



March 5, 2024

Volume 3, Issue 11

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### Useful Information and links

## Hideo Nakamura sessions held at the 30<sup>th</sup> conference of the Turkish Economic Association (ICE-TEA) on November 17 and 18, 2023, at Antalya



**Yücel Candemir** has organised two sessions at the 30<sup>th</sup> TEA (November 17 and 18, 2023) in honour of Hideo Nakamura. The contributions are focusing on the central issues of WCTRS, which are internationally collaborative research and education. Below, you can find brief summaries of the contributions. If you are interested in the presentation documents and the full affiliation of authors, please use the [link](#).

### **Werner Rothengatter, KIT: Introduction to the Vita and the Work of Hideo Nakamura**

Hideo Nakamura, emeritus professor at the University of Tokyo, former president of the Tokyo City University, and former head of the Tokyo Institute of Transport Policy

**1. Publications by SIG A4-  
Handbook on High-Speed  
Rail and Quality of Life and  
Frontiers in High-Speed Rail  
Development**

Both books are free to  
download.

For details: [Click Here](#)

**2. Urban Mobility Research  
in India transport: Selected  
proceedings from 13th  
Research Symposium of  
15th Urban Mobility India  
Conference & Expo 2022**

For details: [Click Here](#)

**3. A new Transport  
Research and Education  
Network to help ESCAP  
member States achieve  
sustainable transport**

For details: [Click Here](#)

**4. Special Issue of  
Transportation Research  
Part E: Logistics and  
Transportation Review on  
“Emerging AI-Driven Smart  
and Sustainable Mobility”**

For details: [Click Here](#)

Paper submission deadline:

**Aug 30, 2024**

**5. Special Issue of  
Transportation Research  
Part A: Policy and Practice  
on “On-demand  
transportation, public  
transportation, operation**

Studies, was highly honoured for his scientific work, policy advice, and merits for establishing networks of international collaboration for transportation research and education. He was invited by Emperor Akihito to give a report on his outstanding contributions for reconstructing the infrastructure of Kobe after the devastating earthquake in 1995. He received honorary doctorships from the Universities of Stuttgart and Lyon and was honoured with the WCTRS Dupuit Prize. WCTR society owes him three most successful years of presidentship 1998-2001, in which the society's international reputation was significantly strengthened, particularly by founding the Journal of Transport Policy.

**Yücel Candemir and Dilay Celebi Gonidis, ITU: Education as a Means of Saving our Planet Earth**

Our world is passing through another disruption, fundamental change in the economic and social order, as it has been several times in the past. As the technology develops into higher stages transforming the mode of production and pushing the way of life and the institutional structure of the society into quite different forms, it changes the political, social, institutional structure of the society as well. The only way out of the impasse “Apocalypse or co-operation” which brings us to an inevitable conclusion: Global Equality. Reaching such an ultimate goal a widespread network of educational effort appears to be the most effective way.

**Yoshi Hayashi, Chubu University**

**Session of November 17: From Club of Rome “The Limits to Growth” via Carbon Neutral to Sufficient New Normal – QOL-MaaS for Bangkok**

YH introduced about the history of dominant concepts of the environment from “The Limits to Growth” via “Carbon Neutral” to “Sufficient Normal. “The Limits to Growth” warned the increasing gaps between exponential population growth and the limited food and natural resources. Likewise, there is the limits to motorization. Excess motorization has been caused by 20th century's stupid mobility that includes a) the fixed time and destinations of commuting travels every morning and evening, b) over 90 % of cars in cities are parking, c) car-oriented suburban sprawls and d) non-walkable streets. These have created time and economic loss, CO2 to cause climate change and pollutants emission to make 6.5 million mortality per year. In the 21st century, quality of life will become the most important concept in transport planning.

**Session of November 18: International Education in Transport**

YH talked about the meaning of an international education in transport and logistics. One of the most important objectives of education is first to “Know the other world”. It would be nice if a university level school will be established in Turkey

efficiency, policy and practice”

For details: [Click Here](#)

Paper submission

deadline: **May 31, 2024**

**6. Special Issue of Transportation Research Part D: Transport and Environment on “Evolving Connections between Land Use and Emerging Mobilities”**

For details: [Click Here](#)

Paper submission deadline:

**Jul 31, 2024**

which is an international hub to link Asia and Europe. It will not only educate technical knowledge of transport and logistics but also make students exchange languages, techno-scientific knowledge, histories, diverse cultures and habits in different countries. Finally, students acquire a broad common sense. Mixed class gathering students in a variety of disciplines such as engineering, economics, geography, sociology, and informatics. It is ideal that Turkish will be less than half in class.

