

Curriculum Vitae

Notarization. I have read the following and certify that this *curriculum vitae* is a current and accurate statement of my professional record.

Signature *Sevgi Erdogan*

Date 03/12/2019

I. Personal Information

I.A. 107325419, Erdogan, Sevgi, serdogan@umd.edu, 301-405 9877
<https://orcid.org/0000-0002-9706-120X>
<http://www.umdsmartgrowth.org/people/sevgi-erdogan/>
<https://mti.umd.edu/affiliates?page=2>

I.B. Academic Appointments at UMD

National Center for Smart Growth Research and Education
Assistant Research Professor, Jun. 2018- Present
Affiliate of Maryland Transportation Institute, Apr. 2018-Present
Assistant Research Scholar, Jun. 2015- Jun. 2018
Faculty Research Associate, Nov. 2011- Jun. 2015

I.C. Administrative Appointments at UMD

NA

I.D. Other Employment

2003-2011 Graduate Research Assistant, Civil and Environmental Eng. Dept., University of Maryland, College Park, Maryland
2008-2010 Graduate Research Assistant, Dept. of Transportation Services, University of Maryland, College Park, Maryland
1998-2000 Graduate Research/Teaching Assistant, Civil and Environmental Eng. Dept. Istanbul Technical University, Istanbul, Turkey
1996-1998 Engineer, Project Planning and Cost Management.YUKSEL PROJECT International Co. & LOUIS BERGER Joint Venture, Istanbul, Turkey.

I.E. Educational Background

<i>Istanbul Technical University, Turkey</i>	<i>Geodesy and Photogrammetry Eng. B.S. 1994</i>
<i>Istanbul Technical University, Turkey</i>	<i>Civil Engineering- Transportation, M.S. 1998</i>
<i>University of Delaware, Newark, DE</i>	<i>Food and Resource Economics-OR, M.S. 2001</i>
<i>University of Maryland, College Park, MD</i>	<i>Civil Engineering-Transportation, Ph.D.2011</i>

I.F. Continuing Education

NA

I.G. Professional Certifications, Licenses, and Memberships

Member, National Academies of Science, Transportation Research (TRB).
Member, National Academies of Science, Transportation Research (TRB), Standing Committee on Network Modeling ADB(30).
Member, Institute for Operations Research and Management Science (INFORMS), 2007, 2009, 2015 and 2018.

Member, EURO Working Group on Transportation (The Association of European Operational Research Societies), since 1999.

Member, Baltimore-Washington Electric Vehicle Initiative (BEVI) and Maryland EV (MDEV), an electric vehicle education and outreach resource serving Maryland and the Mid-Atlantic region (2016- 2017).

Member, Women's Transportation Seminar, WashingtonD.C. Chapter, Member, 2007.

Member, Institute of Transportation Engineers Maryland Student Chapter, (ITE-MD) at UMD, 2004- 2011.

Member, ITS America Maryland Student Chapter, (ITS-MD) at UMD, Founding Member, 2004- 2011.

Member, Chamber of Survey and Cadaster Engineers, Istanbul, Turkey, since 1994.

II. Research, Scholarly, Creative and/or Professional Activities

II.A.1. Books (Include full citation information and ISBN)

II.A.2. Books Authored (specify original or revised edition)

II.A.3. Books Edited

II.A.4. Books Translated (as translator)

II.A.5. Major Reference Works

Sadabadi, K. F., Erdogan, S., Jacobs, T., H., Ducca, F. W., and Zhang, L. Local Methods for Modeling, Economic Evaluation, Justification and Use of the Value of Travel Time Reliability in Transportation Decision Making. VOLUME 1: FINAL REPORT. Prepared for The Strategic Highway Research Program 2, Transportation Research Board of The National Academies by University of Maryland Center for Advanced Transportation Technology and National Center for Smart Growth, College Park, Maryland, August 2014.

II.A.6. Exhibition Catalogs

II.A.7. Other

II.B. Chapters

II.B.1. Books

Erdogan, S., Liu, C. Ma, T. The Effects of Bike Share on Transit Ridership. Working paper for chapter in book on transit-oriented development in Washington, DC and Paris as final product of the symposium titled the Transit, Development, and Urban Form with the visiting LABEX consortium of research universities in Paris, France. (In Press, in French)

II.B.2. Collections

NA

II.B.3. Encyclopedia

NA

II.B.4. Series

NA

II.B.5. Research Paper

NA

II.B.6. Other

NA

II.C.

II.C.1.

Refereed Journals

Refereed Journal Articles

1. Engelberg, D., Erdogan, Avin, U., Moeckel, R., Shahumyan, H., Ducca, F.W., Knaap, G.J., Finio, N., Exploring the future of the Baltimore-Washington Region: What Can Exploratory Scenario Analysis Tell Us?, (under review) *Journal of American Planning Association (JAPA)*.
2. Zhenbao, W., Erdogan, S. Ducca, F., Evaluating Efficacy of the Zero-Emission Vehicle Deployment Strategies: Maryland Case, (under review) *Sustainability*.
3. Fan, W., Erdogan, S., Welch, T.F., Ducca, F.W., 2017. Use of Statewide Models as a Decision Tool for Zero-Emission Vehicles Deployment (Transportation Research Record, 2828, 78-86).
4. Fan,W., Jiang, X., Erdogan, S. Sun, Y., 2016. Modeling and Evaluating FAIR Highway Performance and Policy Options. *Transport Policy*, 48, 156-168.
5. Liu, C., Erdogan, S., Ma, T., Ducca, F.W. How to Increase Rail Ridership in Maryland? Direct Ridership Models (DRM) for Policy Guidance. *ASCE's Journal of Urban Planning and Development*, 10.1061/(ASCE)UP.1943-5444.0000340 , 04016017.
6. Ma,T., Liu, C., Erdogan, S., 2016. Bicycle Sharing and Transit: Does Capital Bikeshare Affect Metrorail Ridership in Washington, D.C.? *Transportation Research Record*, 2534, 1-9.
7. Erdogan, S., Cirillo, C., Tremblay, J-M., 2015. Ridesharing as a Green Commute Alternative: A Case Study at the University of Maryland Campus. *International Journal of Sustainable Transportation*, 9 (5), 377-388.
8. Erdogan, S., Welch, T.F., Knaap, G.J., Ducca, F.W., 2013. What to Expect in 2030: The Impacts of Fuel Prices and Fuel Efficiency on Land Use and Transportation. *Transportation Research Record*, 2397, 89-98.
9. Erdogan, S. Miller-Hooks, E., 2012. A Green Vehicle Routing Problem. *Transportation Research Part E: Logistics and Transportation Review*, 48(1), 100-114. (Top most cited and among most downloaded articles list (last viewed on 11/2/2017)).
10. Dong, J., Mahmassani, H.S., Erdogan, S., Lu, C-C., 2011. State- Dependent Pricing for Real-Time Freeway Management: Anticipatory versus Reactive Strategies. *Transportation Research Part C: Emerging Technologies*, 19, 644-657.
11. Zhou, X., Erdogan, S., Mahmassani, H.S., 2006. Dynamic Origin-Destination Trip Demand Estimation for Subarea Analysis. *Transportation Research Record*, 1964, 176-184.

