



Montreal, QC, Canada
- July 17 to July 21, 2023 -

DIAMOND

ARTM

PLATINUM

AGENCE
DE MOBILITÉ
DURABLE
MONTRÉAL



Transport
Canada

Transports
Canada

GOLD

Québec 


INFINITY|Q

 IVADO

SILVER


10 ANS
CARGOM
LOGISTIC AND TRANSPORTATION
METROPOLITAN CLUSTER OF MONTRÉAL


cirodd


TRUE NORTH
MARINE

 Stantec

 YUL

 CIM+

BRONZE

PORT  MONTREAL

 Communauto

 CIVILIA

 Kiewit

SPECIAL PARTNERS


CIRRELT


TOURISME /
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Palais
des congrès
de Montréal

Québec 
Fonds de recherche – Nature et technologies
Fonds de recherche – Santé
Fonds de recherche – Société et culture

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1 WELCOME LETTERS

President of the WCTR

First of all, I would like to extend my warm welcome to all conference participants, distinguished speakers and guest speakers at this 16th WCTRS World Conference.

This great WCTRS world conference is being hosted by the CIRRELT in this great conference center, Palais des congrès Montreal with the Conference Directorate (CDT) headed by Professors Catherine Morency (Chair) and Martin Trepanier (Vice Chair). This is the first time we hold the WCTRS world conference in North America since the University of California at Berkeley hosted our World Conference in 2007! I also note that the University of British Columbia hosted the 1986 world conference in Vancouver (hosted by Professor Trevor Heaver, Sauder School of Business, UBC).



Since the 2013 Rio de Janeiro World Conference, the WCTR Society has expanded greatly our research capability and outreach on transport, infrastructure and supply chain fields by expanding Special Interest Groups (SIGs) to 30+, which are now meaningfully grouped into nine Topic Area management (TAM) under the leadership of Professors Lori Tavasszy (SCC Chair) and Hideki Nakamura (SCC Vice Chair). As the Society president, I express my sincere appreciation to the SIG chairs/co-chair and TAM leaders for their dedication and effort in order to make this conference successful as we see today. In addition, the two journals we publish jointly with Elsevier (Transport Policy under the leadership of Editor in Chief, Prof. Haijun Huang and Case Studies in Transport Policy under the leadership of Prof. Rosario Macario – who just stepped down and Prof. Xiaowen Fu) have been making excellent progress increasing paper submissions, improving number of downloads, citations and impact factors very rapidly. Prof. Ozay Ozaydin who organizes special issues of journals for this world Conference says we have 20 special issues in various stages of development.

On the international front, our society (under the leadership of my predecessor, Professor Yoshitsugu Hayashi) has held the 2016 world conference in Shanghai and the 2019 world conference in Mumbai in order to expand into the rapidly growing countries in Asia. Since I took over the WCTRS presidency in 2019, I have made significant efforts to expand collaboration with many international organizations. Our WCTRS Steering Committee (STC) invites regularly over a dozen high-profile international organizations to speak at our bi-annual STC meetings: TRB, ITF, World Bank, Club of Rome, Asian Development Bank Institute, East Asia Society for Transportation Studies (EASTS), AET (Association of European Transport), Pan-American Society of Transportation Research, ATRS (World Air Transport Research Society), CODATU (Cooperation for Urban Mobility in Developing World), SLOCAT (Sustainable Low Carbon Transport), UNESCAP (UN Economic and Social Commission Asia Pacific).

As a result, the WCTR Society has memberships from 100+ countries on six continents and our World Conference registered participants range around 1000-1600. In addition to holding a largely triennial



world conference, our Scientific Committee organized a major virtual conference in summer 2022 which attracted more than 1800 participants.

From January 2020, the WCTR Society has Established three Presidential Task Forces, namely, Covid-19 Research and Policy Task Force, WCTRS Charter Education-License Task Force (paired with Beijing Jiaotong Univ), and Global Subway Efficiency Benchmarking Task Force. Covid TF has accomplished a lot including formulating and submitting the WCTRS Covid Policy recommendations to the world political leaders and international organizations in May 2020 in addition to publishing high-profile books and numerous journals and magazines.

After two-year long data collection and analysis, the Subway Efficiency Benchmarking TF will be tabling its inaugural global Subway Efficiency Benchmarking report and present efficiency excellence awards to the winning cities on 19th July (10:50-12:30) in this conference.

WCTR-Y (Young) is the WCTRS future! Under Prof. Laetitia Dablanc's leadership, even during the pandemic, its activities continued including holding two virtual conferences in 2022. Just yesterday, they held WCTR-Y conference which included an successful career development session for graduate students and young academics. A Special Session is scheduled on July 18 where four PhD grantees will present their grant research findings.

Finally, I would like to extend my sincere gratitude to all of the WCTRS committee members and leaders, and the Montreal Conference Directorate leaders and team members for their effort, dedication and hard work even at this very moment in order to make the WCTRS World Conference a success.

Enjoy your conference!

Prof. Tae Hoon Oum

President, the World Conference on Transport Research Society, and Professor Emeritus, Sauder School of Business, University of British Columbia, Vancouver, Canada

WCTRS Scientific Committee

Dear Delegate,

on behalf of the Scientific Committee, we are delighted to welcome you to the 16th WCTR!

The effect of the Covid-19 pandemic has clearly been felt by all. The Montreal conference had to be delayed by a full year to allow researchers to get together. On a positive note, we have done our utmost to turn the gap year to the society's advantage with an online event and many other activities. The 2022 WCTR online conference had 1800 attendees from more than 100 countries. It provided us a clearer picture of our constituency and boosted our hopes for the future. We are deeply grateful to everyone who has helped to make this meeting such a success. Other notable results included the book on Covid-19 related transport research and the WCTRS Taskforce on Global Subway Efficiency Benchmarking. The society's journals Transport Policy and Case Studies on Transport Policy have strengthened their positions, with impact factors of 6,8 and 2,5 respectively. All in all, the society is in excellent scientific shape.

In 2023, we look forward to a conference well up to the WCTR standards. Despite all the hindrances to international travel, we expect a strong representation from previous host countries China and India. Continuing the momentum of earlier conferences, WCTRS offers excellent publication opportunities. We have agreements in place with over 20 major transportation journals for special issues around the best WCTR papers. In addition, we offer the opportunity for authors to have their papers published in Elsevier's Transportation Research Procedia. Our thanks go out to the paper reviewers, session track organizers, topic area managers and other members of the WCTRS Scientific Committee for their tremendous efforts to handle the many papers for review, selection and programming. We are indebted to the CIRRELT team for supporting the scientific review process, and all the local preparations including an excellent venue and supporting activities. Without their contributions, holding this conference would not be possible. Together with all attendees, we look forward to many opportunities for quality scientific exchange.

We wish you a great Conference!



Prof. Lóránt Tavasszy

Chairman of the WCTRS Scientific Committee,
Professor of Freight and Logistics,
Delft University of Technology,
The Netherlands



Prof. Gopal R. Patil

Vice-Chair (Conference) of the WCTRS Scientific Committee
Professor of Transportation Engineering
Indian Institute of Technology Bombay, India

President of the Direction Board of CIRRELT

Dear WCTR2023 attendees,

The CIRRELT team is happy to welcome you at the Palais des congrès for this prestigious conference. Founded in 1971, the Interuniversity Research Centre on Entreprise Networks, Logistics and Transport regroups 118 professors from 15 Quebec universities and more than 70 collaborators from all over the world. The mission of CIRRELT is to develop tools and methods aimed to improve transport and production systems in general, using the most advanced techniques in numerical intelligence, while keeping in mind the need for sustainable transition towards a better world.

As co-founder of the Institute for Data Valorization (IVADO), CIRRELT is now at the heart of the striving research on artificial intelligence and is now leveraging transport research towards this new paradigm. CIRRELT is also proposing multidisciplinary and intersectoral research in catalyzing collaboration between natural science, engineering, social science and healthcare.

Our center gladly dedicates its resources to the organization of this conference, with more than 50 volunteers and staff.

We hope that you will enjoy your stay in Montreal and have a successful participation in the conference.



Prof. Annie Ross

President of the Direction Board of CIRRELT
Deputy Vice-President, Research Office of Research and Innovation
Full Professor, Department of Mechanical Engineering
Polytechnique Montréal

16th WCTR Local President and Chair of the Local Organising Committee

Dear WCTR2023 delegates,

it is with great pleasure that we are welcoming you in Montreal for the 16th World Conference on Transport Research (WCTR 2023). The world conference is the most important event from the World Conference on Transport Research Society (WCTRS).

Typically occurring every three years, the WCTR attracts top researchers from around the world and is a unique opportunity to share research questions and outcomes across a wide diversity of transport-related topics. Due to the COVID pandemics, four years have passed since the 15th WCTR brightly hosted by the Indian Institute of Technology in Bombay (India) in May 2019. Since then, our world was significantly affected by a more than 1000 days pandemics that altered the way we all think about transportation and anticipate its evolution. Faced with a high level of uncertainty, the WCTRS and Montreal local committee decided, in 2022, to postpone the Montreal conference and propose an innovative WCTRS virtual event in the summer of 2022. More than 1850 people participated in this virtual event where sessions were organised by WCTRS' special interest groups (SIG).



