



# TRG NEWSLETTER

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## Previous Newsletters

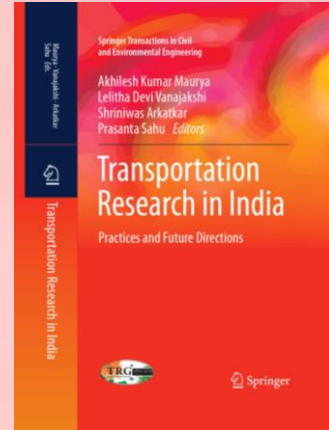


TRG India Proudly Presents  
Decennial Year Book  
on

## **“Transportation Research in India - Practices and Future Directions”**

Editors:

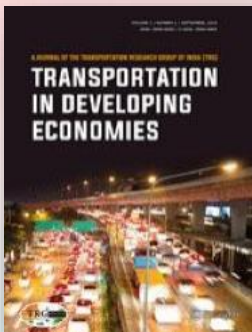
**Dr. Akhilesh Kumar Maurya**  
**Dr. Lelitha Devi Vanajakshi**  
**Dr. Shriniwas Arkatkar**  
**Dr. Prasanta Sahu**



### About this book

This co-edited book focuses on state-of-the-art research in transportation in India. Exploring the need for a sustainable transport paradigm in India, this timely book offers solution concepts for mobility and infrastructure challenges faced by local, state, and national transport authorities. The contents provide a holistic understanding of the paradigm, considering several case studies and study findings from the leading transportation researchers in India. At the same time, it also addresses the pressing transportation related challenges such as road user safety, traffic operation efficiency, economic and social development, non-motorized transport planning, environmental impact mitigation, energy consumption reduction, land-use, equity, freight transport planning, multimodal coordination, access for the diverse range of travellers' needs, sustainable pavement construction, and emerging vehicle technologies. The existing practices and policies in all the sectors and levels of transport are highlighted in this book with an emphasis on a broader vision for achieving sustainable and inclusive development. The information and data-driven inferences compiled in the book will be useful for practitioners, policymakers, educators, researchers, students, and individual learners.

## Official Journal of TRG



Transportation in Developing Economies, TiDE (Springer)

The journal provides a forum for discussion of research on transportation problems uniquely arising in the developing world. The contents include papers on all topics related to transportation, emphasizing research, planning and engineering problems that typically arise in developing economies.

**Editor-in-Chief:** Prof. Partha Chakroborty

**Latest Issue:** Volume 8 Issue 2, October 2022



## Welcome for 7<sup>th</sup> CTRG 2023 at SVNIT, Surat

Venue: Marriott, Surat





## Summary of Workshops – 6<sup>th</sup> CTRG 2021

### Workshop-A: Sustainable Transport

**Chair – Dr. Mukti Advani, CSIR-CRRI, New Delhi; Co-Chair – Dr. Amit Agarwal, IIT Roorkee**

Discussed areas of research to be taken up in the future have been categorised into three broad types as below:

- **Short-term**
  - Improving NMT around Public transport stop/station through subtle design changes
  - Real-time information for public transit trip planning
  - Feasibility of double-decker transit systems in the metro cities
- **Medium-term**
  - Impact of various restrictions by the authorities of gated communities in metro cities on the modal share and identification of the affected user group
  - Impact of weekly markets on the travel behavior; preparation of guidelines/ policies for weekly markets to encourage NMT and pedestrians
  - Impact of socio-demographic and livelihood on the adaption of the bicycle/ walk for various trip purposes
  - Preparation of interactive maps for cyclists/ pedestrians by integrating the local paths
- **Long-term**
  - Possibilities of flattening the transit peaks to reduce the crowding in peak hours and attract new users
  - Multimodal integration to improve sustainable modal share

### Workshop-B: Transportation Modes, Planning & Demand Forecast

**Chair – Dr. Prasanta Kumar Sahu, BITS Hyderabad ; Co-Chair – Dr. Manoj M., IIT Delhi**

Discussed areas of research to be taken up in the future have been categorised into two broad categories as below:

- **Research issues/topics that need to be addressed in immediate future i.e. next 2-3 years**
  - Development of data repository of travel survey, transportation network and land use for advanced travel demand modelling.
  - Prototype development and testing an integrated land use transport model
  - Design and performance analysis of multi-model transport networks
  - Development of freight travel demand models.
- **Capacity building/training/education issues/topics that need to be addressed in immediate future i.e. next 2-3 years**
  - Training professionals, researchers and academicians for household travel survey data collection, data analysis and transport modelling.
  - Training professionals, researchers and academicians in transport network analysis and design
  - Training professionals, researchers and academicians in transit routing and scheduling

## Summary of Workshops – 6<sup>th</sup> CTRG 2021

### Workshop-C: Traffic Systems Analysis

**Chair – Dr. Shriniwas S. Arkatkar, SVNIT Surat; Co-Chair – Dr. Marisamynathan S, NIT Trichy**

Discussed areas of research to be taken up in the future have been listed as below:

- Involve and align with the interdisciplinary departments for understanding user behaviour
- Data-driven model on the driver behaviour
- Integrated traffic flow model for better-representation of non-lane based heterogeneous traffic conditions
- Data collection using the simulator and Naturalistic driving data
- Work on geometric design consistency for different road characteristics and prepare guidelines
- Optimization of signal time includes the design of geometric characteristics at the intersection
- Benefits of better geometric design and traffic control as a fixed time, signal coordination, and vehicle actuated/adaptive signal control.
- Data collection needs ITS applications with infrastructure facility (utilization of the mobile data should be emphasized particularly)
- Combine OBD data with traffic parameters for examining driver behaviour
- Exploring the use of mobile data for developing various ITS-related applications

### Workshop-D: Highway Materials & Pavement

**Chair – Dr. Aravind Swamy, IIT Delhi; Co-Chair – Dr. Sunitha V., NIT Trichy**

Discussed areas of research to be taken up in the future have been categorized into two broad categories as below:

- Bridging the gap between industry and academia
- Training of budding researchers
- Promoting field and research lab visits
- Development of manuals/guidelines relevant to the transportation sector
- Conducting popular lecture series
- Having student chapters at engineering college levels



## Special Webinar by TRG India



Dr. Deepty Jain  
Asst. Professor

TERI School of Advance Studies

TRG successfully organized the first webinar of its current webinar series by the TCT-E01 subcommittee. Dr. Deepty Jain, Assistant Professor, Department of Sustainable Studies, TERI School of Advance Studies delivered an excellent session on the topic “Potential change in travel patterns in Delhi and its impact on emissions” on August 10, 2022 (5-6 PM). The webinar received overwhelmed response from various stakeholders of transportation including Students, Researchers, Academicians, and Industrial professionals across the country. TRG appreciates the efforts of TCT E01 Chair Dr. Mukti Advani, CSIR-CRRI, and Co-Chair Dr. Amit Agarwal, IITR for planning and conducting the webinar successfully. Furthermore, webinars will be conducted by other TCT committees of TRG in near future.

## In the News...

### Chenab Bridge – Engineering Marvel of India



The golden joint of the world’s highest bridge was completed and inaugurated on the 13th of August to complete the ever-going project of Chenab Bridge. The most anticipated project of Kashmir Valley, The Chenab Bridge is finally complete witnessing its golden joint. The joint linked two ends of the deck of the railway bridge. The bridge magnificently constructed with an arch goes over the Chenab River which runs through the Reasi district of Kashmir.

#### Salient features of the bridge:

- The proposed location is 60 Km North of Katra (UT of J&K, India).
- Total Span Length: 1263 M
- Height 359 M from bed level, which is 35m higher than height of the Eiffel tower
- Bridge locations fall in seismic zone V as per BIS seismic zoning map, IS 1893-1984
- Bed rock comprises highly jointed and fractured dolomite /siliceous limestone
- Bridges to be designed for Modified Broad Gauge loading of Indian Railway Standard Codes, substructure for double line & superstructure for single BG line