12. Aull-Hyde R., Erdogan, S., Duke, J.M., 2006. An Experiment on the Consistency of Aggregated Comparison Matrices in AHP, European Journal of Operational Research, 171(1), 290-295.

II.C.2. Invited Reviews of Journal Articles

II.C.3. Perspectives, Opinions, and Letters

NA

II.C.4. Other

NA

II.D. Published Conference Proceedings

II.D.1. Refereed Conference Proceedings

1. Fan W., Erdogan, S., Welch, T.F., Ducca, F.W. Use of Statewide Models as a Decision Tool for Zero-Emission Vehicles Deployment. 96th Annual Meeting of the Transportation Research Board, Washington, D.C. January 8-12, 2017.
2. Fan, W., Erdogan, S., Welch, T.F. Assessing HOV to HOT Lane Conversion: A Multi-scale Analysis in Maryland. 95th Annual Meeting of the Transportation Research Board, Washington, D.C. January 10-14, 2016.
3. Fan,W., Erdogan, S., Jiang, X., Sun, Y., 2016. Modeling and Evaluating FAIR Highway Performance and Policy Options. 95th Annual Meeting of the Transportation Research Board, Washington, D.C. January 10-14, 2016.
4. Fan,W., Jiang, X., Erdogan, S., Gu, W. Land-use Policy for Transit Station Areas: Park-and-ride versus Transit-oriented Development. 95th Annual Meeting of the Transportation Research Board, Washington, D.C. January 10-14, 2016.
5. Erdogan, S., Patnam, K., Ducca, F.W., Zuxuan, D., Yang, D.,Wang, X., Mahapatra, S. Statewide Dynamic Traffic Routing For Transportation Planning: Maryland Case. 94th Annual Meeting of the Transportation Research Board, Washington, D.C. January 12-16, 2015.
6. Erdogan, S., Zhou, X., Liu, J. A Simplified Dynamic Traffic Assignment Framework for Statewide Traffic Modeling. 94th Annual Meeting of the Transportation Research Board, Washington, D.C. January 12-16, 2015.
7. Liu, C., Erdogan, S., Ma, T., Ducca, F.W. How to Increase Rail Ridership in Maryland? Direct Ridership Models (DRM) for Policy Guidance, 93rd Annual Meeting of the Transportation Research Board, Washington, D.C. January 12-16, 2014.
8. Avin, U., Welch, T. F., Knaap, G.J, Ducca, F.W., Mishra, S., Chiu, Y., Erdogan, S. Even Smarter Growth? Land Use, Transportation and Greenhouse Gas in Maryland, 93rd Annual Meeting of the Transportation Research Board, Washington, D.C., January 12-16, 2014.

9. Erdogan, S., Welch, T., Knaap, G.J., Ducca, F.W. What to Expect In 2030: The Impacts of Fuel Prices and Fuel Efficiency on Land Use and Transportation. Association of European Schools of Planning Conference. Ankara, Turkey, July 11-15, 2012.
10. Dong, J., Erdogan, S., Lu, C-C., Mahmassani, H.S. State-Dependent Pricing for Real-Time Freeway Management: Static, Reactive and Anticipatory. 86th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2007.
11. Zhou, X., Erdogan, S., Mahmassani, H.S. Dynamic Origin-Destination Trip Demand Estimation for Subarea Analysis. 85th Annual Meeting of the Transportation Research Board, January 22-26, 2006, Washington D.C.
12. Erdogan, S., Zhou, X. and Mahmassani, H.S. A DTA-based Network Extraction and Zonal Aggregation Procedure for Subarea Analysis of ITS Deployment Alternatives. Proceedings of the 12th World Congress on Intelligent Transportation Systems, 4972-4990, November 2005.
13. Mahmassani, H.S., Zhou, X. and Erdogan, S. Zonal Aggregation and Network Extraction for Subarea Analysis Using a Dynamic Assignment Procedure. 84th Transportation Research Board Annual Meeting, January 9-13, 2005, Washington D.C.
14. Erdogan, S., Demand Management By ITS: Area Pricing for Improving Sustainability of Transit Demand. 9th Meeting of the EURO Working Group on Transportation, Proceedings of the Conference, 10-13 June 2002, Bari, Italy.
15. Erdogan, S. An Evaluation Framework for ITS Technologies. Fifth International Congress on Advances in Civil Engineering, September 25-27, 2002, Istanbul Technical University, Istanbul, Turkey.
16. Dell'Orco, M., Erdogan, S., The Value-of-time in Peak-load Pricing of Two Bridges on Bosphorus: a Fuzzy Approach, 8th Meeting of the Euro Working Group on Transportation, Proceedings of the Conference, 11-14 September 2000, Rome, Italy.
17. Erdogan, S. and Hengirmen, S., Evolution of A Car Park Study: A Shopping Centre in Gaziantep, Fifth International Conference on Urban Transport and the Environment for the 21st Century. Proceedings of the Conference, 259-266, 2000, Rhodes, Greece.
18. Erdogan, S., Gedizlioglu, E., Akad, M., Dynamic Model Approach For Congestion Management: Bosphorus Crossing Case. Modeling and Management in Transportation, Proceedings of the Conference, pp: 125-130, October 1999, Poznan, Poland.
19. Akad, M., Iyınam, F., Erdogan, S., Possible Effects of a Bus Lane across the Bosphorus Bridge, Modeling and Management in Transportation, Proceedings Book, 213-218, October 1999, Poznan, Poland.
20. Seckin, I., Alpkokin, P., Erdogan, S., Examination of Passenger Demand in Stations of Light Rail System of Istanbul. II. International Symposium and Exhibition of

Transportation, Proceedings of the Conference, 123-137, October 1-4, 1998, Istanbul, Turkey.

II.D.2. Non-Refereed Conference Proceedings

1. Knaap, G.J., Avin, U., Engelberg, D., Erdogan, S., Ducca, F.W., Shahumyan, H., Moeckel, R., Demographic Change, Autonomous Vehicles, & Energy Price Volatility: An Exploratory Scenario Exercise for a Sustainable Baltimore-Washington Region, Association of Collegiate Schools of Planning Conference, Denver, Colorado, October 12-15, 2017.
2. Engelberg, D., Erdogan, S., Knaap, G.J., Modeling the Land Use Impacts of Autonomous Vehicles, *Association of Collegiate Schools of Planning Conference*, Denver, Colorado, October 12-15, 2017.
3. Erdogan, S., Liu, C. and Ma, Ting. The Effects of Bike Share on Transit Ridership, Transit. *Development, and Forme Urbaine: Washington et Paris Workshop*, Washington, D.C. October 16-19, 2014.
4. Erdogan, S., Mishra, S., Welch, T.F., Wang, Y., *Knaap, G and Ducca, F. An Integrated Land Use and Transportation Model: Lessons Learned from Maryland Scenario Planning. *Association of Collegiate Schools of Planning Conference*. Cincinnati, Ohio, November 1-4, 2012.