**Kaan Ozbay and Bekir O. Bartin, NYU C2SMART Center and Ozyegin Univ.: Transportation Education and Research Initiatives at New York University in the ERA of Big Data and Artificial Intelligence to Improve Personal and Freight Mobility in Smart and Connected Cities**

Congestion pricing is one of the demand management strategies used to alleviate traffic congestion. In this study, we attempt to estimate the additional tolls that can be charged to drivers at the New Jersey Turnpike (NJTPK) using the full marginal cost functions estimated using facility specific data. The available dataset used in this study consists of individual vehicle records at the NJTPK. Using the NJTPK specific data and the developed cost functions, we estimate the range of the additional tolls that can be charged for various OD pairs. We show that the estimated values highly depend on value-of-time assumptions and the choice of the travel time function.



**Füsun Ulengin, Sabanci University: The Impact of Transport on Climate Change and its Implications on Transport Education**

Transport and logistics education is at the forefront of adapting to the challenges and opportunities presented by the new era of transportation. Educational

## WCTRS society journals



[Transport Policy](#)



[Case Studies in Transport Policy](#)

## WCTRS book series

For details, visit: [link](#)

institutions are evolving to ensure that students are equipped with the knowledge and skills needed to shape the future of transportation. The impact of transport on climate change cannot be ignored, and the transport and logistics education sector must evolve to address this critical issue. By integrating sustainability principles, promoting green technologies, optimizing supply chains, understanding regulations, and embracing interdisciplinary perspectives, educational institutions can prepare future professionals to play a crucial role in reducing the environmental footprint of transportation.

### **Zeynep Nuhoglu, UND: A Track Record on Supporting Transport and Research in Turkey**

UND has supported higher education for transport and logistics since 1999 when they co-founded the first transport and logistics vocational school at Istanbul University. A close cooperation is existing with 30 national and international educational organizations. UND also supported the establishment of EMIT (Eurasian and Eastern Mediterranean Institute on Transport and Logistics) in 2013 as an industry/university partnership including Turkish and international partners. EMIT has organized international workshops and conference contributions. A main initiative started by UND, WCTRS, ITU, and international universities, was the launch of a first International Distance Learning Program in September 2020. UND plans further activities with sponsoring international education programs for young logistic professionals.

### **Daniel Weiss, Tilman Matteis, Gernot Liedtke, DLR: Exploring Transition Pathways in Logistics: A Multi-level Perspective on Artificial Intelligence, Deglobalization, and Sustainability**

The presentation delves into potential transformation pathways of global logistics, emphasizing the impacts of Artificial Intelligence, Deglobalization, and Sustainability. Based on the Multi-Level Perspective, it presents scenarios where established players adeptly incorporate sustainable practices and automation to preserve global value chains with increased sustainability and efficiency. Conversely, it examines a substitution pathway, replacing global value chains of incumbents with localized production and shorter, continent-based transport handled by niche players exploiting disruptive technologies like 3D printing. Considering this, the presentation underscores the imperative for proactive educational reforms, advocating for the integration of data and computer science with foresight methods in curricula to adeptly prepare professionals for these varied and potential futures.



# PRINCIPLES OF INFRASTRUCTURE

*Case Studies and Best Practices*



Hideo Nakamura, Kotaro Nagasawa, Kazuaki Hiraishi,  
Atsushi Hasegawa, KE Seetha Ram, Chul Ju Kim, and Kai Xu

ASIAN DEVELOPMENT BANK INSTITUTE

Prof. Yücel Candemir, *Istanbul Technical University (ITU), Turkey.*

Prof. Werner Rothengatter, *Karlsruhe Institute of Technology (KIT), Germany.*

## International Webinar Series on “Sustainable Transport and Livability” - Announcement of First Webinar by Prof. Aruna Sivakumar

We are excited to announce the First Webinar of International Webinar Series on “Sustainable Transport and Livability” Jointly Organized by Special Interest Group (SIG-F4) of the World Conference on Transport Research Society (WCTRS) and Sustainable Transport and Livability (TSTL), Journal, Taylor & Francis in association with IISc Sustainable Transportation Lab. (IST Lab.), Indian Institute of Science (IISc), Bengaluru.

### About Webinar Series

Find us on



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E-mail to us at



## Editorial team of WCTRS Research Newsletter

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To foster knowledge exchange and propel the discourse on topics related to Sustainable Transport and Livability, a collaborative international webinar series is jointly initiated by the Special Interest Group (SIG-F4) - Livability and Sustainable Transport of World Conference on Transport Research Society (WCTRS) and the Sustainable Transport and Livability (TSTL), Journal, Taylor and Francis, in association with IISc Sustainable Transportation Lab., Indian Institute of Science, Bengaluru.