## Call for Papers

- Special Issue of Transportation Research Part D: Transport and Environment on “Challenges in road transport emission modelling and forecasting for climate policy”. For More Details: [Click Here](#)  
**Submission Deadline: November 30, 2022**
- Special Issue of Transportation Letters on “Driver Behavior and Road Safety: Technological Advances in Combatting Human Errors and Behavioral Alarms”. For More Details: [Click Here](#)  
**Submission Deadline: December 31, 2022**
- Special Issue of Cleaner Materials on “Cutting-edge advancements in sustainable asphalt paving materials”. For More Details: [Click Here](#)  
**Submission Deadline: December 31, 2022**
- Special Issue of Transportation Research Part D: Transport and Environment on “Green pathways for a connected and automated vehicle future”. For More Details: [Click Here](#)  
**Submission Deadline: January 31, 2023**
- Special Issue of Sustainable Cities and Society on “People-Environment-Infrastructure Relationship in Future Cities” For More Details: [Click Here](#)  
**Submission Deadline: February 28, 2023**
- Special Issue of Case Studies in Construction Materials on “New contributions to the science of asphalt pavements” For More Details: [Click Here](#)  
**Submission Deadline: March 31, 2023**
- Special Issue of Asian Transport Studies on “Urban Space Transformation for Vulnerable Road User”. For More Details: [Click Here](#)  
**Submission Deadline: April 30, 2023**

## PhD & Post-Doctoral Openings

Ph.D. Position - Emerging transportation technologies at Department of Civil Engineering, Illinois Institute of Technology  
Deadline: Open until filled  
[Click for more details](#)

Ph.D. Position - 'Future-oriented urban transport modeling' at Department of Architecture and Planning at the NTNU Faculty of Architecture and Design. Deadline: Open until filled  
[Click for more details](#)

PhD position - connected automated vehicles (CAVs) or AI controls at Zachary Department of Civil and Environmental Engineering at Texas A&M University. Deadline: Open until filled  
[Click for more details](#)

PhD Position – Pavement Materials at Department of Civil and Environmental Engineering at the University of Nebraska–Lincoln. Deadline: Open until filled  
[Click for more details](#)

PhD Position - electric vehicle impacts on infrastructure and equity at Civil, Engineering department at the University of Colorado Boulder. Deadline: Open until filled  
[Click for more details](#)

PDF Position - "Design and development of dynamic models for urban traffic and driver behaviour predictions" at Department of Civil and Infrastructure Engineering, IIT Jodhpur. Deadline: Open until filled  
[Click for more details](#)



## Upcoming Conferences



14 – 17th September, 2022: 2<sup>nd</sup> International Conference on Transportation Infrastructure Projects : Conception to Execution organized by Transportation Engineering Group, Department of Civil Engineering, IIT Roorkee. For more details [Click here](#)



15 - 17 October, 2022: 14<sup>th</sup> International Conference on Traffic and Granular Flow (TGF) organized by Transportation Research and Injury Prevention Centre, Department of Civil Engineering, IIT Delhi. For more details [Click here](#)



11 - 12 November, 2022: 4<sup>th</sup> National Conference on Recent Advances in Traffic Engineering (RATE-2022) organized by Transportation Engineering and Planning Section, Department of Civil Engineering, SVNIT Surat. For more details [Click here](#)



19 - 21 December, 2022: 14<sup>th</sup> International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC) organized by the Transportation Systems Engineering group of the Department of Civil Engineering, IIT Bombay. For more details [Click here](#)



29 – 31 May, & 1 June, 2023: 9<sup>th</sup> Annual International Conference on Transportation organized by the Transportation Engineering Unit of ATINER. For more details [Click here](#)



14 - 17 June, 2023: International Conference on Transportation and Development (ICTD 2023) at Austin, Texas, USA organized by the Transportation & Development Institute (T&DI) of ASCE. For more details [Click here](#)



14 - 17 June, 2023: International Airfield & Highway Pavements Conference (Pavements 2023) at Austin, Texas, USA organized by the Transportation & Development Institute (T&DI) of ASCE. For more details [Click here](#)

## Upcoming Events



**08 - 11 October, 2022: 81st Annual Session of the Indian Roads Congress organized by Transportation Research and Injury Prevention Centre, Department of Civil Engineering, IIT Delhi. For more details [Click here](#)**



**04 - 06 November, 2022: 15<sup>th</sup> Urban Mobility India ( UMI ) Conference cum Exhibition, Kochi, Kerala organized by the Ministry of Housing and Urban Affairs (MoHUA), Government of India (GoI). For more details [Click here](#)**

### Connect with us at:



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