

# ARKOPAL K. GOSWAMI, PhD

*Ranbir & Chitra Gupta School of Infrastructure Design and Management (RCGSIDM), Indian Institute of Technology Kharagpur*  
[akgoswami@infra.iitkgp.ac.in](mailto:akgoswami@infra.iitkgp.ac.in)

## EDUCATION

- **DOCTOR OF PHILOSOPHY**, Civil Engineering, **University of Virginia**, Charlottesville, Virginia, USA, 2008
- **MASTER OF SCIENCE**, Civil Engineering, **University of Virginia**, Charlottesville, Virginia, USA, 2003
- **BACHELOR OF SCIENCE (ENGG.)**, Civil Engineering, **National Institute of Technology**, Jamshedpur, Jharkhand, India, 2000

## EXPERIENCE

- **ASSISTANT PROFESSOR**, Ranbir and Chitra Gupta School of Infrastructure Design and Management, Indian Institute of Technology Kharagpur (IITKGP), Kharagpur, West Bengal, India (June 2015 – current)
- **ASSISTANT PROFESSOR**, Department of Civil Engineering, Birla Institute of Technology & Science (BITS), Pilani, Rajasthan, India (Aug 2014 – Jun 2015)
- **PRINCIPAL TRANSPORTATION PLANNER**, Hampton Roads Transportation Planning Organization, Chesapeake, Virginia, USA (Dec 2013 – Jul 2014)
- **SENIOR TRANSPORTATION PLANNER**, County of Loudoun, Leesburg, Virginia, USA (Nov 2010 – Nov 2013)
- **SENIOR CONSULTANT**, Dye Management Group, Inc., Bellevue, Washington, USA (Jul 2007 – Oct 2010)

## RESEARCH (ongoing/completed)

- Principal Investigator (PI - India) of **Developing an integrated land use - transport - emissions model utilizing emerging big data sources for quantifying the energy and environmental impacts of ridesharing services**, awarded under the Scheme for Promotion of Academic and Research Collaboration (SPARC), in collaboration with University of Leeds, Ministry of Human Resource Development, GoI
- Principal Investigator (PI) of **Assessment of emissions from thermal power plants due to energy demand from electric vehicles: Policy recommendations for renewable energy integration**, awarded under the Impactful Policy Research in Social Sciences (IMPRESS) scheme, Indian Council of Social Science Research (ICSSR), Ministry of Human Resource Development, GoI
- Joint Principal Investigator (J-PI) of **Comprehensive Development Plan (CDP) of Talcher Coalfields, Mahanadi Coalfields Limited (MCL)**, Mahanadi Coalfields Limited, CI, GoI
- Principal Investigator (PI) of **Smart & Integrated Pedestrian System Design**, an Uchhatar Avishkar Yojana (UAY) initiative of the Ministry of Human Resource Development (MHRD), Government of India [COMPLETED]
- Principal Investigator (PI) to conduct research on **Developing A Performance Based Asset Management Model to Forecast Roadway Infrastructure Preservation Needs in India**, an Institute Scheme For Innovative Research And Development (ISIRD), IIT Kharagpur
- Principal Investigator (PI) to conduct research on **Developing a Pedestrian Master Plan for Varanasi** under the SandHI initiative of IIT Kharagpur and IIT BHU, Ministry of Human Resource Development (MHRD), Government of India [COMPLETED]
- Joint Principal Investigator (J-PI) of **Development of Index and Measurement of Happiness at New Town, Kolkata**, funded by the Newtown Kolkata Development Authority (NKDA), West Bengal [COMPLETED]
- Joint Consultant of **Transit Oriented Development Research Project- Kolkata**, funded by Nikken Sekkei Research Institute, Tokyo, Japan [COMPLETED]

### INTERNATIONAL INDUSTRY PROJECTS (2007 – 2014)

- Principal Transportation Planner overseeing the development of **Long Range Transportation Plan** for the Hampton Roads region, Virginia, USA
- Lead planner on a project to **Plan & Improve the Bicycle and Pedestrian Network** around future metro rail stations in Loudoun County, Virginia, USA
- Reviewed and approved land use proposals to ensure that the **Effects of Future Land Developments on Loudoun County's Transportation Network** is mitigated, Virginia, USA
- Consultant on a National Highway Cooperative Research Program (NCHRP) project 20-74A titled **Development of Service Levels for the Interstate Highway System**, Dye Management Group, Inc., USA
- Lead consultant on a project that developed a **Performance Based Highway Maintenance Management Business Model** for the Alabama Department of Transportation (ALDOT), Dye Management Group, Inc., USA
- Lead consultant on a project for the Federal Highway Administration (FHWA), Office of Asset Management to **Develop the Scope and Course Outline for Construction Engineers' Academy**, Dye Management Group, Inc., USA

