

Piyushimita Thakuriah (Vonu), PhD
Dean, Edward J Bloustein School of Planning and Public Policy
Distinguished Professor of Transportation and Urban Informatics
Director, Rutgers Urban and Civic Informatics Lab
Rutgers University
New Brunswick, New Jersey, USA
URL: <https://bloustein.rutgers.edu/thakuriah/>

EMPLOYMENT

- *Distinguished Professor and Dean, Edward J Bloustein School of Planning and Public Policy*, Rutgers University, New Brunswick, NJ. Since October, 2018.
- *Director, Rutgers Urban and Civic Informatics Lab*, Rutgers University, New Brunswick, NJ. New NJ. Since May 2020.
- *Founding Director and Principal Investigator*, UK Economic and Social Research Council-funded *Urban Big Data Centre*, University of Glasgow, UK (Led by University of Glasgow, with universities of Cambridge, Edinburgh, Bristol, Reading, Sheffield and Illinois-Chicago as partners). January 2014-August 2018.
- *Ch2m Chair of Transportation and Professor, Department of Urban Studies and Affiliated Professor, School of Engineering*, University of Glasgow, UK. January 2013-August 2018.
- *Professor*, Department of Urban Planning and Policy, University of Illinois at Chicago. August 2012 – December 2012.
- *Associate Professor*, Department of Urban Planning and Policy, University of Illinois at Chicago. September 2001-July 2012.
- *Interim Director*, Urban Transportation Center, University of Illinois at Chicago. August 2005-August 2008.
- *Associate Director for Research Programs*, Urban Transportation Center, University of Illinois at Chicago. September 1999- July 2005.
- *Assistant Professor*, Department of Urban Planning and Policy, University of Illinois at Chicago. January 1997-August 2001.

FELLOWSHIPS AND HONORS

- *Honorary Professor*, University of Glasgow, UK. July 2018 through July 2022.
- *European Commission Marie Curie Fellow*. The fellowship is funded by European Commission Grant No 632075 “*Social Transport Systems*”, Brussels. 2014-2018.
- *Fellow*, Committee on Institutional Cooperation (CIC) – Academic Leadership Program (ALP). Academic Year 2006.
- *Postdoctoral Research Fellow*, *National Institute of Statistical Sciences*, Research Triangle Park, North Carolina. The fellowship was funded by the US National Science

Foundation's (NSF) Division of Mathematical Sciences (DMS) Grant Numbers 9313013 "Measurement, Modeling and Prediction for Infrastructural Systems" and 9208758 "Mathematical Sciences: Fellows for Cross-Disciplinary Research in Statistics".
September 1994-December 1996.

EDUCATION

- Ph.D. in Public Policy Analysis (specialization in Transportation Planning), University of Illinois at Chicago. August 1994.
 - Dissertation title: *Evaluation of Dynamic Route Guidance in Advanced Traveler Information Systems*; published as journal articles in *Transportation Research - Part C: Emerging Technologies* and *Mathematical and Computer Modelling*.
- Master of Urban Planning and Policy (MUPP), University of Illinois at Chicago. December 1991.
 - Capstone project *Non-Response Bias and Trip Generation Models*; published in *Transportation Research Record*, Journal of Transportation Research Board.
- M.A. in Industrial Psychology, University of Delhi, India. August 1989.
- B.A. (with Honors) in Psychology, University of Delhi, India. September 1987.

PUBLICATIONS

BOOKS AND EDITED WORK

Thakuriah, P., N. Tilahun and M. Zellner (2017). *Seeing Cities through Big Data: Research, Methods and Applications in Urban Informatics*. Edited volume of selected papers presented in workshop sponsored by National Science Foundation on Big Data and Urban Informatics. Springer, NY.

Moshfeghi, Y., Ounis, I., Macdonald, C., Jose, J., Triantafillou, P., Livingston, M., and Thakuriah, P. (2015) UCUT'15: *Proceedings of the ACM First International Workshop on Understanding the City with Urban Informatics*. ACM. ISBN 9781450337861

Thakuriah, P. and G. Geers (2013). *Transportation and Information: Trends in Technology and Policy*. Springer, NY.

Thakuriah, P., Glenn Geers, Ouri Wolfson and Budhu Bhaduri (eds.) (2011). *Proceedings of 4th ACM SIGSPATIAL International Workshop on Computational Transportation Science*. Held in conjunction with ACM SIGSPATIAL GIS 2011. ACM Press, New York. ACM ISBN: 978-1-4503-1034-5.

Thakuriah, P. (2001). Guest Editor of *Special Issue on Methodological Issues in Accessibility Measures with Possible Policy Implications*. Journal of Transportation and Statistics, Vol.4, Nos. 2/3, Sept.-December.

JOURNAL ARTICLES AND REFEREED BOOK CHAPTERS

- Venkatasubramanian, A., L. Evers, P. Thakuriah and K. Ampountolas. *Functional distributional clustering using spatio-temporal data*. Forthcoming in Journal of Applied Statistics.
- Chen, L., Thakuriah, P.V. & Ampountolas, K. (2021). *Short-Term Prediction of Demand for Ride-Hailing Services: A Deep Learning Approach*. Journal of Big Data Analytics in Transportation. doi: <https://doi.org/10.1007/s42421-021-00041-4>
- Wu, G., J. Hong, and P. Thakuriah (2021). *Investigating temporal changes in the relationship between time spent on the Internet and Non-mandatory activity-travel time use*. Transportation, pp. 1-23. doi: <https://doi.org/10.1007/s11116-021-10174-8>
- Sun, Y. and P. Thakuriah P (2021). *Public transport availability inequalities and transport poverty risk across England*. Environment and Planning B: Urban Analytics and City Science. February. doi:10.1177/2399808321991536
- Hong, J., P. Thakuriah, P. Mason, C. Lido (2020). *The role of numeracy and financial literacy skills in the relationship between information and communication technology use and travel behavior*. Travel Behaviour and Society, Vol. 21, pp. 257-264
- Thakuriah, P., K. Sila-Nowicka, J. Hong, C. Boididou, M. Osborne, C. Lido, A. McHugh (2020). *Integrated Multimedia City Data (iMCD): A Composite Survey and Sensing Approach to Understanding Urban Living and Mobility*. In Computers, Environment and Urban Systems. <https://doi.org/10.1016/j.compenvurbsys.2019.101427>
- Wu, W., W. Liu, P. Thakuriah and J. Wang (2020). *The Geography of Human Activity and Land Use: A Big Data Approach*. In Cities: The International Journal of Urban Policy and Planning. Vol. 97, 102523 <https://doi.org/10.1016/j.cities.2019.102523>
- Wu, G., J. Hong and P. Thakuriah (2019). *Assessing the Relationships Between Young Adults' Travel and Use of the Internet over Time*. Transportation Research – Part A, Vol 125, pp. 8-19.
- Anejionu, O. C. D., P. Thakuriah, A. McHugh, Y. Sun, D. McArthur, P. Mason, and Rod Walpole (2019). *Spatial urban data system: A cloud-enabled big data infrastructure for social and economic urban analytics*. In Future Generation Computer Systems, Vol 98, pp. 456-473.
- Anejionu, O. C. D., Y. Sun, P. Thakuriah, A. McHugh, P. Mason (2019). *Great Britain Transport, Housing, and Employment Access Datasets for small-area Urban Area Analytics*. Journal Data in Brief, Vol. 27, Article 104616. <https://doi.org/10.1016/j.dib.2019.104616>
- Sila-Nowicka, K. and P. Thakuriah (2019). *Multi-sensor movement analysis for transport safety and health applications*. In PLoS ONE 14(1):e0210090.
- Paule, J. D. G., Y. Sun and P. Thakuriah (2018). *Beyond Geo-Tagged Tweets: Exploring the Geo-Localization of Tweets for Transportation Applications*. In Transportation Analytics in the Era of Big Data, pp. 1-21.

- Hong, J. and P. Thakuriah (2018). *Examining the relationship between different urbanization settings, smartphone use to access the Internet and trip frequencies*. In *Journal of Transport Geography*, Vol 69, pp 11-18.
- Thakuriah, P., N. Tilahun and M. Zellner (2017). *Introduction to Seeing Cities Through Big Data: Research, Methods and Applications in Urban Informatics*. In *Seeing Cities through Big Data: Research, Methods and Applications in Urban Informatics*, Springer, NY, pp. 1-9.
- Thakuriah, P., N. Tilahun and M. Zellner (2017). *Big Data and Urban Informatics: Innovations and Challenges to Urban Planning and Knowledge Discovery*. In *Seeing Cities through Big Data: Research, Methods and Applications in Urban Informatics*, Springer, NY, pp. 11-48.
- Thakuriah, P., L. Dirks, and Y. Keita Mallon (2017). *Digital Infomediaries and Civic Hacking in Emerging Urban Data Initiatives*. In *Seeing Cities through Big Data: Research, Methods and Applications in Urban Informatics*, Springer, NY, 189-208.
- Thakuriah, P., K. S. Nowicka and J. D. G. Paule (2016). *Sensing Spatiotemporal Patterns in Urban Areas: Analytics and Visualizations using the Integrated Multimedia City Data Platform*. In *Journal of Built Environment*, Vol. 42(3), pp. 415-429.
- Lido, C., Osborne, M., Livingston, M., Thakuriah, P., and Sila-Nowicka, K. (2016) *Older learning engagement in the modern city*. In *International Journal of Lifelong Education*, Vol 35, pp. 490-508.
- Tilahun, N., Thakuriah, P., Li, M., and Keita, Y. (2016) *Transit use and the work commute: analyzing the role of last mile issues*. In *Journal of Transport Geography*, Vol 54, pp. 359–368.
- Hong, J., and P. Thakuriah (2016) *Relationship between motorized travel and time spent online for non-work purposes: an examination of location impact*. In *International Journal of Sustainable Transportation*, Vol. 10(7), pp. 617-626.
- Cottrill, C. D., and P. Thakuriah (2015) *Location privacy preferences: a survey-based analysis of consumer awareness, trade-off and decision-making*. In *Transportation Research Part C: Emerging Technologies*, Vol. 56, pp. 132-148.
- Cottrill, C. and P. Thakuriah (2014). *Privacy in Context: An Evaluation of Policy-based Approaches to Location Privacy Protection*. In *International Journal of Law and Information Technology*, Vol. 22 (2), pp. 178-207.
- Thakuriah, P., Persky, J., Soot, S., and Sriraj, P. (2013) *Costs and benefits of employment transportation for low-wage workers: An assessment of job access public transportation services*. In *Evaluation and Program Planning*, Vol. 37, pp. 31-42.
- Thakuriah, P. and N. Tilahun (2013). *Incorporating Weather Information into Real-Time Speed Estimates: Comparison of Alternative Models*. In *Journal of Transportation Engineering*, Vol. 139, No. 4, pp. 379-389.
- Thakuriah, P., P. Metaxatos, J. Lin and E. Jansen (2012). *Factors Affecting Propensity to Use Bicycle and Pedestrian Facilities in Suburban Locations*. In *Transportation Research*

- Part D: Transport and Environment, Vol. 17, pp. 341-348.
- Tang, L. and P. Thakuriah (2012). *Ridership effects of real-time bus information system: A case study in the City of Chicago*. In Transportation Research - Part C: Emerging Technologies, Vol. 22, pp. 146-161.
- Thakuriah, P., S. Soot. C. Cottrill, N. Tilahun, E. Blaise and W. Vassilakis. (2011). *Integrated and Continuing Transportation Services for Seniors: Case Studies of New Freedom Program*. In Transportation Research Record, Vol. 2265, pp. 161-169.
- Tang, L. and P. Thakuriah (2011). *Will the Psychological Effects of Real-time Transit Information Systems Lead to Ridership Gain?* In Transportation Research Record, Vol. 2216, pp. 67-74.
- Thakuriah, P. (2011). *Variations in Employment Transportation Outcomes: Role of Site Level Factors*. In Papers in Regional Science, Vol. 90, No. 4, pp. 755-772.
- Thakuriah, P. (2011). *Analysis of Cost-Effectiveness of Employment Transportation Services*. In Transportation Research Record, Vol. 2217, pp. 55-62.
- Thakuriah, P., L. Tang and W. Vassilakis (2011). *Spatio-Temporal Effects of Real-Time Bus Arrival Time Information*. Proc. of Association for Computing Machinery (ACM) SIGSPATIAL, pp. 6-11.
- Cottrill, C. and P. Thakuriah (2011). *Protecting Location Privacy*. In Transportation Research Record, Vol. 2215, pp. 67-74.
- Thakuriah, P., L. Tang and S. Menchu (2011). *Young Women's Transportation and Labor Market Experiences*. In Women's Issues in Transportation, Vol. 2, National Research Council, pp. 276-287.
- Cottrill, C. and P. Thakuriah (2011). *Privacy and Gender: Reviewing women's attitudes towards privacy in the context of Intelligent Transportation Systems (ITS) and Location Based Services (LBS)*. In Women's Issues in Transportation, Vol. 2, National Research Council, pp. 117-126.
- Thakuriah, P. and N. Tilahun (2010). *Using Real-Time Weather Information in Traveler Information Systems and Location-Based Services: A Statistical Learning Application Under Alternative Experimental Conditions*. In Proc. ACM SIGSPATIAL GIS 2010.
- Thakuriah, P., S. Menchu and L. Tang (2010). *Car-Ownership Among Young Adults: Generational and Period-Specific Perspectives*. In Transportation Research Record, Vol. 2156, pp. 1-8.
- Cottrill, C. and P. Thakuriah (2010). *Evaluating Pedestrian Crashes in Areas with High Low-Income or Minority Populations*. In Accident Analysis and Prevention, Vol. 42, Issue 6, pp. 1718-1728.
- Thakuriah, P. (2010). *Evaluation of Alternative Data Imputation Strategies: A Case Study of Motor Carrier Safety Data*. In Transportation Letters: The International Journal of Transportation Research, Vol. 2, Issue 3, pp. 199-216.

- Metaxatos, P. and P. Thakuriah (2009). *Planning for Bus-on-Shoulders Operations in Northeastern Illinois: A Survey of Stakeholders*. In *Transportation Research Record*, Vol. 2111, pp. 10-17.
- Thakuriah, P. (2009). *Transportation and Employment Accessibility in a Changing Context of Metropolitan Decentralization: The Case of Delhi, India*. In *Projections, the MIT Planning Journal*, Vol. 9, pp. 60-80.
- Cottrill, C. and P. Thakuriah (2008). *GPS Adoption by Households: Evidence from a Household Travel Survey*. In *Proc. MobiQuitous 2008, 5th International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services*.
- Minocha, I., P. S. Sriraj, P. Metaxatos and P. Thakuriah (2008). *Analysis of Transit Quality of Service and Employment Accessibility for the Greater Chicago, Illinois, Region*. In *Transportation Research Record*, Vol. 2042, pp. 20-29.
- Thakuriah, P., P.S Sriraj, S. Soot and Y. Liao (2006). *Determinants of Perceived Importance of Targeted Transportation Services for Low-Income Riders*. In *Transportation Research Record*, Vol. 1986, pp. 145-153.
- Sriraj, P.S., M. Minor and P. Thakuriah. (2006). *Spatial Decision Support System for Low-Income Families: Relocation Tool for the Chicago, Illinois, Region*. In *Transportation Research Record*, Vol. 1956, pp. 119-126.
- Thakuriah, P. and Y. Liao (2006). *Transportation Expenditures and Ability to Pay. Evidence from Consumer Expenditure Survey*. In *Transportation Research Record*, Vol. 1985, pp. 257-267.
- Thakuriah, P., S. Soot, P.S. Sriraj, Y. Liao and G. Berman (2005). *Activity and Travel Changes of Job Access Transportation Service Users: Analysis of a User Survey*. In *Transportation Research Record*, Vol. 1927, pp. 55-62.
- Thakuriah, P. and Y. Liao. (2005). *Analysis of Variations in Vehicle Ownership Expenditures*. In *Transportation Research Record*, Vol. 1926, pp. 1-9.
- Lee, J. and P. Thakuriah (2004). *Probabilistic Linkage of Commercial Motor Vehicle and Carrier Data*. In the *Journal of Transportation Research Forum*, Vol. 43, No. 2, Fall, pp. 37-52.
- Sinha, A. and P. Thakuriah (2004). *Relationship of Occupational, Industry and Socioeconomic Characteristics and Job Start Times: Evidence from Current Population Survey*. In *Transportation Research Record*, Vol. 1894, pp 67-74.
- Thakuriah, P. (2002). *Commercial Motor Carrier Operations in Northeast Illinois Region: Impacts on Land Use Trends Since 1970*. In "Suburban Sprawl Private Decisions and Public Policy". Eds. Wim Wiewel and Joseph J. Persky. New York: M.E. Sharp, Inc, pp. 115-134.
- Sacks, J., N. Roupail, B. Park and P. Thakuriah. (2002). *Statistically-Based Validation of Computer Models in Traffic Operations and Management*. In *Journal of Transportation and Statistics*, Vol. 5, Issue 1, pp. 1-15.