Prof. Catherine Morency, 16th WCTR Local President & **Prof. Martin Trépanier**, Chair of the Local Organising Committee

We are thrilled to host the 16th WCTR in the beautiful, highly efficient, centrally located Palais des Congrès of Montreal. On Monday July 17th, participants will also have the opportunity to enjoy the Young Conference on the topic of “Imagining the Future: Sustainable and Resilient Transportation”. In addition to welcome notes from the WCTRS president and scientific Chair, the opening ceremony will welcome statements from influential organisations such as Transport Canada, the Montreal Metropolitan Transport Authority who is providing free transit passes to all delegates for 8 days, the City of Montreal, the Montreal Transit Authority, the Quebec Research funds and CIRRELT. Over the four days of the conference, participants will enjoy keynotes from eight distinguished speakers on artificial intelligence, decarbonizing transport system, disruption in travel behaviours, emerging physical internet, causality in modeling, traffic network reliability and evolution of aviation networks. Some 285 sessions are planned during the conference, including presentations, posters, special sessions, panels and meetings.

From a transportation standpoint, Montreal is a dynamic and innovative city offering a diversity of transportation-related options and initiatives. To face the worldwide challenge of climate change, the city, along with plenty cities across the Quebec's province, has adopted aggressive carbon neutrality targets and is moving towards the adoption of a 2050 Land Use and Mobility Plan to lead the way to the green transition. Quebec is also in a strategic position, with its hydroelectricity, to contribute to reducing the carbon footprint of transportation systems. Multiple technical visits have been planned to give some



delegates the opportunity to learn more about some of the interesting things happening right now such as the construction of the REM, an automated light rail system with 26 universally accessible stations, the Bixi system, a large-scale third generation bikesharing system, the carsharing service by Communauto - the first company to propose a carsharing service in North America in 1994 or the Montreal Port for instance.

We wish you a fruitful and thought-provoking conference as well as an exciting visit of Montreal.

Prof Catherine Morency,
16th WCTR Local President

P. Eng., Ph.D., Department of Civil, Geological and Mining Engineering, Polytechnique Montreal, Head of Mobilité Chair, Head of Canada Research Chair on Personal Mobility.

Prof Martin Trépanier
Chair of the Local Organising Committee

P. Eng., Ph.D., Department of Mathematics and Industrial Engineering, Polytechnique Montreal, Director of CIRRELT, Head of the Transportation Transformation Chair.

2 THE WORLD CONFERENCE ON TRANSPORT RESEARCH SOCIETY (WCTRS)

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2.1 Objectives

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



2.2 Research areas

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 which conduct research into emerging issues in Transport and aim to bridge gaps between research and policy-making.

Formed in April 2020, this Task Force aims to investigate the damages and emergent measures and formulate constructive recommendations on ways to deal with the ongoing COVID-19 crisis, to improve the social impacts of the response whilst minimizing damages to the Transport and Logistics sector. Please visit the **WCTRS COVID-19 Task Force Website** for more info.

2.3 World Conferences

The World Conference on Transport Research (WCTR) is organized every three years, for almost 50 years, under the authority of a permanent body, the WCTR Society. It brings together managers, policy analysts, advisers, operators, and academics, all with a common interest in promoting state of the art and state of the practice in all areas of transport research.

2.4 Committees

Conference Directorate

President, the WCTR Society, Tae Oum (Vancouver, CA)
Chair Scientific Committee, Lóránt Tavasszy (Delft, NL)
SCC Vice-chair Conference, Gopal Patil (Mumbai, IN)
Secretary General, Greg Marsden (Leeds, UK)
Chair of Local Organizing Committee, CIRRELT Director Martin Trépanier (Montreal, CA)
Local Conference President, Catherine Morency (Montreal, CA)

Scientific Committee

Scientific Committee Chair
President, the WCTR Society

Lóránt Tavasszy
Tae Oum

TU Delft, NL
University of British Columbia, CA

Vice Chair for SIGs	Hideki Nakamura	Nagoya University, JP
Vice Chair for Prizes	Sergio Jara-Diaz	University of Chile, CL
Vice Chair for Conferences	Gopal Patil	IIT-Bombay, IN
Vice Chair for Publications	Anming Zhang	University of British Columbia, CA
Vice Chair for Publications (Procedia)	Fusun Ulengin	Sabanci University, TR
Vice Chair for Communications	Maria Attard	University of Malta, MT
Editor-in-Chief for Transport Policy	Xiaowen Fu	Hongkong Polytechnic University, CN
Editor-in-Chief for Case Studies in Transport Policy	Rosário Macário	Universidade de Lisboa, PT
WCTR 16 Conference Director	Catherine Morency	Ecole Polytechnic Montreal, CA
WCTR 16 Conference Vice-Director	Martin Trépanier	Ecole Polytechnic Montreal, Canada
Young Initiative Lead	Laetitia Dabanc	Université Gustave Eiffel, France)

Topic Areas Managers (TAM)

Topic Area A	Thierry Vanelislander	University of Antwerp, BE
Topic Area B	Johan Woxenius	University of Gothenburg, SE
	Michael Browne	University of Gothenburg, SE
Topic Area C	Zong Tian	University of Nevada at Reno, US
Topic Area D	Bhargab Maitra	IIT-Kharagpur, IN
Topic Area E	Georgina Santos	Cardiff University, UK
Topic Area F	Haixiao Pan	Tongji University, CN
	Masanobu Kii	Kagawa University, JP
Topic Area G	Stephen Ison	De Montford University Leicester, UK
	Maria Attard	University of Malta, MT
Topic Area H	Meng Li	Tsinghua University, CN
	Binyam Reja	World Bank, US
Topic Area H	Rajan Choudhary	Indian Institute of Technology Guwahati, IN

Special Interest Groups Chairs (SIG)

SIG A1 Chair	Martin Dresner	University of Maryland, US
SIG A1 Co-Chair	Chikage Miyoshi	Cranfield University, UK
SIG A1 Co-Chair	Yuichiro Yoshida	Hiroshima University, JP
SIG A2 Chair	Thierry Vanelislander	University of Antwerp, BE
SIG A2 Co-Chair	Enrico Musso	University of Genova, IT
SIG A3 Chair	John Preston	University of Southampton, UK
SIG A3 Co-Chair	Yung-Cheng (Rex) Lai	National Taiwan University, TW
SIG A3 Co-Chair	Melody Khadem Sameni	Iran University of Science and Technology, IR
SIG A4 Chair	KE Seetha Ram	Asian Development Bank Institute, PH
SIG A4 Co-Chair	Yoshitsugu Hayashi	Chubu University, JP
SIG B1 Chair	Kun Wang	Hong Kong Polytechnic University, CN
SIG B1 Co-Chair	Aseem Kinra	University of Bremen, DE
SIG B3 Chair	Ralf Elbert	Darmstadt University of Technology, DE
SIG B3 Co-Chair	Jason Monios	Kedge Business School, FR
SIG B3 Co-Chair	Gunnar Stefansson	Chalmers University of Technology, SE

SIG B4 Chair	Michael Browne	(University of Gothenburg, SE
SIG B4 Co-Chair	Anne Goodchild	University of Washington, US
SIG B5 Chair	Sushant Sharma	Texas A&M University, US
SIG B5 Co-Chair	Lori Tavasszy	Delft University of Technology, NL
SIG C1 Chair	Xiaobo Qu	Chalmers University of Technology, SE
SIG C1 Co-Chair	Xiaopeng Li	University of South Florida, US
SIG C2 Chair	Keshuang Tang	Tongji University, CN
SIG C2 Co-Chair	Zong Tian	University of Nevada at Reno, US
SIG C2 Co-Chair	Azusa Toriumi	University of Tokyo, JP
SIG C3 Chair	Ashish Bhaskar	Queensland University of Technology, AU
SIG C4 Chair	Wael Alhajayseen	Qatar University, Qatar
SIG C4 Co-Chair	Babak Mehran	University of Manitoba, CA
SIG D1 Chair	Caroline Bayart	Laboratoire d'Economie des Transports, FR
SIG D1 Co-Chair	Catherine Morency	Polytechnique Montréal, CA
SIG D2 Chair	Chandra Bhat	University of Texas at Austin, US
SIG D3 Chair	Bhargab Maitra	ITT-Kharagpur, IN
SIG D4 Chair	Juan Carrasco	University of Concepcion in Chile, CL
SIG E1 Chair	Fusun Ülengin	Sabanci University, TR
SIG E1 Co-Chair	Özay Özaydin	Dogus University, TR
SIG E2 Chair	Georgina Santos	Cardiff University, UK
SIG E2 Co-Chair	Paolo Beria	Politecnico di Milano, IT
SIG E2 Co-Chair	Marco Percoco	SDA Bocconi School of Management, IT
SIG F1 Chair	Masanobu Kii	Kagawa University, JP
SIG F1 Co-Chair	Rolf Moeckel	Technical University of Munich, DE
SIG F2 Chair	Patrick Jochem	Karlsruhe Institute of Technology, DE
SIG F2 Co-Chair	Wei-Shiuen Ng	International Transport Forum, OECD, FR
SIG F3 Chair	Ye Li	Tongji University, CN
SIG G1 Chair	Greg Marsden	University of Leeds, UK
SIG G1 Co-Chair	Louise Reardon	University of Birmingham, UK
SIG G2 Chair	Guenter Emberger	Vienna University of Technology, AT
SIG G2 Co-Chair	Yacan Wang	Beijing Jiaotong University, CN
SIG G2 Co-Chair	Takeru Shibayama	Vienna University of Technology, AT
SIG G3 Chair	Stephen Ison	De Montfort University, UK
SIG G3 Co-Chair	Maria Attard	(University of Malta, MT
SIG G4 Chair	Helena Titheridge	University College London, UK
SIG G4 Co-Chair	Caroline Mullen	University of Leeds, UK
SIG G6 Chair	Lawrence Frank	University of California, San Diego, US
SIG G6 Co-Chair	Haneen Khreis	University of Cambridge, UK
SIG H1 Chair	Shinya Hanaoka	Tokyo Institute of Technology, JP
SIG H2 Chair	Ashish Verma	Indian Institute of Science Bangalore, IN
SIG H2 Co-Chair	Keping Li	Tongji University, CN
SIG H5 Chair	Varameth Vichiensan	Kasetsart University, TH
SIG I1 Chair	Rajan Choudhary	Indian Institute of Technology Guwahati, IN