II.D.3. Other
NA

II.E. Conferences, Workshops, and Talks

II.E.1. Keynotes
NA

II.E.2. Invited Talks

1. An Overview of Smart Growth in Maryland, Seminar to a group of academics, planners and government employees from multiple municipalities in Kyoto Prefecture, Japan, October 16, 2017.
2. A Sustainable Future: How can the Transportation Sector Pave the Way?, Seminar to Civil and Environmental Engineering Department, University of New Hampshire, Durham, February 16, 2017.
3. Advances in Transportation, and Land Use Planning for a Sustainable Future, Lecture to Local Government Officers from Anhui Province as part of Anhui Industrial Upgrade Executive Development Program, Organized by the UMD Office of China Affairs, College Park, MD, November 15, 2016.
4. Transportation Models and Sustainability, Half-day long seminar, Organized by China/Maryland Triway Training Program, College Park, MD, October 3, 2016.

5. Smart Growth, Sustainable Cities: the US Approach, Day-long seminar to Beijing Commission of Urban Planning Group (25), Organized by the UMD Maryland China Initiative, College Park, MD, November 11, 2015.
6. Pathways to Green Logistics: Past, Present and Future of the Green Vehicle Routing Problem (GVRP). Invited session talk in the Transportation Science and Logistics (TSL) track for the INFORMS (the Institute for Operations Research and the Management Sciences) Conference, Philadelphia, November 1-4, 2015.
7. Invited discussant for paper 'Densification or modal transfer? The contradictory tensions that affect TOD revealed by suburban mobility and parking policies' by T. Delaunay and N. Baron, at Transit. Development, and Forme Urbaine: Washington et Paris Workshop, Paris, March 16-18, 2015.
8. Tools to Support Transportation Emissions Reduction Efforts: A Multifaceted Approach. Lecture to Environmental Protection Department of Anhui Province as part of Metropolitan Area Air Pollution Control Training Program, Organized by the UMD Maryland China Initiative, College Park, MD, December 8, 2014.
9. Smart Growth in the US. University of Maryland, Lecture to Kunming Institute of Environmental Science Executive Education Program on Environmental Impact Assessment, organized by the UMD Maryland China Initiative, College Park, MD, October 28, 2014.
10. Maryland Statewide Transportation Model, Florida International University, ITE-Student Chapter Seminar, Miami, FL, November 20, 2012.
11. The National Center for Smart Growth Research and Education: Bringing Intelligence to Smart Growth, the World Bank Annual Sustainability Meeting, Annapolis, MD, February 28, 2012.

II.E.3. Refereed Presentations

(* Indicates the presenter, no * indicates poster presentations)

1. *Erdogan, S., Capar, I., Capar, I., Nejad, M., M., Planning for Electric Vehicles: Maryland Case Study, INFORMS Annual Meeting, November 4-7, 2018, Phoenix, AZ. (Invited Session)
2. Zhou, Z., Erdogan, S., G., Examine the U.S. Ridesourcing Market Using 2017 NHTS, Association of Collegiate Schools of Planning Conference, Denver, Colorado, October 25-28, 2018, Buffalo, NY.
3. *Knaap, G.J., Avin, U., Engelberg, D., Erdogan, S., Ducca, F.W., Shahumyan, H., Moeckel, R., Demographic Change, Autonomous Vehicles, & Energy Price Volatility: An Exploratory Scenario Exercise for a Sustainable Baltimore-Washington Region, Association of Collegiate Schools of Planning Conference, Denver, Colorado, October 12-15, 2017.

4. *Engelberg, D., Erdogan, S., Knaap, G.J., Modeling the Land Use Impacts of Autonomous Vehicles, Association of Collegiate Schools of Planning Conference, Denver, Colorado, October 12-15, 2017.
5. *Erdogan, S., Engelberg, D., Knaap, G.J., Ducca, F.W., Modeling Autonomous Transit Service in Statewide Transportation Networks, the 16th TRB National Transportation Planning Applications Conference, Raleigh, North Carolina May 14-18, 2017.

Also invited to be presented at the 97th Annual Meeting of the Transportation Research Board, Washington, D.C. January 7-11, 2018.

6. *Erdogan, S., Engelberg, D., Knaap, G.J., Ducca, F.W., An Integrated Land Use and Transportation Model For Anticipating Impacts Of Autonomous Vehicles On Location Choices, the 16th TRB National Transportation Planning Applications Conference which will be held in Raleigh, North Carolina May 14-18, 2017.
7. *Sadabadi, K. F., Jacobs, T., Erdogan, S., Ducca, F. W., and Mahapatra, S. Value of Travel Time Reliability and its Use in Transportation Decision Making: A Data-Driven Approach. NATMEC 2016 Improving Traffic Data Collection, Analysis, and Use Conference, Miami, FL, May, 1-4, 2016
8. *D. Engelberg, S. Erdogan, H. Shahumyan, R. Moeckel, D. Yang, F. Ducca, and G. Knapp. Transportation Model Integration to Measure Sustainability. 6th Transportation Research Board Conference on Innovations in Travel Modeling (ITM), Denver, CO, May, 1-4, 2016.
9. *Erdogan, S., Fan, W., Zhou, X. How to Design an Effective Off-hour Delivery (OHD) Program: A Network Design Perspective. The INFORMS Annual Conference, Optimization/Network Optimization Cluster, Philadelphia, PA, November 1-4, 2015.
10. Erdogan, S., Patnam, K., Zhou, X., *Ducca, F., Mahapatra, S., Deng, Z. and Liu, J. Dynamic Traffic Assignment Approaches for Statewide Transportation Planning and Operations: Maryland Case. The 15th Transportation Research Board, Planning Applications Conference, Atlantic City, NJ, May 17-21, 2015.
11. *Erdogan, S., Deng, Z., Yang, D., Wang, X., Ducca, F. and Patnam, K. Large Scale Dynamic Traffic Routing for Statewide Transportation Planning. 4th Transportation Research Board Conference on Innovations in Travel Modeling (ITM), Baltimore, MD, April 27-30, 2014.
12. *Erdogan, S., Patnam, K., Ducca, F. W., Zhou, J., Yang, D., Zhang, L., and Mollanejad, M. Large Scale Dynamic Traffic Routing for Statewide Transportation Planning: Application of TRANSIMS in Maryland. Conference on Agent-Based Modeling in Transportation Planning and Operations. Blacksburg, VA, September 30-October 2, 2013.
13. Erdogan, S., Mishra, S., Welch, T.F., Wang, Y., *Knaap, G and Ducca, F. An Integrated Land Use and Transportation Model: Lessons Learned from Maryland Scenario

Planning. Association of Collegiate Schools of Planning Conference. Cincinnati, Ohio, November 1-4, 2012.

14. *Erdogan, S. and Miller-Hooks, E. Optimization in Operations of Alternative Fuel-Powered Fleets. INFORMS Annual Meeting, October 10-14, 2009, San Diego, CA.
15. *Mahmassani, H.S., Dong, J., Erdogan, S., Lu, C-C. Online DTA and Anticipatory for Real-time Traffic Management. INFORMS Annual Meeting, November 4-7, 2007, Seattle, WA.

II.E.4. Refereed Workshop Papers

1. Zhou, Z., Erdogan, S., G., Examine the U.S. Ridesourcing Market Using the 2017 NHTS Data, National Household Travel Survey (NHTS) Data for Transportation Applications Workshop, August 8-9, 2018, Washington, D.C.