- Thakuriah, P. (2001). *Introduction to the Special Issue on Methodological Issues in Accessibility Measures with Possible Policy Implications*. In *Journal of Transportation and Statistics*, Vol. 4, Nos. 2/3, Sept.-December.
- Thakuriah, P., J. Lee, G. Yanos and A. Srinivasan (2001). *Motor Carrier Safety: An Assessment of Enforcement Strategies*. In *Transportation Research Record*, Vol. 1779, pp. 150-156.
- Thakuriah, P., D. Virmani, S. Yun, and P. Metaxatos (2001). *Estimation of Demand for Intercity Travel: Issues with the American Travel Survey*. In the *Proceedings of Transportation Research Board Conference on Personal Travel: The Long and Short of It*. In *Transportation Research Circular*, No. E-C026, pp. 255-270.
- Thakuriah, P. and P. Metaxatos. (2000). *Effect of Residential Location and Transportation on Employment Opportunities*. In *Transportation Research Record*, Vol. 1726, pp. 24-32.
- Thakuriah, P., A. Sen and A. Karr. (1999). *Probe-Based Surveillance for Travel Time Information in ITS*. In *Behavioral and Network Impacts of Driver Information Systems*. Edited by Richard Emmerink and Peter Nijkamp. Ashgate Publishing Ltd, England, pp. 393- 425.
- Sen, A., P. Metaxatos, S. Soot and P. Thakuriah (1999). *Estimation of Demand due to Welfare Reform*. In *Papers in Regional Science*, Vol. 78, No. 2, pp. 195–211.
- Sen, A., P. Thakuriah, X. Zhu and A. Karr. (1999). *Variances of Link Travel Time Estimates: Implications for Optimal Routes*. In *International Transactions in Operational Research*, the *Journal of the International Federation of Operations Research Societies*, Vol. 6, pp. 75-87.
- Sen, A., S. Soot, P. Thakuriah, H. Condie. (1998). *Estimation of Static Travel Times in a Dynamic Route Guidance System - II*. In *Mathematical and Computer Modelling*, Vol. 27, No. 9-11, pp. 67-85.
- Metaxatos, P., S. Soot, P. Thakuriah and A. Sen (1998). *Transportation Planning Process for Linking Welfare Recipients to Jobs*. In *Transportation Research Record*, Vol. 1626, pp. 149-158.
- Sen, A., P. Thakuriah, X. Zhu and A. Karr. (1997). *Frequency of Probe Reports and Variance of Travel Time Estimates*. In *Journal of Transportation Engineering*, Vol. 123, No. 4, July/August, pp. 290-297.
- Thakuriah, P. and A. Sen (1996). *Quality of Information given by Advanced Traveler Information Systems*. In *Transportation Research Part C: Emerging Technologies*, Vol. 4, No. 5, pp. 249-266.
- Thakuriah, P., A. Sen, S. Soot and E. Christopher (1996). *Non-response and Urban Travel Models*. In *Transportation Research Record*, No. 1551, pp. 82-87.
- Sen, A. and P. Thakuriah (1995). *Estimation of Static Travel Times in a Dynamic Route Guidance System*. In *Mathematical and Computer Modelling*, Vol. 22, No. 4-7, pp. 83-101.

Soot, S., A. Sen, J. Marston and P. Thakuriah (1995). *Multiworker Household Travel Demand*. In National Personal Transportation Survey Report Series, Demographic Special Reports, U.S. Department of Transportation, Federal Highway Administration, February.

Thakuriah, P., A. Sen, S. Soot and E. Christopher (1993). *Non-response Bias and Trip Generation Models*. In Transportation Research Record, Vol. 1412, pp. 64-70.

REFEREED CONFERENCE PROCEEDINGS

Chen L., Sun Y., Thakuriah P. (2020) *Modelling and Predicting Individual Salaries in United Kingdom with Graph Convolutional Network*. In: Madureira A., Abraham A., Gandhi N., Varela M. (eds) Hybrid Intelligent Systems. HIS 2018. Advances in Intelligent Systems and Computing, vol 923. Springer.

Chen, L., K. Ampountolas and P. Thakuriah (2019). *Predicting Uber Demand in NYC with Wavenet*. Proc. SMART ACCESSIBILITY 2019: The Fourth International Conference on Universal Accessibility in the Internet of Things and Smart Environments, pp. 1-5.

Paule, J. D. G., Y. Moshfeghi, J. Jose and P. Thakuriah (2017). *On Fine-Grained Geo-Localization of Tweets*. Proc ACM SIGIR conference, Amsterdam, Netherlands, 2017 (ICTIR'17),

Wu, G., J. Hong and P. Thakuriah (2017). *Role of the Internet in Shaping Young Adults' Attitude, Travel Choices, and Sustainable Lifestyles: Longitudinal Perspective*. Proc 2017 Transportation Research Board Annual Conference.

Hong, J. and P. Thakuriah (2017). *Effects of Residential Locations and Mobile Technologies on Trip Generation: Focusing on Mediating Effects*. Proc 2017 Transportation Research Board Annual Conference.

Sila-Nowicka, K., and Thakuriah, P. (2016) *The trade-off between privacy and geographic data resolution. a case of GPS trajectories combined with the social survey results*. In: XXIII ISPRS Congress, Prague, Czech Republic, 12-19 Jul 2016, pp. 535-542. (doi:10.5194/isprs-archives-XLI-B2-535-2016).

Wu, G., J. Hong and P. Thakuriah (2015). *Effect of Employment Status on the Relationship between Time Spent on the Internet and Activity Engagement*. Proc 14th International Conference on Travel Behaviour Research, Windsor, UK, July.

Thakuriah, P. and Y. Keita-Mallon (2014). *Analysis of Household Transportation Spending During US Economic Recession*. Proc 2014 Transportation Research Board Annual Conference.

Tilahun, N., P. Thakuriah, M. Li and Y. Keita-Mallon (2014). *Transit Use and the Work Commute: An empirical analysis of the role of urban densities, last mile problems, and personal constraints on mode choice*. Proc 2014 TRB Annual Conference.

- Tilahun, N., P. Thakuriah and Y. Keita-Mallon (2013). *Factors Determining Transit Access by Car-Owners: Implications for Intermodal Passenger Transportation Planning*. Proc 2013 Transportation Research Board Annual Conference.
- Thakuriah, P. and W. Vassilakis (2012). *Perceived and Functional Independence in Travel: Assessing the Role of Neighborhood Factors and Community-Based Mobility Services for Persons with Disabilities*. Proc Transportation Research Board Annual Conference.
- Tang, L. and Thakuriah (2011). *Will the Psychological Effects of Real-time Transit Information Systems Lead to Ridership Gain?* Proc 2011 Transportation Research Board Annual Conference.
- Cottrill, C. and P. Thakuriah (2011). *Protecting Locational Privacy. Policy Evaluation*. Proc Transportation Research Board Annual Conference.
- Thakuriah, P. and N. Tilahun (2011). *Incorporating Weather Information into Real-Time Speed Estimates: Comparison of Alternative Models*. Proc Transportation Research Board Annual Conference.
- Thakuriah, P. and N. Tilahun (2010). *Using Real-Time Weather Information in Traveler Information Systems and Location-Based Services*. Proc ACM SIGSPATIAL GIS, San Jose, CA.
- Thakuriah, P., Cottrill, C., N. Thomas and S. Vaughn (2010). *Sketch Planning Methodology for Determining Interventions in Bicycle and Pedestrian Crashes: An Ecological Approach*. Proc Transportation Research Board Annual Conference.
- Thakuriah, P., Tang, L. and S. Menchu (2010). *Car-Ownership Among Young Adults: Generational and Period-Specific Perspectives*. Proc Transportation Research Board Annual Conference.
- Metaxatos, P. and P. Thakuriah (2009). *Planning for Bus-on-Shoulders Operations in Northeastern Illinois: A Survey of Stakeholder*. Proc Transportation Research Board Annual Conference.
- Cottrill, C. and P. Thakuriah (2008). *GPS Adoption by Households: Evidence from a Household Travel Survey*. Proc First International Workshop on Computational Transportation Science.
- Thakuriah, P. and L. Tang (2008). *Longitudinal Analysis of Effect of Transportation Difficulties on Earnings Among Young Adults from Disadvantaged Families*. Proc Transportation Research Board Annual Conference.
- Cottrill, C. and P. Thakuriah (2008). *Evaluating Pedestrian Risk in Environmental Justice Areas*. Proc Transportation Research Board Annual Conference.
- Tang, L. and P. Thakuriah (2007). *An Examination of Anticipated Behavioral Responses to Real-Time Transit Information Systems*. Proc World Conference on Transport Research Society, Berkeley, CA.
- Sriraj, P., Minor, M., and Thakuriah, P. (2006). *Impact of Information on Housing Relocation*

- Using Analytical Hierarchy Process and Interactive GIS*. Proc Applications of Advanced Transportation Technology of the American Society of Civil Engineers, Chicago.
- Thakuriah, P. and Y. Liao (2005). *An Analysis of Variations in Vehicle-Ownership Expenditures*. Proc Transportation Research Board Annual Conference.
- Thakuriah, P. (2004). *Job Access Services and Programs for Low-Income Workers: Some Comments*. Proc City Futures International Conference, Chicago, IL.
- Sinha, A. and P. Thakuriah (2004). *Relationship of Occupational, Industry and Socioeconomic Characteristics and Job Start Times: Evidence from Current Population Survey*. Proc Transportation Research Board Annual Conference.
- Thakuriah, P., S. Soot, P. S. Sriraj, Y. Liao and G. Berman (2005). *Activity and Travel Changes of Job Access Transportation Service Users: Analysis of a User Survey*. Proc Transportation Research Board Annual Conference, January 2005.
- Lee, J. and P. Thakuriah (2002). *Application of Probabilistic Linkage to Commercial Motor Vehicle and Carrier Data*. Proc Transportation Research Board Annual Conference.
- Lee, J. and P. Thakuriah (2002). *An Evaluation of Alternative Signal Control Strategies*. Proc 9th World Congress on ITS, Chicago.
- Ortega, J., P. Sriraj and P. Thakuriah (2003). *Spatial Data Integration for Low-Income Worker Accessibility Assessment: A Case Study of the Chicago Metropolitan Area*. Paper presented in the Mid-Continent Transportation Symposium, Iowa State University, Ames, Iowa, August.
- Thakuriah, P. (2002). *Data Quality Criteria for Evaluating Commercial Motor Carrier and Vehicle Databases*. Proc Transportation Research Board Annual Conference.
- Thakuriah, P. and P. Metaxatos (2000). *Effect of Residential Location and Transportation on Employment Opportunities*. Proc Transportation Research Board Annual Meetings.
- Thakuriah, P., A. Sen, S. Soot and E. Christopher (1996). *Nonresponse and Urban Travel Models*. Proc Transportation Research Board Annual Meetings.
- Thakuriah, P., A. Sen, S. Soot and E. Christopher (1994). *Non-response Bias and Trip Generation Models*. Proc Transportation Research Board Annual Meetings.

BOOK REVIEW

- Thakuriah, P. (2001). Review of "Urban Transportation Planning: A Decision-Oriented Approach" by Michael Meyer and Eric Miller. In ASCE Journal of Transportation Engineering, Vol. 127, No. 454.

INPUT INTO SELECTED RECENT POLICY DOCUMENTS

U.S. Government Accountability Office. *Data and Analytics Innovation: Emerging Opportunities and Challenges*. Highlights of a Forum. GAO-16-659SP: Published: Sep 20, 2016. Publicly Released: Sep 20, 2016.

U.K. Parliamentary Office of Science and Technology. *Big and Open Data in Transport*. Houses of Parliament POSTNOTE Number 472 July 2014.

U.S. Senate Bill S. 3466 on September 10, *2008 Job Access and Reverse Commute Program Improvements Act of 2008* - 110th Congress (2007-2008) by Senator Russ Feingold, Senate - Banking, Housing, and Urban Affairs.

Several other policy and planning documents and policy pieces of regional significance.

EXTERNAL FUNDED RESEARCH

- **Total involvement in grants to date:** approximately \$70 million (including grant income earned in UK £ and euros; ***non-USD conversions to USD using currency conversion rate on date of contract issuance***).
- **As Principal Investigator:** approx. \$25 million.
- **Additional grants as Co-P.I. or researcher:** approx. \$38 million.
- **Managed** additional \$7 million between 2005 and 2008 as Interim Director of the Urban Transportation Center in the University of Illinois at Chicago.
- **Founding Director and Principal Investigator of the ESRC-funded Urban Big Data Centre** competitively funded (approx. £11 million including supplemental awards and institutional support) over 5 years. This is a major science and technology centre operating a national data service based in the University of Glasgow that involves 6 other universities, funded by UK Research Council's Economic and Social Research Council.