16th WCTR 2023 Local organizing committee

Ahsan Habib	Dalhousie University
Babak Mehran	University of Manitoba
Catherine Morency	Polytechnique Montréal
Claude Comtois	Université de Montréal
Francesco Ciari	Polytechnique Montréal
Geneviève Boisjoly	Polytechnique Montréal
Lina Kattan	University of Calgary
Luis F. Miranda-Moreno	McGill University
Marie-Soleil Cloutier	Institut nationale de la recherche scientifique
Martin Trépanier	Polytechnique Montréal
Matthew Roorda	University of Toronto
Nicolas Saunier	Polytechnique Montréal
Owen Waygood	Polytechnique Montréal
Radhwane Boukelouha	Polytechnique Montréal
Trevor Hanson	University of New Brunswick
Ugo Lachapelle	Université du Québec à Montréal
Yan Cimon	Université Laval
Zachary Patterson	Concordia University

Support staff

Alessia Rigonat	Polytechnique Montréal
Alexandre Brunet	Polytechnique Montréal
Alexandre Cambier	Polytechnique Montréal
Amadou Mbagnick Sarr	Polytechnique Montréal
Amaury Philippe	Polytechnique Montréal
Amin Yarahmadi	Polytechnique Montréal
Asad Yarahmadi	Polytechnique Montréal
Bitra Farokhian	Polytechnique Montréal
Brigitte Milord	Polytechnique Montréal
Camille Garnier	Polytechnique Montréal
Danielle Maia de Souza	Université de Montréal
David Murray	Polytechnique Montréal
Elnaz Mohsenin	Polytechnique Montréal
Elsa Sebatigita	Polytechnique Montréal
Emilie Savard	Polytechnique Montréal
Eya Chekir	Polytechnique Montréal
Flore Caye	Polytechnique Montréal
François Sarrazin	Université de Montréal
Geneviève Bastien	Polytechnique Montréal
Hamed Malekzadeh	Polytechnique Montréal
Hedieh Keshavarz	Polytechnique Montréal

Hubert Verreault	Polytechnique Montréal
Ikram Selmi	Polytechnique Montréal
Imed Essid	Polytechnique Montréal
Jana Abou Taam	Polytechnique Montréal
Jean-François Bruneau	CIRRELT-IVADO
Jorge Mortes Alcaraz	Polytechnique Montréal
Kaveh Rezvani Dehaghani	Polytechnique Montréal
Killian Giraudi	Polytechnique Montréal
Laura Kolcheva	Polytechnique Montréal
Loic Parrenin	Polytechnique Montréal
Louissette Garcin	Polytechnique Montréal
Lucie L'Heureux	CIRRELT/Université de Montréal
Lucie-Nathalie Cournoyer	CIRRELT/Université de Montréal
Maria Laura Guerrero Balarezo	Polytechnique Montréal
Marine Astruc	Polytechnique Montréal
Mathilde Zanolini	Polytechnique Montréal
Meriem Ines	Polytechnique Montréal
Mohammad Ghavidel	Polytechnique Montréal
Mostafa Abolfazli	Polytechnique Montréal
Nathalie Sargo Andrade	CIRRELT/Université de Montréal
Nicolas Charron	Polytechnique Montréal
Noé Fillon	Polytechnique Montréal
Pierre Marchand	CIRRELT/Université Laval
Pierre-Léo Mongeon-Bourbonnais	Polytechnique Montréal
Praveen Kumar Pandey	Polytechnique Montréal
Radhwane Boukelouha	Polytechnique Montréal
Romario Philibert	Polytechnique Montréal
Ronan Cimadure	Polytechnique Montréal
Sara Lach Gar	Polytechnique Montréal
Sophia Nadeau	Polytechnique Montréal
Suzanne Pirie	Polytechnique Montréal
Tristan Dupont	Polytechnique Montréal
William Denorme	Polytechnique Montréal
Yanis Pierre	Polytechnique Montréal
Yuxuan Wang	Polytechnique Montréal
Zhangcun Yan	Polytechnique Montréal

3 WCTR2023: THE 16TH WORLD CONFERENCE ON TRANSPORT RESEARCH

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The **16th World Conference on Transport Research (WCTR2023)** is held at the Convention Centre (Palais des congrès) in Montreal, Canada, from July 17th to 21st 2023. The aims of the conference are to bring together experts in all areas of transport research from all parts of the world and to stimulate the exchange of ideas in the field of transport policy and practice.



3.1 Conference venue and practical information

The **Palais des congrès** is in the heart of downtown Montreal and is connected to the Montreal metro/subway system (Place d'Armes station, **orange** line).

Welcome at the Montréal-Pierre Elliott Trudeau International Airport (YUL) airport

WCTR2023 volunteers will be ready to welcome you at the airport, arrivals level, on **Saturday and Sunday, from 7:00 to 22:00**, and on **Monday, from 7:00 to 17:00**, with a public transport pass (all modes AB, public). The transit pass is offered by ARTM, the main sponsor of WCTR2023. You can use the pass from Saturday, July 15th, to Saturday, July 22nd, inclusively, including for the [Bus 747, from the YUL Airport to the city center](#). You must be fully registered for the conference to receive the pass. Of course, you can also receive the pass at the registration desk, at the Palais, starting Monday, July 17th.

For more details about the different stops, please visit the [following link](#). **Please note that the pass should not be folded (fragile)**. To plan your trip with the STM public system (subway and/or bus), you can use the following [link](#).

Registration at the WCTR2023

The registration desk (level 5, facing 517) will be opened in the following hours:

- **Monday (July 17th)**, from 7:30 to 19:30
- **Tuesday (July 18th), Wednesday (July 19th) and Thursday (July 20th)**, from 7:30 to 17:30
- **Friday (July 21st)**, from 7:30 to 10:30

Please note that [you must wear your CONFERENCE BADGE, received upon registration, AT ALL TIMES](#). In case of non-use, you may be directed to the registration desk, to verify your registration.

Conference certificate of participation

The certificate of participation will be distributed on request. An e-mail must be sent to wctr2023@cirrelt.ca, by Friday at the latest. Please note that if you wish to receive a printed version, you must mention "printed version" in the e-mail, otherwise the certificate will be supplied in PDF format, by email), by Friday at the latest.

For the presenter's certificate, the name and paper number(s) must be indicated in the e-mail.

Washrooms/lavatories

Three washrooms/lavatories are located on **level 5** (close to 516A, 518A and 520C) and two are located on **level 4** (take the escalators at either end of the level 5 foyer)

Accessibility

All entrances of the Palais are equipped with access ramps and automatic doors and every room is equipped with listening systems, for the hearing impaired. Toilets equipped with electric doors are strategically located in the building. Reserved parking spaces for permit holders are available at the Viger parking lot (entrance from Rue Chenneville). An elevator provides access to all floors: P4.

Visitors can borrow wheelchairs (Information counter), which are available for loan free of charge and must be [reserved in advance](#). An ID is required as a deposit. It will be given back to you when the wheelchair is returned.

Internet and Wi-Fi information

Wi-Fi will be available in the Conference Venue. Wifi (SSID): **WCTR2023** and password **WCTR2023**.

Poster printing services

Some stores, like **Staples (=Bureau en Gros)**, offer printing services. Their closest shop is located at 770 Rue Notre-Dame Ouest Montréal, QC, H3C 1J2. Their opening hours is indicated below:

Monday and Tuesday, from 9:00 to 18:00

Wednesday, Thursday and Friday, from 9:00 to 19:00

Saturday, from 9:00 to 17:00

Sunday, from 10:00 to 17:00

Please note that requests should ideally be made 3 to 4 days in advance (although same day printing is also available) on the following website: <https://shop.staplescopyandprint.ca/pages/print-perfect> (Signage > Affiches/Bannières)

Poster dimensions: 100 cm (height) x 200 cm (width) – Landscape

Smoking policy

In Québec you usually **cannot smoke inside places that are open to the public**. For example, **you're not allowed to smoke** in hospitals, schools, CEGEPs, universities, day-care centres, **bars, restaurants**, sport centres, concert halls or on **public transportation**. For more detailed information, [click here](#). You're usually allowed to smoke outdoors, but there are many exceptions. For instance, you cannot smoke in outdoor play areas (e.g., skate parks or splash pads), sports fields (e.g., baseball fields or outdoor pools).

COVID-19: travel, testing and borders

For more information on COVID-19 requirements in Canada, please use the following [link](#).

