borowski, E., **Ermagun, A.**, & Levinson, D. Disparity of Access: Variations in Transit Service by Race, Ethnicity, Income, and Auto Availability. 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2019.
- 15. Arian, A., **Ermagun, A.**, & Chiu, Y. Smart and Connected Community Detection using Travelers Point of Interest. 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2019.
- 16. Soria, J., **Ermagun, A.**, Arian, A., & Chiu, Y. Examining the Effectiveness of App-based Incentive Systems for Peak Spreading. 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2019.
- 17. **Ermagun, A.** & Levinson, D. Spatio-temporal Short-term Traffic Forecasting using the Network Weight Matrix and Systematic Detrending. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 18. **Ermagun, A.** & Levinson, D. Development and Application of the Network Weight Matrix to Predict Traffic Flow for Congested and Uncongested Conditions. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 19. **Ermagun, A.**, Lindsey, G., & Loh, T. Bicycle, Pedestrian, and Mixed-mode Trail Traffic: A Performance Assessment of Demand Models. 97<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- Ermagun, A., Shamshiripour, A., & Stathopoulos, A. Performance Analysis of Crowd-shipping in Urban and Suburban Areas. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 21. **Ermagun, A.** & Stathopoulos, A. To Bid or Not to Bid: The Supply Determinants of Crowd-Shipping. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 22. Ermagun, A., Punel, A., & Stathopoulos, A. A Dynamic Prediction of Shipment Status in Crowdsourced Delivery Platforms. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 23. Kelarestaghi, K., **Ermagun, A.**, & Heaslip, K. Cycling Usage and Frequency Determinants in College Campuses. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 24. Palmateer, C., **Ermagun, A.**, Owen, A., & Levinson, D. The Role of Transit Service Area Definition in Accessibility-based Evaluation. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 25. Palmateer, C., **Ermagun, A.**, Owen, A., & Levinson, D. Accessibility-based Evaluation of Transit Projects. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- Arian, A., Ermagun, A., & Chiu, Y. An Empirical Investigation of the Reward Incentive and Trip Purposes on Departure Time Behavior Change. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- Arian, A., Ermagun, A., & Chiu, Y. Detecting of Smart and Connected Community: Insight from a Mobility App. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.

- 28. Biehl, A., **Ermagun, A.**, & Stathopoulos, A. What Drives Behavioral Change? An Application of the Transtheoretical Model to Walking and Cycling Behavior. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 29. Biehl, A., **Ermagun, A.**, & Stathopoulos, A. A Critical Review of the Transtheoretical Model for Exploring New Routes to Travel Behavior Change Models. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 30. Punel, A., **Ermagun, A.**, & Stathopoulos, A. Studying Determinants of Crowd-shipping Use. 97<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 31. Punel, A. & **Ermagun, A.** Mapping Airline's Twitter Network to Get Insights into its Market Segments. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 32. Mehdizadeh, M. & **Ermagun, A.** "I'll Never Stop Driving My Child to School": On Multimodal and Monomodal Car Users. 97th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2018.
- 33. **Ermagun, A.** & Levinson, D. The Use of Network Econometrics to Assess Road Network Reliability. 7th International Symposium on Transport Network Reliability (INSTR2018), Sydney, Australia, January 2018.
- 34. **Ermagun, A.**, Lindsey, G., & Loh, T. Bicycle, Pedestrian, and Mixed-mode Trail Traffic: A Performance Assessment of Demand Models, 57th Annual Meeting of the Association of Collegiate Schools of Planning (ACSP), Colorado, Denver, October 2017.
- Arian, A., Ermagun, A., & Chiu, Y. Detecting of Smart and Connected Community: Insight from a Mobility App. 57th Annual Meeting of the Association of Collegiate Schools of Planning (ACSP), Colorado, Denver, October 2017.
- 36. **Ermagun, A.** & Stathopoulos, A. Bidding, Accepting, and Delivering: On Performance Assessment of Crowd-shipping, 2017 INFORMS Annual Meeting, Houston, Texas, October 2017.
- 37. **Ermagun, A.** & Stathopoulos, A. Reliability and the Edge of Vulnerability in Crowd-sourced Shipping, 2017 INFORMS Annual Meeting, Houston, Texas, October 2017.
- 38. Arian, A. **Ermagun, A.**, & Chiu, Y. Community Detection with Similar and Dissimilar Travel Activity Patterns. 2017 INFORMS Annual Meeting, Houston, Texas, October 2017.
- 39. Arian, A., **Ermagun, A.**, & Chiu, Y. What Mode Should I Choose? Offering Travel Packages in Mobility-as-a-service Era. 2017 INFORMS Annual Meeting, Houston, Texas, October 2017.
- Punel, A., Ermagun, A., & Stathopoulos, A. Differences between Users and Non-users of Crowdsourced Shipping, 2017 INFORMS Transportation Science and Logistics Conference, Chicago, Illinois, July 2017.
- 41. **Ermagun, A.** & Levinson, D. Network Weight Matrices and Traffic Flow Analysis. 56th Annual Meeting of the Western Regional Science Association, Santa Fe, New Mexico, February 2017.
- 42. **Ermagun, A.** & Levinson, D. An Introduction to the Network Weight Matrix. 96<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2017.
- 43. **Ermagun, A.** & Levinson, D. Using Temporal Detrending to Observe the Spatial Correlation of Traffic. 96<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2017.
- 44. Sohrabi, S., **Ermagun, A.**, & Ovaici, R. Finding Optimum Capacity of Freeways considering Stochastic Capacity Concept. 96<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2017.