GRANTS AS PRINCIPAL INVESTIGATOR (non-USD conversion rate as per date of award)

Role	Title	Sponsor	Period
P.I.	Urban Big Data for Trusted Smart Statistics Training Grant	European Commission (Eurostat, official EC statistical agency)	2018-2018
P.I.	Social and Economic Implications of Transport Sharing and Automation	UK Research Council Economic & Social Research Council	Under contract (will start Feb 2018)

P.I.	Social Analytics Strategic Network (SASNet)	Economic & Social Research Council	2016-2017
P.I.	iMCD: An Interdisciplinary data resource to Address the Challenges of Urban Living	Engineering and Physical Sciences Research Council	2015-2016
P.I.	Social Transport Systems	European Commission	2014-2018
P.I.	Urban Big Data Centre	Economic & Social Research Council	2014-2019
P.I.	Active Travel and the Role of Information Technology: A Survey-Based Study in Glasgow	Glasgow City Council/UK Technology Strategy Board and University of Glasgow KE Support	2013-2014
P.I.	Exploring Traffic Safety Risks to Child Pedestrians	University of Glasgow	2013-2013
P.I.	Urban Informatics, Big Data and Community Engagement	Institute for Policy and Civic Engagement	2012-2013
P.I.	Big Data and Urban Informatics (co-PI Jan. 2013-2014 following move to UK)	National Science Foundation	2012-2014
P.I.	Next Generation Intermodal Passenger Transportation System	Illinois Department of Transportation	2012-2014
P.I.	Analysis of Bicycle Crashes in Chicago Metropolitan Area	Chicago Department of Transportation	2011-2012

P.I.	Post-Implementation Evaluation Of Emissions Benefits Of CMAQ Projects: Phase 2	Chicago Metropolitan Agency for Planning	2010-2011
P.I.	Eisenhower Graduate Fellowship (awarded to advisee William Vassilakis)	U.S. Department of Transportation, Federal Highway Administration	2010-2011
P.I.	Analysis of Employment Transportation Services for the JobLinks Program	U.S. Department of Labor through the Community Transportation Association of America	2009-2010
P.I.	Evaluation of Transportation for Disadvantaged Populations	U.S. Department of Transportation, Federal Transit Administration	2008-2009
P.I.	Eisenhower Graduate Fellowship (awarded to advisee Caitlin Cottrill)	U.S. Department of Transportation, Federal Highway Administration	2008-2010
P.I.	Post-Implementation Evaluation Of Emissions Benefits Of CMAQ Projects	Chicago Metropolitan Agency for Planning	2008-2009
P.I.	Design of Special Events, Weather and Construction Delay Component of a Dynamic Traveler Information System	NAVTEQ, LLC	2007-2008
P.I.	Bus on Shoulders	Illinois Department of Transportation	2007-2008
P.I.	Human Service Transportation Survey	Community Transportation Association of America	2007-2008

P.I.	Lipinksi/Randolph Scholarship	Illinois Department of Transportation	2005-2006
P.I.	Planning Partners and economic Impacts Study	U.S. Department of Transportation, Federal Transit Administration	2005-2006
P.I.	Study on Employment Transportation Partnerships and Economic Benefits	U.S. Department of Labor through the Community Transportation Association of America	2005-2006
P.I.	System-Wide Information for Transportation Assessment and Research	U.S. Department of Transportation, Federal Highway Administration	2005-2008
P.I.	Common Ground's Planning	Northeastern Illinois Planning Commissions	2003-2005
P.I.	Eisenhower Graduate Fellowship (awarded to advisee Jiangping Zhou)	U.S. Department of Transportation, Federal Highway Administration	2004-2005
P.I.	Partnership for Low-Income Worker Accessibility	U.S. Department of Labor JobLinks Program through the Community Transportation Association of America	2003-2004
P.I.	Economic Benefits of Intelligent Transportation Systems (ITS) to the Chicago Metropolitan Area	Illinois Department of Transportation through the Metropolitan Transportation Support Initiative	2003-2004
P.I.	Impact of Transit on Low-Income Populations	U.S. Department of Transportation, Federal Transit Administration	2001-2010
P.I.	Development, Testing and Evaluation of Intelligent Databases for Motor Carrier Safety	U.S. Department of Transportation, Bureau of Transportation Statistics	2000-2001

P.I.	Development, Testing and Evaluation of Intelligent Databases for Motor Carrier Safety	Illinois Department of Transportation match to BTS grant	2000-2001
P.I.	Access to Jobs for Low-Income Workers: Partners and Stakeholders	Community Transportation Association of America	2001-2003
P.I.	Initiative for Access to Jobs and Economic Opportunities	Illinois Board of Higher Education through University of Illinois at Chicago to match FTA grant	2002-2003
P.I.	Development of a Midwest Personal Travel Demand Model	Illinois Department of Transportation through the Metropolitan Transportation Support Initiative	1999-2000
P.I.	Preliminary Technology Guidelines for an Intelligent Transportation Systems (ITS) Deployment in Malaysia: Implications for a Revenue Model	Oyster Solutions, New Delhi, India and Sinar Dian Technologies SDN BHD, Kuala Lumpur, Malaysia	1999-2000
P.I.	Statistical Support Service for National Transit Database	Pace, suburban Chicago bus division	1998-1999
P.I.	Implications of the Welfare Reform Bill on Suburban Chicago Transit Demand: Some Strategies for Pace	Pace, suburban Chicago bus division	1997-1998

P.I.	Evaluation of RT-TRACS Adaptive Signal Control	Chicago Department of Transportation	2000-2001
P.I.	Intermodal Safety Issues in Northeastern Illinois	Illinois Transportation Research Consortium (subcontract from Northwestern University)	1998-1999
P.I.	Comparison of Interstate and Intrastate Commercial Motor Vehicle Safety	Illinois Transportation Research Consortium	1998-1999

Total funds generated as Principal Investigator **\$24,790,452**

GRANTS AS CO-PRINCIPAL INVESTIGATOR OR RESEARCH AFFILIATE

Role	Title	Sponsor	Period
Co-I	Urban Development, Migration, Segregation and Inequality	Economic and Social Research Council (joint project with Chinese Academy of Social Sciences)	2015-2016
Co-PI	Administrative Data Research Center	Economic and Social Research Council	2013-2018
Researcher	Q-Step Quantitative Methods Programme	Nuffield Foundation, Economic and Social Research Council UK, Higher Education Funding Council for England	2013-2018
Researcher	AQMeN Phase II	Economic and Social Research Council	2013-2016
Co-PI	Land-Use and Economic	National Center for Freight and Infrastructure Research and Education - University of Wisconsin	2008-2010

Co-PI	IGERT: Integrative Graduate Program in Computational Transportation Science	National Science Foundation	2005-2010
Co-PI	Transit Strategies Targeting Elderly People	Illinois Center for Transportation	2007-2008
Co-PI	Transportation and Welfare Reform	Illinois Department of Human Services	1998-1999
Co-PI	Travel Information, Access to Economic Opportunities and Issues of Environmental Justice	Chicago Area Transportation Study	2000-2001
Researcher	Transportation Infrastructure and Network Modeling	National Science Foundation's (NSF) through the National Institute of Statistical Sciences (NISS)	1996-2000
Co-PI	Intermodal Safety Issues in Northeastern Illinois	Illinois Department of Transportation	1998-1999
Co-PI	Highways and Urban Decentralization	Illinois State Toll Highway Authority	1997-1999
Co-PI	Urban Decentralization	Illinois State Toll Highway Authority	1997-2000
Researcher	Metropolitan Initiative/Case Studies	Brookings Institute	1998-1999
Researcher	Modeling and Prediction for Infrastructural Systems	National Science Foundation	1993-1999
Researcher	Fellows for Cross-Disciplinary Research in Statistics	National Science Foundation	1993-1999

Total Funds as Co-P.I. or Research Affiliate \$38,023,826

KEYNOTES, SIGNIFICANT COLLOQUIA, INVITED PRESENTATIONS AND PANEL LEADERSHIP

- International Association of Chinese Planners. *Urban Informatics and Aspirations for Evidence-Based Decision Making and Community Engagement in a Post-Pandemic World*. Keynote address (virtual presentation), September 10, 2021.
- International Statistical Institute (ISI) Panel. *Partnerships with official statistical agencies: an academic perspective on experimental statistics*. Invited speaker and discussant, 63rd World Statistics Congress. Panel organized by Statistics Netherlands, with participation of Mexican National Statistical Office, June 22, 2021.
- Princeton University New Jersey Big Data Alliance, Moderator, panel on *Smart Data to Illuminate Community Grand Challenges*, April 30, 2021.
- Newark Airport City Consortium. *Newark Airport City: A Regional Planning View*. Keynote address (virtual address), April 30, 2021.
- Princeton University, Princeton. *Aspirations for a Better Post-Pandemic World*. Princeton-Panelist Remarks Princeton-Mellon Foundation, Oct 21, 2020.
- AASHTO Joint Policy Conference. *Mobility Analytics in the COVID Era: Prospects and Challenges with New Forms of Data and AI*. Keynote Address, American Association of State Highway and Transportation Officials (AASHTO) 2020 Joint Policy Conference (Virtual Address), Sept 30, 2020.
- Port Authority of New York and New Jersey, New York City, World Trade Center. *Decision-Support and Citizen Engagement for Mobility and Smart Cities: Prospects and Challenges with New Forms of Data*. Invited talk, Regional Roundtable. Dec. 17, 2019.
- New York City Bloustein School Alumni Group, LMHQ, New York City, NY. *Smart Mobility and Analytics*. Invited talk, Oct 11, 2019.
- Ohio State University NSF Workshop on Sustainable Urban Systems, Columbus, Ohio. *Urban Informatics and Smart Mobility in Future Cities: Prospects and Challenges with New Forms of Data and AI*. Keynote speech. July 16, 2019.
- European Commission, Eurostat New Techniques and Technologies for Statistics 2019, Brussels, Belgium. *Challenges in Urban Informatics and Smart Cities with New Forms of Data*. Keynote speech, March 13, 2019.
- Royal Society of Edinburgh supported by The Scottish Informatics and Computer Science Alliance (SICSA) and the Engineering and Physical Sciences Research Council (EPSRC) Digital Economy Theme. *Social and Economic Aspects of Urban Informatics*. Keynote speech, May 30, 2018.
- 4th Conference on Sustainable Urban Mobility – CSUM2018, Skiathos Island, Greece. *Exploring social and economic implications of big data for mobility*. Keynote speech, May 24, 2018.

- University of Leeds, New and Emerging Forms of Data in Policy Making: Transport, Health and Air Quality Management. *New Forms of Data and Mobility Analysis*. Keynote speech, April 24, 2018.
- Joint meeting of the Directors of Methodology and Information Technology, National Statistical agencies of member countries of the European Union and associated countries, and the statistical agency of the European Commission, Eurostat, Luxembourg. *Urban Big Data Centre: Key Lessons for Smart Statistics*. Keynote speech, Feb 23, 2018.
- Georgia Tech, Atlanta, Georgia. Invited speaker on *Urban Informatics: Examples, Prospects and Challenges* in Planning Future Lecture Series, Oct 20, 2017.
- Statistics Netherlands, Heerlen, Netherlands. Invited speaker on *Transport Planning and Operations with Big Data* in Big Data Matters Towards Smart Statistics workshop. Sept 27, 2017.
- Guild of European Research-Intensive Universities, Brussels, Belgium. Panelist and Speaker on *Big Data and Urban Informatics*, May 10, 2017.
- Chinese University of Hong Kong. *Emerging Data Sources and Urban Informatics: Examples, Prospects and Challenges*. Keynote in Advanced Workshop of Urban Studies and Smart Cities, April 28, 2017.
- National Science Foundation Workshop on Acquiring and Sharing Data Within the CMMI Research Community. Invited speaker on *Urban Data Infrastructure and Urban Informatics*. Also Member of Steering Committee. Feb 5-6, 2017.
- Helsinki City Hall, Reboot Helsinki, Tampere and Finland with Big Data. Keynote Speaker. *An Overview of the Urban Big Data Center*, January 26, 2017.
- Big Data Analysis for Transportation Engineering Systems, Indian Institute of Technology, Chennai, India. Indo-US Workshop. Dec 5-6, 2016. Program Committee Member.
- Erasmus University Rotterdam, Netherlands. September 16, 2016. *Big Data, Urban Informatics and the City*. Invited Lecture, Erasmus Paviljoen, Campus Woudestein of Erasmus University.
- University of Manchester DACAS Summer School, September 12, 2016. *Seeing Cities with Big Data: Emerging Topics in Urban Informatics*. Keynote Speaker.
- Carnegie Mellon University, Pittsburgh, Sept 6, 2016. *Emerging Data Sources and Urban Informatics: Examples, Prospects and Challenges*. Invited speaker, Heinz College of Business.
- First International Workshop on Big Data Smart Transportation Analytics in Shanghai, China, jointly organized by Purdue University and Tongji University, Shanghai, China, July 16-17, 2016. *Unstructured Data for Urban Informatics*. Invited speaker and International Advisory Committee member.
- U.S. National Academy of Sciences Mapping Science Committee, Washington D.C. *Grand Challenges in Smart Cities*. April 14, 2016. Keynote Speaker.

- European Commission Joint Research Center, Seville, Spain. Invited presentation on *Urban Informatics and Transportation Research*. NECTAR Cluster 8 Meeting on Big data: a new opportunity for urban transport and mobility policies.
- Leibnitz Center for Informatics, Saarland, Germany, Schloss Dagstuhl Seminar on *Computational Challenges in Cooperative Intelligent Urban Transport*, Feb 28-March 4, 2016. Keynote speaker.
- U.S. Comptroller General Forum on 21st Century Data Analytics, jointly organized by U.S. GAO and the National Academies Board on Mathematical Sciences and Their Applications. *Future Promises and Benefits of Big Data Economy*. Jan 27-28, 2016. Washington DC, Invited attendee and speaker.
- Alan Turing Institute. *Urban Big Data– Examples, Prospects and Challenges*. Invited presentation at the ATI Scoping Workshop, University of Edinburgh, November 30, 2015.
- Edinburgh Napier University. *Unstructured Data Use in Transportation Research – Examples, Prospects and Challenges*. Keynote Lecture in Workshop on Smart Urban Mobility, Nov 27, 2015.
- 12th PASCAL Observatory Conference Connecting Cities and Universities at Strategic Frontiers, Catania, Sicily. *The Future of Cities: Big Data and the Urban Economy*. Keynote Speaker, Oct 7, 2015,
- Research Data Alliance Sixth Plenary Meeting Paris, France. *Data Systems in Urban Big Data Centre*. Plenary presentation, Urban Working Group, Sept 24, 2015.
- Joint Statistical Meetings, Seattle. *Unstructured Social Media Data for Transportation Applications: Benefits and Challenges*. Invited presentation in JSM Transportation Special Interest Group's Session on New Tools for Transportation Statistics, Seattle, Aug. 8-13, 2015.
- University of Leeds. *Emerging Data Sources and Urban Informatics*. Keynote Speaker, Opening Event of Leeds Institute of Data Analytics. July 10, 2015.
- Iowa State University, Ames, Iowa. *Smart Transportation Planning and Operations*. Colloquium Speaker, Department of Civil Engineering. April 27, 2015.
- Association of American Geographers. *Frontiers of Research on Urban Informatics*. Chair of panel organized by AAG 2015 Symposium on CyberGIS for Fostering New Frontiers of Geographic Research and Education, Chicago, IL, April 2015.
- Edinburgh Science Festival. *Urban Informatics*. Chair of panel and speaker, Edinburgh, April 16, 2015.
- University College Dublin, Dublin, Ireland. *Big Data for Urban Informatics: Examples from the Glasgow Urban Big Data Centre*. Colloquium Speaker, University College Dublin, School of Geography, Planning and Environmental Policy, March 26, 2015.
- European Commission Joint Program Initiative Urban Governing Board. *Urban Big Data and Smart Cities*. Plenary presentation to the full governing board of the EC JPI

- Urban, London, UK, on March 9, 2015.
- American Association for the Advancement of Science (AAAS) Annual Meeting, San Jose. *Transport Informatics*. Invited panelist and speaker in US Government Accountability Office and UK Parliament Office for Science and Technology joint special session on Social Implications of Big Data in AAAS Annual Meeting, San Jose, Feb. 13, 2015.
- High Performance Computing and Big Data Conference (UKHPC), London. *Urban Big Data: Addressing the Social, Economic and Environmental Challenges Facing Cities*. Plenary Speaker, Annual HPC and Big Data Conference, London, Feb 3, 2015.
- Ohio State University, Columbus. *Data-driven Modeling for Transportation: Prospects and Challenges*. Colloquium Speaker, Ohio State University's Department of Geography, Columbus, Jan. 16, 2015.
- Imperial College, London. *Urban Informatics and ICT Entrepreneurship for Data-Driven Public Transport Planning and Operations*. Imperial College Centre for Transport Studies (CTS) Seminar Series, London, Nov. 19, 2014.
- Holyrood, Parliament of the Government of Scotland. *The Science of Running Smart Cities*. Keynote speaker, Scottish Parliament, Edinburgh, Nov 12, 2014.
- UK Research Council's Economic and Social Research Council. *Urban Big Data Centre – Research, Data Service and Data Products*. Speaker and Panelist in ESRC's Urban Big Data Network Launch. Westminster Annex, London, October 15, 2014.
- University of Edinburgh. *Transportation Policy Applications using Confidential Data Linkage*. Invited Presentation in University of Edinburgh's Administrative Data Research Centre Annual Retreat, October 2, 2014.
- National Science Foundation-sponsored Workshop on Big Data and Urban Informatics, University of Illinois at Chicago. *Big Data and Urban Informatics*. Opening Plenary Presentation. August 11, 2014.
- Royal Academy of Engineering, London. *Urban Informatics: Social and Behavioral Modeling of Transportation*. Invited Presentation in IBM Big Data Analytics Workshop, March 12, 2014.
- Transportation Research Board Annual Conference, Washington, DC. *Urban Digital Infomediaries in an Era of Big Data and Open Data Initiatives*. Opening presentation in Workshop on Big Data and Open Data, January 12, 2014.
- King's College, London. *Does Better Data Help Solve Problems?* Invited presentation in New Limits of Growth Series, October 4, 2013.
- National Science Foundation-sponsored Workshop on Big Data and Urban Informatics, University of Illinois at Chicago. *Big Data and Urban Informatics: e-Infrastructure for Urban Social Science Research*. Opening presentation, March 28, 2013.