Accident insurance

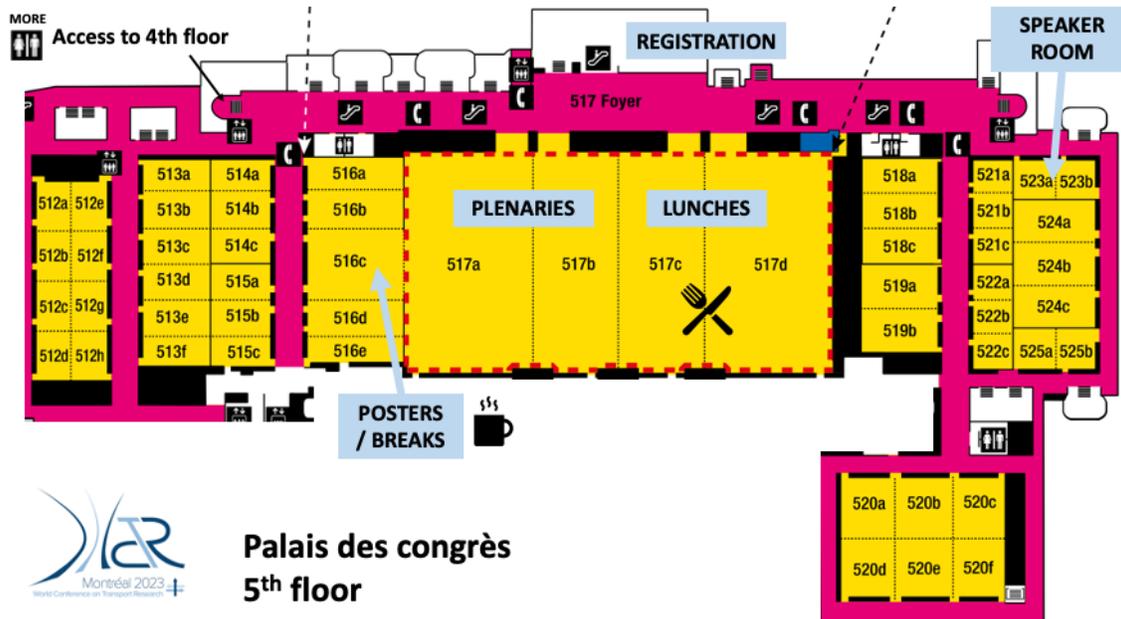
Please make sure to contract your own travel insurance.

3.2 Layout plans

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Registration

Registration will take place in the **Level 5, Rooms 517B/517C (Foyer)**.



Opening ceremony

The Opening ceremony will take place in **Level 5, Room 517AB**.

Plenary sessions and General Assembly

The General Assembly, Plenary I and Plenary II will take place in **Level 5, Rooms 517AB**.

Poster sessions

Poster sessions will take place in **Level 5, Room 516**, in the following days:

- Wednesday (July 19th), from 16:00 to 17:50
- Thursday (July 20th), from 8:30 to 10:20 and from 13:50 to 15:30.

Coffee breaks and lunch

Coffee breaks will take place in the following rooms:

- **Monday (July 17th) and Friday (July 21st): Level 5, facing 517**
- **Tuesday (July 18th), Wednesday (July 19th) and Thursday (July 20th): Level 5, Room 516**

Lunch will take place in the following rooms:

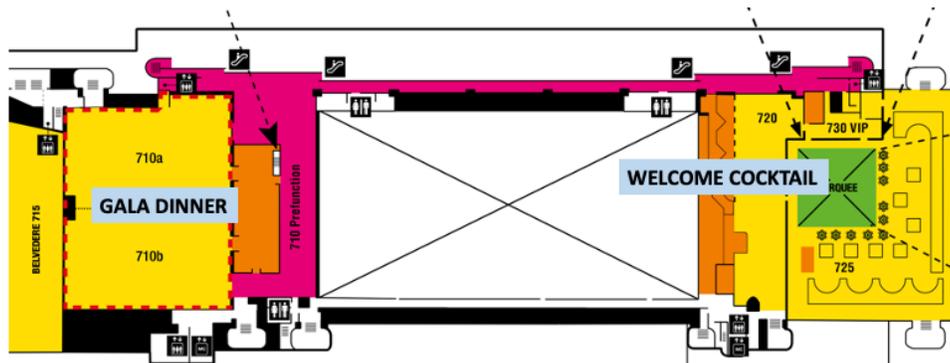
- **Monday (July 17th) Level 5, Room 517C**
- **Tuesday to Friday (July 18th to July 21st): Level 5, Room 517CD**

Sessions, TAG keynote and SIG meetings

For further details regarding the location of each session, please consult the full Conference program.

Welcome cocktail and Gala Dinner

The **Welcome cocktail will start at 19:00** and will take place on **Level 7, Room 720** and following that, the **Gala dinner will be held at 19:30**, in **Level 7, Room 710AB**. Please note that the participation to the Evening gala, at a cost of **CAD \$200/person**, is not included in the conference registration fees.



3.3 Conference program

FULL SCHEDULE OVERVIEW

Monday (July 17th) * Tuesday (July 18th) * Wednesday (July 19th) * Thursday (July 20th) * Friday (July 21st)

Monday, July 17 th	Tuesday, July 18 th	Wednesd., July 19 th	Thursday, July 20 th	Friday, July 21 st
8:30-10:10 WCTRS-Y (524) Technical visits WCTRS-SCC meeting (521ABC)	8:30-9:45 Opening ceremony (517AB)	8:30-10:20 Plenary II (517AB)	8:30-10:20 Sessions and Posters (see schedule)	8:30-10:20 Sessions (see schedule)
10:10-10:30 Coffee break (facing 517)	9:45-10:55 Plenary I (517AB)	10:20-10:50 Coffee break (516)	10:20-10:50 Coffee break (516)	10:20-10:50 Coffee break (facing 517)
10:30-12:10 WCTRS-Y (524) Technical visits WCTRS-SCC meeting (521ABC)	10:55-11:15 Coffee break (516)	10:50-12:30 Sessions (see schedule)	10:50-12:30 SIG meetings and Sessions (see schedule)	10:50-12:50 Closing Ceremony (517AB)
	11:15-12:30 Plenary I (517AB)			
12:10-13:30 Lunch (517CD)	12:30-13:50 Lunch TRANSPORT CANADA (517CD)	12:30-13:50 Lunch (517CD)	12:30-13:50 Lunch CIRRELT (517CD)	12:30-13:50 Lunch (517CD)
13:30-15:10 WCTRS-Y (524) Technical visits WCTRS-STC meeting (521ABC)	13:50-15:30 TA keynotes and sessions (see schedule)	13:50-15:30 General Assembly (517AB)	13:50-15:30 Sessions and Posters (see schedule)	14:20-17:00 Technical visits
15:10-15:30 Coffee break (516)				
15:30-17:10 WCTRS-Y (524) Technical visits WCTRS-STC meeting (521ABC)	15:30-16:00 Coffee break (516)	15:30-16:00 Coffee break (516)	15:30-16:00 Coffee break (516)	
	16:00-17:50 Sessions (see schedule)	16:00-17:50 Sessions (see schedule)	16:00-17:50 Sessions (see schedule)	
17:30-19:30 Welcome reception AGENCE DE MOBILITÉ DURABLE (see schedule)				
			18:45-22:00 Gala Dinner ARTM (710)	

The most updated version of the Conference program is available at:
<https://easychair.org/smart-program/WCTR2023/index.html>

Monday, July 17th

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[\(Back to schedule overview ↑\)](#)

SCHEDULE OVERVIEW

8:30- 10:10	10:10-10:30	10:30- 12:10	12:10-13:30	13:30- 15:10	15:10-15:30	15:30-17:10	17:30-19:30	
WCTRS-Y (524)	Coffee break (facing 517)	WCTRS-Y (524)	Lunch (517C)	WCTRS-Y (524)	Coffee break (facing 517)	WCTRS-Y (524)	Welcome reception AGENCE DE MOBILITÉ DURABLE (720)	
Session EB-M (521)		WCTRS-SCC meeting (521ABC)		WCTRS-STC meeting (521ABC)		WCTRS-STC meeting (521ABC)		
WCTRS-SCC meeting (521ABC)		Technical visits (see dedicated section in this booklet)		Technical visits (see dedicated section in this booklet)		Technical visits (see dedicated section in this booklet)		Technical visits (see dedicated section in this booklet)
Technical visits (see dedicated section in this booklet)								

[Monday \(July 17th\)](#) * [Tuesday \(July 18th\)](#) * [Wednesday \(July 19th\)](#) * [Thursday \(July 20th\)](#) * [Friday \(July 21st\)](#)

DETAILED SCHEDULE

July 17th, 07:30-19:30 - Session REG1: Registration (Location: facing 517)

July 17th, 08:30-09:30 Session EB-M: Editorial Board and Editors meeting: Transport Policy and Case Studies on TP [↑](#)

CHAIR: Xiaowen Fu (Hong Kong Polytechnic University, Hong Kong)

LOCATION: 521

Reserved to members

July 17th, 08:30-08:50 Session WCTRS-Y: Introduction [↑](#)

CHAIR: Tae Hoon Oum (The University of British Columbia, Canada)

LOCATION: 524

- Tae Hoon Oum, President of the WCTRS
- Sagar Patni, Chair of the Young conference – University of Florida, USA

July 17th, 08:50-10:10 Session WCTRS-Y-1: FIRST SESSION: Autonomous vehicles and their integration into existing networks and logistics [↑](#)

CHAIR: Laetitia Dablanc (University Gustave Eiffel, Logistics City Chair, SPLOTT, France)

LOCATION: 524

Moderator: Aline Fernandes – Loughborough University, UK

- **Autonomous Inland Navigation: a literature review and extracontractual liability issue**, Camilla Domenighini – University of Antwerp, Belgium
- **Social acceptability of shared autonomous vehicles from avoiders to innovators in Hannover (Germany)**, Leen De Paepe – Ghent University, Belgium
- **Consumer Logistics Decision-Making about Hyperconnected Last-Mile Services: A Review**, Merve Seher Cebeci – Delft University of Technology, Netherlands

July 17th, 09:30-10:10 Session SCC-M1: SCC WCTRS Scientific committee meeting (part 1) [↑](#)

CHAIR: Lori Tavasszy (Delft University of Technology, Netherlands)

LOCATION: 521

Reserved to the members of WCTRS Scientific Committee.