The proposed series will primarily focus on key themes addressing the linkages between sustainable transport and livability as follows: How sustainable transport interventions affect physical, mental, economic, and social well-being. How sustainable transport interventions can make society and individuals healthier and happier. How sustainable transport interventions affect the quality of life, equity, and social justice. How sustainable transport impacts safety, accessibility, affordability, and environmental quality. How sustainable transport can contribute toward improving disaster resiliency of urban transport systems.

### Webinar Format and Speakers

Each session will be of 1.5 hours duration and will comprise of expert presentations and interactive Q&A sessions. The potential speakers will include eminent researchers through invitation and selected authors of papers published in the TSTL journal.

### First Webinar of Series “Sustainable Transport and Livability”

**Speaker:** Dr. Aruna Sivakumar, Imperial College London

**Title:** Accessibility metrics in urban and transport planning: Going beyond travel times and costs

**Date:** 7th March 2024, Time: 4:30 PM - 6:00 PM (IST)

*Please register using the following link:*

<https://events.teams.microsoft.com/event/72998b19-ed6b-4bac-8114-0f01ce1bdf70@6f15cd97-f6a7-41e3-b2c5-ad4193976476>

**Webinar Platform:** Microsoft Teams (Please download Microsoft Teams app preferably for attending the event)

### Agenda

Introduction to webinar series : 10 Mins

Presentation by the invited speaker : 45 Mins

Q&A

: 35 Mins

### **Abstract**

Accessibility (regional accessibility) as an urban and transport planning measure has been in use since the 1970s. Over the past couple of decades, there have been several papers revisiting the concept of accessibility. These are broadly divided into papers that study the gap between perceived and measured accessibility and, more recently, papers that aim to utilise the vast data resources that are becoming available to develop new methods for measuring accessibility. Within this context, this paper questions the definition and scope of accessibility. Specifically, it asks whether accessibility metrics are being limited in staying focused on travel time and cost measures. Using accessibility to education in Greater London (UK) as the empirical context, this paper explores the impact of incorporating the 'quality' of access into the accessibility metric. Two specific measures of the quality of access are considered: safety risk due to traffic conditions and exposure to air pollutants. The paper concludes with the suggestion that we now live in a world where accessibility-based planning must focus not only on the generalised cost of travel, but urban and transport planners should also consider providing equitable regional accessibility that is healthy and safe. In the global move towards sustainable transport, such an enhanced measure of accessibility will ensure that health and safety are not compromised.

### **About Speaker**

Aruna Sivakumar is Reader in the Centre for Transport Engineering and Modelling, Imperial College London and director of the Urban Systems Lab. She leads (and has led) several smart city and systems modelling initiatives funded by EPSRC, ESRC, EU Horizon 2020, Shell Inc in the UK, and SMRT Singapore etc, and she co-leads the Environment and Urban Life research area of the ESRC-funded LISS DTP. Aruna has over 20 years of experience in travel demand modelling research in the UK/Europe and the US, with expertise in activity-based travel demand modelling, the microeconomic modelling of travel behaviour and demand, accessibility and equity analysis, transport planning and policy. Application areas include transport mode and destination choice, shared mobility and micro-mobility services, health and equity implications of travel behaviour, electric vehicle adoption, charging and use patterns for private and fleet vehicles, and the impacts of social influence on choice and travel behaviour. Aruna is a member of several scientific committees, including the Travel Forecasting committee of the Transportation Research Board (TRB) in the US. She is also the Editorial Board member of TSTL and a member of WCTRS-SIG-F4.

*Prof. Ashish Verma, Indian Institute of Science, India. Chair, SIG F4.*

## Rescoping SIG F4 as Livability and Sustainable Transport

### SIG Objectives (Modified)

SIG F4, which earlier focused on Livability and Non-motorized Transport will now focus on Livability and Sustainable Transport. SIG F4 will aim to thrust research that furthers our knowledge on the many linkages between sustainable transport and livability of cities and the policy, planning, design, and engineering interventions that affect these connections. These linkages of sustainable transport to livability may include impacts on: quality of life, equity, social justice; safety, accessibility, affordability, and environmental quality; disaster resiliency; physical, mental, economic, and social well being, etc., and similar other indicators of livability. In general, the preference will be for research that evaluate or inform the development of transportation interventions to improve livability of cities. The SIG will particularly encourage research that are cross-disciplinary or inter-disciplinary.