Transportation Research Board Annual Conference, Washington DC. *Big Data Informatics: Innovations in Mining Structured and Unstructured Information for Mobility Decision-Making*. Opening presentation in Workshop on Big Data Informatics, January 2013.

National Institute of Informatics, Shonan Village Center, Kanagawa, Japan. *Transportation in a Connected and Ubiquitous Sensing Environment: Challenges and Opportunities*. Invited presentation in Social Issues in Computing for Transportation workshop, Dec 20, 2012.

Illinois Institute of Technology-Chicago Kent College of Law. *Sensors and Analytics: Mobility Technologies and Locational Privacy Implications*. Invited speaker and panel discussant in Under Watchful Eyes: The Technologies that Track on Oct. 5 2012.

University of Glasgow, UK. *Smart and Sustainable Transportation Systems*. Invited colloquium on March 14, 2012.

National Science Foundation (NSF) CyberGIS Workshop. *Geospatial Interoperability, Semantics, and Representation*. Panel co-chair, Oak Ridge National Labs, Oak Ridge, TN on Sept. 29, 2011.

Transportation Research Board Annual Conference, Washington, DC. *Workshop on Pervasive Data in Transportation*. Panel co-chair on January 23, 2011.

Research and Innovative Technology Administration, U. S. Department of Transportation, Washington, DC. *Cooperative Data Sharing: Issues and Challenges*. Invited presentation in Workshop on the IntelliDriveSM Program on April 28, 2010.

Leibniz Center for Informatics, Dagstuhl, Germany. *Humans, Society and the Economy in the Context of Computational Transportation Science*. Invited attendance and presentation in Workshop on Computational Transportation Science on March 25, 2010.

Panel on Technology and Innovations held by U.S. House of Representatives Chair Jim Oberstar and Congressman Daniel Lipinski, Chicago. *Intelligent Transportation Systems Research Needs*. Invited presentation on March 5, 2010.

Ministry of Urban Development, Government of India, New Delhi, India and Institute of Urban Transportation, India. *Collaborative, Content-Rich Intelligent Transportation Systems for Urban Transport*. Invited presentation on Dec, 4, 2009.

University of Illinois at Chicago Supply Chain Management and Freight Transportation Symposium Panel. *Transportation Reauthorization: The University Perspective*. Invited presentation and panel discussant on Nov. 19, 2009.

National Conference on Smart Transportation, Brisbane, Australia. *Smart Transportation and Computational Transportation Science*. Specially invited international guest and keynote workshop presenter on April 22, 2009.

- ITS World Congress Special Session, New York, NY. *Industry-University R&D Collaboration on Intelligent Transportation Systems*. Panel leader of faculty and researchers from USA, Australia and Europe on November 18, 2008.
- Chicago Metropolitan Agency for Planning, Chicago, IL. *Economic Benefit Estimation of Employment Transportation Services*. Invited speaker, November 14, 2008.
- North American Travel Monitoring Exposition and Conference, Washington, D.C. *Private Sector Data Sharing Agreements*. Panel leader on August 8, 2008.
- University of Tennessee, Knoxville, TN, Department of Civil Engineering and Center for Transportation Research. *Interdisciplinary Transportation Research – Challenges and Opportunities in Use-Inspired Research, Education and Services*. Invited seminar on July 14, 2008.
- U.S. House of Representatives Committee on Transportation and Infrastructure (Congressmen James Oberstar and Daniel Lipinski.) *Freight Congestion and Employment Transportation in the Chicago Metropolitan Area*. Testimony on June 17, 2008.
- National Resource Center for Human Service Transportation Coordination. *Human Service Transportation Plans: State of the Practice*. Invited speaker in seminar held in the U.S. Department of Transportation Conference Center on Jan. 17, 2008.
- Tongji University, College of Architecture and Urban Planning, Shanghai, China. *Mobility and Accessibility for the Urban Poor: Policies, Analysis and Implementation Strategies*. Invited colloquium on October 8, 2007.
- ITS World Congress Special Session, Beijing, China. *ITS and Higher Education*. Panel leader of faculty and researchers from Australia, Europe, Japan, China and Canada. October 13, 2007.
- ITS World Congress Special Session, Beijing, China. *IGERT: A Doctoral Program in Computational Transportation Science*. Invited presentation made in Special Session on ITS and Higher Education. In the Intelligent Transportation Systems World Congress, Beijing, China, on October 13, 2007.
- Joint Census Bureau and Brookings Institute Workshop on Local Employment Dynamics (in Brookings Institute, Washington, D.C.) *LEHD: Potential for Transportation Planning and Programming*. Invited presentation on Feb. 1, 2007.
- Federal Transit Administration, U.S. DOT, Washington, D.C. *National Longitudinal Travel Data*. Invited presentation on Feb. 1, 2007.
- University of Michigan, Ann Arbor, Center for Complex Systems. *Modeling Accessibility and Equity: The Indian Context*. Invited presentation on November 17, 2006.
- NAVTEQ, LLC, Chicago, IL. *Design of a Prototype Travel Time Information System for Dynamic Content Dissemination and Management*. Invited speaker, October 25, 2006.

- Global Foundation for Democracy and Development (FUNGLODE), Santo Domingo, Dominican Republic. *Planning, Urban Transportation Systems: Land-Use, Economic Development and Sustainability Interactions*. Invited colloquium on May 27, 2006.
- Government of Dominican Republic, Santo Domingo, Dominican Republic. *Urban Transportation Systems: Issues and Analysis*. Invited colloquium on May 26, 2006.
- Federal Reserve Bank of Chicago and Illinois Welfare Policy Symposium. *Transportation for Low-Income Employment and Discretionary Trips. Review of Recent Trends*. Panelist in Illinois Welfare Policy Symposium on May 24, 2006.
- School of Planning and Architecture, New Delhi, India. *Elements of the U.S. Regional Transportation Planning Process: Overview of the Chicago Area Transportation Plan*. Invited colloquium on December 6, 2004.
- Community Transportation Association of America Expo, Seattle, WA. *Partnerships for Low-Income Worker Transportation*. Invited speaker, July 2004.
- Northwestern University, Transportation Center, Evanston, IL. *Accessibility for Low-Income Workers. Needs Assessment, Trends and Evaluation*. Invited speaker in Northwestern University Transportation Center Seminar Series on Dec. 4, 2003.
- Community Transportation Association of America Expo, Philadelphia, PA. *Low-Income Worker Accessibility: Survey of JARC-Funded Transit in 23 Sites*. Invited speaker, June, 2003.
- U.S. Senate Committee on Environment and Public Works (Senator James Inhofe). *Illinois Transportation: The Crossroads of Our Nation*. Testimony on April 7, 2003.
- Interpreting Neighborhood Change, Voorhees Center, Chicago. *Spatial Accessibility to Economic Opportunities: Concepts, Measurement and Implications for Low-income Populations*. Invited speaker, April 4, 2003.
- United States Department of Transportation, Bureau of Transportation Statistics. *Data Linkage Issues: Some Considerations and Applications*. Invited speaker, June 11, 2002.
- World Bank, Inter-American Development Bank, Washington, DC., International Symposium on Intelligent Transportation Systems in Emerging Nations hosted by ITS America, *ITS and Planning in Emerging Markets*. Invited speaker on May 2, 2002.
- University of Illinois at Urbana-Champaign, IL, GIS Colloquium Series hosted by the Departments of Planning and Geography. *Access to Economic Opportunities. Policy and Methodological Issues*. Invited speaker, February, 2000.
- University of Wisconsin. *Transportation Systems. Planning to Make It Take Us Where We Want To Go*. Invited speaker in the University of Wisconsin Spring College Program. April, 2000.
- Northwestern University/University of Chicago. Joint Center for Poverty Research. Invited presentation as member of a panel on *Transportation and Welfare Reform*. December 15, 1998.

University of Illinois at Chicago. Department of Mathematics, Statistics and Computer Science. *Estimation of Travel Times on Arterial Street Networks*. Invited colloquium. April 4, 1998.

Transportation Research Board Annual Conference, Washington D.C. *Welfare Reform and Women's Travel Needs*. Invited presentation, Panel on Transportation and Welfare Reform. January, 1998.

Massachusetts Institute of Technology, Cambridge, MA. *Quality of Route Guidance in Probe-based Advanced Traveler Information Systems*. Invited colloquium in the Department of Civil and Environmental Engineering. May 1995.

University of Florida, Gainesville, FL. *Transportation Planning and Intelligent Vehicle Highway Systems*. Invited colloquium in the School of Planning and Architecture. April 1994.

Indian Institute of Technology, New Delhi, India. *Implementation of a Dynamic Route Guidance System: Issues and Considerations*. Invited colloquium. December 1992.

CONFERENCE PRESENTATIONS

(Starred items indicate a full paper)

Presentation of Fully Refereed Papers

**Role of the Internet in Shaping Young Adults' Attitude, Travel Choices, and Sustainable Lifestyles: Longitudinal Perspective*. Presented in 2017 Transportation Research Board Annual Conference (with Guoqing Wu and Jinhyun Hong).

**Effects of Residential Locations and Mobile Technologies on Trip Generation: Focusing on Mediating Effects*. Presented in 2017 Transportation Research Board Annual Conference (with Jinhyun Hong).

**Effect of Employment Status on the Relationship between Time Spent on the Internet and Activity Engagement*. Presented in 14th International Conference on Travel Behaviour Research, Windsor, UK, July 2015 (with G. Wu and J. Hong).

**Analysis of Household Transportation Spending During US Economic Recession*. Presented in 2014 TRB Annual Conference (with Yaye Keita-Mallon).

* *Transit Use and the Work Commute: An empirical analysis of the role of urban densities, last mile problems, and personal constraints on mode choice*. Presented in 2014 TRB Annual Conference (with Nebiyou Tilahun, Moyin Li and Yaye Keita-Mallon).

**An Analysis of Emerging Urban Digital Infomediaries in an Era of Big Data and Open Data Initiatives*. Presented in 2013 AESOP-ASCP Joint Congress (with L. Dirks, and Y. Keita Mallon.).

- **An Analysis of Household Car-Ownership and Transportation Expenditures during the US Economic Recession.* Presented in 2013 AESOP-ASCP Joint Congress (with Y. Keita-Mallon).
- **Factors Determining Transit Access by Car-Owners: Implications for Intermodal Passenger Transportation Planning.* Paper presented in 2013 Transportation Research Board Annual Conference (with N. Tilahun and Y. Keita-Mallon).
- **Mobility for Persons with Disabilities: Examining Service and Planning Innovations of the U.S. New Freedom Program.* Paper presented in TRANSED 2012, 13th International Conference on Mobility and Transport for Elderly and Disabled Persons held in New Delhi, India from September 17 - 21, 2012. (With Siim Soot).
- **Perceived and Functional Independence in Travel: Assessing the Role of Neighborhood Factors and Community-Based Mobility Services for Persons with Disabilities.* Paper presented in 2012 Transportation Research Board Annual Conference (with W. Vassilakis).
- **An Assessment of Temporal and Spatial Effects of Bus Arrival Time Information and Implications for Spatially Targeted Location-Based Services.* Paper presented in 2012 Transportation Research Board Annual Conference (with L. Tang and W. Vassilakis).
- **Analysis of Cost-Effectiveness of Employment Transportation Services.* Presented in 88th Transportation Research Board Annual Conference, Jan. 2011.
- **Will the Psychological Effects of Real-time Transit Information Systems Lead to Ridership Gain?* Presented in 88th Transportation Research Board Annual Conference, Jan. 2011. (With L. Tang)
- * *Integrated and Continuing Transportation Services for Seniors: Case Studies of New Freedom Program.* Presented in 88th Transportation Research Board Annual Conference, Jan. 2011. (With S. Soot, C. Cottrill, N. Tilahun, E. Blaise and W. Vassilakis).
- **Protecting Locational Privacy. Policy Evaluation.* Presented in 88th Transportation Research Board Annual Conference, Jan. 2011. (With C. Cottrill).
- **Incorporating Weather Information into Real-Time Speed Estimates: Comparison of Alternative Models.* Presented in 88th Transportation Research Board Annual Conference, Jan. 2011. (With N. Tilahun).
- **Using Real-Time Weather Information in Traveler Information Systems and Location-Based Services.* Presented in 18th International Conference on Advanced in GIS, ACM SIGSPATIAL GIS, San Jose, CA, November 2010. (With N. Tilahun)
- **Sketch Planning Methodology for Determining Interventions in Bicycle and Pedestrian Crashes: An Ecological Approach.* Presented in 87th Transportation Research Board Annual Conference, Jan. 2010. (With Cottrill, C., N. Thomas and S. Vaughn)

- **Car-Ownership Among Young Adults: Generational and Period-Specific Perspectives.* Presented in 87th Transportation Research Board Annual Conference, Jan. 2010. (With L. Tang and S. Menchu)
- **Young Women's Transportation and Labor Market Experiences.* Presented in Transportation Research Board Conference on Women's Issues, October, 2009, Irvine, CA. (With L. Tang and S. Menchu).
- **Planning for Bus-on-Shoulders Operations in Northeastern Illinois: A Survey of Stakeholder.* Presented in 88th Transportation Research Board Annual Conference, Jan. 2009. (With P. Metaxatos)
- **A Networked Approach to Planning for Deployment of Intelligent Transportation Systems.* Presented in ITS World Congress 2008, November 18, New York, NY (With C. Cottrill and T. Gustafson).
- **GPS Use by Households: Early Indicators of Privacy Preferences regarding Vehicle Infrastructure Integration and Ubiquitous Mobility Information Access.* Presented in ITS World Congress 2008, November 18, New York, NY. (With C. Cottrill).
- **Including Weather Effects in Real-Time Traffic Information Environment - Exploratory Analysis and Alternative Models.* Presented in ITS World Congress 2008, November 18, New York, NY (With G. Yanos, J. Lin, P. Metaxatos, R. Sulo, W. Pu and L. Mbekeani).
- **GPS Adoption by Households: Evidence from a Household Travel Survey.* Presented in First International Workshop on Computational Transportation Science IWCTS 08, July 21, 2008, Trinity College Dublin, Ireland. Held in conjunction with: The Fifth International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous 2008). (With C. Cottrill).
- **Longitudinal Analysis of Effect of Transportation Difficulties on Earnings Among Young Adults from Disadvantaged Families.* Paper presented in January, 2008 annual meetings of the Transportation Research Board, Washington, DC. (With L. Tang)
- **Cost-Effectiveness Analysis of Job Access and Reverse Commute Program.* Paper presented in January, 2008 annual meetings of the Transportation Research Board, Washington, DC. (With P.S. Sriraj and T. Schmidt)
- **Evaluating Pedestrian Risk in Environmental Justice Areas.* Paper presented in January, 2008 annual meetings of the Transportation Research Board, Washington, DC. Paper presented in January, 2008 annual meetings of the Transportation Research Board, Washington, DC. (With C. Cottrill)
- **Analysis of Transit Quality of Service and Employment Accessibility for the Greater Chicago Region.* Paper presented in January, 2008 annual meetings of the Transportation Research Board, Washington, DC. (With. I. Minocha, P.S. Sriraj and P. Metaxatos).
- **Relationship of Attitudes towards Road and Transit Capital Investments and Propensity to Ride Transit Given Traveler Information.* Paper presented in January, 2007 annual meetings of the Transportation Research Board, Washington, DC. (with L. Tang)