July 17th, 10:10-10:30 Coffee break (Location: Facing 517) [↑](#)

July 17th, 10:30-12:10 Session SCC-M2: SCC WCTRS Scientific committee meeting (part 2) [↑](#)

CHAIR: Lori Tavasszy (Delft University of Technology, Netherlands)

LOCATION: 521

Reserved to the members of WCTRS Scientific Committee.

July 17th, 10:30-12:10 Session WCTRS-Y-2: SECOND SESSION: New commuting practices and new commuting modes [↑](#)

CHAIR: Laetitia Dablanç (University Gustave Eiffel, Logistics City Chair, SPLOTT, France)

LOCATION: 524

Moderator: Léa Zachariou – Gustave Eiffel University, France

- **WTP quality estimates in commute mode choice: issues of performance comparison under sample size and balance impacts**, Nikita Gusarov – Grenoble Alpes University, France
- **Optimizing intermodal commuting by way of detours and breaks: Evidence of micromobility users in France**, Dylan Moïnse – Gustave Eiffel University, France
- **Are route stabilities the same when go to and get off work? An empirical investigation on route choices using passenger vehicle trajectory data**, Jihao Deng, Chris Bachmann, Qiangqiang Shangguan, Quan Yuan – University of Waterloo
- **Care-Driven Informality: The Case of Community Transport**, Léa Ravensbergen – McMaster University, Canada



July 17th, 12:10-13:30 Lunch (Location: 517C) [↑](#)

July 17th, 13:30-15:10 Session WCTRS-Y-3: THIRD SESSION: Opportunities and limits to rail development [↑](#)

CHAIR: Laetitia Dablanç (University Gustave Eiffel, Logistics City Chair, SPLOTT, France)

LOCATION: 524

Moderator: Camilla Domenighini – University of Antwerp, Belgium

- **How does structural reform affect cost and demand in railway**, Sidi Sun – University of Leeds, UK
- **The slow and difficult implementation of high-speed rail interoperability in Europe: the case of the Atlantic Corridor**, Philippe Bairras, Iñigo Aguas Ardaiz – Gustave Eiffel University, France
- **Assessing the competitiveness of decarbonized rail alternatives**, Antoine Belleguie – Gustave Eiffel University, France
- **Role and issues surrounding children ICT use on board French trains**, Léa Zachariou – Gustave Eiffel University, France

July 17th, 13:30-15:10 Session STC-M1: STC WCTRS Steering committee meeting (part 1) [↑](#)

CHAIR: Tae Hoon Oum (The University of British Columbia, Canada)

LOCATION: 521

Reserved to the members of WCTRS Steering Committee.



July 17th, 15:10-15:30 Coffee break (Location: Facing 517)

July 17th, 15:30-17:10 Session STC-M2: STC WCTRS Steering committee meeting (part 2) [↑](#)

CHAIR: Tae Hoon Oum (The University of British Columbia, Canada)

LOCATION: 521

Reserved to the members of WCTRS Steering Committee.

July 17th, 15:30-15:50 Session WCTRS-Y-4: FOURTH SESSION: Mobility in the Global South [↑](#)

CHAIR: Laetitia Dablanc (University Gustave Eiffel, Logistics City Chair, SPLOTT, France)

LOCATION: 524

Moderator: Antoine Robichet – Gustave Eiffel University, France

What is the role of participation in mobility planning in the Global South? Reflections from Rio de Janeiro and Porto Alegre, Brazil, Aline Fernandes Barata - Loughborough University, UK

July 17th, 15:50-17:10 Session WCTRS-Y-5: Q&A SESSION: Career development for young academics [↑](#)

CHAIR: Laetitia Dablanc (University Gustave Eiffel, Logistics City Chair, SPLOTT, France)

LOCATION: 524

Moderator: Antoine Robichet – Gustave Eiffel University, France

Laetitia Dablanc, leader of the WCTRS-Y, and colleagues will share their thoughts and respond to questions from the audience on career development, including strategies for position search, publication, and all other issues shared by young academics in transport research.

Interactive tools will be used during the session.

July 17th, 17:30-19:30 Welcome cocktail AGENCE DE MOBILITÉ DURABLE [↑](#)

CHAIR: Catherine Morency (Polytechnique Montréal, Canada)

LOCATION: 720

Tuesday, July 18th

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SCHEDULE OVERVIEW

8:30-9:45	9:45-10:55	10:55-11:15	11:15- 12:30	12:30- 13:50	13:50-15:30	15:30-16:00	16:00-17:50
Opening ceremony (517AB)	Plenary I (517AB)	Coffee break (516)	Plenary I (517AB)	Lunch TRANSPORT CANADA (517CD)	TA kenotes (see schedule) Sessions (see schedule)	Coffee break (516)	Sessions (see schedule)

[Monday \(July 17th\)](#) * [Tuesday \(July 18th\)](#) * [Wednesday \(July 19th\)](#) * [Thursday \(July 20th\)](#) * [Friday \(July 21st\)](#)

DETAILED SCHEDULE

July 18th, 07:30-17:30 - Session REG2: Registration (Location: facing 517) ↑

July 18th, 08:30-09:45 Session OPEN-C: Opening Ceremony ↑

CHAIR: Catherine Morency (Polytechnique Montréal, Canada)

LOCATION: 517AB

- **Catherine Morency & Martin Trépanier**, Chair of the Conference & Chair of the local organizing committee
- **Tae Oum**, WCTRS president - Opening address of the 16th WCTR
- **Christian Dea** - Chief Economist and Director General of Transportation Economic Analysis Directorate
- **Marc Blanchet**, Executive Director, Transit Projects, Infrastructures and Systems, Montreal Metropolitan Transport Authority - main sponsor
- **Eric Allan Caldwell**, City of Montreal Elected Official and Chair of Montreal Transit Authority - Welcome to Montreal
- **Marie-Claude Léonard**, CEO of the Montreal Transit Authority - Transit initiatives
- **Rémi Quirion**, Quebec's chief Scientist - Innovation policy
- **Annie Ross**, CIRRELT's president
- **Lori Tavasszy**, WCTRS Scientific Chair - Conference details

July 18th, 09:45-10:55 Session PLEN I-1: Plenary I (part 1) ↑

CHAIR: Catherine Morency (Polytechnique Montréal, Canada)

LOCATION: 517AB

09:45 Annie Levasseur (Canada Research Chair in Measuring the Impact of Human Activities on Climate Change, ETS Montreal, Canada)

Toward decarbonized transport systems: carbon accounting methods to support the development of effective policies and increase mobilization

10:20 Foutse Khomh (FRQ-IVADO Research Chair on Software Quality Assurance for Machine Learning Applications, Polytechnique Montréal, Canada)

Artificial Intelligence in Transportation: Challenges and Opportunities



July 18th, 10:55-11:15 Coffee break (Location: 516) [↑](#)

July 18th, 11:15-12:30 Session PLEN I-2: Plenary I (part 2) [↑](#)

CHAIR: Catherine Morency (Polytechnique Montréal, Canada)

LOCATION: 517AB

11:15 Eric Miller (Director of the U of T Transportation Research Institute (UTTRI), University of Toronto, Canada)

Disruption: Travel Behavioural Changes & Transportation System Challenges in a Post-COVID World

11:50 Benoît Montreuil (Coca-Cola Material Handling & Distribution Chair, Georgia Tech, United States)

On the Emerging Physical Internet: Progress and Challenges Toward Resilient, Sustainable, Hyperconnected Freight Transportation and Logistic Ecosystems



July 18th, 12:30-13:50 Lunch TRANSPORT CANADA (Location: 517CD) [↑](#)

July 18th, 13:50-15:30 Session 01_SS: SPECIAL SESSION: Future of Transportation Mobility and Safety – A Keynote Session of Canadian Distinguished Scholars [↑](#)

CHAIR: Tarek Sayed (University of British Columbia, Canada)

LOCATION: 519A

- **Introduction** (Tae Oum, president of the WCTRS)
- **Optimization, Modeling and Assessment of Smart City Transportation Systems** (Prof Hesham Rakha)
- **Real-time management of traffic lights — improving mobility and decreasing greenhouse gas emissions** (Prof. Leandro Coelho)
- **Network vulnerability, and Resilience Analysis: A data-driven Approach** (Prof. Lina Kattan)
- **Towards Safer Urban Networks: The Role of Advanced Technologies and Big Data** (Prof. Tarek Sayed)

July 18th, 13:50-15:30 Session 05_SS: SPECIAL SESSION: Impact of the COVID-19 lockdown on urban transport in Latin America [↑](#)

CHAIR: Angelica del Rocío Lozano Cuevas (Universidad Nacional Autónoma de México, Mexico)

LOCATION: 518A

- **Willingness to Limit Purchases in "Panic Buying" Environments: The Latin-American Case.** Holguin-Veras J. Rensselaer Polytechnic Institute, USA.

- **Changes in Household Inventories of Critical Supplies: The Latin-American Case.** Holguin-Veras J. Rensselaer Polytechnic Institute, USA
- **Impact of the COVID-19 lockdown measures on local traffic-related air pollution in three Latin-American Metropolises.** Nieto-Rascón O., Lozano A. Universidad Nacional Autónoma de México, Mexico
- **Use and the intention to use BRT services before, during, and after the COVID-19 pandemic. The Colombian case.** Cantillo V. Universidad del Norte, Barranquilla, Colombia.
- **Shortage of construction materials and interruption of the supply chain due to Covid-19 from the perspective of the Caribbean islands.** Valdés, D. University of Puerto Rico at Mayaguez, Puerto Rico.
- **Mobility trends in Chile in COVID-19: The role of income and gender inequality.** Carrasco, J.A. Universidad de Concepción, Chile.