### PUBLIC OUTREACH - SHORT-TERM COURSES / WORKSHOPS ORGANIZED

- Course instructor, Introduction to Multimodal Urban Transportation Systems (MUTS), **National Programme on Technology Enhanced Learning (SWAYAM-NPTEL)** course, 2020 & 2021
- Principal coordinator for **Scheme for Promotion of Academic and Research Collaborations (SPARC)** webinar on Shared Urban Mobility Systems: Integrating Inherent Strengths with Learnings from Developed Nations, December 2021
- Principal coordinator for **Global Initiative of Academic Networks (GIAN)** course on Information Technology Applications in Transportation Planning and Management, March 2019
- Coordinator, Joint International Field Workshop on Smart Infrastructure Planning to Connect People and Jobs, in collaboration with **Georgia Institute of Technology**, Atlanta, March 2019
- Principal coordinator for **Global Initiative of Academic Networks (GIAN)** course on Smart Urban Multimodal Transport Planning, Operations and Management, July 2019
- Principal coordinator for **Technical Education Quality Improvement Program (TEQIP-III)** course on Sustainable Cities - Planning and Designing Infrastructure for Green Urban Mobility, November 2018
- Convener of **International Symposium on Water Urbanism and Infrastructure Development in Eco-Sensitive Zones**, in collaboration with **Columbia University, USA**, 2017
- Co-convener for workshop conducted on development of Urban Observatory (UO) with **University of Strathclyde, Glasgow** in conjunction with **British Deputy High Commission, Kolkata**, 2017
- Joint International Field Studios on Water Urbanism conducted in Kolkata & Varanasi with **Columbia University, New York, 2016 & 2017**
- Coordinated workshop on Engineering Asset Management in collaboration with **Curtin University, Australia**, 2017

### NATIONAL / INTERNATIONAL ACADEMIC COLLABORATIONS

- Principal Coordinator, **SGR International Faculty Outreach Program**, to host Dr. Sytse de Maat, Principal of De Maat Architecture, Amsterdam, Netherlands, December 2019
- External Associate-Supervisor to PhD Research Scholar at **Calcutta University**, 2018
- Joint guidance of doctoral research scholar under the Indo-Korea Research Internship Program, DST, GoI, with **Ajou University, Suwon**, South Korea, 2017
- Joint guidance of post-graduate student under **DAAD Scholarship Program** with TU-Munich, Germany, 2017 & 2019

## TEACHING/ACADEMIA

- Lecture classes delivered on following topics at undergraduate and postgraduate levels:
  - **Financing Infrastructure Projects**
  - **Infrastructure Regulatory Issues**
  - **Planning, Operations, and Management of Transportation Facilities**
  - **Transportation Systems Planning and Management**
  - **Highway Engineering**
- Laboratory sessions conducted: **Simulation, Virtual Reality, Highway Engineering, and Project Management**
- Teaching Feedback Score: **Core courses – 4.15 / 5.0; Elective courses: 4.26 / 5.0**