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- **An Examination of Anticipated Behavioral Responses to Real-Time Transit Information Systems*. Paper presented in World Conference on Transport Research Society, Berkeley, CA, July 2007. (With L. Tang)
 - **Transportation Expenditures and Ability to Pay: Evidence from the Consumer Expenditure Survey*. Paper presented in January, 2006 annual meetings of the Transportation Research Board, Washington, DC. (With Y. Liao)
 - **Determinants of Perceived Importance of Targeted Transportation Services for Low-Income Riders*. Paper presented in January, 2006 annual meetings of the Transportation Research Board, Washington, DC. (With P.S. Sriraj, S. Soot and Y. Liao)
 - * *Housing Relocation Assistant: A Housing Relocation Tool for the Chicagoland Area*. Paper presented in January, 2006 annual meetings of the Transportation Research Board, Washington, DC. (With P.S. Sriraj and M. Minor)
 - * *Impact of Information on Housing Relocation Using Analytical Hierarchy Process and Interactive GIS*. Paper presented and published in Proceedings of the Applications of Advanced Transportation Technology of the American Society of Civil Engineers, Chicago, August 2006. (With P.S. Sriraj and M. Minor)
 - **An Analysis of Variations in Vehicle-Ownership Expenditures*. Presented in Transportation Research Board Annual Conference, January 2005. (With Y. Liao)
 - * *Job Access Services and Programs for Low-Income Workers: Some Comments*. Paper presented in City Futures International Conference, Chicago, IL, July, 2004.
 - **Relationship of Occupational, Industry and Socioeconomic Characteristics and Job Start Times: Evidence from Current Population Survey*. Presented in Transportation Research Board Annual Conference, January 2004. (With A. Sinha)
 - **Activity and Travel Changes of Job Access Transportation Service Users: Analysis of a User Survey*. Presented in Transportation Research Board Annual Conference, January 2005. (With S. Soot, P. S. Sriraj, Y. Liao and G. Berman)
 - **Model-Based Estimates of Transportation Safety Data Quality*. Paper presented in Hong Kong Society for Transportation Studies 2004 Conference, December 2004, Hong Kong.
 - **Application of Probabilistic Linkage to Commercial Motor Vehicle and Carrier Data*. Presentation made in the Transportation Research Board Annual Conference, January 13, 2003. (With J. Lee)
 - **An Evaluation of Alternative Signal Control Strategies*. Paper presented and published in the Proceedings of the 9th World Congress on ITS, Chicago, IL, October 16, 2002.
 - **Spatial Data Integration for Low-Income Worker Accessibility Assessment: A Case Study of the Chicago Metropolitan Area*. Paper presented in the Mid-Continent Transportation Symposium, Iowa State University, Ames, Iowa, August 2003. (With J. Ortega and P.S. Sriraj)

- * *Data Quality Criteria for Evaluating Commercial Motor Carrier and Vehicle Databases*. Presentation made in the Transportation Research Board Annual Conference, Washington, DC, January 22, 2002.
- * *Effect of Residential Location and Transportation on Employment Opportunities*. Paper presented in the Seventy-ninth Annual Meetings of the Transportation Research Board (TRB), Washington, DC, January 2000. (With P. Metaxatos)
- * *Factors Contributing to Growth in VMT*. Paper presented in the Seventy-ninth Annual Meetings of the Transportation Research Board (TRB), Washington, DC, January 2000. (With S. Soot)
- * *Estimation of the Demand for Inter-city Travel: Issues with Using the American Travel Survey*. Paper presented in the Transportation Research Board Mid-Summer Conference, Personal Travel: The Long and Short of It, Washington, D.C., July 1999. (With D. Virmani, S. Yun, and P. Metaxatos)
- * *Link Travel Time Estimation with Imputed Signal Control*. Presentation made in Transportation Research Board Annual Meetings, Washington, D.C. 1998.
- * *Nonresponse and Urban Travel Models*. Paper presented in Transportation Research Board Annual Meetings, Washington, D.C. 1996. (With A. Sen, S. Soot, E. Christopher)
- * *A Model for Evaluating Decisions for Advanced Traveler Information Systems*. Presentation in INFORMS, a meeting of the Operations Research Society of America/The Institute of Management Sciences [ORSA/TIMS], New Orleans, November 1995. (With A. Sen)
- * *Variances of Link Travel Times: Implications for Optimal Routes*. Paper presented in Annual Conference of International Federation of Operations Research Societies [IFORS], St. Louis, Missouri, October 1995. (With A. Sen)
- * *Non-response Bias and Trip Generation Models*. Paper presented in Transportation Research Board Annual Meetings, Washington, D.C. 1994. (With A. Sen, S. Soot and E. Christopher)

Abstract Reviewed Presentations (Full papers, some with discussant, are starred)

- * *Relationship between Motorized Travel and Time Spent on the Internet for Non-Work Purposes*. Presented in ACSP Annual Conference, Houston, Oct 24, 2015 (with J. Hong).
- Accessibility Patterns in UK Cities*. Presentation in the European Regional Science Association conference in Lisbon, Portugal, August 26, 2015 (with D. McArthur).
- * *Mobility for Persons with Disabilities: Examining the Case of New Freedom Service Users*. Presented in ACSP Annual Conference, Minneapolis, October, 2010. (With N. Tilahun, S. Soot, W. Vassilakis).

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- **Evaluating Pedestrian Risk in Areas with High Low-Income or Minority Populations.* Presented in ACSP Annual Conference, Minneapolis, October, 2010. (With Cottrill, C.)
 - **Dynamic Microsimulation of Transportation and Labor Markets.* Presented in the International Association of Travel Behavior Research, Dec. 2009, Jaipur, India. (With Persky, J. and S. Soot).
 - **Outcome-Based Evaluation of Employment Transportation Services. Net User, Non-User and Societal Benefits.* Paper presented in the Association of Collegiate Schools of Planning (ACSP)-Association of European Schools of Planning (AESOP) Annual Conference, Chicago, June 11, 2008. (With P.S. Sriraj, J. Persky and L. Tang).
 - **A Spatial Decision Support System for Transportation Planning using Urban Indicators for the Chicago Area.* Paper presented in the ACSP-AESOP Annual Conference, Chicago, June 10, 2008. (With P.S. Sriraj; P. Metaxatos, T. Swarup, L. Dirks, I. Minocha)
 - **Decision Problems In Intelligent Transportation Systems Project Selection, Prioritization And Sequencing.* Paper presented in the ACSP Annual Conference, Milwaukee, Oct 20, 2007. (With C. Cottrill and T. Gustafson).
 - **Ridership Effects of Real-time Transit Traveler Information Systems.* Paper presented in the ACSP Annual Conference, Milwaukee, Oct 21, 2007. (With L. Tang)
 - **An Examination of the Simultaneous Relationship between Transportation Expenditures and Household Incomes.* Presentation made in the 11th International Conference on Travel Behaviour Research, Kyoto, August 2006.
 - **Variations in Outcomes of Targeted Transportation Services.* Paper presented in Oct. 2005 Association of Collegiate Schools of Planning conference, Kansas City, MO.
 - **A Spatial Decision Support System for Transit and Housing Markets using the Analytic Hierarchy Process and Interactive GIS.* Paper presented in Oct. 2005 Association of Collegiate Schools of Planning conference, Kansas City, MO. (With P.S. Sriraj and M. Minor)
 - **A Longitudinal Analysis of Effects of Adequate Transportation Access in Young Adulthood.* Paper presented in Nov. 2005 North American Regional Science Council, Las Vegas, NV. (With Y. Liao)
 - **Multilevel Linear Modeling of Household Vehicle Usage.* Paper presented in Nov. 2005 North American Regional Science Council, Las Vegas, NV. (With Y. Liao)
 - **Transportation Expenditures: Evidence from the Consumer Expenditure Survey.* Presentation in the North American Regional Science Council (NARSC), Philadelphia, Nov. 2003. (With Y. Liao)
 - **Highway Expenditure and Economic Performance: Exploratory Analysis in a Multi-Year Cross-country Setting.* Paper presented in the North American Regional Science Council (NARSC), Philadelphia, Nov. 2003. (With S. Niumpradit)

- **Cross-Sectoral Conceptualization of Job Accessibility Projects: A Spatial Multi-Criteria Decision Support System Application*. Paper presented in the North American Regional Science Council (NARSC), Philadelphia, Nov. 2003. (With J. Ortega)
- **Cross Country Adoption of Intelligent Transportation Systems: The Case of Electronic Toll Collection Systems*. Presentation made in the Association of Collegiate Schools of Planning (ACSP) Conference, Baltimore, MD, November 23, 2002. (With S. Niumpradit)
- **Framework for Intercity Travel Demand Modeling in the United States*. Paper presented in the Annual North American Meetings of the Regional Science Association International, Montreal, Canada, November 1999.
- **An Assessment of Needs for Access to Jobs*. Paper presented in the Annual Meetings of the Association of Collegiate Schools of Planning, Chicago, November 1999. (With P. Metaxatos)
- **Application of ITS to improve ground access control and traveler information in major airports*. Paper presented in the Institute of Transportation Engineers Annual Conference, Las Vegas, Nevada, August 1999.
- **Impact of Land Use and Transportation on Company Location Preference*. Presentation in the Annual Meeting of the North American Regional Science Council, Santa Fe, New Mexico. November, 1998. (With A. Sen and S. Soot)
- **Estimation of Demand due to Welfare Reform*. Paper presented in the Annual North American Regional Science Council, Buffalo, New York, November 1997. (With A. Sen, P. Metaxatos, S. Soot)
- **Traveler Learning and Route Choice*. Presented in the Annual Meeting of the North American Regional Science Council, Cincinnati, 1995. (With A. Sen)
- **Characterization of Imperfection in Information given by Advanced Traveler Information Systems*. Paper presented in the North American Regional Science Council Annual Conference, Niagara Falls, Canada, November, 1994. (With A. Sen)
- **Evaluation of Route Quality in an Advanced Traveler Information System*. Paper presented in the North American Regional Science Council Annual Conference, Houston, November 1993. (With A. Sen)
- **Development of a Short-Term Travel Time Prediction System for a Dynamic Route Guidance System*. Paper presented in the North American Regional Science Council Annual Meeting, November 1992. (With A. Sen)
- **Entropy Maximization and Spatial Interaction Models*. Paper presented in the North American Regional Science Council Annual Conference, Chicago, November 1992. (With A. Sen)

Presentations in Pre-Organized Conference Sessions

Economic and Social Urban Indicators: A Spatial Decision Support System for Chicago Area Transportation Planning. Presentation in the Association of American Geographers

- Annual Conference session on *SDSS Development: Learning from Real World Experiences*, Boston, April 16, 2008.
- **Transportation and Employment Accessibility In A Changing Context Of Metropolitan Decentralization: Case of New Delhi, India*. Paper presented in Pre-Organized Session: *Urban Work/Labor: The Politics and Ethics of the Changing Development Debate* in the Annual Meetings of Association of Collegiate Schools of Planning (ACSP), Milwaukee, Oct 18, 2007.
- Markov Chain Monte Carlo: Application for Imputation of Transportation Databases*. Presentation made in session on *Markov Chain Monte Carlo in Action*, Transportation Research Board Annual Conference, January 14, 2003.
- Intelligent Transportation Systems for Economies in Transition*. Presentation made in the ITS America Annual Meetings, Miami Beach, FL, June 4, 2001.
- Data Needs for Evaluation of Adaptive Signal Control Systems*. Presentation made in the Mid-Year Joint Transportation Research Board and NATMEC Conference, Madison, WI. August 29, 2000.
- **Detection of High-Risk Trucks. Data Linkage and Inference*. Paper presented in the Joint Research Conference of the American Statistical Association (ASA) Quality and Productivity Section, Section on Physical and Engineering Sciences and the Institute of Mathematical Statistics, Seattle, WA. June 2000.
- Comparison of Interstate and Illinois Intrastate Commercial Motor Vehicle Safety*. Presented in the Illinois Transportation Engineers Annual Conference, University of Illinois at Urbana-Champaign, October 1999.
- Estimation of Transportation Service Needed for Welfare to Work*. Presentation made in the National Association for Welfare Research and Statistics (NAWRS) Annual Conference, Chicago. August, 1998.
- Estimation of Travel Times on Signalized Arterial*. Presentation made in Institute of Mathematical Statistics (IMS) Conference, Richmond, Virginia, March, 1996.
- A Simulation-Based Model of Advanced Traveler Information Systems*. Presented in Transportation Workshop, National Institute of Statistical Sciences, Research Triangle Park, October 1995.

UNPUBLISHED TECHNICAL RESEARCH REPORTS AND WORKING PAPERS

- Thakuriah, P. (2015). *UBDC Data Sourcing Strategy: Framework and Operating Principles to Create a Research-Led Data Strategy, Data Governance Plan, and Related Workflow and Project Management Plans*. Version 2.0.
- Currier, S., P. Thakuriah, N. Bailey, D. McNulty and J. Ryall (2015). *Urban Big Data Centre Governance Model and Terms of Reference*. Current version 3p2 - AG and RAC/DAC, 13 August 2015, draft completed during review period.