July 18th, 13:50-15:30 Session 06_SS: SPECIAL SESSION by WCTRS COVID-19 Task Force (1) [↑](#)

CHAIR: Junyi Zhang (Southeast University, China, Japan)

LOCATION: 518B

- **Welcome remark from the WCTRS president,** Tae Hoon Oum, Sauder School of Business, University of British Columbia, Canada
- **Report from the WCTRS COVID-19 Task Force,** Yoshitsugu Hayashi, the immediate past president of WCTRS, Chubu University, Japan; Junyi Zhang, School of Transportation, Southeast University, China (previously, Hiroshima University, Japan)
- **Impacts of COVID-19 on the transport sector: Cases of major cities in China,** Yacan Wang & Huiyu Zhou, School of Economics and Management, Beijing Jiaotong University, China
- **Measures on public transport during the COVID pandemic and the changing travel demand,** Varameth Vichiensan, Department of Civil Engineering, Faculty of Engineering, Kasetsart University, Thailand
- **How Covid-19 has changed transport policy? A case of the UK,** Greg Marsden, Institute for Transport Studies, University of Leeds
- **Identifying impacts of the pandemic's lockdowns on urban logistics, the case of Paris and France,** Laetitia Dablanc, Logistics City Chair, University Gustave Eiffel, France
- **Lessons learned for transforming seaports and freight transport systems,** Thierry Vanelslander, Department of Transport and Regional Economics, Faculty of Business and Economics, University of Antwerp, Antwerp, Belgium
- **Effects of grocery hoarding during the COVID-19 pandemic,** Jonas Flodén, John Magnus Roos, Johan Woxenius, Department of Business Administration, School of Business, Economics and Law at University of Gothenburg, Sweden

July 18th, 13:50-15:30 Session TA-A: TOPIC AREA A KEYNOTE [↑](#)

CHAIR: Thierry Vanelslander (Department of Transport and Regional Economics (TPR), Antwerp, Belgium)

LOCATION: 520D

13:50 Christa Sys (University of Antwerp, Belgium)

Air and maritime transport: what can they learn from each other? - jointly with Wouter Dewulf

14:40 Wouter Dewulf (University of Antwerp, Belgium)

Air and maritime transport: what can they learn from each other? - jointly with Christa Sys

July 18th, 13:50-15:30 Session TA-B: TOPIC AREA B KEYNOTE [↑](#)

CHAIRS: Johan Woxenius (University of Gothenburg, Sweden) and Michael Browne (University of Gothenburg, Sweden)

LOCATION: 524C

13:50 Per Olof Arnäs (Director Logistics Strategy, Einride, Sweden)

Embracing complexity in freight transport and logistics: The next 100 years

14:40 Alison J. Conway (City College of New York, United States)

In times of dramatic change how does freight transport fit into the urban planning process?

July 18th, 13:50-15:30 Session TA-D: TOPIC AREA D KEYNOTE [↑](#)

CHAIR: Bhargab Maitra (IIT Kharagpur, India)

LOCATION: 520A

13:50 Juan Antonio Carrasco Montagna (Universidad de Concepcion, Concepcion, Chile).

14:40 Chandra Bhat (The University of Texas at Austin, USA)

July 18th, 13:50-15:30 Session TA-E: TOPIC AREA E KEYNOTE [↑](#)

CHAIR: Georgina Santos (Cardiff University, UK)

LOCATION: 520C

13:50 Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)

The Role of Freight Carriers and Non-Freight Carrier Agents in the Generation of Freight Externalities: Implications for the Fight Against Climate Change

14:40 Roger Vickermans (University of Kent, UK)

The transport problem: the need for consistent policies on pricing and investment

July 18th, 13:50-15:30 Session TA-F: TOPIC AREA F KEYNOTE [↑](#)

CHAIRS: Haixiao Pan (Tongji University, China) and Masanobu Kii (Kagawa University, Japan)

LOCATION: 520B

13:50 Jean-Claude Thill (University of North Carolina at Charlotte, United States)

Are the Socio-economic Impacts of Rail Transit Investments Debatable?

14:40 Yoshitsugu Hayashi (Chubu University, Japan)

"The Limits to Growth" to Carbon Neutral and Beyond – Towards New Normal Mobility in 21st Century

July 18th, 13:50-15:30 Session TA-G: TOPIC AREA G KEYNOTE [↑](#)

CHAIRS: Stephen Ison (De Montfort University, UK) and Maria Attard (University of Malta, Malta)

LOCATION: 519B

13:50 Helena Titheridge (University College London, UK)

Social sustainability within transport - jointly with Caroline Mullen

14:15 Caroline Mullen (University of Leeds, UK)

Social sustainability within transport - jointly with Helena Titheridge

14:40 Louise Reardon (University of Birmingham, UK)

Governing Transport Futures – our role as researchers, the role of politics in that, and the position of transport in other “futures” agendas

July 18th, 13:50-15:30 Session TA-H: TOPIC AREA H KEYNOTE [↑](#)

CHAIRS: Meng Li (Tsinghua University, China) and Binyam Reja (The World Bank, United States)

LOCATION: 524A

13:50 Huapu Lu (Tsinghua University, China)

Green and Intelligent Development in Chinese Cities: Experience and Prospects

14:40 Binyam Reja (World Bank, United States)

Worldwide development on green transport



July 18th, 15:30-16:00 Coffee break (Location: 516) [↑](#)

July 18th, 16:00-17:50 Session 08_SS: SPECIAL SESSION: WCTRs Cooperation and Networking for Critical Issues of Future Mobility [↑](#)

CHAIR: Luo Xiao (Tongji University, China)

LOCATION: 515C

Tongji and WCTRs has long term relationship, Tongji held WCTRs Conference in 2016 and achieved great success. Tongji and WCTRs has built very close relationship and officially sign 1 Special sessions are meant to provide additional flavor to the conference besides regular technical sessions. The format of special session is flexible and it could be a panel discussion, invited talks, or selected paper presentations from shortlisted papers. If the proposed special session does not fall under one specific SIG, it may well be proposed under a Topic Area. 2 cooperation contract after the 2016 conference. With the great effort of 2 sides, Tongji University and WCTRs established “Tongji-WCTRs World Transport Research Center” in 2019, which is the first research center of WCTRs. It is necessary to continually enhance the cooperation the network especially in the post-pandemic period. Recently, with the quick development of technology, China has met new challenge and chance in transport sector. The wisdom and exchange between 2 sides become more important and necessary. The objectives of the session are to (1) highlight the concurrent critical viewpoints for maintaining mobility from energy competing with other energy consumers such as data center, climate change, and peoples’ quality of life, (2) continuously promote these issues by the cooperation with WCTRs,(3) introduce the research and development of Tongji university in recent years;(4) looking for more chances for cooperation chance to joint-degree, PhD enrollment, post-doctor project.(5) Visiting scholar program;(6)other cooperation chances.

July 18th, 16:00-17:50 Session 10_SS: SPECIAL SESSION: Innovative transport research from PhD candidates: discover the papers from the 2023 recipients of PhD Grants of WCTRS-Y, the Young Initiative of WCTRS

CHAIR: Laetitia Dablanc (University Gustave Eiffel, Logistics City Chair, SPLOTT, France)

LOCATION: 513F

PhD students' grants holders for 2023 present their innovative research and discuss it with the audience. The PhD grants competition is one of the three activities of the WCTRS Young Researchers Initiative (WCTRS-Y). The overall objective of WCTRS-Y is to train/prepare young members of the Society for gradual promotion to take more senior positions in the activities. Active young members are seen as the future of the World Conference on Transport Research Society.

- **Introduction of the special session** Tae Hoon Oum, President of the WCTRS
- **Understanding the Impact of Pedestrian Intervention on Laziness and Car Dependency Reduction in a European Island** Karyn Scerri, University of Malta, Malta / Innovation Grant
- **How do managers evaluate country logistics performance for global supply chain decision making** Debarshee Bhardwaj, University of Bremen, Germany / Prestige Grant
- **Assessing complementary and competing interactions between transit and shared transportation modes** Elodie Deschaintres, Polytechnique Montréal, Canada / Prestige Grant
- **Effects of Mass Rapid Transit Systems (MRTS) on Changing Urban Landscape: A Remote Sensing-Based Study of Delhi Metro** Vaibhav Puri, University of Delhi, India /Prestige Grant
- **Final debate with authors** Moderated by Laetitia Dablanc, WCTRS-Y leader

July 18th, 16:00-17:50 Session A1-S1_SS: SPECIAL SESSION: What have 20 years of the European Aviation Conference told us about the role of market forces, regulation and governance in commercial aviation? [↑](#)

CHAIR: William Morrisson (Wilfrid Laurier University, Canada)

LOCATION: 520D

PANELISTS: Ken Button (George Mason University), Wouter Dewulf (University of Antwerp), Wolfgang Grimme (German Aerospace Center), Brian Pearce (Former Chief Economist, IATA), Barry Humphreys CBE (BKH Aviation)

July 18th, 16:00-17:50 Session A2-S1: Hinterland Intermodal [↑](#)

CHAIR: Edwin van Hassel (University of Antwerp, Belgium)

LOCATION: 524B

16:00 Olusegun Adepoju (Nigerian Army University, Biu, P.M.B 1500 Borno State,, Nigeria)
Adebambo Somuyiwa (LADOKE AKINTOLA UNIVERSITY OF TECHNOLOGY OGBOMOSO, OYO STATE, Nigeria)
Victor Dosunmu (LADOKE AKINTOLA UNIVERSITY OF TECHNOLOGY OGBOMOSO, OYO STATE, Nigeria)