- 45. **Ermagun, A.** & Levinson, D. Spatiotemporal Traffic Forecasting: Review and Proposed Directions. 96th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2017.
- 46. **Ermagun, A.** & Samimi, A. Mode Choice and Travel Distance Joint Models for School Trips. 96<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2017.
- 47. **Ermagun, A.**, Lindsey, G., & Loh, T. Urban Trails and Demand Response to Weather Variations. 96<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2017.
- 48. **Ermagun, A.** & Levinson, D. Intra-household Bargaining for School Trip Accompaniment of Children: A Group Decision Approach. 96th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2017.
- 49. Arian, A., **Ermagun, A.**, & Chiu, Y. (2017). Characterizing Activity Patterns using Co-clustering and User-activity Network. In 2017 IEEE 20th International Conference on Intelligent Transportation Systems, 1-6.
- 50. **Ermagun, A.**, & Lindsey, G., & Loh, T. Urban Trails and Demand Response to Weather Variations. 56th Annual Meeting of the Association of Collegiate Schools of Planning (ACSP), Portland, Oregon, November 2016.
- 51. **Ermagun, A.** Age and Gender Gap in Decision Making of Active Travel Mode to School. 2<sup>nd</sup> International Conference on Transport & Health, San Jose, California, June 2016.
- 52. **Ermagun, A.** & Samimi, A. Potential Cost Savings of Promoting Active Travel to School. 2<sup>nd</sup> International Conference on Transport & Health, San Jose, California, June 2016.
- 53. **Ermagun, A.** & Levinson, D. "Transit Makes You Short": On Health Impact Assessment of Transportation and the Built Environment. 2<sup>nd</sup> International Conference on Transport & Health, San Jose, California, June 2016.
- 54. **Ermagun, A.** & Levinson, D. Accessibility and Transit Performance. 95th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2016.
- 55. **Ermagun, A.** & Levinson, D. Public Transit in School Trips: Active or Non-active. 95th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2016.
- 56. **Ermagun, A.** & Lindsey, G. Differences in Spending by Local Trail Users: A Two-Part Model of Expenditures. 95th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2016.
- 57. Cao, J. & Ermagun, A. The Influences of the Hiawatha LRT on Changes in Travel Behavior: A Retrospective Study on Movers. 95th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2016.
- 58. Shamshiripour, A., **Ermagun, A.**, & Samimi, A. Scrutiny of Dichotomy between Activity Purpose and Accompaniment Pattern of Senior Citizens. 95th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2016.
- 59. Kamali, M. R., **Ermagun, A.**, Viswanathan, K., & Pinjari, A. Development of Route Choice Data Using Truck GPS. 95<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2016.
- 60. Lindsey, G., **Ermagun, A.**, & Loh, T. The Effects of Weather on Urban Trail Use: A National Study. 95<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2016.
- 61. **Ermagun, A.** & Samimi, A. How Far Is Too Far: Providing Safe and Comfortable Walking Environments. 95<sup>th</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2016.