### Name of SIG Chair/Co-chair

**Chair:** Ashish Verma; **Co-Chair:** Kazuki Nakamura

### Number of members: 26

**New Members:** Ashish Verma, Indian Institute of Science (IISc), Bangalore India, (Chair, SIG-F4), Kazuki Nakamura, Meijo University, Japan (Co-Chair, SIG-F4), Aseem Kinra, Universität Bremen, Germany, Meng Li, Tsinghua University, China, Eva Heinen, ETHZ, Switzerland, Maria Attard, University of Malta, Malta, Manoj M., Indian Institute of Technology (IIT), Delhi, Rahul T. M., Indian Institute of Technology (IIT) Ropar, Shinya Hanaoka, Tokyo Institute of Technology, Tokyo, Japan, Arnab Jana, Indian Institute of Technology (IIT) Bombay, Helena Titheridge, University College London, Aruna Sivakumar, Imperial College London, Susan Shaheen, University of California, Berkeley, Ram Pendyala, Arizona State University, USA, Tanu Priya Uteng, Institute of Transport Economics Oslo, Norway, Kumares Sinha, Purdue University, Masanobu Kii, Osaka University, Japan, Martin Trépanier, Université de Montréal, CANADA, Marianne Vanderschuren, University of Cape Town, South Africa, Greg Marsden, University of Leeds, UK, Hemanthini Allirani, Indian Institute of Science (IISc), Bangalore India, Julie Pelata, Université Gustave Eiffel, David Kohlrantz, RWTH Aachen University, Anindita Mandal Lulea University of Technology, Norbert Anthony Gerome Paranga, University of the Philippines, Aditya Manish Pitale, Indian Institute of Technology Roorkee, (IIT) India.

*Prof. Ashish Verma, Indian Institute of Science, India. Chair, SIG F4.*



## Urban Transitions 2024

November 18 - 20, 2024  
Melia Sitges, Sitges, Spain

The majority of people live in cities, and urbanization is continuing worldwide. Cities have long been known to be society's predominant engine of innovation and wealth creation, yet they are also a main source of pollution and disease. There has been a transition to non communicable diseases (NCDs) in many low and medium income countries, partly due to urbanization and related environmental exposures and lifestyles. Furthermore, climate change is a driver for change. Cities are often characterized by high levels of environmental exposures such as air pollution and noise, heat island effects and lack of green space and physical activity levels.

Emerging evidence suggests that (poor) urban and transport planning may be to a large extent, responsible for this and may have a large impact on mortality and morbidity in cities. Furthermore the impacts are not equally distributed among the population with the more the more deprived often suffering disproportionately. The Sustainable Development Goals and the New Urban Agenda have given new impetus to improve our cities. Paradigms such as sustainable cities, liveable cities, resilient cities, smart cities and healthy cities have been promoted successfully by different communities, but need more alignment to make systematic improvements to cities. New concepts such as car free cities, compact cities, low carbon cities and nature based solutions and new technologies such as electric vehicles and (shared) autonomous vehicles have been introduced and may improve the urban environment and thereby health.

Decision-makers need not only better data on the complexity of factors in environmental and developmental processes affecting human health, but also enhanced understanding of the linkages to be able to know at which level to target their actions. Cities have come to the forefront of providing solutions for issues such as climate change, which has co-benefits on health, but still need better knowledge. City organisations (for example C40, Healthy Polis, ICLEI) play an important role. Multi-sectorial and multi-disciplinary approaches are needed to tackle the current problems and therefore we have organized an international conference with world leading experts on urban and transport planning, architecture, environmental science and exposures, physical activity, climate change, public health to discuss the current status and challenges and solutions in cities.

The objective of the Urban Transitions 2024 conference is to promote healthy urban development by bringing together different sectors and disciplines (e.g. urban and

transport planning, architecture, green space management, environmental exposure assessment, environmental epidemiology, physical activity, climate change, and public health and governance) working within cities and presenting the state of the art research and providing solutions to and future healthy visions of our cities.