II.E.5. Refereed Abstracts
NA

II.E.6. Refereed Posters

1. Engelberg, D., Erdogan, S., Knaap, G.J. Collaborating for Climate: An Integrated Modeling Approach, the 96th Annual Meeting of the Transportation Research Board, Washington, D.C. January 8-12, 2017.

II.E.7. Refereed Panels
NA

II.E.8. Non-Refereed Presentations

1. Erdogan, S., PRESTO, Prospects for Regional Sustainability Tomorrow, MAPP of the Future: A Research and Creative Practice Symposium, University of Maryland, College Park, April 13, 2018.
2. Erdogan, S. Environmental impact models BEM (Building Emissions Model) and MEM (Mobile Emissions Model). SESYNC Project 2nd Workshop, Annapolis, MD, August 3-5, 2015.
3. Sevgi Erdogan, Possibilities for a Bike Rental /Share /Loan Program, Bicycle Advisory Group Meeting, University of Maryland, November 3, 2008, College Park, MD.
4. Mahmassani, H.S., Erdogan, S., Lu, C-C. Evaluation of Road Pricing Schemes for Transportation System Management. Invited Brown Bag Luncheon seminar series, The World Bank, August 29, 2005, Washington D.C.

II.E.9. Non-Refereed Workshop Papers

1. Erdogan, S., Liu, C. and Ma, Ting. The Effects of Bike Share on Transit Ridership, Transit. Development, and Forme Urbaine: Washington et Paris Workshop, Washington, D.C. October 16-19, 2014.

II.E.10. Non-Refereed Abstracts

II.E.11. NA
Non-Refereed Posters

II.E.12. NA
Non-Refereed Panels
NA

II.E.13. **Symposia**
Invited Participant, Imagine the Future: Conceptualizing Infrastructure Systems for an Interconnected World, George Mason University (October 8-9, 2017). The outcome of the symposium was an Ocean-based floating communities (OBFCs) design which can be found at <http://civil.gmu.edu/imagine/outcome-2017.html>

II.E.14. **Workshops**

II.E.15. Colloquia

II.E.16. Other

II.F. Professional and Extension Publications

II.F.1. Reports and Non-Refereed Monographs

1. Congestion in Baltimore, Washington, Richmond Region, Final Report, Spring 2019. Prepared for Greater Washington Partnership.
2. Contributed in preparation of the Capital Region Blueprint for Regional Mobility, funded by the Greater Washington Partnership, the project summary report can be found at (see page 31)
http://www.greaterwashingtonpartnership.com/blueprint/dist/GWP_report_00i.pdf
3. Engaging the Future: Baltimore-Washington 2040, by the National Center for Smart Growth Research and Education (NSCG), April 2018. Available online at
<http://www.umdsmartgrowth.org/wp-content/uploads/2018/04/39317-UMD-Printing-Presto-Long-report-FINAL-1.pdf>
4. Purple Line Economic Development Report (Draft), Prepared for Maryland Dept. of Transportation, by the National Center for Smart Growth Research and Education (NSCG), June 2017. Available online at http://purplelinecorridor.org/wp-content/uploads/2018/08/103017_PurpleLineEDReportNCSG.pdf
5. Erdogan, S., Ducca, F.W., Pandit, D. Implementing a Simplified Dynamic Traffic Assignment Model, Phase-1. Report prepared by the National Center for Smart Growth Research and Education at the University of Maryland for the Maryland State Highway Administration, funded by MD State Highway Administration and the National Transportation Center at the University of Maryland, November 2016.
6. Erdogan, S., Fan, W., and Ducca, F.W., Modeling Support for Local Jurisdictions. Report prepared by the National Center for Smart Growth Research and Education at the University of Maryland for the Maryland Department of Environment, July 2015.
7. Sadabadi, K. F., Erdogan, S., Jacobs, T., H., Ducca, F. W., and Zhang, L. Local Methods for Modeling, Economic Evaluation, Justification and Use of the Value of

Travel Time Reliability in Transportation Decision Making. VOLUME 1: FINAL REPORT. Prepared for The Strategic Highway Research Program 2, Transportation Research Board of The National Academies by University of Maryland Center for Advanced Transportation Technology and National Center for Smart Growth, College Park, Maryland, August 2014. Available online at <http://www.trb.org/Main/Blurbs/171444.aspx>

8. Erdogan, S., Ducca, F.W., Patnam, K., Zuxuan, D., Yang, D., and Wang, X., Inclusion of Time Dependent Networks in Maryland Statewide Transportation Model: Proof of Concept. Maryland SHA Research Report MD-14-3-1 by the national Center for Smart Growth Research and Education at the University of Maryland, Final Report, July 2014. Available online at http://www.smartgrowth.umd.edu/assets/tprg/dta_report-finaldraft-07-15-14-submitted.pdf
9. Erdogan, S., Ducca, F.W., and Mollanejad, M. Inclusion of Time Dependent Networks in MSTM. Prepared by the National Center for Smart Growth Research and Education at the University of Maryland for Maryland SHA, Interim Report, June 2013.
10. Ducca, F. W., Erdogan, S., Gallivan, P., Knaap, G. J., Mishra, S., Petto, G., Wang, Y., and Welch T.F. Maryland Scenarios Project Draft Final Year 3 Report. Prepared for Maryland Dept. of Transportation, National Center for Smart Growth Research and Education (NSCG), Transportation Policy Research Group (TPRG) Report, August 2012. Available online at <http://www.umdsmartgrowth.org/projects/past-projects/maryland-scenario-project/>
11. Erdogan, S. and Mahmassani, H.S. Application of DYNASMART-P Methodology for Transportation System Redundancy Analysis in Greater Baltimore Region. Project Report, Submitted to the Baltimore Metropolitan Council, University of Maryland, April 2007.
12. Mahmassani, H.S., Sbayti, H., Erdogan, S., Lu, C.-C. and Dong, J. DYNASMART-P 1.4 User's Guide. US DOT/ FHWA Final Report. Maryland Transportation Initiative, University of Maryland, 2007.
13. Mahmassani, H.S., Sbayti, H., Erdogan, S., Lu, C.-C. DYNASMART-P 1.2 User's Guide and Programmer's Guide. US DOT/ FHWA Final Report. Maryland Transportation Initiative, University of Maryland, 2006.
14. Mahmassani, H.S., Zhou, X., Zhang, K., Erdogan, S. and Hamdar, S.H. DYNASMART-P Integrated Corridor Management Benefits Analysis. Final Research Report, Maryland Transportation Initiative, University of Maryland, 2005.
15. Erdogan, S., Mahmassani, H.S. A General Procedure for Preparing a Network in DYNASMART-P Format, prepared for Southern California Association of Governments, Maryland Transportation Initiative, University of Maryland, August 2003.

16. Mahmassani, H. S., Qin, X., Zhou, X., Mahfoud, R. H., Lu, C.-C., Erdogan, S. TMC Evaluation Report For A Real-Time DTA System Prototype: Phase 1.5B. Technical Report, Maryland Transportation Initiative, University of Maryland, College Park, 2003.