## REFERRED JOURNAL PUBLICATIONS

- Kavta, K., Goswami, A.K. (2022) Estimating mode choice of motorized two-wheeler commuters under the influence of combined travel demand management measures: An ICLV modeling approach, **Transport Policy**, Vol. 126, pp. 327 – 335  
<https://doi.org/10.1016/j.tranpol.2022.08.004>
- Nag, D., Sen, J., Goswami, A.K. (2022) Measuring connectivity of pedestrian street networks in the built walking environment: A Space-Syntax approach, **Transportation in Developing Economies**, <https://doi.org/10.1007/s40890-022-00170-7>
- Nag, D., Goswami, A.K. Measuring the built environment through image calibration using hybrid audit approach, **Journal of Transportation Engineering, Part A: Systems** (accepted for publication)
- Bhaduri, E., Goswami, A.K. Examining user attitudes towards ride-hailing services – A SEM-MIMIC Ordered Probit approach, **Travel Behaviour & Society** (accepted for publication)
- Kumari, R., Banerjee, A., Goswami, A.K. Developing a Method to Remotely Estimate On-Road Vehicular Stream Emissions in Mixed Traffic Conditions, **Journal of Institute of Town Planners, India** (accepted for publication)
- Raj, P., Bhaduri, E., Moeckel, R., Goswami, A.K. Analyzing user behavior in selection of ride-hailing services for urban travel in developing countries, **Transportation in Developing Economies** (accepted for publication)
- Hussain, S., Goswami, A.K. (2022) Predicting Pedestrian Crash Locations in Urban India: An Integrated GIS-based Spatiotemporal HSID Technique, **Journal of Transportation Safety & Security**,  
<https://doi.org/10.1080/19439962.2022.2048759>
- Bhaduri, E., Nag, D, Goswami A.K. (2022) Impact of Street Design and Operational Factors on Level of Satisfaction of Green Transportation Users in a Large Metropolitan Area, In: A.K. Maurya, et.al. (eds), Proceedings of the Fifth International Conference of Transportation Research Group of India, **Lecture Notes in Civil Engineering**, 219, pp 475-501, Springer, Singapore, [https://doi.org/10.1007/978-981-16-8259-9\\_31](https://doi.org/10.1007/978-981-16-8259-9_31)
- Nimesh, V., Kumari, R., Reddy, M.V., Goswami A.K. (2022) Assessment of Emission Implications on Introducing Electric Vehicles in India on the Non-Renewable Energy Sector, In: M. Parida, et.al. (eds), Proceedings of the Fifth International Conference of Transportation Research Group of India, **Lecture Notes in Civil Engineering**, 220, pp 215-229, Springer, Singapore, [https://doi.org/10.1007/978-981-16-9925-2\\_15](https://doi.org/10.1007/978-981-16-9925-2_15)
- Kavta, K., Goswami, A.K., (2021) A methodological framework for a priori selection of travel demand management package using fuzzy MCDM methods, **Transportation**, Vol. 48, pp 3059-3084. <https://doi.org/10.1007/s11116-020-10158-0>
- Zannat, K.E., Bhaduri, E., Goswami, A.K., Choudhury, C.F. (2021) The tale of two countries: modeling the effects of COVID-19 on shopping behavior in Bangladesh and India, **Transportation Letters**, Vol.3, Issue 5-6, pp. 421-433  
<https://doi.org/10.1080/19427867.2021.1892939>

- Nimesh, V., Kumari, R., Soni, N., Goswami, A.K., Reddy, M. V. (2021) Implication viability assessment of electric vehicles for different regions: An approach of life cycle assessment considering exergy analysis and battery degradation, **Energy Conversion and Management**, Vol 237, <https://doi.org/10.1016/j.enconman.2021.114104>
- Hussain, M.S., Kumari, R., Nimesh, V., Goswami, A.K. (2021) Assessing Impact of Urban Street Infrastructure on Pedestrian Safety Perception, **Proceedings of the Institution of Civil Engineers - Urban Design and Planning**, <https://doi.org/10.1680/jurdp.20.00033>
- Prakash, K., Nimesh, V., Hussain, S., Goswami, A.K. (2020) Study of Ambient Air Quality on Transport Network near Mining Region – A Case of Talcher Coalfield, **Indian Journal of Environmental Protection**, Vol 40, No. 12, pp. 1247-1254
- E. Bhaduri, B.S. Manoj, Z. Wadud, A.K. Goswami, C.F. Choudhury, (2020) Modelling the effects of COVID-19 on travel mode choice behaviour in India, **Transportation Research Interdisciplinary Perspectives**, Vol 8, November 2020, <https://doi.org/10.1016/j.trip.2020.100273>
- Nimesh, V., Sharma, D., Reddy, M. V., Goswami, A.K. (2020) Implication viability assessment of shift to electric vehicles for present power generation scenario of India, **Energy**, Vol 195, <https://doi.org/10.1016/j.energy.2020.116976>
- Nag, D., Goswami, A.K., Gupta, A., Sen, J. (2020) The three constructs of assessing urban sidewalk networks: A synthesis of Pedestrian Level of Service literature, **Transport Reviews**, Volume 40, Issue 2, pp 204-240, <https://doi.org/10.1080/01441647.2019.1703841>
- Bhaduri, E. Goswami, A.K., and Moeckel, R. (2020) How sustainable is the growth of mass transit system in developing countries – an Indian perspective, **Transportation Research Procedia**, Vol 48, pp. 2706-2724, <https://doi.org/10.1016/j.trpro.2020.08.244>
- Kumar, G. J., Nag, D., Bhaduri, E., and Goswami, A.K. (2020) Developing a relationship between user satisfaction, physical environment, and behavior – A case of pedestrian infrastructure, **Transportation Research Procedia**, Vol 48, pp. 2343-2363, <https://doi.org/10.1016/j.trpro.2020.08.284>
- Nag, D., and Goswami, A.K. (2019) Identification of Measures of Effectiveness (MOEs) for Developing Pedestrian Level of Service (PLOS): A Theoretical Approach using Experts' Opinion, **Journal of International Review for Spatial Planning and Sustainable Development**, Volume 7, Issue 4, pp 56-82, October 2019 [https://doi.org/10.14246/irpspd.7.4\\_56](https://doi.org/10.14246/irpspd.7.4_56)
- Nag D., Roy A., Goswami A.K. (2019) Estimating Environmental Benefits of Electronic Toll Collection (ETC). In: Mathew T., Joshi G., Velaga N., Arkatkar S. (eds) **Transportation Research. Lecture Notes in Civil Engineering**, Vol 45, pp 441-452, October 2019, Springer, Singapore, [https://doi.org/10.1007/978-981-32-9042-6\\_35](https://doi.org/10.1007/978-981-32-9042-6_35)
- Bhaduri, E., Manoj, B S, Sen, J., Maitra, B., Goswami, A. K. (2019) Measuring User Satisfaction of Pedestrian Facilities and its Heterogeneity in Urban India – A Tale of Three Cities, **Journal of the Eastern Asia Society for Transportation Studies**, Volume 13, pp. 144-171, <https://doi.org/10.11175/easts.13.144>
- Nag, D., Paul, S., Saha, S., Goswami, A.K. (2018) Sustainability assessment for the transportation environment of Darjeeling, India, **Journal of Environmental Management**, Volume 213, February 2018, pp. 489-502 <https://doi.org/10.1016/j.jenvman.2018.01.042>
- Parmar, S.S., Goswami, A.K., Sen, J. (2018) Allocation of Infrastructure in city region based on resilient economic landscapes of development preparedness: Cases of districts West Bengal and West Mithila region, **6th Annual International Conference on Architecture and Civil Engineering (ACE 2018)**, doi: 10.5176/2301-394X\_ACE18.27
- Mondal, S., et. al (2017) Utilization of Constrained Urban Spaces for Distributed Energy Generation – Development of Solar Paved Walkway, **Energy Procedia**, Volume 130, September 2017, pp. 114-121 <https://doi.org/10.1016/j.egypro.2017.09.406>