- 62. **Ermagun, A.** Age and Gender Gap in Decision Making of Active Travel Mode to School. Active Living Research Conference, Florida, 2016.
- 63. **Ermagun, A.** & Samimi, A. How Far Is Too Far: Providing Safe and Comfortable Walking Environments. Active Living Research Conference, Florida, 2016.
- 64. **Ermagun, A.** & Levinson, D. Cost Effectiveness of Transit: A Job Accessibility Approach. 14<sup>th</sup> International Conference on Competition and Ownership in Land Passenger Transport, Chile, August 2015.
- 65. **Ermagun, A.**, Hajivosough, S., Samimi, A., & Rashidi, T. H. (2015). Accounting for Joint Decision-making Process of Escorting Pattern and Activity Types. 94th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2015.
- 66. Poorfakhraei, A., Ermagun, A., & Samimi, A. The Effect of Model Specification on the Results of Pedestrian Injury Analysis. 94th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2015.
- 67. **Ermagun, A.**, Rashidi, T. H., & Lari, Z. A. Long-term Planning and the Impact of Modal Specification on Policy Assessment for School Trip Behavior. 94th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2015.
- 68. **Ermagun, A.** Health Cost Effectiveness of Active Travel in School Trips. Walk21 International Conference on Walking and Liveable Communities, Sydney, October 2014.
- 69. **Ermagun, A.**, Rashidi, T. H., Arian, A., & Samimi, A. A. Mode Choice and Escort Decisions in School Trips: Application of a Copula-Based Model. 93<sup>rd</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2014.
- 70. Poorfakhraei, A., **Ermagun, A.**, & Samimi, A. Investigating the Effect of Impact Speed on Pedestrian Fatality in Traffic Accidents. 93<sup>rd</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2014.
- 71. **Ermagun, A.**, Samimi, A., & Rashidi, T. H. What Is the Tolerable Walking Distance to School? Application of a Discrete Hazard-based Model and a Random Utility Method. In International Choice Modelling Conference 2013.
- 72. Samimi, A. & **Ermagun, A.** Students' Choice of Active Modes: A Three Level Nested Logit Model. In 13th World Conference on Transport Research, Rio de Janeiro, Brazil, 2013.
- 73. Samimi, A. & **Ermagun, A.** How are Children Accompanied to School? In 13th World Conference on Transport Research, Rio de Janeiro, Brazil, 2013.
- 74. Samimi, A. & **Ermagun, A**. Analysis of School Trip Mode Choice: Promoting Active Travel. 92<sup>nd</sup> Annual Meeting of the Transportation Research Board, Washington, D.C., January 2013.
- 75. Samimi, A. & **Ermagun, A.** Active Transportation Mode Choice Behavior across Genders in School Trips. 91st Annual Meeting of the Transportation Research Board, Washington, D.C., January 2012.

#### Book Chapters and Review: 8 Chapters

- 1. **Ermagun, A.**, & Levinson, D. (2021). Access and Transit System Performance. In Applications of Access, Edited by Levinson, D. & Ermagun, A. The University of Sydney.
- 2. Janatabadi, F., Tajik, N., & Ermagun, A. (2021). Transit Access Performance Across Chicago. In Applications of Access, Edited by Levinson, D. & Ermagun, A. The University of Sydney.