Principal Components Analysis of Constraints against Seaport-Hinterland Logistics Efficiency in Nigeria (abstract)

16:20 Emma Ceulemans (University of Antwerp, Belgium)
Ivan Cardenas (University of Antwerp, Belgium)

Thierry Vanelander (University of Antwerp, Belgium)

Edwin van Hassel (University of Antwerp, Belgium)

An overlooked dimension of Sychromodality: Unravelling its complex behavioural and organisational nature (abstract)

16:40 Marie-Sabine Saget (Laval University/CIRRELT, Canada)

Jacques Renaud (Laval University/CIRRELT, Canada)

Maryam Darvish (Laval University/CIRRELT, Canada)

Trade-off analysis in multimodal distribution network design (abstract)

17:00 Alina Kovalenko (Centre for High North Logistics, Nord University, Norway)

Terje Andreas Mathisen (Nord University, Norway)

Jeroen Pruyn (Delft University of Technology, Netherlands)

Generalized transport costs in intermodal shipping: The context of the Northeast Passage (abstract)

17:20 Tareq Abu-Aisha (University of Quebec at Trois-Rivières, Canada)

Jean-Francois Audy (University of Quebec at Trois-Rivières, Canada)

Mustapha Ouhimmou (École de technologie supérieure, Canada)

Preliminary investigation of the sea-rail intermodal system's efficiency using a simulation approach: case of Trois Rivieres port (abstract)

July 18th, 16:00-17:50 Session A2-S14_SS: SPECIAL SESSION: Challenges and opportunities along the sea-port-hinterland chain of digital transformation and decarbonization [↑](#)

CHAIR: Jean-Francois Audy (University of Quebec at Trois-Rivières, Canada)

LOCATION: 512F

The objectives of this special session are to i) presents a few challenges and opportunities provided by the digitalization and/or decarbonization of the maritime sector at sea, at the port and in the hinterland and ii) allow an open discussion between researchers and practitioners to highlights future research avenues. Open to all attendees to the WCTR, this session is co-organized by the Réseau Québec maritime (RQM) and the Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation (CIRRELT).

- **Welcome speech** (Jean-François Audy, Université du Québec à Trois-Rivières-CIRRELT-RQM)
- **General introduction to digital transformation and decarbonization along the sea-port-hinterland chain** (Claude Comtois, Professor Emeritus, Université de Montréal-CIRRELT-RQM)
- **Challenges and opportunités at sea** (Capt. Gurjeet Warya, VP Business Development & Operations, True North Marine)
- **Challenges and opportunités at the port** (Geneviève Allard, Director Innovation, Logistics and Productivity, Trois-Rivières Port Authority)
- **Challenges and opportunités in the hinterland** (Emma Frejinger, Full professor, Université de Montréal- CIRRELT-Quebec Artificial Intelligence Institute (MILA))
- **Q&A period by the animator** (Audy) with the panel (Allard, Comtois, Frejinger, Warya)

July 18th, 16:00-17:50 Session A3-S1: Disruptive Events [↑](#)

CHAIR: John Preston (University of Southampton, UK)

LOCATION: 512H

16:00 Carl-William Palmqvist (Lund University, Sweden)
Michelle Ochsner (Lund University, Sweden)

Train Delays due to Extreme Weather Events in Sweden 2001-2020 (abstract)

16:20 Prabhash Shukla (National Rail and Transportation Institute, India)
Keshav Swami (National Rail and Transportation Institute, India)
Hari Krishna Gaddam (National Rail and Transportation Institute, India)

Simulation Based Passengers Emergency Evacuation Study for a Double Decker Train Coach (abstract)

16:40 Mehmet Şirin Artan (Yildiz Technical University, Turkey)
İsmail Sahin (Yildiz Technical University, Turkey)

A Comparative Analysis of Train Delay Prediction Models for Markov Chains (abstract)

July 18th, 16:00-17:50 Session A5-S1: Advances in Road Transport Analysis [↑](#)

CHAIR: Gopal R. Patil (Indian Institute of Technology Bombay, India, India)

LOCATION: 513A

16:00 Sandra Lechtenberg (University of Münster, Germany)
Bernd Hellingrath (University of Münster, Germany)

Guiding practitioners of road freight transport to implement machine learning for operational planning tasks (abstract)

16:20 Bessem Dammak (National School of Engineering of Tunis, Tunisia)
Francesco Ciari (Polytechnique Montréal, Canada)
Amel Jaoua (National School of Engineering of Tunis, Tunisia)

Investigating of machine learning's capability in enhancing traffic simulation models (abstract)

16:40 Elija Deineko (German Aerospace Center (DLR), Germany)
Ibraheem Oluwatosin Adeniran (German Aerospace Center (DLR), Germany)
Carina Kehrt (German Aerospace Center, Germany)
Gernot Liedtke (German Aerospace Center (DLR), Germany)

Optimizing Two-Echelon Logistics Network for Urban Logistics by LRP Heuristics with integrated Microscopic Transport Simulation (abstract)

July 18th, 16:00-17:50 Session B1-S5_SS: SPECIAL SESSION: Applied Data Science in Supply Chain Management – potentials and challenges in maritime supply chains [↑](#)

CHAIR: Leif Meier (Westphalian University of Applied Sciences, Germany)

LOCATION: 512G

This session aims to discuss applied Data Science Projects and Applications in Supply Chain Management, with a maritime focus. It analyses potentials from both, a scientific and an industry point of view to identify an applied path of research from a maritime base with a critical analysis.

- **Quantitative Challenges of Resilient Supply Chains.** Leif Meier, Westphalian University of Applied Sciences, Gelsenkirchen, Germany
- **Applied Data Science in Transportation. An overview.** Maxime Lachaize, Accenture, Toronto, Canada.

- **Digitalisation Trends in Liner Shipping.** Johan Woxenius, University of Gothenburg, Sweden.

July 18th, 16:00-17:50 Session B3-S1: Glittering colors of intermodal freight transport networks [↑](#)

CHAIR: Ralf Elbert (Technical University Darmstadt, Germany)

LOCATION: 518C

16:00 Juan Manuel Pulido (University of Antwerp, Belgium)

Ivan Dario Cardenas (University of Antwerp, Belgium)

Valentin Carlan (University of Antwerp, Belgium)

Thierry Vanelslander (University of Antwerp, Belgium)

The role of visibility in enhancing the adoption of synchromodality (abstract)

16:20 Zahra Mashayekhi (McMaster University, Canada)

Manish Verma (McMaster University, Canada)

An Analytical Approach to Rail-Truck Intermodal Network Design (abstract)

16:40 Qiaoya Xie (Tongji University, China)

Yunqiang Wu (Tongji University, China)

Rong Zhang (Tongji University, China)

The impact of COVID-19 on freight transport in the post-epidemic period: the modal shift from road to waterway (abstract)

17:00 Jiaqi Shen (Tongji University, China)

Hao Liu (Tongji University, China)

Rong Zhang (Tongji University, China)

Railway pricing for automobile transport based on discrete choice model and cost accounting (abstract)

17:20 Ralf Elbert (Technical University of Darmstadt, Germany)

Johannes Rentschler (Technical University of Darmstadt, Germany)

The impact of dynamic estimated time of arrival forecasts on the pre-and post-haulage of intermodal transport – a simulation study (abstract)

July 18th, 16:00-17:50 Session B4-S1: Simulation approach to urban freight research [↑](#)

CHAIR: Michael Browne (University of Gothenburg, Sweden)

LOCATION: 524C

16:00 Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)

Sofia Perez-Guzman (Rensselaer Polytechnic Institute, United States)

Abdelrahman Ismael (Rensselaer Polytechnic Institute, United States)

Julia Amaral (Rensselaer Polytechnic Institute, United States)

A Behavioral Micro Simulation Case Study: Distribution Center Location (abstract)

16:20 Michiel de Bok (Delft University of Technology, Netherlands)

Sofia Giasoumi (Significance, Netherlands)

Loránt Tavasszy (Delft University of Technology, Netherlands)

Sebastian Thoen (Significance, Netherlands)

Ali Nadi (Delft University of Technology, Netherlands)

Jos Streng (City of Rotterdam, Netherlands)

A simulation study of the impacts of micro hub scenarios for city logistics in Rotterdam (abstract)

16:40 Zuopeng Xiao (Harbin Institute of Technology, Shenzhen, China)
Kailin Song (Harbin Institute of Technology, Shenzhen, China)

Feasibility of eco-routing and carbon trade policy schemes in urban freight transport: Market structure and decision trade-off (abstract)

17:00 Lukas Barthelmes (Karlsruhe Institute of Technology (KIT), Germany)
Mehmet Emre Görgülü (Karlsruhe Institute of Technology (KIT), Germany)
Jelle Kübler (Karlsruhe Institute of Technology (KIT) - Institute for Transport Studies (IfV), Germany)
Aljoscha Löffler (Karlsruhe Institute of Technology (KIT), Germany)
Martin Kagerbauer (Karlsruhe Institute of Technology, Germany)
Peter Vortisch (Karlsruhe Institute of Technology, Germany)

Modeling framework for the agent-based simulation of rail-based urban parcel transport: An application of a two-stage transport chain selection model in the city of Karlsruhe, Germany (abstract)

17:20 Anna Buerklen (Technische Universität Berlin, Technical University of Applied Sciences Wildau, Germany)
Ibraheem Adeniran (Deutsches Zentrum für Luft- und Raumfahrt, Germany)
Carina Kehrt (Deutsches Zentrum für Luft- und Raumfahrt, Germany)
Gernot Liedtke (Technische Universität Berlin, Deutsches Zentrum für Luft- und Raumfahrt, Germany)

A simulative assessment of collaborative last mile delivery solutions (abstract)

July 18th, 16:00-17:50 Session B5-S1_SS: SPECIAL SESSION: The Physical Internet is Realistic - An Oxford Style Debate [↑](#)

CHAIR: Matthew Roorda (University of Toronto, Canada)

LOCATION: 521

After the keynote speech of Prof. Benoit Montreuil a debate will be staged to discuss the scope of the Physical Internet vision. This debate session is broken down into four sections: opening remarks, a rebuttal, a question-and-answer period by audience (for clarification of points) and closing remarks. Before the debate begins, the moderator shares the motion, and each audience member casts their vote. The voting breakdown is not shared publicly until the end of the debate. Intervenants: Benoît Montreuil, José Holguín-Veras, Jean-Paul Rodrigue and Mike Brown. The two teams select their stance (for/against) based on lottery system.