- Goswami, A.K., Miller, J.S., Hoel, L.A. (2011) Offsite Passenger Service Facilities: A Viable Option for Airport Access?, **Journal of Air Transport Management**, Volume 17, Issue 5, September 2011, pp. 263-270  
<https://doi.org/10.1016/j.jairtraman.2011.02.014>
- Miller, J.S., Goswami, A.K. (2007) Technical Assistance: A Path to Better Interagency Cooperation, **Journal of Public Works Management & Policy**, Volume 11, No. 4, April 2007, pp. 305-315 <https://doi.org/10.1177/1087724X07301535>
- Miller, J.S., Hoel, L.A., Goswami, A.K., Ulmer, J.M. (2006) Borrowing Residential Trip Generation Rates, **ASCE Journal of Transportation Engineering**, Volume 132, No. 2, February 2006, pp. 105 – 113 [https://doi.org/10.1061/\(ASCE\)0733-947X\(2006\)132:2\(105\)](https://doi.org/10.1061/(ASCE)0733-947X(2006)132:2(105))
- Miller, J.S., Hoel, L.A., Goswami, A.K., Ulmer, J.M. (2006) Assessing the Utility of Private Information in Transportation Planning Studies: A Case Study of Trip Generation Analysis, **Journal of Socio-Economic Planning Sciences**, Volume 40, Issue 2, June 2006, pp.94 – 118 <https://doi.org/10.1016/j.seps.2004.10.003>
- B.S. Manoj, Mandar, V., Goswami, A.K. Commuters access to public transport: Estimating modal share of first and last-mile trips in Mumbai, India, **Transportation in Developing Economies** (under 2<sup>nd</sup> review)
- Vallejo-Borda, J.A., Bhaduri, E., Ortiz-Ramirez, H.A., Arellana, J., Choudhury, C.F., Rodriguez-Valencia, A., Wadud, Z., Goswami, A.K., (2021). Modelling the Covid-19 Travel Choices in Colombia and India: A Hybrid Multiple Discrete-Continuous Nested Extreme Value Approach, **Transportation Research Record** (under 2<sup>nd</sup> review)
- Shende, S; Bhaduri, E., Goswami, A.K. (2022). Analyzing Changes in Travel Patterns Due to Covid-19 Using Twitter Data in India. **Case Studies on Transport Policy** (under review)