- Thakuriah, P., S. Currier, C. Wong, I. Gordon, C. Cottrill, R. Weedon, C. Carter, K. Dingwall (2015). *Urban Big Data Centre Data Acquisition Strategy*. Original draft 2/4/15; current version v0p5 13/08/15.
- Soot, S., L. Gan and P. Thakuriah. (2013). *Bicycle Crash Analysis and Trends: City of Chicago 2005-2010*. Final Report to Active Transportation Alliance and Chicago Department of Transportation.
- Thakuriah, P., S. Soot, N. Tilahun, W. Vassilakis and C. Cottrill. (2011). *Analysis of Employment Transportation Services for the JobLinks Program*. Final Report submitted to U.S. Department of Labor and Community Transportation Association of America, Washington, D.C.
- Thakuriah, P., S. Soot, C. Cottrill, and E. Blaise (2011). *Case Studies of the New Freedom Program*. Final Report to Federal Transit Administration, U.S. Department of Transportation, Washington, D.C for FTA Grant Number IL-26-5001-00.
- Thakuriah, P., N. Tilahun, S. Soot, C. Cottrill and W. Vassilakis. (2011). *Employment Transportation for Low-Wage Workers*. Final Report to Federal Transit Administration, U.S. Department of Transportation, Washington, D.C for FTA Grant Numbers IL-26-5001-00 and IL-37-X007-00.
- Thakuriah, P., J. Lin, W. Vassilakis, E. T. Blaise, L. Gan (2011). *Post-Implementation Evaluation of the CMAQ Program in Northeastern Illinois. Phase 2*. Final Report to Chicago Metropolitan Agency for Planning, Chicago, IL, June.
- Kawamura, K., P. Thakuriah, P.S. Sriraj, L. Dirks, L. Rashidi, D. Miodonski and S. Sherburn. (2011). *Understanding Freight-Land Use Interrelationships*. Final Report # 02-07 to CFIRE, University of Wisconsin at Madison.
- Thakuriah, P., J. Lin, P. Metaxatos (2009). *Post-Implementation Evaluation of the CMAQ Program in Northeastern Illinois*. Final Report to Chicago Metropolitan Agency for Planning, October.
- Thakuriah, P. and others. (2009). *Sustainable Transportation and Grounds in UIC*. Final Report to University of Illinois at Chicago Office of the Chancellor's Sustainability Committee.
- Thakuriah, P., P.S. Sriraj, S. Soot and J. Persky (2008). *Economic Benefits of Employment Transportation*. Final Report to Federal Transit Administration, U.S. DOT and Community Transportation Association of America, June for Grant No's DOT IL-37-X007-00 4 and DOT IL-37-5002-00. [Report to the U.S. Department of Transportation that has been summarized in DOT's report to the U.S. Senate Committee on Banking, Housing, and Urban Affairs, U.S. House of Representatives Committee on Transportation and Infrastructure, Government Accountability Office and U.S. Department of Labor. The analysis in the report has led to the introduction of a U.S. Senate Bill S. 3466 on September 10, 2008 by Senator Russ Feingold (D-WI)]
- Thakuriah, P., S. Soot and P.S. Sriraj (2008). *Partnerships for the Job Access and Reverse Commute Program: A Multi-Site Study of the Institutional and Coordination*

- Processes behind Employment Transportation for Low-Income Workers*. Final Report to Federal Transit Administration, U.S. DOT and Community Transportation Association of America, June for Grant No DOT IL-37-X007-00 4 and CTAA 918.
- Thakuriah, P., P. Metaxatos, A. Mohammadian, C. J. Curtis and W. Vassilakis. (2010). *Bus Operations on Shoulders: Analysis of a Preliminary Concept*. Final Report submitted for review to Technical Review Panel of Illinois Transportation Center Project R-27-5).
- Thakuriah, P., (2008). *Urban Transportation Center: A Self-Study*. Submitted to Dean of the College of Urban Planning and Public Affairs, UIC, as part of an external review of the Center required by the Illinois Board of Higher Education.
- Rashidi, T., A. Mohammadian and P. Thakuriah (2007). *Effectiveness of Transit Strategies Targeting Elderly People*. Final Report to the Illinois Center for Transportation.
- Soot, S. and P. Thakuriah. (2006). *Case Studies of Job Access and Reverse Commute Planning Partnerships*. Final Report to Federal Transit Administration, U.S. DOT.
- Thakuriah, P., Sriraj, P.S. and K. Hoschouer (2006). *An Equity Assessment of the Job Access and Reverse Commute Program*. With support from Federal Transit Administration, US Department of Transportation, JobLinks Program, and the US Department of Labor. Urban Transportation Center, UIC, March 2006.
- Thakuriah, P., Sriraj, P. S. J. Persky and R. Baiman (2006) *An Economic Analysis of the Targeted Transportation Services for Low-Income Workers*. Interim Report to the Federal Transit Administration, US Department of Transportation and the Community Transportation of America, Washington, D.C.
- Thakuriah, P., Sriraj, P.S., Y. Liao, K. Hoschouer (2005). *Role of Planning Partnerships in Transportation Coordination*. Final Report to Federal Transit Administration, US Department of Transportation and JobLinks Program of the Community Transportation Association of America.
- Thakuriah, P., Sööt, S., Sriraj, P.S., Dickson, C. (2003) *Partnerships for Low-Income Employment Transportation*. Final Report from a Focus Group. With Support from: Federal Transit Administration, US Department of Transportation, JobLinks Program, and the US Department of Labor. Urban Transportation Center, UIC..
- Thakuriah, P. and S. Niumpradit (2003). *The Analysis of the Impact of Intelligent Transportation Systems to the Economy: The Case of Electronic Toll Collection systems*. Report III to the Metropolitan Transportation Support Initiative (METSI), August.
- Thakuriah, P., J. Lee and S. Niumpradit. (2003). *Development, Testing and Evaluation of Intelligent Databases for Commercial Motor Vehicle Safety*. U.S Department of Transportation, BTS, Grant Number DTTS-00-B003-IL Final Report.
- Niumpradit, S. and P. Thakuriah (2002). *The Economic and Aggregate Productivity Benefits of Intelligent Transportation Systems*. Report to the Metropolitan Transportation Support Initiative, University of Illinois at Chicago and Illinois Department of Transportation. Thakuriah, P., J. Lee and others (2002).

- Thakuriah, P. J. Lee and others. (2002). *Evaluation of Alternative Signal Control Strategies in the City of Chicago* Final report to the Chicago Department of Transportation, with support from the National Institute of Statistical Sciences.
- Soot, S., P.S. Sriraj and P. Thakuriah (2002). *A Survey of Users of Job Access Reverse Commute Funded Transportation Services*. Report to the Federal Transit Administration, U.S. Department of Transportation.
- Zhang, T., M. Jaffe and P. Thakuriah. (2001). *Strategic Study for the Combined Development of Chongming, Changxing and Hengsha Inland in Shanghai*. Final report to the Chinese Municipal Government of Shanghai.
- Thakuriah, P.(2000). *Preliminary Technology Guidelines for an Intelligent Transportation Systems (ITS) Deployment in Malaysia: Implications for a Revenue Model*. Final Report to Oyster Solutions, New Delhi, India and Sinar Dian Technologies SDN BHD, Kuala Lumpur, Malaysia.
- Thakuriah, P., G. Yanos, D. Virmani, A. Sreenivasan and V. Rivas (2000). *Comparison of Interstate and Intrastate Commercial Motor Vehicle Safety*. Final Report No. VB-H1-98 to the Illinois Transportation Research Center.
- Thakuriah, P., S. Soot, and P. Metaxatos. (1999) Destination Accessibility Measures for a Low-Income Group. Technical Synopsis Part B of report titled *Implications of the Welfare Reform Bill on Suburban Chicago Transit Demand: Some Strategies for Pace*.
- Graves, T. L., A. F. Karr, N. M. Rouphail and P. Thakuriah. (1998) *Real-time Prediction of Incipient Congestion on Freeways from Detector Data*. Technical Report #79, National Institute of Statistical Sciences, Research Triangle Park.
- Thakuriah, P., P. Metaxatos and D. Yang (1999). *Propensity for Long-Distance Travel in the United States*. Final report to the Metropolitan Transportation Support Initiative.
- Thakuriah, P. (1999). *Commercial Motor Carrier Operations in the Northeast Illinois Region: Impacts on Land Use: Trends Since 1970*. In Metropolitan Case Study for Chicago. Brookings Institute.
- Thakuriah, P., S. Soot, P. Metaxatos, and others (1998). *Implications of the Welfare Reform Bill on Suburban Chicago Transit Demand: Some Strategies for Pace*. Final report to Pace. This report was a basis for a U.S. Department of Labor grant to the six-county northeastern Illinois area for transportation purposes and was further used as a basis for the Chicago Area Transportation Study's Job Access and Reverse Commute application to the Federal Transit Administration for FY 1998.
- Thakuriah, P., S. Soot, A. Sen, P. Metaxatos, and others (1998). *Transportation and Welfare Reform*. Final report to the Illinois Department of Human Services.
- Soot, S., A. Sen, P. Thakuriah and others (1998). *Highways and Urban Decentralization*. Final report to the Illinois State Toll Highway Authority.
- Thakuriah, P. and A. Sen (1996). *Quality of Information Given by Advanced Traveler Information Systems*. Working Paper # 51, National Institute of Statistical Sciences.

- Thakuriah, P. (1996). *Travel Time Estimation with Imputed Signal Control Information*. Working Paper # 52, National Institute of Statistical Sciences.
- Thakuriah, P. and A. Karr. (1996). *Analysis of Probe-Based Information on Signalized Arterials*. NISS Working Paper #48.
- Thakuriah, P. and A. Karr. (1996). *Characterization of Imperfection in Information given by Advanced Traveler Information Systems*. NISS Working Paper Series.
- Sen, A., S. Soot, Thakuriah, P. and A. Karr. (1996). *Estimation of Static Travel Times in a Dynamic Route Guidance System – II*. NISS Working Paper Series.
- Thakuriah, P. and A. Sen (1994). *Static Estimates of Travel Times in ADVANCE: Release 1.5 Algorithm Report and Detail Design Document (#8600)*. ADVANCE Working Paper Series #39.
- Thakuriah, P. (1994). *Static Estimates of Travel Time for ADVANCE. Release 1.0 SPU Algorithm*. ADVANCE Working Paper Series, Task TRF-TT-31, June.
- Thakuriah, P. and A. Sen. (1993) *Data Fusion for Travel Time Prediction*. ADVANCE Working Paper Series, Task TRF-TT-07, June.
- Sen, A., P. Thakuriah and N. Liu (1993). *Travel Time Prediction: Report for Phase I of the ADVANCE Project*. ADVANCE Working Paper Series, Task TRF-TT-11, September.
- Sen, A., P. Thakuriah and N. Liu (1993). *Design of the ADVANCE Travel Time Forecasting Procedure*. ADVANCE Working Paper # 31.
- Sun, L. and P. Thakuriah. (1993). *Solutions to Selected Exercises in Regression Analysis: Theory, Methods and Applications*. Published by Springer-Verlag, New York, NY.
- Boyce, D., A. Sen, S. Soot and P. Thakuriah. (1991). *TAMS Study on the Third Airport: A Review of the Enplanement Forecasts*. Report to the Bi-State Commission on Site Selection of a Third Airport, Chicago.

SELECTED INTERNATIONAL (NON-US AND NON-UK) EXPERIENCE

- Malaysia (2000). *Study on Technology Guidelines for an Intelligent Transportation Systems (ITS) Deployment in Klang Valley in Malaysia*. Role: Technology expertise.
- Mexico (2000). *Relationships between land-use, transportation and the environment: Comparison between Chicago, USA and Mexico City, Mexico*. Role: Technology and modeling expertise.
- China (multiple years/initiatives). Role: expert in transportation planning, operations and Big Data. Examples include:
- Strategic Study for the Combined Development of Chongming, Changxing and Hengsha Island in Shanghai*. Final report to the Chinese Municipal Government of Shanghai, China, 2001.

ICCVE *International Conference on Connected Vehicles and Expo* Technical Program Committee member, jointly supported by China National Center of ITS Engineering & Technology, TRB, IEEE and other committees and hosted by Tsinghua University, Dec 2012.

Urban Development, Migration, Segregation and Inequality. Co-PI on joint University of Glasgow and Chinese Academy of Social Sciences project supported by ESRC, 2015-2016.

India (multiple years/initiatives). Role: Technology, urban transportation planning and policy expertise. Examples include:

Study on Transportation and Employment Accessibility in a Changing Context of Metropolitan Decentralization: The Case of Delhi, India. (Published as peer-reviewed journal article in *Projections*, the MIT Planning Journal, 2009, Vol. 9, pp. 60-80).

University of Michigan and University of Illinois at Chicago joint study in Smart Transportation solutions in Bangalore, Chennai and New Delhi, India, 2006.

Sustainable Urban Transport Project launched by the Ministry of Urban Development, Government of India with the help of Global Environment Facility (GEF), UNDP and the World Bank, 2012-Current.

Australia (multiple years/initiatives). Role: Technology expertise. Examples include:

AUS-Dedicated Short Range Communications (DSRC) Technology Group (2009 to 2011).

Scientific review panel for STAR Transportation program in New South Wales (2006-Current).

Scientific collaborator with National ICT of Australia (Australian national laboratory system) on multiple technology projects (2006-Current)

Lead collaborator from UBDC consortium for Australian Urban Research Infrastructure Network, led by University of Melbourne, with University of New South Wales, University of Adelaide and other leading Australian universities (2014-Current).

Dominican Republic (2006). *Advisor to Dominican Republic government on metro construction in Santo Domingo*. Role Urban transportation policy and planning expertise.

Colombia (2009). *Study on Ridership Aspects and Intelligent Transportation System design for a proposed metro system in Bogota, Colombia*. Role: Technology and urban transportation planning expertise.

European Commission ICT Research (2009-2012). *Mobility, Data Mining and Privacy (MODAP)*. Coordination Action type project funded by EC FET-OPEN, 2009-2012. Coordinated by Sabanci University, Turkey, 7th Framework programme. Role: Associate Member and US collaborator on mobility and ubiquitous technologies.

Finland (2016-Current). Support to Helsinki and Tampere efforts to establish smart cities programs including support towards proposal development for (successful) European Regional Development Funds around smart mobility systems.

Netherlands (2016-Current). Support to Statistics Netherlands to develop a program around mobility and productivity measurement for their newly established Center of Big Data Statistics, under an MOU that is in the process of being signed with the Urban Big Data Centre.

Multiple other European Initiatives and Programs in Lifelong Learning and Learning Cities (2013-Current), including Centre for Research and Development in Adult and Lifelong Learning (CR&DALL), UK, and PASCAL, a Network of Excellence funded by the European Union. Affiliate involvement through Urban Big Data Centre.

SELECTED PROFESSIONAL SERVICE

Selected Professional International Service

Chair, International Expert Committee for the Canada Foundation for Innovation (Smart Cities), March 2020, Toronto, Canada (virtual meeting).

Member, Advisory Group, UK Office of National Statistics Data Science Campus, April 2018-Current.

Member, European Commission/Eurostat's 2019 New Techniques and Technologies for Statistics (NTTS) Scientific Committee.

Member, Scientific Committee, 3rd International Conference "Smart Data, Smart Cities", Delft, The Netherlands, October 4-5, 2018.

Member of steering committee, NSF CMMI Data Infrastructure Workshop, Arlington, VA, Feb 6-7, 2017.

Member of program committee, Big Data and Transport workshop held in IIT-Chennai funded by Indo-US Science and Technology Forum, Chennai, India, Dec 5-6, 2016.

Member, International Advisory Committee, First International Workshop on Big Data Smart Transportation Analytics in Shanghai, China, jointly organized by Purdue University and Tongji University, Shanghai, China, July 16-17, 2016.

Chair, Workshop on Innovative Multi-modal Data on Urban Living. Sponsored by Engineering and Physical Sciences Research Council, Glasgow, UK, Feb 3-4, 2016.

Program Committee Member, Workshop on Technological and Social Limits to Future Cities. Sponsored by Engineering and Physical Sciences Research Council, Glasgow, UK, April 18, 2016.

Program Committee Member and Institutional Sponsor, 4th ACM International Conference on Information and Knowledge Management (CIKM) 2015 Workshop on Understanding the City with Urban Informatics. Melbourne, Australia, Oct 23, 2015.

Program Committee Member, International Conference on Location-Based Social Media Data, Athens, Georgia, March 13-14, 2015.

Program Committee Member, AAAI-15 Workshop on Artificial Intelligence for Transportation, Austin, Texas, Jan 25-26, 2015.

General Chair, Workshop on Big Data and Urban Informatics. Sponsored by US National Science Foundation, Chicago, IL, August 11 and 12, 2014.

Co-Chair (with Massimo Craglia, European Commission Joint Research Centre, Italy, and Chris Pettit, University of New South Wales, Australia), Urban Data Interest Group, Research Data Alliance (RDA), a joint effort of the European Commission, the US National Science Foundation and National Institute of Standards and Technology, and the Australian Government's Department of Innovation to build social and technical bridges that enable open sharing of data, 2013-Current.

Member, Evaluation Strategy Board, Glasgow Future City Demonstrator Project funded by UK Technology Strategy Board, 2013-2014.

Affiliate Member, Centre for Research and Development in Adult and Lifelong Learning of PASCAL International Observatory, 2013-Current.