- II.F.2. Pre-print / Working Paper (*Not Work in Progress*)
- II.F.3. Legal Briefs
- II.F.4. Policy Briefs
- II.F.5. Refereed Extension Publications
- II.F.6. Non-Refereed Extension Publications
- II.F.7. Refereed Curricula
- II.F.8. Non-Refereed Curriculum
- II.F.9. Non-Refereed Journal Articles
- II.F.10. Other

II.G. Book Reviews, Notes, and Other Contributions

- II.G.1. Book Reviews
- II.G.2. Essays
- II.G.3. Notes
- II.G.4. Manuals
- II.G.5. Other

II.H. Completed Creative Works

- II.H.1. Digital Media (e.g., CDs, DVDs)

II.H.2. Datasets

Green Vehicle Routing Problem Instance Dataset

- II.H.3. Constructed Projects
- II.H.4. Demonstrations
- II.H.5. Inventions
- II.H.6. Original Plans and Designs

II.H.7. Photography

Transportation and Traffic Theory. Flow, Dynamics and Human Interaction. 16th International Symposium on Transportation and Traffic Theory, Symposium Program Cover Photograph, 2005.

Book cover photograph, Turkish translation of Feminism and the Mastery of Nature by Val Plumwood, published by Metis Publishing House, <http://www.metiskitap.com/catalog/book/4600>

- II.H.8. Software and Applications

II.H.9. Websites

Created first version of University of Maryland Campus Bike Program (BikeUMD) Blog and commuting route map from various destinations.

- II.H.10. Exhibitions and Installations
- II.H.11. Curatorial Practice
- II.H.12. Performance or Interpretation – Performing Arts

- II.H.13. Direction – Performing Arts
- II.H.14. Production – Performing Arts
- II.H.15. Costume, Stage, Multimedia, and Theatrical Design
- II.H.16. Artistic and Graphic Design
- II.H.17. Dramaturgy
- II.H.18. Artwork
- II.H.19. Choreography
- II.H.20. Playwriting, Screenwriting, and Musical Composition
- II.H.21. Works of Creative Writing
- II.H.22. Performance or Interpretation – Film, Video, and Multimedia
- II.H.23. Direction – Film, Video, and Multimedia
- II.H.24. Production – Film, Video, and Multimedia
- II.H.25. Citations and Reviews
- II.H.26. Other

II.I. Significant Works in Public Media

Specify the following: Title, Publication/Media Name, Contributors, Types (print, online, broadcast, video, documentary)

- II.I.1. Explanatory, Investigative, or Long-Form Journalism
- II.I.2. Other Significant Journalism
- II.I.3. Commentary / Analysis
- II.I.4. Interactive Online Database
- II.I.5. Radio Series
- II.I.6. TV / Radio Broadcast
- II.I.7. Ongoing Articles / Columns in Newspapers
- II.I.8. Ongoing Articles / Columns in Magazines
- II.I.9. Ongoing Articles / Columns in Newsletters
- II.I.10. Other

II.J. Sponsored Research and Programs – Administered by the Office of Research Administration (ORA)

List source, title, amount awarded, time period and role (i.e., principal investigator or co-investigator) in reverse chronological order or its inverse. If there are co-investigators, please list them.

II.J.1. Grants (Selected)

As PI/Co-PI:

Co-PI: Development of a Prototype of an Integrated Modeling System for Socio-Economic and Environmental Analysis to Promote Sustainability at the Regional Level, the National Socio-Environmental Synthesis Center (SESYNC), 2014-2016, funding for two graduate students, three international workshops and high performance computing support. (Co-PI, Gerrit Knaap)

PI: Implementing a Simplified Dynamic Traffic Assignment Model, Maryland State Highway Administration (SHA), and National Transportation Center, November, 2014 – November, 2015, \$60,153.

PI: Inclusion of Time Dependent Networks in Statewide Travel Demand Models, Maryland State Highway Administration (SHA) and Federal Highway Administration (FHWA), October, 2012 - April, 2014, \$200,000. (Co-PI, Fred Ducca)

As Project Manager and Senior Scientist:

Project Manager: Evaluating Richmond-Washington-Baltimore Megaregion, Greater Washington Partnership. January 1, 2018 – December 31, 2018, \$ 100,000. (PIs, Fred Ducca, Gerrit Knaap).

Senior Scientist: Cooperative Agreement with Maryland Department of Transportation, Maryland Dept. of Transportation, July 1, 2017-June 30, 2019, \$150/year. (PI, Gerrit Knaap, Co-PI, Fred Ducca).

Senior Scientist: Prospects for Regional Sustainability Tomorrow (PRESTO), Town Creek Foundation, July 1, 2017- June 30, 2018, \$200,000. (PI, Gerrit Knaap).

Senior Scientist: Smart and Connected Communities (SCC) Planning: How can Investments in Smart Cities Technologies Improve the Lives of Low-Income, Inner City Residents, the National Science Foundation, 06/01/2017-05/31/2018, \$ 100,000. (PI, Gerrit Knaap).

Senior Scientist: People, Land, Water and Fish: Integrating Social and Environmental Models in the Chesapeake Watershed, the National Socio-Environmental Synthesis Center (SESYNC), 2017-2018, funding for one graduate student, four international workshops and high performance computing support. (PIs, Gerrit Knaap, Raleigh Hood).

Senior Scientist: Modeling Support for Local Jurisdictions, Part 1, Maryland Department of Environment, April 2014 - April 2015, \$50,000. (PI, Fred Ducca, CoPI, Uri Avin).

II.J.2. Contracts
II.J.3. Other

II.K. Gifts, and Funded Research not administered by ORA
II.K.1. Gifts (*solicited and in-kind funds*)
II.K.2. Community Capacity Building (*assistance provided resulting in awards*)
II.K.3. Volunteer Contributions
II.K.4. Other

II.L. Centers for Research, Scholarship, and Creative Activities
II.L.1. Centers Established
II.L.2. Centers Directed
II.L.3. Symposia Organized (*through center*)
II.L.4. Other

II.M. Patents

II.M.1. Device

II.M.2. Other

II.N. Entrepreneurial, Technology Transfer, and Public Engagement Activities

II.O. Other Research / Scholarship / Creative Activities

II.P. Research Fellowships, Prizes and Awards

Listed among the Most Downloaded Articles in last 90 days from Transportation Research Part E: Logistics and Transportation Review (last viewed on 12/07/2018). Article Title: A Green Vehicle Routing Problem.

Listed as the Top Most Cited Article from 2012 to 2017 from Transportation Research Part E: Logistics and Transportation Review in the Most Cited Articles (last viewed on 11/02/2017). Article Title: A Green Vehicle Routing Problem.

Certificate of Outstanding Contribution in Reviewing Award by Elsevier for Transportation Research Part E, 2015 and 2016.

Recognized Reviewer by Elsevier for Transportation Research Part C and European Journal of Operational Research, 2015.

Selected for **the Advancing Professional Track Faculty Program** for 2016-2017 cohort, sponsored by the ADVANCE Program for Inclusive Excellence and the Office of Faculty Affairs at the University of Maryland.

Recipient of University of Maryland **Student Scholarship** for the 5th Annual Smart and Sustainable Campuses Conference, 2010.

Recipient of the **Women in Transportation Seminar (WTS), Washington D.C. Chapter Doctoral Student Scholarship**, 2007.

Recipient of two international **Travel Grants**, Istanbul Technical University, 1999 and 2000.