#### CONFERENCE PROCEEDINGS/PRESENTATIONS

- Bhaduri, E., Meshram, A., Goswami, A.K. **Investigating the effect of built environment on adoption and use frequency of ride-hailing service in developing countries**, ASCE International Conference on Transportation & Development, Seattle, Washington, USA, May 2022
- Manoj B.S., Goswami, A.K. **Prioritizing the Key Attributes in Transit-Oriented Development (TOD) Using Multi-Criteria Decision Making (MCDM) Approach**, ASCE International Conference on Transportation & Development, Seattle, Washington, USA, May 2022
- Sidhart K., Manoj B.S., Goswami, A.K. **An Application of Latent Class Analysis for Residential Choice Model in the Context of Transit-Oriented Development in India**, ASCE International Conference on Transportation & Development, Seattle, Washington, USA, May 2022 (accepted)
- Hussain, M.S., Gupta, A., Goswami, A.K. **Predicting Pedestrian Crashes and Severity Using Pseudo-Safety Indicators - An Integrated Viswalk-SSAM Approach**, 50th Annual Conference of the Urban Affairs Association, Washington D. C., USA, April 2022.
- Zannat, K.E., Bhaduri, E., Goswami, A.K., Choudhury, C.F. **The tale of two countries: Modelling the effects of COVID-19 on shopping behaviour in Bangladesh and India**, 101<sup>st</sup> Annual meeting of Transportation Research Board (TRB), Washington D.C, USA, January 2022 (online)
- Manoj B.S., Goswami, A.K. (2022). **Apriori Modal Choice Estimation for Transit Oriented Developments (TOD): A Developing Nation Context**, 50th European Transport Conference, Milan, Italy (submitted)
- Manoj B.S., Goswami, A.K. (2022) **Joint Estimation utilizing Revealed and Stated Preference Datasets: An Application for First and Last Mile Mode Choice Models**, 2nd International Conference on Transportation Infrastructure Projects : Conception to Execution (TIPCE-2022), Roorkee, India, Springer Proceedings (under review)

- Raj, P., Bhaduri, E., Moeckel, R., Goswami, A.K. **Analysis of the motivation to select ride-hailing service for urban travel in developing countries**, 6th Conference of the Transportation Research Group of India, Tiruchirappalli, Tamilnadu, India, December 2021
- Kavta, K., Srivastava, N., Manoj, BS., Goswami, A.K., Matsumara, S. **Location choice analysis for Transit Oriented Development (TOD): A case study of Kolkata**, 6th Conference of the Transportation Research Group of India, Tiruchirappalli, Tamilnadu, India, December 2021
- Nag, D., Sen, J., Goswami, A.K. **Measuring connectivity of pedestrian street networks in the built walking environment: A Space-Syntax approach**, 6th Conference of the Transportation Research Group of India, Tiruchirappalli, Tamilnadu, India, December 2021
- Manoj, B.S., Vaidya, M., Goswami, A.K. **Commuters Access to Public Transport: Estimating Modal Share of First and Last-mile trips in Mumbai, India**, 6th Conference of the Transportation Research Group of India, Tiruchirappalli, Tamilnadu, India, December 2021
- Kumari, R., Banerjee, A., Goswami, A.K. **Developing a method to remotely estimate on-road vehicular stream emissions in mixed traffic conditions**, International Conference on Sustainable Urban Mobility (SUMo 2020), Institute of Town Planners (ITPI), West Bengal Chapter, October 2021 (online)
- Shinde, S., Bhaduri, E., Goswami, A.K. **Analyzing Changes in Travel Patterns due to COVID-19 using Twitter Data in India**, 49<sup>th</sup> European Transport Conference, Association for European Transport, September 2021 (online)   
<https://aetransport.org/past-etc-papers/conference-papers-2021>
- Hussain, S., Goswami, A.K., Gupta, A. **Prediction of Pedestrian Crash Locations in Urban Areas: A GIS-based Spatio-temporal Hotspot Analysis**, 14<sup>th</sup> Eastern Asia Society for Transportation Studies, EASTS 2021, Hiroshima, Japan, September 2021 (online)
- Bhaduri, E., Manoj, BS, Wadud, Z., Goswami, A.K., and Choudhury, C.F. **Modelling the Effects of COVID-19 on Mode Choice Behaviour in India**, 100<sup>th</sup> Annual meeting of Transportation Research Board (TRB), Washington D.C, USA, January 2021 (online)
- Bhaduri, E., Manoj B.S., Wadud, Z., Goswami, A.K. and Choudhury, C.F. **Modelling the Effects of COVID-19 on Mode Choice Behaviour in India**, 2<sup>nd</sup> Bridging Transportation Researchers (BTR) Conference, August 2020 (online)   
<https://bridgingtransport.org/blog/conference-program/>
- Nag, D., Goswami, A.K., and Sen J. **Selection of Attributes for Pedestrian Level of Service Measures: A Screening Tool**, 99<sup>th</sup> Annual meeting of Transportation Research Board (TRB), Washington D.C, USA, January 2020
- Nimesh, V., Kumari, R., Reddy, M.V., Goswami, A.K. **Assessment of Emission Implications of Introducing Electric Vehicles in India on the Non-Renewable Energy Sector**, paper presented at the 5th Conference of the Transportation Research Group of India (CTRG-2019), Bhopal, Madhya Pradesh, India, December 2019
- Nag D., Goswami A.K., Sen, J. **Assessing connectivity of an urban pedestrian networks: A case of Varanasi, India**. Paper presented at the 49th Annual Urban Affairs Association Conference 2019, April 2019, Los Angeles, USA
- Nag, D., Goswami, A.K., and Sen J. **Measuring users' perception of urban pedestrian infrastructure networks: A conjoint analysis approach**, paper presented at 98<sup>th</sup> Annual meeting of Transportation Research Board (TRB), Washington D.C, USA, January 2019
- Nag, D., Goswami, A.K. **Developing pedestrian LOS for urban sidewalk network: a methodology for selection of measures of effectiveness using a three-dimensional approach**, paper presented at Urban Transitions 2018, Sitges, Barcelona, Spain, November 2018