This conference will be of interest to researchers, policy makers and practitioners in:

- Urban planning
- Architecture
- Transport planning
- Environmental science and exposure assessment
- Climate change
- Public health (epidemiologists, health impact assessment)
- Citizens science
- Social science
- Policy and decision making

#### **Submit Abstract**

Deadline for submission of abstracts: **24 May 2024**

***Note: You can submit as many abstracts to the conference for review as you would like.***

Abstracts for talks and posters are invited on the following topics:

1. Cities (Concepts and frameworks)
  - a) Conceptual models and frameworks for cities
  - b) Defining, measuring and aligning liveable, sustainable, low carbon, smart, resilient, equitable, car free, compact, and/or healthy cities
  - c) Addressing complexity in cities
  - d) Informal settlements
  - e) Sustainable development goals and cities
  - f) The New Urban Agenda and future directions
  - g) Future (healthy) visions of cities (Car free, Low carbon...)
  - h) Characterising urbanization using technology (e.g. remote sensing, personal sensing, google view etc)
  - i) Cities and SDGs
  - j) The role of cities in Planetary health
2. Land use and transport (interrelations, planning, design and engineering)
  - a) City governance and planning

- b) Connecting land use and transport planning
  - c) Land use policies and travel behaviour
  - d) What is healthy urban planning?
  - e) Healthy urban transport policy measures
  - f) Designing compact cities
  - g) Designing resilient cities
  - h) Designing cities for healthy transportation
  - i) Impact of new technologies on cities (e.g. Electric cars, autonomous vehicles)
  - j) Impact of climate change on urban and transport planning
3. Planning, environment and health (exposures, epidemiology, health effects and impacts)
- a) Urban planning and health
  - b) Transport practice and planning and health
  - c) City governance and public health
  - d) Smart cities and health
  - e) Built environment, physical activity and health
  - f) Built environment and mental health
  - g) Built environment and physical health
  - h) Exposure and health effects of air pollution
  - i) Exposure and health effects of noise
  - j) Exposure and health effects of temperature, heat islands and climate change
  - k) Informal settlements and health
  - l) Health impact assessment of urban and transport planning
  - m) Evaluations of urban interventions (environment, climate, health etc)
  - n) Health co-benefits of climate mitigation and adaption action
  - o) Sessions of invited projects (e.g. UBDPolicy)
  - p) The use of remote sensing in observations and assessments of cities
4. Nature based solutions/green cities
- a) Urban biodiversity and ecosystems
  - b) Greening of cities
  - c) Nature based solutions
  - d) Urban exposure and epidemiology of green space and biodiversity
  - e) Nature based solutions and health
  - f) Health impact assessment of nature-based solutions and green space
  - g) The use of remote sensing and google view in green space and biodiversity assessments
5. Justice and inequality
- a) Justice in urban and transport planning
  - b) Planning and social impacts

- c) Inequalities, environment and health
  - d) Environmental Justice
  - e) City and neighbourhood gentrification
6. Engagement, impacts and education
- a) Stakeholder engagement
  - b) Community participation in planning
  - c) Citizens science
  - d) From science to practice
  - e) Barriers and facilitators for policy changes
  - f) Translating evidence
  - g) Education

### Supporting Journals

1. Cities, Elsevier
2. Environment International, Elsevier
3. Journal of Transport & Health, Elsevier

**Conference website:** [Click here](#)

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## Membership of the WCTRS

The World Conference on Transport Research Society (WCTRS) provides a forum for the interchange of ideas among transport researchers, managers, policymakers, and educators from all over the world from a multi-modal, multi-disciplinary, and multi-sectoral perspective.

Every three years, the Society holds the World Conference, where leading transport professionals from all countries and areas convene to learn from one another. WCTRS Montréal was held from 17th-21st July 2023.

In addition to our [Special Interest Groups](#), which facilitate research activities and the exchange of ideas in 42 topic areas, the WCTRS has a number of Task Forces that conduct research into emerging issues in transport and aim to bridge gaps between research and policy-making.

All academics, practitioners, students and interested individuals are invited to apply to become an individual member of the WCTRS. You can apply to join at any time by completing [this online form](#) or returning the completed application form (see the link below) to the [WCTRS Secretary](#).

The benefits of membership include:

- Access to a truly international network of transport academics and practitioners, which is the only such worldwide network, with over 1000 experts interested in transport research from over 80 countries.
- A wide variety of Special Interest Groups (SIGs), each dedicated to a specific academic topic, from mode-specific policy and modelling to solutions for climate change and disaster resilience. The full list can be found on the SIGs webpage.
- A free online subscription to the Society's two Journals: Transport Policy and Case Studies on Transport Policy.
- Online access to the proceedings of past conferences.
- Liaison with some 30 partner journals, which publish the best conference papers.
- Outreach to international organisations such as the International Transport Forum, World Bank and UNFCCC conferences.
- WCTRS Young Initiatives, including the WCTRS-Y Conference, grants awarded to young researchers, and dedicated newsletters and job information.
- Opportunities to contribute to the planning of a future World Conference through participation in Special Interest Groups and other Society activities.

More details: [Click here](#)

## WCTRS RESEARCH NEWSLETTER

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