III. Teaching, Extension, Mentoring, and Advising

III.A. Courses Taught

URSP 805 Seminar in Research Design, Urban and Regional Planning and Design Program, Instructor, Spring 2019, (Graduate)

PLCY 790 Project Course/Independent Study, School of Public Policy, Instructor, Summer 2018, (Graduate)

URSP 805 Seminar in Research Design, Urban and Regional Planning and Design Program, Co-Instructor, Spring 2016, 2017, and 2018, (Graduate)

AS.420.646.81 Transportation Policy and Smart Growth, Johns Hopkins University, Baltimore, MD, Zanvyl Krieger School of Arts and Sciences, the Environmental Sciences and Policy Program, Instructor for 6 of 12 themes, (Co-taught with Dr. Sabya Mishra), , Fall 2012, Graduate (online)

III.B. **Teaching Innovations**

- III.B.1. Major Programs Established
- III.B.2. Education Abroad Established
- III.B.3. Textbooks
- III.B.4. Software, Applications, Online Education, etc.
- III.B.5. Instructional Workshops and Seminars Established
- III.B.6. Course or Curriculum Development
- III.B.7. Teaching Modules

III.B.8. **Other**

Guides capacity building at the NCSG on two modeling fronts:

MATSim – A simulation-based micro-simulation transportation model

ITHIM – Integrated Transportation and Health Impacts Model

Mentor to Dockless Bikeshare Data Organizing and Demonstration Team at the Data Challenge 2019; an annual week-long data exploration event at the University of Maryland, hosted by the College of Information Studies (IS) and the School of Architecture, Planning and Preservation, Maryland’s School of the Built Environment (MAPP) (February 23 – March 2, 2019). Worked closely with four students (from MAPP, IS and Geographical Sciences programs) to prepare data for the challenge and demo analysis prior to actual event since December 2018.

Faculty Launch Program, University of Maryland, College Park. Teaching and Learning Transformation Center

Participating in a series of professional development activities to advance teaching methods, and leverage innovative, evidence-based approaches in classroom. Expected to receive teaching certificate from the Office of the Provost when completed.

Instructor at the Training Workshop for DYNASMART-P: Intelligent Transportation Network Planning Tool; held on the campus of the University of Maryland, College Park (November, 2004 and April 2005); hosted by the Federal Highway Administration Office of Research and Development and the Maryland Transportation Initiative, University of Maryland.

III.C. **Advising: Research or Clinical**

This refers to students whose projects the faculty has supervised as adviser, committee chair, or committee member (indicate role). The name of student, academic year(s) involved, and the name of institution if other than UMD should be indicated, as well as placement of the student(s), if the project is completed. List completed work first.

- III.C.1. Undergraduate

III.C.2. Master's

Committee Member, Yan Liu. Thesis Title: A Model System to Evaluate the Impacts of Vehicle Related Taxation Policies on Household Greenhouse Gas Emissions. Civil and Environmental Engineering, Transportation Program, November 2014.

III.C.3. Doctoral

Committee Member, Kartik Kaushik. Dissertation Title: Population Synthesis for Microsimulation and Big Data based Performance Measurement, Civil and Environmental Engineering, Transportation Program, University of Maryland. April 2019.

Committee Member, Zuxuan Deng, Dissertation Title: Three Essays on Urban Transportation Studies in Washington D.C., Urban and Regional Planning and Design Program, University of Maryland, March 2019.

Committee Member, Zhenpeng Zhou, Comprehensive Exam, Urban and Regional Planning and Design Program, University of Maryland, Summer, 2018.

Committee Member, Kerry Li Fang. Dissertation Title: Do Industrial Clusters Encourage Firm Innovation?, Urban and Regional Planning and Design Program, University of Maryland, April 2018.

Committee Member, Dissertation/Thesis Committee Member Yan Liu. Dissertation Title: Market Penetration of New Vehicle Technology: A Generalized Dynamic Approach for Modeling Discrete-Continuous Decision. Civil and Environmental Engineering, Transportation Program, November 2017.

Committee Member, Ting Ma. Dissertation Title: Estimating the Impacts of Capital Bikeshare on Metrorail Ridership in the Washington Metropolitan Area, Urban and Regional Planning and Design Program, University of Maryland, March 2017.

Committee Member, Jean-Michel Tremblay. Dissertation Title: Statistical Methods for Advanced Econometric Models with Applications to Vehicle Holding and Speed Quantiles Distribution. Civil and Environmental Engineering, Transportation Program, May 2016.

Committee Member, Carolina Valdemarin Burnier. Dissertation Title: Children's Activities and School Travel: A tour based analysis of the influence of children's out-of-home activities on the choice of school travel patterns. Urban and Regional Planning and Design Program, University of Maryland, December 2013.

III.C.4. Post-doctoral

III.C.5. Other Directed Research (*e.g. K-12 Interactions*)

III.D. Mentorship

III.D.1. Junior Faculty

1. Zhenbao Wang, Ph.D., *Post-doctoral Visiting Scholar* at the National Center for Smart Growth, University of Maryland, from College of Civil Engineering, Hebei University of Engineering, Hebei, China. (2016-2017).
2. Wenbo Fan, Ph.D., *Post-doctoral Visiting Scholar* at the National Center for Smart Growth, University of Maryland, from School of Transportation and Logistics, Southwest Jiaotong University, Chengdu, China.

III.D.2. Other

1. Anjun Li, *Visiting Doctoral Student* at the National Center for Smart Growth, University of Maryland, from School of Transportation and Logistics, Southwest Jiaotong University, Chengdu, China, (Fall 2018-Spring 2020).
2. Mohammad Motalleb Nejad, *Graduate Research Assistant* (Ph.D.) at the National Center for Smart Growth, and Civil and Environmental Eng. Department, University of Maryland, College Park. (Fall 2017- Present).
3. Zhenpeng Zhou, *Ph.D. Candidate/ Graduate Research Assistant*, School of Architecture, Planning and Preservation, Urban Studies and Planning Program. (Spring 2017-Present).
4. Binbin Peng, *Ph.D. Candidate/ Graduate Research Assistant*, School of Architecture, Planning and Preservation, Urban Studies and Planning Program. (Spring 2017-Present).
5. Zhenbao Wang, Ph.D., *Post-doctoral Visiting Scholar* at the National Center for Smart Growth, University of Maryland, from College of Civil Engineering, Hebei University of Engineering, Hebei, China. (Summer 2016-Summer 2017).
6. Wenbo Fan, Ph.D., *Post-doctoral Visiting Scholar* at the National Center for Smart Growth, University of Maryland, from School of Transportation and Logistics, Southwest Jiaotong University, Chengdu, China. (Summer 2014-Fall 2015).
7. Darshan Pandit, *Graduate Research Assistant* (M.S.) at the National Center for Smart Growth, and Civil and Environmental Eng. Department, University of Maryland, College Park. (Fall 2015-Fall 2016).
8. Stacy Wang, *Undergraduate Student*, Civil and Environmental Eng. Department, University of Maryland, College Park.
9. Hang Yang, *Graduate Research Assistant* (M.S.) at the National Center for Smart Growth, and Civil and Environmental Eng. Department, University of Maryland, College Park. (Fall 2015-Spring 2017).
10. Di Yang, *Graduate Research Assistant* (M.S. and Ph.D) at the National Center for Smart Growth, and Civil and Environmental Eng. Department, University of Maryland, College Park. (Spring 2013-Fall 2016).
11. Ting Ma, *Graduate Research Assistant* (Ph.D.), Urban and Regional Planning and Design Program, University of Maryland, College Park. (Spring 2015-Spring 2017).
12. Zuxuan Deng, *Graduate Research Assistant* (Ph.D.), Urban and Regional Planning and Design Program, University of Maryland, College Park. (Fall 2014-