- Hussain, S, Jha, D., Goswami, A.K. **Using GIS to identify vehicle crash hot spots and unsafe crossroads – A case study of Kolkata, India**, paper presented at 39th Asian Conference on Remote Sensing: Remote Sensing Enabling Prosperity, ACRS 2018, <http://www.scopus.com/inward/record.url?eid=2-s2.0-85071890704&partnerID=MN8TOARS>
- Bhaduri, E., Nag, D., Goswami, A.K. **Evaluation of Service Improvement measures on Mass Transit modal share**, Proceedings of the 12<sup>th</sup> World Congress of the Regional Science Association International (RSAI), Goa, India, May 2018, ISBN 978-989-54216-0-2
- Kavta, K., Goswami, A.K. **Traffic congestion mitigation: A research review of supply and demand approaches**. Paper presented at 97<sup>th</sup> Annual meeting of Transportation Research Board (TRB), Washington D.C, USA, January 2018, <https://trid.trb.org/view/1496210>
- Kavta, K., Goswami A.K **Performance-Based Asset Management: Forecasting Roadway Infrastructure Preservation Needs**. Paper presented at World Road Meeting, International Road Federation (IRF), New Delhi, India, November 2017
- Hussain, M.S., Nag, D., Goswami, A.K. **A Methodology to Determine Urban Pedestrian Trip Generation of Commercial Land Use**. Paper presented at World Road Meeting, International Road Federation (IRF), New Delhi, India, November 2017
- Nag D., Goswami, A.K. **Identification of Measures of Effectiveness (MOEs) for developing Pedestrian Level of Service (PLOS)—A Theoretical Approach using Expert’s Opinion**. Paper presented at 4<sup>th</sup> International Conference on Spatial Planning and Sustainable Development, Seoul National University, Seoul, South Korea, August 2017
- Bansal, S., Goswami, A.K., Sen, J. **Globally Integrated Urban Network Management based on Airport-oriented Development (AOD) - evaluation of concept and strategic model: A case of Varanasi, India**. Paper presented at Annual Conference of Europe Urban Research Association (EURA), University of Warsaw, Poland, June 2017
- Roy, A., Nag, D., Goswami, A.K. **Impact of Electronic Toll Collection on Reducing Delays at Toll Plaza**. Paper presented at 12th Conference on Transportation Planning and Implementation Methodologies for Developing Countries, IIT Bombay, Mumbai, India, December 2016
- Goswami, A.K., Miller, J.S., Hoel, L.A. **Measuring the Quality of Landside Access to Airports**, 89<sup>th</sup> Annual Transportation Research Board Conference, Washington D.C., January 2010
- Goswami, A.K., Miller, J.S., Hoel, L.A. **Measuring Pre-Flight Travel Time in the Air Journey**, 29<sup>th</sup> International Air Transport Conference, Irving, TX, August 2007, [https://doi.org/10.1061/40938\(262\)7](https://doi.org/10.1061/40938(262)7)
- Miller, J.S., Goswami, A.K. **Achieving Interagency Cooperation Through Technical Assistance: Option for Coordinating Transportation and Land Use Planning**, 84<sup>th</sup> Transportation Research Board Annual Meeting, Washington D.C., January 2005
- Goswami, A.K., Miller, J.S., Hoel, L.A. **Assessing the Feasibility of Passenger Offsite Airport Terminals**, 9<sup>th</sup> Air Transport Research Society (ATRS), Rio de Janeiro, Brazil, July 2005