- 3. Palmateer, C., **Ermagun, A.**, Owen, A., & Levinson, D. (2021). The Role of Transit Service Area Definition for Access-based Evaluation. In Applications of Access, Edited by Levinson, D. & Ermagun, A. The University of Sydney.
- 4. Palmateer, C., Owen, A., & **Ermagun, A.**, (2021). Access-based Evaluation of Transit-Oriented Developments. In Applications of Access, Edited by Levinson, D. & Ermagun, A. The University of Sydney.
- 5. Borowski, E., **Ermagun, A.**, & Levinson, D. (2021). Disparity of Access: Variations in Transit Service by Race, Ethnicity, Income, and Auto Availability. In Applications of Access, Edited by Levinson, D. & Ermagun, A. The University of Sydney.
- 6. **Ermagun, A.** (2021). Transport Access and Health. International Encyclopedia of Transportation, Edited by Vickerman, R., 7, 335-340.
- 7. Arian, A., Ermagun, A., & Chiu, Y. (2018). An Empirical Investigation of the Reward Incentive and Trip Purposes on Departure Time Behavior Change. Advances in Transport Policy and Planning, Edited by Shiftan, Y. & Kamargianni, M., 1, 145-167.
- 8. **Ermagun, A.** (2015). Human Transit: How Clearer Thinking about Public Transit Can Enrich Our Communities and Our Lives by Jarrett Walker. Transportation Journal, 54(3), 405-407.

HONORS AND AWARDS	
Best Research on Innovation, Transportation Research Board Annual Meeting, Washington, D.C.	2020
ExCEEd Teaching Fellow, American Society of Civil Engineers, Fort Myers, Florida.	2019
Best Research on Innovation, Transportation Research Board Annual Meeting, Washington, D.C.	2018
Finalist in the 31st Competition for the Charles M. Tiebout Prize in Regional Science, 56th Annual Meeting of the Western Regional Science Association, Santa Fe, New Mexico.	2017
Best Poster Paper Award, Association of Collegiate Schools of Planning (ACSP) 56th Annual Conference, Portland, Oregon.	2016
John S. Adams Award, in Recognition of Outstanding Academic Achievement in the Field of Transportation Policy and Planning, Center for Transportation Studies, University of Minnesota.	2016
Best Poster Paper Award, Active Living Research Conference, Clearwater Beach, Florida.	2016
Fellowship Award, MIT Summer School, Modeling and Simulation of Transportation Networks, Massachusetts Institute of Technology	2015
Student Travel Award, 94th, 95th, and 96th Transportation Research Board Annual Meeting, Center for Transportation Studies, University of Minnesota.	2015-2017
Best Paper Award for 13th International Conference on Traffic and Transportation Engineering, Tehran.	2014
Travel Award, 13th World Conference on Transport Research (WCTR), Rio de Janeiro, Brazil.	2013

## **GRANTS AND CONTRACTS**

# Total Funding: \$2,856,181.00

National Oceanic and Atmospheric Administration. Integrating Environmental Justice into NWS Services to Reduce the Vulnerability of HUSVCs to Extreme Weather Events. Co-PI. Award: \$446,939.00.	2022-2025
Mississippi Department of Transportation. Mississippi State Summer Transportation Institute. PI. Award: \$53,094.00.	2022
United States Department of Agriculture and National Science Foundation. SCC-IRG Track 1: Reducing the Vulnerability of Disadvantaged Communities to the Impacts of Cascading Hazards under a Changing Climate. Co-PI. Award: \$1,700,000.00.	2021-2024
Mississippi Department of Transportation. Mississippi Transportation Research Center. PI. Award: \$359,959.00.	2018-2022
Mississippi Department of Transportation. Mississippi State Summer Transportation Institute. PI. Award: \$61,842.00.	2021
National Science Foundation. SCC-PG: Reducing the Vulnerability of Disadvantaged Communities to the Impacts of Cascading Hazards under a Changing Climate. Co-PI. Award: \$118,724.00.	2020-2021
Mississippi State University, Bagley College of Engineering, Community Resilience Working Group, PI. Award: \$5,000.00.	2020-2021
Mississippi State Board of Contractors. Investing in Mississippi's Current and Potential Construction Workforce Through Safety, Knowledge Transfer, and Promotional Tool Development Initiatives. Co-PI. Award: \$36,623.00.	2019-2021
William and Flora Hewlett Foundation. Replacing Traditional Textbooks with Open Educational Resource. PI. Award: \$4,000.00.	2019-2021
Mississippi Department of Transportation. Mississippi State Summer Transportation Institute. Co-PI. Award: \$60,000.00.	2019
City of Minneapolis. Evaluation of Bicycle Traffic Control Devices and Street Design Elements in Minneapolis. PI. Award: \$10,000.00.	2017