- Fall 2015).
13. Xiang Wang, *Visiting Ph.D. student* at the National Center for Smart Growth, University of Maryland, from School of Transportation Engineering, Tongji University, China. (Fall 2012-Spring 2014).
 14. Jiazhong Zhou, *Visiting Ph.D. student* at the National Center for Smart Growth, University of Maryland, from School of Traffic and Logistics, Southwest Jiaotong University, China. (Fall 2012-Spring 2014).
 15. Mostafa Mollanejad, *Graduate Research Assistant (Ph.D.)*, at the National Center for Smart Growth and Civil and Environmental Eng. Department, University of Maryland, College Park. (Fall 2012-Fall 2013).

III.E. Advising: Other than Directed Research

III.E.1. Undergraduate

III.E.2. Master's

III.E.3. Doctoral

III.E.4. Post-doctoral

III.E.5. Other Advising Activities

(Include advising student groups, special assignments, recruiting, etc.)

Continue to work with four students I've been mentoring for Dockless Bikeshare Data Demonstration Team at the Data Challenge 2019; an annual week-long data exploration event at the University of Maryland. Students I continue to work with are: Lingzi Hong and Jiahui Wu from College of Information Studies (IS), Zhengpeng Zhou from the School of Architecture, Planning and Preservation, Maryland's School of the Built Environment (MAPP) and Hannah Younes from Geographical Science, since December 2018.

III.F. Professional and Extension Education

III.F.1. Professional Programs Established

III.F.2. Major Extension Programs *(Include situation, objectives, outputs, outcomes / impact)*

III.F.3. Workshops

1. Co-organized an International Workshop, People, Land, Water, and Fish in the Chesapeake Watershed, lead by Drs. R. Hood and G. Knaap, funded by the National Socio-Environmental Synthesis Center (SESYNC), a center funded by NSF support, Annapolis, MD, February 21-22, 2019.
2. Co-Organizer, TRB Specialty Workshop, Network Modeling in the Era of Automation Technologies, Big Data Analytics & Advanced Computing: Identifying Challenges & Pathways to Future Breakthroughs, Sponsored by Standing Committee on Transportation Network Modeling; Standing Committee on Artificial Intelligence and Advanced Computing Applications; and Subcommittee on Emerging Technologies in Network Modeling, 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 13-17, 2019, (with Drs. Leila Hajibabai and Hadi Meidani).

3. Co-organized an International Workshop, People, Land, Water, and Fish in the Chesapeake Watershed, led by Drs. R. Hood and G. Knaap, funded by the National Socio-Environmental Synthesis Center (SESYNC), a center funded by NSF support, Annapolis, MD, Sept. 6-7, 2018.
4. Organized an International Workshop, Model Integration and Collaboration Workshop, as part of the project Development of a Prototype of an Integrated Modeling -Economic and Environmental Analysis to Promote Sustainability at the Regional Level, funded by the National Socio-Environmental Synthesis Center (SESYNC), a center funded by NSF support, Annapolis, MD, May 16-17, 2016.
5. Organized Specialty Workshop, Advancing the Statewide Transportation Planning and Analysis: Statewide Dynamic Traffic Assignment (DTA) and Agent-Based Models (ABM), 94th Annual Meeting of the Transportation Research Board, Washington, D.C., January 12-16, 2015.
6. Organized TRANSIMS Training in cooperation with the Argonne National Laboratory, Smart Growth Center, University of Maryland, College Park, February 13-14, 2013.

III.F.4. Guest Lectures (*Presented in traditional classes or for someone else's program*)

University of Maryland, College Park, MD, Urban and Regional Planning and Design Program

URSP 688N, Transportation Policy, Economics, and Finance, Guest Lecturer, two weeks including two homework assignments and grading, Graduate, October 2013 and 2015.

University of Maryland, College Park, MD, Civil and Environmental Engineering Department

ENCE 370, Introduction to Transportation Engineering & Planning, Guest Lecturer, Undergraduate, Spring 2018.

ENCE 472, Transportation Engineering and NCSG PALS (Partnership for Active Learning in Sustainability) Program, Guest Lecturer, Undergraduate, Spring 2017.

ENCE 688L, Advanced Topics in Civil Engineering: Advanced Transportation Demand Modeling, Guest Lecturer, Graduate, Spring 2016.

Dynamic Traffic Assignment Software Dynasmart-P Training, Lecturer, March 2005, Workshop for Professionals and Government Staff Members.

III.F.5. Extension Signature Programs

III.F.6. Extension Programs of Distinction

III.F.7. Other

III.G. Contribution to Learning Outcomes Assessment

III.H. Other Teaching Activities

University of Delaware, Newark, DE, Civil and Environmental Engineering Department

Transportation Engineering, Teaching Assistant, Undergraduate, Spring 2001.

Istanbul Technical University, Istanbul, Turkey, Civil Engineering Department

Traffic Flow Theory, Graduate, Spring 1998, 1999.

Traffic Management, Graduate, Fall 1999.

Earthworks and Railway Engineering, Undergraduate, Spring 1998, 1999.

Highway Planning, Undergraduate, Spring 1998.

III.I. Teaching Awards

IV. Service and Outreach

IV.A. Editorships, Editorial Boards, and Reviewing Activities

IV.A.1. Editorships

IV.A.2. Editorial Boards

Editorial Advisory Board member, Urban Planning, (2019-present). Journal Information: An international open access journal, Cite Score: 1.08, SCImago Journal Rank (SJR): 0.4.

Editorial Advisory Board (EAB) member, Transportation Research Part E: Logistics and Transportation Review by Elsevier. Journal Information: Cite Score: 4.03, Impact Factor: 3.289, 5-Year Impact Factor: 4.093, SCImago Journal Rank (SJR): 1.901.

IV.A.3. Reviewing Activities for Journals and Presses

1. 4OR-A Quarterly Journal of Operations Research,
2. Computers and Operations Research,
3. Energy Systems,
4. Environmental Impact Assessment Review,
5. EURO Working Group on Transportation (The Association of European Operational Research Societies) 2016 Conference,
6. European Journal of Operations Research,
7. IEEE Intelligent Transportation Systems Society,
8. International Journal of Sustainable Transportation,
9. International Journal of Sustainability in Higher Education,
10. International Journal of Transportation Science and Technology,
11. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations,
12. Journal of Transport Geography,
13. Journal of Transportation Letters,
14. Sustainability,

15. The Annual Meeting of the Transportation Research Board,
16. The Journal of Advanced Transportation,
17. Transportation Research Part A: Policy and Practice,
18. Transportation Research Part C: Emerging Technologies,
19. Transportation Research Part E: Logistics and Transportation Review,
20. Transportation Science,
21. Transportmetrica A: Transport Science.