#### TECHNICAL REPORTS/BOOK CHAPTERS

- Hussain, M.S., Nimesh, V., Goswami, A.K. (2022). **Safety around transit systems, last-mile safety, and aid from advancing system technologies**, Advances in Cognitive Intelligent Systems for Sustainable Engineering: Concepts, architectures, and practical applications, Institution of Engineering and Technology (IET) Book Series (Scopus Indexed)
- Nag, D., Manoj BS, A. K. Goswami, and S. Bharule (2020). **Framework for Public Transport Integration at Railway Stations and its Implications for Quality of Life**. Handbook on High-Speed Rail and Quality of Life, ADBI Working Paper 1054. Tokyo : Asian Development Bank Institute. Available: <https://www.adb.org/publications/framework-public-transport-integration-railway-stations-implications-quality>; <https://dx.doi.org/10.2139/ssrn.3551888>

- Manoj, B.S., Nag, D., Goswami, A.K. **Assessment of Traffic Impacts for Proposed Multi-level Car Park (MLCP) at Alipore, Kolkata**, Mackintosh Burn Limited, Govt. of West Bengal Enterprise, October 2019
- Kavta, K., Goswami, A.K. **Study of Transit Oriented Development with Reference to Intermodal Transportation Hub: The Case of Kolkata**, Nikken-Sekkei Research Institute (NSRI), Tokyo, Japan, April 2018
- Nag, D., Goswami, A.K. Accidents & Emergencies. In B. Maitra (Ed.), **Training Manual for Drivers, Govt. of West Bengal** (pp.159-173). Kolkata, West Bengal: Cygnus Advertising (India) Pvt. Ltd. ISBN: 978-93-80813-53-0, 2017
- Kavta, K., Goswami, A.K. Road Markings. In B. Maitra (Ed.), **Training Manual for Drivers, Govt. of West Bengal** (pp.47-67). Kolkata, West Bengal: Cygnus Advertising (India) Pvt. Ltd. ISBN: 978-93-80813-53-0, 2017
- Dye Management Group, Inc. **Development of Service Levels for the Interstate Highway System**, National Cooperative Highway Research Program (NCHRP) Report 677, National Academy of Sciences, Washington DC, 2010 (DOI: 10.17226/22909)
- Goswami, A.K., Miller, J.S., Hoel, L.A. **Airport Offsite Passenger Service Facilities: Volume I: Definition, Background, and Opportunities**, Virginia Transportation Research Council, Report No. 08-R15, May 2008
- Goswami, A.K., Miller, J.S., and Hoel, L.A. **Airport Offsite Passenger Service Facilities: An Option for Improving Landside Access: Volume II: A Methodology to Determine Demand for Airport Offsite Passenger Service Facilities**, Virginia Transportation Research Council, Charlottesville, report No. 09-R6, February 2009
- Miller, J.S., Goswami, A.K. **Providing Technical Assistance in an Environment of Uncertainty: A Case Study of Coordinating Transportation and Land Use**, Virginia Transportation Research Council, Report No. 05-R20, Feb 2005
- Ulmer, J.M., Goswami, A.K., Miller, J.S., Hoel, L.A. **Residential Trip Generation: Ground Counts Versus Surveys**, Virginia Transportation Research Council, Report No. 03-R18, June 2003