# TEACHING

Courses	Section	Evaluation
CE 3113 Transportation Engineering	Spring 2019	4.3 out of 5
CE 3113 Transportation Engineering	Fall 2019	4.8 out of 5
CE 3113 Transportation Engineering	Spring 2020	4.5 out of 5
CE 4173 and CE 6173 Travel Behavior Modeling	Spring 2020	4.7 out of 5
CE 4133 and CE 6133 Geometric Designs of Highways	Spring 2020	Not Performed
CE 8163 Public Transportation	Fall 2020	5 out of 5

CE 4163 and CE 6163 Urban Transportation Planning	Spring 2021	4.5 out of 5
CE 3113 Transportation Engineering	Summer 2021	4.9 out of 5
CE 4173 and CE 6173 Travel Behavior Modeling	Fall 2021	4.9 out of 5
CE 3113 Transportation Engineering	Spring 2022	4.8 out of 5
K-12 Outreach		
Mississippi Summer Transportation Institute. A two-week summer Federal Highway Administration and Mississippi Department of Audience: Rising high school sophomores and juniors mostly.		2022
Mississippi Summer Transportation Institute. A two-week summer camp sponsored by Federal Highway Administration and Mississippi Department of Transportation. Audience: Rising high school sophomores and juniors mostly.		2021
Mississippi Summer Transportation Institute. A two-week summer Federal Highway Administration and Mississippi Department of	1 1	2019
Audience: Rising high school sophomores and juniors mostly.	1	
Audience: Rising high school sophomores and juniors mostly.  ADVISING AND MENTORING		
ADVISING AND MENTORING		
ADVISING AND MENTORING Undergraduate Students		2019
ADVISING AND MENTORING  Undergraduate Students Megan Finney, Mississippi State University Abigail Musser, Mississippi State University (Honors Thesis)	•	2021
ADVISING AND MENTORING  Undergraduate Students Megan Finney, Mississippi State University		
ADVISING AND MENTORING  Undergraduate Students Megan Finney, Mississippi State University Abigail Musser, Mississippi State University (Honors Thesis)		2021
ADVISING AND MENTORING  Undergraduate Students Megan Finney, Mississippi State University Abigail Musser, Mississippi State University (Honors Thesis) Kiara Batson, Mississippi State University		2021
ADVISING AND MENTORING  Undergraduate Students Megan Finney, Mississippi State University Abigail Musser, Mississippi State University (Honors Thesis) Kiara Batson, Mississippi State University  Master of Science Student Advisees		2021 2021
ADVISING AND MENTORING  Undergraduate Students Megan Finney, Mississippi State University Abigail Musser, Mississippi State University (Honors Thesis) Kiara Batson, Mississippi State University  Master of Science Student Advisees Christopher Melin, Mississippi State University  Doctoral Student Advisees Fatemeh Janatabadi, Mississippi State University		2021 2021 2019-Present 2021-Present
ADVISING AND MENTORING  Undergraduate Students Megan Finney, Mississippi State University Abigail Musser, Mississippi State University (Honors Thesis) Kiara Batson, Mississippi State University  Master of Science Student Advisees Christopher Melin, Mississippi State University  Doctoral Student Advisees Fatemeh Janatabadi, Mississippi State University Jacquelyn Erinne, Mississippi State University		2021 2021 2019-Present 2021-Present 2020-2022
ADVISING AND MENTORING  Undergraduate Students Megan Finney, Mississippi State University Abigail Musser, Mississippi State University (Honors Thesis) Kiara Batson, Mississippi State University  Master of Science Student Advisees Christopher Melin, Mississippi State University  Doctoral Student Advisees Fatemeh Janatabadi, Mississippi State University		2021 2021 2019-Present 2021-Present