Member, Expert Panel, Government of India on Sustainable Urban Transport Project' launched by the Ministry of Urban Development, Government of India with the help of Global Environment Facility (GEF), UNDP and the World Bank, 2012-2013.

Member, Technical Advisory Committee, International Conference on Connected Vehicles & Expo Program Committee, Beijing, China, Co-sponsored by Transportation Research Board, IEEE, IFAC and ACM, Dec 12-16, 2012.

Founding Co-Chair (with Harvey Miller, Ohio State University, USA), Joint Subcommittee on Computational Transportation and Society, Transportation Research Board, 2012-2015. (Lead sponsoring committee: ABJ30: Urban Transportation Data and Information Systems; partner sponsoring committees: ABJ60: Geographic Information Science and Applications and ABJ95: Visualization in Transportation).

General Chair, 4th International Workshop on Computational Transportation Science in the ACM SIGSPATIAL 19th International Conference on Advances in GIS, 2011.

Member, Program Committee, University Consortium for Geographic Information Science (UCGIS) - GIScience for Changing Human Environment, 2011.

Treasurer, Faculty Women's Interest Group, Association of Collegiate Schools of Planning, 2010-2013.

Member, Program Committee, 3rd International Workshop on Computational Transportation Science. Held in conjunction with Association of Computing Machinery (ACM) SIGSPATIAL GIS 2010, San Jose, CA, Nov. 2-5, 2010.

- Associate Member, MODAP (Mobility, Data Mining and Privacy) funded by European Commission FET OPEN Office of Emerging Technologies, 2009-2012.
- Member, Marsha Ritzdorf Awards Selection Committee, Association of Collegiate Schools of Planning, 2010.
- Representative, Association of Collegiate School of Planning (ACSP) Faculty Women Interest Group, Midwest Region, 2008-2010.
- Member, USAID and Higher Education for Development Review Panel, 2008.
- Member, Program Committee, 1st International Workshop on Computational Transportation Science IWCTS 08, July 21, 2008, Trinity College Dublin, Ireland.
- Member, Intelligent Transportation Systems (ITS) World Congress Program Committee, 2005-2008.
- Member, Federal Transit Administration and U.S. Department of Labor Joblinks Job Access and Reverse Commute Advisory Committee, 2006-2008.
- Member, Committee on Urban Transportation Data and Information Systems, Transportation Research Board, National Academy of Sciences, Washington, D.C. 2007-2017.
- Member, Committee on Statistical Methodology and Statistical Computer Software, Transportation Research Board, National Academy of Sciences, Washington, D.C. 2004-2008.
- Member, Committee on National Transportation Data Needs and Requirements, Transportation Research Board, National Academy of Sciences, Washington, D.C. 1999-2002.
- Member, U.S. Bureau of Census design of the Vehicle Inventory and Use Survey questionnaire development review team of the Economic Census. 2000.
- Member, U.S. Department of Transportation, Bureau of Transportation Statistics, Workshop on development of methodology for performance measurement of the transportation system. Summer 2000.
- Member, Freeway and Multi-lane Highway Subcommittee of the Highway Capacity Committee of the Transportation Research Board. 1995-1998.
- Member, Panel on Weaving Area Capacity and Level of Service on Freeways, Arterials, and Collector-Distributor Roads, National Cooperative Highway Research Panel, Transportation Research Board, National Academy of Sciences, Washington, D.C. 1995-1999.
- Coordinator, Transportation Planning sessions of the INFORMS [organized by the Operations Research Society of America/Institute of Management Sciences (ORSA/TIMS)] bi-annual and later, annual, meetings. 1994-1997.

Selected Regional Service

- Member, Sustainable Glasgow team, 2012-2013.

Chair, Program Committee, Institute of Transportation Engineers 2008 Midwest Annual Conference.

Member, Chicago Metropolitan Agency for Planning (CMAP) Transportation Committee, 2006-2010.

Representative, Public Transportation/Multi-Modal Technical Advisory Group, Illinois Center for Transportation, University of Illinois at Urbana-Champaign, 2006-2009.

Member, Intelligent Transportation Systems Deployment Committee, Gary-Chicago-Milwaukee (GCM) Priority Intelligent Transportation Systems Corridor. 1998-2005.

Member, Advanced Technology Task Force, Chicago Area Transportation Study (CATS). As a member of this Task Force, I reviewed the development of the *Strategic Early Deployment Plan for Intelligent Transportation Systems in Northeastern Illinois* a sub-part of which was ultimately included in the region's 20-year plan titled Destination 2020. 1998-2005.

Selected Service to Campus Activities

Chair, Appointing Committee, Research Associate in Transport Modeling and Informatics, Urban Big Data Centre, University of Glasgow, 2017.

Chair, Appointing Committee, Senior Data Services and IT Manager, UBDC, University of Glasgow, 2016.

Member, University of Glasgow Big Data Network, 2016-Current.

Chair, Appointing Committee, Senior Business Manager, UBDC, University of Glasgow, 2015.

Chair, Appointing Committee, Research Associate of Urban Indicators Project, UBDC, University of Glasgow, 2015.

Lead representative from the social sciences in the leading Research Hub and the Data Center initiatives on campus, a state-of-the-art building designed to house data-intensive dry and wet labs from across campus in planned £1 billion University of Glasgow campus expansion, 2015-Current.

Chair, Appointing Committee, Senior Project Manager, UBDC, University of Glasgow, 2014.

Chair, Appointing Committee, Chair in Big Data and Urban Modeling, Urban Studies, University of Glasgow, 2014.

Member, Smart Campus Initiative, a campus development program in the University of Glasgow historic Gilmorehill campus as a test bed for research and teaching in the smart cities field to explore aspects of urban innovation, city systems, big data, informatics, energy management and transport policy. University of Glasgow, 2014-Current.

Chair, Appointing Committee, Postdoctoral Research Associate in Urban Modeling and Simulations, 2014.

Review Committee Member, Institutional Review of Humanities Advanced Technology and Information Institute, University of Glasgow, July 2014.

Member, UPP Ph.D. Committee, 2011-2012.

University of Illinois at Chicago Faculty Senate. 2010-2012.

Member, UPP Advisory Committee, 2010-2011.

Chair, Search Committee, Urban Transportation Assistant Professor Search, 2010-2011.

Member, MUPP Transportation Committee, 2009-2010.

Chair, UPP Ph.D. Committee, 2009-2010.

Member, UIC Campus Research Review Board. Review campus-wide limited submission proposals, campus-wide nominations of awards and fellowships. 2008-2010.

Member, MUPP Transportation Committee, 2008-2009.

Chair, Campus Committee on Sustainable Transportation and Grounds. Responsible for developing recommendations to the Chancellor on sustainable transportation options to campus. Led a 20-faculty committee to identify sustainable options for the future sustainability of the campus and the city. Primary author of 2009 report *Sustainable Transportation and Grounds in UIC* submitted to University of Illinois at Chicago Office of the Chancellor's Sustainability Committee. 2007-2009.

Member, Chancellor's Task Force on Sustainability. Represent the Transportation and Grounds Committee on campus committee on sustainability. 2007-2009.

Chair, UPP Ph.D. Committee, 2007-2008.

Member, UIC Alumni Planning Committee. Fund-raising and publication of Provost's Alumni initiatives. 2007.

Member, CUPPA Dean Search Committee, 2007-2008.

Member, CUPPA Executive Committee, UPP Representative, 2006-2007.

Member, UPP Search Committee for faculty for undergraduate program, 2006-2007.

Chair, Space Planning Committee, College of Urban Planning and Public Affairs. Responsible for developing a report on the management of space and criteria per which space should be allocated among units. 2006-2008.

Member, Computational Transportation Science Executive Committee. Develop ideas for collaboration, student research, recruitment and coursework in the CTS IGERT program. 2006-2011.

Member, Institute of Environment Science and Policy Steering Committee, 2005-2006.

Member, Faculty Search Committee, Urban Planning and Policy program, 2004-2005.

Member, Ph.D. Committee, UPP program, 2004-2005.

Member, UPP P&T Committee, 2004-2005.

Member, CUPPA P&T Committee, 2004-2005.

Chair, UPP Transportation Specialization, 2004-2005.

Member, UPP Undergraduate Committee, 2003-2004.

Member, Master of Urban Planning and Policy (MUPP) Curriculum Committee, 2001-2002.

Selection Committee membership for the International Scholars Awards/Watamull Awards given jointly by the John Nuveen Center and the Office of International Services, UIC, 1997-1999.

Represented the College of Urban Planning and Public Affairs in developing a research collaboration with the Universidad Autonoma Metropolitana in Mexico City as a part of UIC's mission to facilitate collaboration with Chicago's "Sister City", 1997-1998.

EDITORIAL AND PUBLICATION/PROPOSAL REVIEW ACTIVITIES

Editorial Activities

Associate Editor, Editorial Board, Harvard Data Science Review (new journal, accepted role of Associate Editor).

Member, Editorial Board, Journal of Big Data Analytics in Transportation (2018-Current).

Member, Editorial Board, Environment and Planning B, September 2016-Current.

Member, Editorial Board, Journal of Transportation and Statistics, 2003-2006 and 2011-Current.

Editor-in-Chief, Journal of Urban and Regional Information Systems Association (URISA Journal), 2011-2014.

Member, Editorial Board, Journal of Urban and Regional Information Systems Association (URISA Journal), 2007-2010.

Guest Editor, Journal of Transportation and Statistics. Special Issue on *Measurement of Accessibility*. Vol.4, Nos. 2/3, Sept.-December.

Selected Review Activities (last 10 years)

UK Research Council's Economic and Social Research Council.

Engineering and Physical Sciences Research Council.

European Research Council.

The Leverhulme Trust.

UK Research Council's Medical Research Council.

ACM SIGSPATIAL International Workshop on Computational Transportation Science.

PlosOne

Journal of Transport Geography

Environment and Planning B

Transportation Research Board, National Academy of Sciences - Multiple Committees including Urban Transportation Data and Information Systems Committee (ABJ30), Statistical Methodology and Statistical Computer Software in Transportation Research (ABJ80), Committee on Public Transportation Planning and Development (AP025), Traveler Behavior and Values (ADB10) and several others.

Transportation

Transportation Letters: International Journal of Transportation

Transportation Research Part C: Emerging Technologies

ASCE Journal of Transportation Engineering

International Journal of Modeling and Simulation

International Journal of Sustainable Transportation

Journal of Transportation and Statistics

Journal of Urban and Regional Information Systems Association

Urban Affairs Review

Journal of Intelligent Transportation Systems

Proceedings: Transportation Research Board Women's Travel Conferences

Proceedings: IEEE Intelligent Transportation Systems

Proceedings: International Workshop on Computational Transportation Science

Proceedings: International Association of Travel Behavior Research

Proceedings: Intelligent Transportation Systems World Congress

Proceedings: North American Travel Monitoring Exposition and Conference

Abstract only: 2008 Midwestern ITE Annual Conference

MacArthur Foundation Fellowship nominations

University Transportation Centers program, US Department of Transportation

New South Wales, Australia, STAR Program proposals

USAID and Higher Education for Development (HED) Review Panel

University Consortium for Geographic Information Science (UCGIS)

NSF Division of Mathematics and Statistics

NSF IGERT program.

Illinois Transportation Center proposals

SELECTED SIGNIFICANT (NATIONAL OR INTERNATIONAL) ADVISEE AWARDS

Lord Kelvin-Adam Smith PhD Fellowship (2014-2018): Ashwini Venkatasubramanian
 WTS Women's Scholarship, Chicago Chapter (2012): Meredith Klekotka
 Eisenhower Graduate Research Fellowship (US DOT) 2010-2011: William Vassilakis
 Eisenhower Graduate Research Fellowship (US DOT) 2008-2010: Caitlin Cottrill
 10th Privacy Enhancing Technologies Symposium Graduate Student Award, Berlin, Germany, July 2010: Caitlin Cottrill
 Mobility, Data Mining and Privacy (MODAP) Travel Award, EU FET-OPEN 2009-2012
 The Future and Emerging Technologies Open Scheme, August 2010: Caitlin Cottrill
 NSF-IGERT Fellowship: Caitlin Cottrill, 2005-2007
 TRB Women's Conference Study Grant, 2009: Stephen Vaughn
 ITE-Midwest Best Student Paper Award 2008: Lei Tang.
 Eisenhower Graduate Research Fellowship (US DOT) 2004-2005: Jiangping Zhou
 Eno Foundation Fellowship 2002; Juan Ortega
 American Public Transportation Foundation Hall of Fame Award 2002: Juan Ortega
 American Public Transportation Foundation Hall of Fame Award 2001: Juan Ortega

DOCTORAL DISSERTATIONS AND MASTER'S THESIS/PROJECTS

Advisor/Dissertation Chair or Co-Supervisor

Venkatasubramanian, Ashwini (University of Glasgow, 2014-Current. Co-supervisors; K. Ampountolas and L. Evers). Potential topic: *Transport Network Analytics - Evaluating Traffic Equilibrium with Heterogeneous Urban Big Data*.

Wu, Guoqiang (Chris) (University of Glasgow, graduated 2018). *A Methodological Framework to Assess Interactions among Travel Behaviour, ICT Use and Energy Consumption*.

Keita-Mallon, Yaye (University of Illinois at Chicago, expected graduation August 2011-Current. Advisor till 2014). *Mobility in the Context of Time, Space, and Economic Outcomes: Perspectives of Female Travelers*.

Cottrill, Caitlin (Graduated Summer 2011). *Privacy Issues in Intelligent Transportation Systems and Location-Based Services*. NSF-IGERT Doctoral Fellow (2006-2008); Eisenhower Graduate Fellow 2008-2010. (Chair, Doctoral Dissertation).

Tang, Lei (Graduated Spring 2009). *Behavioral Responses to Real-time Transit Information Systems*. Winner, ITE-Midwest Best Student Award, 2008. (Chair, Doctoral Dissertation).

Ortega, J. F. (Summer, 2004). *Spatial Multimedia Methodology for the Selection of Low-Income and Labor Market Accessibility Projects*. Eno Foundation Fellowship 2002; American Public Transportation Foundation Hall of Fame Scholarship Award 2002 and 2001; George Krambles Transportation Fund Scholarship 2001. (Chair, Doctoral Dissertation)

Niumpradit, S. (Summer, 2004). *Modeling Relationships Between Highway Expenditure and Economic Performance: An International Analysis* (Chair, Doctoral Dissertation).

Dissertation Committee Membership

Booth, Joel (Ph.D. graduate, Fall 2011, Department of Computer Science). *Context-Aware Natural Language Interfaces for Transportation Information Systems*. (Member, Dissertation Committee)

Mugler, M. (Doctoral Candidate, Department of Bioengineering). *Neural Interfaces for Speech and Rehabilitative Biofeedback in Spoken Communication*. (Member, Dissertation Committee)

Miller, Ed. (Ph.D. Graduate, 2011, Department of Urban Planning and Policy). *CRAeating Gentrification?* (Member, Dissertation Committee)

Lundquist, D. (Ph.D. Graduate, 2011, Department of Information and Decision Sciences). *Self-Balancing Supply/Demand Routing Protocol for Mobile Environments*. (Member, Dissertation Committee).