#### INVITED/GUEST SPEAKER

- Capacity Building and Training Program, **Metro and Future Urban Rail Transport**, Institute of Urban Transport (IUT), India, August 2022
- Technical session, **Symposium on Urban Development of NE states -Smart City Revolutions and Innovations in Urban Transport**, North East Festival, Azadi ka Amrut Mahotsav, Gangtok, Sikkim, April 2022
- Symposium, **Transport and COVID-19 in Low- and Middle-Income Countries**, Makerere University, Kampala, Uganda, February 2022 (online)
- Session Moderator, **International Conference on Sustainable Urban Mobility (SUMo 2020)**, Institute of Town Planners (ITPI), West Bengal Chapter, October 2021
- QIP short-term course, **Transition towards Electric vehicles and their Charging Ecosystem in India (TEVCEI-2021)**, IIT (BHU) Varanasi, January 2021
- AICTE short-term training program, **Emerging technologies in transportation engineering for sustainable development**, Vignana Bharathi Institute of Technology (Autonomous), Hyderabad, November 2020
- **Distinguished Alumni Speaker at NIT Jamshedpur**, Industry-Alumni Relations Cell, NIT Jamshedpur, July 2020
- **UK-India Education and Research Initiative (UKIERI)**, Scheme for Promotion of Academic and Research Collaboration (SPARC) webinar, June 2020
- BITS Pilani Hyderabad Campus, **SPARC Workshop**, March 2020
- NIT Sikkim, Ravangla Campus, **Induction Program for 1st Year B.Tech. students**, July 2019
- Public Works Department (PWD), **Safety and Hot Spot Identification along Highways**, IIT Kharagpur, 2018
- Asian Institute of Public Policy and Development, **The role of Trans-Municipal Governance in Transit Oriented Development (TOD): Integrated Policy towards Inclusive Economic Growth in India**, November 2016

- UK-India Joint Network on Sustainable Cities and Urbanization in India, **Urban Observatories for Enhancing the Quality of Urban Life in India**, September 2016
- Institute of Public Health Engineers, India, **Improving Pedestrian Transport for a Smart and Health Urban Future**, July 2016
- University of Virginia, **Sustainable Transportation – A Global Understanding**, July 2016
- University of Kyoto, University of Tokyo and Tokyo Metropolitan University, Joint Collaborative Initiatives under Varanasi-Kyoto Agreement, March 2016

#### AWARDS/MEMBERSHIPS

- Received **Faculty Excellence Award (Assistant Professor) 2022**, IIT Kharagpur
- Received **Springer Best Paper Presentation Award** for student paper titled **Predicting Trends in Roadway Crashes and Forecasting Crash Frequency in Developing Countries: A Case of Mumbai-Pune Expressway**, International Conference on Transportation Infrastructure Projects Conception to Execution (TIPCE), IIT Roorkee, January 2019
- Received best poster award for student paper titled **Estimating Environmental Impacts of Electronic Toll Collection**, 4th Conference of Transport Research Group (CTRG), IIT Bombay, December 2017
- Presented by the **Jack H. Dillard Award** for the paper titled **Option for Coordinating Transportation and Land Use Planning**, by the Virginia Transportation Research Council, Charlottesville, Virginia, 2005
- **Executive Committee Board Member**, Transportation Research Group (TRG), India
- **Chair, Technical Committee of Transportation Research Group (TCT – D01)**, Travel Behaviour and Transport Demand
- **Life Member**, Indian Road Congress (IRC)
- **Committee Member, Urban Roads & Streets (H-8)**, Indian Road Congress (IRC)
- **Associate**, Institution of Engineers (India)
- **Member**, Eastern Asian Society for Transportation Studies (EASTS)
- **Former Member**, Transportation Research Board (TRB) Committee on Roadside Maintenance Operations (AHD50)

#### PROFESSIONAL ENGAGEMENTS

- Serving as Track Chair, **2nd International Conference on Transportation Infrastructure Projects – Conception to Execution (TIPCE2022)**, IIT Roorkee, September 2022
- Served as Session Chair, **6th Conference of Transportation Research Group (CTRG) of India**, NIT Tiruchirappalli, December 2021
- Served as Technical Session Moderator, **International Conference on Sustainable Urban Mobility (SUMo2020)**, Institute of Town Planners India (ITPI), West Bengal Chapter, October 2021
- Served as Technical Session Chair, **13th International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 2020)**, IIT Bombay, December 2020

#### JOURNAL PAPER EDITOR/REVIEWER

- Special Issue Guest Editor, **Transportation in Developing Economies**, Journal of the Transportation Research Group (TRG) of India
- Special Issue Guest Editor, **Journal of Institute of Town Planners India**
- Reviewer, Journal of **Travel Behavior and Society**
- Reviewer, Journal of **Transport and Land Use**

- Reviewer, **Transportation in Developing Economies**, Journal of the Transportation Research Group (TRG) of India
- Reviewer, Journal of **Air Transport Management**
- Reviewer, Journal of **Airport Management**
- Reviewer, **Asian Transport Studies** (ATS) Journal
- Reviewer, **Transportation Research Record**, Journal of the Transportation Research Board