# SERVICES AND PUBLIC OUTREACH

# Service to the Discipline

Editorial Duties	
Co-Founder, Findings Press	2018
Board of Directors, Findings Press	2018-Present
Editor, Resilience Findings	2021-Present
Editorial Advisory Board, Journal of Transport and Land Use	2021-Present
Editorial Advisory Board, Transport Reviews	2021-Present
Handling Editor, Transportation Research Record	2021-Present
Editorial Advisory Board, Journal of Transport Geography	2022-Present
Committee Memberships Member, Transportation Research Board, Standing Committee on Women and Gender in Transportation (AME20)	2019-Present
Research Coordinator, Transportation Research Board, Standing Committee on Women and Gender in Transportation (AME20)	2019-Present
Affiliated Member, American Society of Civil Engineers	2018-Present
Corresponding Member, American Society of Civil Engineers, Committee on Transportation Policy	2020-Present
Member, Transportation Research Board, Standing Committee on Urban Freight Transportation (AT025)	2021-Present
Board of Governors, Transportation & Development Institute (T&DI), American Society of Civil Engineers (ASCE)	2021-2022
Organization of Symposia, Sessions, Seminars, and Workshops Co-organizer, Bridging Transportation Researchers (BTR) Conference	2019-2022
Co-chair, World Symposium on Transport and Land Use Research	2020-2021
Chair, Community Resilience Working Group, Mississippi State University	2020-2022
Moderator, Transportation Research Board, Women and Gender in Transportation Webinar Series	2020
Panelist, National Strategic Planning & Analysis Research Center, Mississippi State University	2019
Discussant, 56th Annual Meeting of the Western Regional Science Association, Santa Fe, New Mexico	2017

#### Reviewer for Refereed Journals

Cities; Journal of Travel Behaviour and Society; Journal of Transportation Research Part A: Policy and Practice; Journal of Transportation Research Part B: Methodological; Journal of Transportation Research Part D: Transport and Environment; Journal of Transportation Research Part C: Emerging Technologies; Urban Studies; Journal of Transport Geography; Journal of Transportation Letters; Journal of Transport and Land Use; Journal of Accident Analysis & Prevention; Journal of European Transport Research Review; International Journal of Sustainable Transportation; Journal of Transportation Research Record; Journal of Transportmetrica A: Transport Science; British Medical Journal (BMJ) Open; Journal of Transport & Health; Journal of Marketing for Higher Education; Sustainability: An Open Access Journal from MDPI; Sensors: An Open Access Journal from MDPI; Research in Transportation Economics; Case Studies in Transport Policy; Journal of Public Transportation; Transport Findings; IEEE Access; Journal of Intelligent Transportation Systems; Transport Reviews; Transport Policy

## Service to the University

Curriculum Development, Developed teaching materials, curriculum, and texts for CE 4173 and CE 6173 Travel Behavior Modeling and Forecasting	2019
Faculty Advisor, Mississippi State University Chapter of the Institute of Transportation Engineers (ITE), Mississippi State University	2019-Present
Graduate Teaching Assistant Workshop Classroom Evaluations, Mississippi State University	2020
Community Resilience Working Group, Mississippi State University	2020
Undergraduate Students Advising, Mississippi State University	2018-Present
Search Committee Member for the Director of Richard A. Rula School of Civil and Environmental Engineering, Mississippi State University	2021
Search Committee Member for Clinical Assistant Professor, Richard A. Rula School of	2019

Interviews and Media Appearances	
Mississippi State University Newsroom, "Mississippi State takes first place in the Deep South Traffic Bowl," by Emily Cambre.	2022
Mississippi State University Newsroom, "MSU leads new \$1.7 million research project to help disadvantaged communities confronting wildfires and related cascading hazards," by Allison Matthews.	2021
Mississippi State University Newsroom, "Bagley Students Continue Winning Streak at ITE Competition," by Abbie Kate Hancock.	2021
NEXUS. A Magazine by NSPARC at Mississippi State University, "The need for integrated data in disasters," by Laura McPhail.	2019

Minnesota Daily, "U study says transit does not have impact on public health," by Kristina Busch.	2016
Catalyst by Center for Transportation Studies, University of Minnesota, "Transit makes you short": On health impact assessment of transportation and the built environment," by Pamela Snopl.	2016
PS News Features, Independent News for the Australian Public Service, "Does using public transport make the community healthier?" by Alan Davies.	2015