IV.A.4. Reviewing Activities for Agencies and Foundations

Research proposal reviewer, FONDECYT Regular 2019 grant competition, an initiative of the Chilean National Science and Technology Commission (CONICYT - Chile), October 2018.

Technical reviewer for the Mid-Atlantic Transportation Sustainability University Transportation Center (MATS UTC), USDOT Strategic Theme: Environmental Sustainability (2016). The consortium is led by the University of Virginia (VT) in Charlottesville and includes: Virginia Polytechnic Institute and State University (VT), University of Delaware (UD), Morgan State University (MSU), Marshall University (MU), and Old Dominion University (ODU).

IV.A.5. Reviewing Activities for Conferences

National Academies of Science, Transportation Research Board Annual Meeting (including 2018 and 2019).

EURO Working Group on Transportation (The Association of European Operational Research Societies) 2016 Conference.

IV.A.6. Other

IV.B. Committees, Professional & Campus Service

IV.B.1. Campus Service – Department

Faculty Work Load and Promotion Committee Chair, National Center for Smart Growth Research and Education, University of Maryland, College Park, (2016- present).

Search Committee Member, National Center for Smart Growth Research and Education, University of Maryland, College Park, (2011-present).

IV.B.2. Campus Service – College

Professional Track Faculty (PTK) Policies and Procedures for Appointment, Evaluation and Promotion Committee, NCSG Representative, School of Architecture, Planning and Preservation, University of Maryland, (2018-present).

Supercomputing Sub-committee Member, School of Architecture, Planning and Preservation and the NCSG Representative, University of Maryland, (2017-present).

IV.B.3. Campus Service – University

Maryland Transportation Institute Affiliate, University of Maryland, College Park,

(March 2018- present).

Smart Cities Initiative Member, University of Maryland, College Park, (2016- present).

Graduate Faculty Member, the Graduate School of the University of Maryland, College Park, (November 2013-present).

IV.B.4. Campus Service – Special Administrative Assignment

Campus Bicycle Advisory Committee Member, Campus Department of Transportation, University of Maryland (2008-2010).

IV.B.5. Campus Service – Other

IV.B.6. Inter-institutional and Regional (e.g. inter-library agencies, regional consortia)

IV.B.7. Offices and Committee Memberships

IV.B.8. Leadership Roles in Meetings and Conferences

Invited Session Chair, Data Analytics in Transportation Operations, Transportation Science and Logistics (TSL) track for the INFORMS (the Institute for Operations Research and the Management Sciences) Conference, Seattle, Washington, October 20-23, 2019.

Organized Day-2 of the International Workshop, People, Land, Water, and Fish in the Chesapeake Watershed. Created the agenda, identified and invited all the participants and administered the workshop which received many positive feedback. The project is led by Drs. R. Hood and G. Knaap, funded by the National Socio-Environmental Synthesis Center (SESYNC), a center funded by NSF support, Annapolis, MD, February 21-22, 2019.

Co-organized, Special Session at the IEEE Transportation Systems Conference, Network Modeling Solutions for Connected and Automated Vehicles: Advances in Computing and Communication Technologies, October 27-30, 2019, Auckland, New Zealand.

Invited Session Chair, by the Chair of the Subcommittee on Emerging Technologies in Network Modeling, The Autonomous Vehicles Symposium, July 15-18, 2019, Orlando, FL.

Invited Session Chair, Sustainable and Resilient Transportation Networks (Lectern session), by the Standing Committee on Transportation Network Modeling, 98th Annual Meeting of the Transportation Research Board, Washington, D.C., January 13-17, 2019.

Invited Participant, Maryland Autonomous Vehicles Work Group, Maryland Department of Transportation (2017- present).

Invited Participant, Maryland Electric Vehicle Infrastructure Council meetings, Maryland Department of Transportation (2016- present).

Invited contributor, Webinar Workshop as part of *project NCHRP20-102(09) Providing Support to the Introduction of CV/AV Impacts into Regional Transportation Planning and Modeling Tools*. July 27, 2017.

IV.B.9. Other Non-University Committees, Memberships, Panels, etc.

Member of National Academies of Science, Transportation Research Board (TRB) Committees:

Member, Standing Committee on Transportation Network Modeling (ADB30),
Transportation Research Board, (June 2018-Present).

Member, Subcommittee on Emerging Technologies in Network Modeling (ADB30 (5)),
Transportation Research Board , (April 2018- Present).

Statewide Travel Demand Forecasting Joint Subcommittee of TRB Multimodal
Transportation Planning Committee (ADA10) and Transportation Demand Forecasting
Committee (ADB40)
Megaregion

Friend of TRB Standing Committees:

Accessible Transportation and Mobility, (ABE60)
International Cooperation, (A0010)
Statewide Multimodal Transportation Planning (ADA10)
Transportation and Sustainability, (ADD40)
Transportation Demand Forecasting, (ADB40)
Transportation Demand Management, (ABE50)
Transportation in the Developing Countries, (ABE90)
Urban Transportation Data and Information Systems, (ABJ30)

IV.B.10. Other

Institute for Operations Research and Management Science
(INFORMS), 2007, 2009, 2015 and 2018.

Baltimore-Washington Electric Vehicle Initiative (BEVI) and Maryland EV (MDEV),
an electric vehicle education and outreach resource serving Maryland and the Mid-
Atlantic region (2016- 2017).

Women's Transportation Seminar, WashingtonD.C. Chapter, Member, 2007.

Institute of Transportation Engineers Maryland Student Chapter, (ITE-
MD) at UMD, 2004- 2011.

ITS America Maryland Student Chapter, (ITS-MD) at UMD, Founding
Member, 2004- 2011.

EURO Working Group on Transportation (The Association of European Operational
Research Societies), since 1999.

Chamber of Survey and Cadaster Engineers, Istanbul, Turkey, since 1994.

IV.C. External Service and Consulting

IV.C.1. Community Engagements, Local, State, National, International

IV.C.2. International Activities

- IV.C.3. Corporate and Other Board Memberships
- IV.C.4. Entrepreneurial Activities
- IV.C.5. **Consultancies (to local, state and federal agencies; companies; organizations)**
Research Consultant/Member, Baltimore-Washington Electric Vehicle Initiative (BEVI) and Maryland EV (MDEV), an electric vehicle education and outreach resource serving Maryland and the Mid-Atlantic region (2016- 2017).

Project Manager for the University of Maryland Campus Bicycle Study, April 2009,
Report available at
https://www.transportation.umd.edu/images/Biking/pdf/Final%20Study_web.pdf

- IV.C.6. Other

IV.D. Non-Research Presentations

- IV.D.1. Outreach Presentations
- IV.D.2. Other

IV.E. Media Contributions

- IV.E.1. Internet
- IV.E.2. TV
- IV.E.3. Radio
- IV.E.4. Digital Media
- IV.E.5. Print Media
- IV.E.6. **Blogs**
BikeUMD Blog, Univeristy of Maryland Campus Bicycle Program, (2009-2010)
- IV.E.7. Feeds
- IV.E.8. Other

IV.F. Community & Other Service

IV.G. Service Awards and Honors

V. Other Information