Rashidi, Taha Hossein (Ph.D. Graduate, 2010, Department of Civil and Materials Engineering). *Households Long-Term Decision Making Process: Vehicle Transactions, Employment and Residential Location Choices*. (Member, Dissertation Committee)

Samimi, Amir (Ph.D. Graduate, 2010, Department of Civil and Materials Engineering). *A Behavioral Mode Choice Microsimulation Model for Freight Transportation in the US*. (Member, Dissertation Committee)

Ruan, Minyan (Ph.D. Graduate, 2010, Department of Civil and Materials Engineering). *Investigation of National and Regional Freight Data Needs and Urban Freight Delivery*. (Member, Dissertation Committee)

Lu, Yandan (Ph.D. Graduate, 2009, Department of Urban Planning and Policy). *Examining the Path Dependence of Urban Development and Work Trip Mode Share Balance Using Agent-Based Modeling*. (Member, Dissertation Committee)

Pu, Wenjing (Ph.D. Graduate, 2007, Department of Civil and Materials Engineering). *Bus Probe-Based Urban Travel Time Prediction*. (Member, Dissertation Committee)

- Mizusawa, Daisuke (Ph.D. Graduate, 2007, Department of Urban Planning and Policy). *Strategic Directions for Implementing Asset Management: Quantifying Benefits of Asset Management*. (Member, Dissertation Committee)
- Long, Liang (Ph.D. Graduate, 2007, Department of Civil and Materials Engineering). *Model-Based Synthesis of Geographically Variable Household Travel Data in Small and Mid-Size Metropolitan Areas*. (Member, Dissertation Committee)
- Zhang, Yong-Ping (Ph.D. Graduate, 2007, Department of Civil and Materials Engineering). *Household Travel Data Simulation: Application of Spatial Transferability of Survey Data*. (Member, Dissertation Committee)
- Srivastava, Snigdha (Ph.D. Graduate, 2007, Department of Urban Planning and Policy). *Information Technology Services Industry: Employment, Training, and Regional Workforce Development Policy Implications*. (Member, Dissertation Committee)
- Yagi, Sadayugi (Ph.D. Graduate, 2006, Department of Civil and Materials Engineering). *An Activity-Based Microsimulation Model of Travel Demand for Transportation Policy and Impact Analysis*. (Member, Dissertation Committee)
- Pena, Norma (Ph.D. Graduate, 2006, Department of Urban Planning and Policy). *Estimating Transportation Indicators for a Regional Participatory Visioning Process*. (Member, Dissertation Committee)
- Retzlaff, Rebecca (Ph.D. Graduate, 2006, Department of Urban Planning and Policy). *Analysis of Biodiversity Plans*. (Member, Dissertation Committee)

Master's Thesis/Project Chair/Primary Supervisor

University of Glasgow

- Guo, Yi (2018 expected graduation). *The Analysis of Six Selected Factors Affecting Ridership in 159 Metro Systems Worldwide*.
- Stricker, Jakob (2018 expected graduation). *Smart ticketing systems in the field of public transportation*.
- Syahrial Bin Syahbani, Taufiq (2018 expected graduation). *Analysing the Effects of Infrastructure, Traffic, and Socioeconomic Factors on Traffic Crashes and Their Fatalities in Jakarta, Indonesia*.
- Rincon, Carlos Daniel (2017 August expected graduation). *Transit Oriented Development. Planning tool or conventional development?*
- Sharma, Shravani (2017 August expected graduation). *Understanding Patterns in Travel Behavior due to the impacts of various mediums of ICT*.
- Bhandari, Parul (2017 August expected graduation). *Impacts of the Use of Cellphones in India*.

Li, Zhongyang (2014). *Analysis of the Application-Impact of the Bus Rapid Transit (BRT) on the Beijing South-Axis Corridor*.

Hassan, Alla (2013). *Integrated Urban Infrastructure Evaluating Flood Systems, SUDS and Water Resource Management*.

Howard, Lawrence (2013). *Small-Scale Concentrated Solar Power: A Review of Solar Tower – Current Activity and Potential for Acceleration of On-Grid, Building-Integrated Implementation*.

University of Illinois at Chicago

Quinn, Chris (Summer, 2013). *Analysis of Bicyclist Crashes in the City of Chicago*. (Member, Master's Thesis).

Alvino, Michael (Fall, 2012). *Neighborhood Walkability: From Measurement to Planning. An analysis of walkability assessments performed in Chicago and recommendations to incorporate them into the planning process*. (Chair, Master's Project).

Gan, Lu (Fall, 2012). *Ordinal Logistic Analysis of Bicyclist Injury Severity in Bicycle/Motor Vehicle Crashes in City of Chicago*. (Chair, Master's Project).

Thomas, Patrick (Spring 2012). *Planning for the Next Great American Tollroad. A Study on Managing Future Options for I-90*. (Chair, Master's Project).

Vassilakis, William (Fall, 2011). *Analysis of Travel Needs of Persons with Disabilities*. (Chair, Master's Thesis).

Carr, Braeden (Summer, 2011). *Congestion Pricing Potential in Chicago*. (Chair, Master's Project).

Goldsberry, Cara (Fall, 2010). *Healthcare Really Cares: Hospital Impact on Neighborhoods*. (Chair, Master's Project).

Vance, Steven. (Spring, 2010). *Reducing Bike Parking Inequity in Chicago's Wards*. (Chair, Master's Project).

Schmidt, Todd (Spring, 2010). *Spatial Analysis of Healthcare and The Obesity Problem: A study of the Chicago Six County Region*. (Chair, Master's Project).

Purinton, Karen (Summer, 2010). *Complete Streets Surrounding Proposed State Commute Rail Station in Plainfield, Illinois*. (Chair, Master's Project).

Johnson, D. (Spring, 2009). *Defining a CTA Station Typology*. (Chair, Master's Project).

Stratton, M. (Fall, 2008). *A Comparison of Walking Reported by the Chicago MPO's Household Travel Surveys from 1990 and 2007*. (Chair, Master's Project)

LaPorte, Angela (Summer 2008). *Merging Natural Hazard and Transportation Planning: The Role of Natural Hazard Risk Assessment in Transportation*. (Chair, Master's Thesis).

Hunt, Stephan (Summer 2008). *Developing Market Analysis Tools for Volunteer Driver Programs*. (Chair, Master's Thesis).

- Minocha, Inshu (Summer, 2007). *An Analysis of Chicago Area Transit Quality and Level of Employment Accessibility*. (Chair, Master's Thesis).
- Interrante, Erica (Spring, 2007). *Implementation of the Coordinated Human Service Transportation Plan (HSTP): A New Approach to Public Transportation Planning for Downstate Illinois*. (Chair, Master's Project).
- Kowal, Christopher (Summer, 2006). *Measuring Urban Green*. (Chair, Master's Project).
- Hochsheur, Kristen. (Spring 2006). *The Spatial Mismatch between Entry-Level Jobs and Low-Income Residents in Select US Cities*. (Chair, Master's Thesis).
- Minor, Mark (Spring, 2006). *Baseball and Transit: An Exploratory Analysis*. (Chair, Master's Thesis).
- Gustafson, Timothy. (Spring, 2006). *Project Evaluation Criteria for Intelligent Transportation Systems for Emergency Management*. (Chair, Master's Thesis).
- Guerriero, Henry. (Summer 2005). *Bicycle Access to Transit in Chicago; 2000 Census Journey-to-Work and Intercept Survey Data*. (Advisor, Master's Project).
- Ammons, William. (Summer 2005). *Specifications for Real-time Travel Information Using AVL Data in the Chicagoland Area*. (Advisor, Master's Project).
- Zhu, H. (Summer, 2003). *Factors Affecting Travel Time Changes between 1990 and 2000: A Study of Metropolitan Chicago* (Chair, Master's Thesis)
- Liao, Y. (Spring, 2003). *Patterns of Household Transportation Expenditures: The Effects of Income and Housing Subsidies* (Chair, Master's Thesis)
- Sen, S. (Spring, 2003). *Public Transportation Information Systems: Application of Soft Systems Methodology to Labor Market and Transportation Problems* (Chair, Master's Thesis).
- Sinha, A.. (Spring, 2003) *Modeling the effect of Occupation, Industry and Spatial Characteristics on Job Start Times* (Chair, Master's Thesis)
- Saulath, S. (Fall, 2001). *Electronic Database for Human Services Transportation Projects*. (Advisor, Master's Project)
- Conlon, M. T. (Summer, 2001). *Accessibility of Child Care for Low-Income Job Seekers in the Chicagoland Region*. (Advisor, Master's Project)
- Gao, F. (Summer, 2001). *Development and Testing of an Intelligent Transportation System for the University of Illinois at Chicago's Intercampus Shuttle Buses*. (Advisor, Master's Project)
- Cerchia, G. (Spring, 2000). *O'Hare International Airport: An Analysis of the Existing Access Roadway*. (Advisor, Master's Project)
- Rivas, V. R. (Spring, 2000). *Capital Improvements Programs of Large Commercial Airports in the United States: The Impact of Passenger Facility Charges*. (Advisor, Master's Project)

- Virmani, D. (Spring, 2000). *Mode Use in Long Distance Travel: An Analysis Using Classification and Regression Trees*. (Advisor, Master's Project)
- Chang, L. (Summer, 1999). *Design Document of A Graphic User Interface for TRANS - A Traffic Simulation Software*. (Advisor, Master's Project).
- Lang, J. (Summer, 1999). *Numerical Experimentation to Assess Reliability of Traffic Simulation Model for Signal Control Systems in the Chicago Area*. (Advisor, Master's Project).
- Short Jr., T. R. (Spring, 1999). *An Application of Traffic Simulation Software for Modern Day Traffic Concerns, in a Historical and Environmental Sensitive Area*. (Advisor, Master's Project).

COURSES TAUGHT IN LAST 10 YEARS

Training course on Introduction to Urban Informatics (University of Glasgow). 3-hour course covering: (1) types of urban Big Data (2) applications of Urban Informatics in dynamic resource management, urban policy analytics, event and change detection (3) technological, methodological, theoretical/epistemological and political economy and Big Data for urban informatics. Offered to date in University of Glasgow, Indian Institute of Technology – Roorkee (via weblink), and University of Essex. A 4-hour version of this course was offered with others to staff at the European Commission's official statistical agencies, Eurostat, in Luxembourg, on Feb 22, 2018.

URBAN 5090: Global City Challenges (Spring 2014 and 2015 course convenor, University of Glasgow): Provide students with an in-depth knowledge of contemporary international urban challenges; urban sustainability; concepts and conflicts in notions of public and private space; migration and urban rural balance; land shortages for development and food production; expansion of the middle classes and governance; real estate planning and housing; urban conflicts, violence and wars; global climate change, environmental sustainability, air pollution and green house gas emissions; and transport and infrastructure.

URBAN 5046: Spatial Planning (team-taught - I teach the part of the course on transportation). The aim of this course is to enable students to generate visionary and imaginative responses to spatial planning challenges, which are realistic and derive from substantial investigation and analysis of relevant data and other evidence. My responsibility is to connect transportation to the context of spatial planning.

URBAN 5101: Introduction to Transport Studies (team taught - currently course lecturer responsible for curriculum on Big Data and Urban Informatics, University of Glasgow). The course is intended to provide a broad-based introduction to the theoretical, methodological and practical motivations for studying transport systems.

UPP 589. Data Analysis and Management II (University of Illinois at Chicago). Specific topics covered include (i) linear and nonlinear regression (ii) qualitative and limited dependent variable models [models for binary, multinomial, ordinal and count data] (iii) categorical data analysis (iv) spatial analysis [including exploratory spatial techniques, spatial clustering, spatial autoregression and lag models] (v) data quality assessment and methods to address non-response bias (vii) introduction to machine learning. Students are taught SAS, GeoDa and LIMDEP.

UPP 561. Transportation Policy Analysis (University of Illinois at Chicago). Major policies concerning the transportation-related aspects of the environment, energy, land-use, economic development, community mobility/accessibility, freight transportation, advanced transportation systems, transportation safety and social justice. Basic concepts in transportation policy formulation, cost-benefit, cost-effectiveness and ROI methods, Multi Criteria Decision Making Methods, Spatial Decision Support Systems, soft systems and group decision-making techniques for transportation.

UPP 584. Methods of Public Policy Analysis (University of Illinois at Chicago). Survey course on methods for formulating and evaluating public policies in transportation, economic development, environment, housing and community development. Experimental, quasi-experimental and non-experimental research designs. Survey methods and sampling designs. Stated preference, contingent valuation and choice experiments. Qualitative methods, cost and benefit assessment and group-decision making techniques.

UPP 565: Advanced Methods of Transportation Planning and Spatial Analysis (University of Illinois at Chicago). Performance measures, models with transportation examples for cross-sectional, time series, spatial, multilevel (linear and non-linear mixed models) and panel data. MCDM methods and Spatial Decision Support Systems. Duration and hazard models and their applications in transportation. Statistical learning and data mining of spatially indexed data.

UPP 502: Planning Skills (University of Illinois at Chicago). Introductory required course in the planning programs. Hands-on introduction to statistics, population and demographic forecasting, economic base analysis, zoning and land-use planning, GIS, illustration and presentation skills. Students learn to use a variety of software such as Excel, SAS, Google SketchUp, ArcGIS and Adobe Photoshop and Illustrator.

CS 567/UPP 567/CME 567: Principles of Computational Transportation Science (co-taught with a faculty member from the Department of Computer Science, UIC). Required course in UIC's NSF IGERT Ph.D. program on Computational Transportation Science. Fundamentals of Intelligent Transportation Systems, Location-Based Services and New Mobility Technologies. Students are taught basics of moving objects database management, data mining, machine learning and knowledge discovery methods for transportation analytics, Human-Computer Interaction,

participatory sensing/crowdsourcing and volunteered geographic information, locational privacy and trust management.

RESEARCH INTERESTS

- **Transportation, Society and Technology**
 - Methods for transportation planning and operations;
 - Socio-economic and demographic aspects of transportation, including modeling the relationship of transportation to labor markets, workforce development and productivity in regional/national economies;
 - Strategies for international and megacity transportation development and planning;
 - Planning and dynamic resource management for innovative transportation solutions and shared mobility strategies (volunteer transportation services, intermodal transportation, collaborative/shared transportation, on-demand systems, information technology solutions);
 - Analysis of transportation safety (fatalities and injuries);
 - Equity in planning including mobility and access of low-wage workers, persons with disabilities, minorities and seniors, and derivation of related metrics and indicators;
 - Performance measurement and transportation program evaluation, survey and sampling design;
 - Computational Transportation Science, Location-Based Services;
 - Technology policy including those relating to digital citizenship, privacy, trust management and mobile Digital Divide;
 - Behavioral theories of technology adoption and ICT-supported behavioral interventions for healthy and sustainable outcomes;
 - Market identification and social implications of location-aware technologies and the sharing economy.
- **Big Data and Urban Informatics**
 - Data-driven analytics of structured (e.g. administrative records or customer transactions data) and unstructured (e.g., GPS, smartcard, lifelogging, social media) data for urban knowledge discovery and urban resource management;
 - Technological, methodological, epistemological and political economy challenges posed by Big Data for Urban Informatics;
 - Data services including governance, acquisition and curation of data, linked multi-modal data infrastructure and associated policies, technologies and standards;
 - Privacy, trust management, responsible innovation;
 - Political economy of Big Data including the role of urban digital entrepreneurs and civic hacking networks.

TEACHING INTERESTS

- Urban transportation planning, operations and policy analysis;
- Transportation demand modeling and simulations;

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- Management and operations of public and intermodal transportation services and international case studies;
 - Urban Informatics, statistics, machine learning, spatial decision support systems, geospatial analysis;
 - Survey and hands-on teaching of open source analytics, visualization, mapping and document production tools for various urban analytics and applications as well as specialized proprietary analytics systems;
 - Principles of Computational Transportation Science and analytics of mobile and moving objects data;
 - Case-study oriented approach to connected data systems relevant to transportation (e.g., data*** from novel sensor systems or social media) and information retrieval and management of structured and unstructured data in the urban environment;
 - User behavior, design and legal aspects of emerging transportation technologies;
 - Introductory urban planning and transportation planning skills (economic and land-use analysis, demographic forecasting, visualization methods, GIS and project evaluation methods);
 - Research design, survey design and sampling, program evaluation.