July 18th, 16:00-17:50 Session C2-S1: Road Traffic Signal Control [↑](#)

CHAIR: Zong Tian (University of Nevada, Reno, United States)

LOCATION: 513B

16:00 Jianyuan Xu (University of Nevada Reno, United States)
Zong Tian (University of Nevada Reno, United States)
Aobo Wang (University of Nevada Reno, United States)

Minimizing Disruptions of Emergency Vehicle Preemption on Arterial Signal Coordination through Different Exit Strategies (abstract)

- 16:15 Aobo Wang (University of Nevada Reno, United States)
Zong Tian (University of Nevada, Reno, United States)
Automated Traffic Signal Performance Measures: A Comparison between Trajectory-based and Controller Event Data-based Approaches (abstract)
- 16:35 Hong Zhu (College of Transportation Engineering, Tongji University, China)
Tianyang Han (Department of Civil Engineering, Graduate School of Engineering, the University of Tokyo, Japan)
Keshuang Tang (College of Transportation Engineering, Tongji University, China)
An Online Learning Agent for Adaptive Traffic Signal Control Featuring Control Robustness (abstract)
- 16:55 Matthew Boog (University of Nevada, Reno, United States)
Comparison of arterial-level signal coordination features for five selected software programs (abstract)
- 17:15 Qingquan Liu (Department of Civil Engineering, Tsinghua University, Beijing 100084, P.R. China, China)
Ke Zhang (Department of Civil Engineering, Tsinghua University, Beijing 100084, P.R. China, China)
Meng Li (Department of Civil Engineering, Tsinghua University, Beijing 100084, P.R. China, China)
Shen Li (Department of Civil Engineering, Tsinghua University, Beijing 100084, P.R. China, China)
Centralized Two-Dimensional Trajectory Planning for Connected and Automated Vehicles Before Isolated Signalized Intersections (abstract)
- 17:35 Yifei Wang (Nagoya university, Japan)
Xin Zhang (Nagoya university, Japan)
Hideki Nakamura (Nagoya university, Japan)
Left-Turn Lane Capacity Estimation based on Vehicle Yielding Maneuver Model to Pedestrians at Signalized Intersections (abstract)

July 18th, 16:00-17:50 Session C3-S1: Emerging technologies: Connected and autonomous vehicles-1 [↑](#)

CHAIR: Rama Balakrishna (Caliper Corporation, United States)

LOCATION: 513C

- 16:00 Omid Ebadi (University of Calgary, Canada)
Seiran Heshami (University of Calgary, Canada)
Lina Kattan (University of Calgary, Canada)
Anticipatory Adaptive Cruise Control (AACC) Systems in Mixed Traffic Flow (abstract)
- 16:20 Saba Sabet (Toronto Metropolitan University, Canada)
Bilal Farooq (Toronto Metropolitan University, Canada)
Multi-objective anticipatory mixed fuel green vehicle routing of connected and automated vehicles (abstract)

16:40 Hugues Blache (ENTPE, France)

Nicolas Saunier (Polytechnique Montreal, Canada)

Is It Possible to Automatically Build a Large Scale Metropolitan Traffic Model? Evidence from a Study of Connected Transportation Applications in Montreal (abstract)

17:00 Jieming Chen (Hong Kong Polytechnic University, Hong Kong)

Yiwei Wu (Hong Kong Polytechnic University, Hong Kong)

Yue Zhou (CCCCIMG, China)

Edward Chung (Hong Kong Polytechnic University, Hong Kong)

Optimal Merging Scheduling and Trajectory Planning of Connected Automated Vehicles at Multi-Lane On-Ramp Entrances (abstract)

July 18th, 16:00-17:50 Session C4-S13_SS: SPECIAL SESSION: International Comparison of Traffic Safety Culture: Global Research Alliance on Traffic and Safety Project (IATSS) [↑](#)

CHAIR: Hideki Nakamura (Nagoya university, Japan)

LOCATION: 520E

The main objective of the session is to share the outputs of a strategic project that is being conducted by the International Association of Traffic and Safety Sciences (IATSS) entitled “Global Research Alliance on Traffic and Safety Project” in nine countries including Japan, China, UK, Germany, Italy, Qatar, UAE, Egypt, and Canada. Through this project, IATSS aims to provide an international study on Road Traffic Safety Culture in different countries with diverse cultural and social backgrounds. This project is part of IATSS efforts to study traffic safety culture globally, including countries with very heterogeneous driver population aiming to help the international community in improving road safety status through the prevention of road crashes. Traffic safety culture is seen as a contextual construct to define high and low risk groups of drivers, based on cultural perceptions that shape both general and personal attitudes and beliefs about traffic safety and specific driving behavior. In this session, presentations will be delivered to showcase the results of the project towards improving the understanding of the correlation between the characteristic of driving population, including cultural backgrounds, and the likelihood of risky driving behaviour.

- **Overview of the IATSS Project** (Prof. Hideki Nakamura)
- **Presentation addressing the results of an international comparative study on driving attitudes and behaviors based on questionnaire surveys** (Prof. Dr. Koji Suzuki)
- **Presentation on the association between national culture, economic development and road safety performance** (Dr. Wouter Van den Berghe)
- **Presentation on modeling the determinants of traffic safety culture** (Prof. Dr. Yasuhiro Shiomi)

July 18th, 16:00-17:50 Session C4-S4: Motorcyclist Safety Analysis [↑](#)

CHAIR: Navoda Rillagodage (University of Manitoba, Canada)

LOCATION: 520C

16:00 Shabna Sayedmohammed (Qatar University, Qatar)

Mohamed Kharbeche (Qatar University, Qatar)

Deepti Muley (Qatar University, Qatar)

Wael Alhajyaseen (Qatar University, Qatar)

Mohammed Alqaradawi (Qatar University, Qatar)

Exploring the Factors Influencing Car Drivers' Perception and Crash Probability with Food Delivery Riders (abstract)

16:15 Abhishek Chakraborty (IIT Kharagpur, India)
Bhargab Maitra (IIT Kharagpur, India)

Riding behaviours of motorcyclists in mixed traffic condition and its association with crash risk (abstract)

16:35 Yen-Hsiu Liu (Taipei Medical University, Taiwan)
Bayu Satria Wiratama (Universitas Gadjah Mada, Indonesia)
Chung-Jen Chao (Central Police University, Taiwan)
Ming-Heng Wang (Taiwan Police College, Taiwan)
Rui-Sheng Chen (Taipei Medical University, Taiwan)
Wafaa Saleh (Edinburgh Napier University, UK)
Chih-Wei Pai (Taipei Medical University, Taiwan)

Unhelmeted Riding, Drunk Riding, and Unlicensed Riding Among Motorcyclists: A Population Study in Taiwan During 2011–2016 (abstract)

16:55 Monik Gupta (Indian Institute of Technology, Bombay, India)
Nagendra Velaga (Indian Institute of Technology, Bombay, India)

Motorized Two Wheeler Riders' Behavior at Speed Breaker (abstract)

17:15 Muhammad Adnan (Transportation Research Institute (IMOB), Hasselt University, Belgium, Belgium)
Fatma Outay (Zayed University, UAE)
Uneb Gazder (University of Bahrain, Bahrain)
Syed Fazal Abbas Baqueri (DHA Suffah University, Pakistan)
Hammad Hussain Awan (The University of Lahore (Islamabad Campus), Pakistan)
Motorcycle Crash Prediction using Naturalistic Driving Data to Facilitate Emerging Insurance Models (abstract)

17:35 Anurag Thombre (Indian Institute of Technology Roorkee, India)
Jatin Bhandari (Indian Institute of Technology Roorkee, India)
Amit Agarwal (Indian Institute of Technology Roorkee, India)
Indrajit Ghosh (Indian Institute of Technology Roorkee, India)

Prediction of Unknown Striking vehicles in Motorized Two-Wheeler Hit-and-Run Crashes in Delhi (abstract)

July 18th, 16:00-17:50 Session D2-S1: TB: Travel Behavior, Equity, and sustainability | [↑](#)

CHAIR: Usman Ahmed (University of Toronto, Canada)

LOCATION: 520A

16:00 Neelima C Vijay (MANIT Bhopal, India)
Siddhartha Rokade (MANIT BHOPAL, India)
Bivina G R (MANIT BHOPAL, India)

Child pedestrian behavior on streets: A systematic review (abstract)

16:20 Weijing Wang (University of California Davis, United States)
Sierra Espeland (University of Vermont, United States)

Jesus Barajas (University of California Davis, United States)

Dana Rowangould (University of Vermont, United States)

Who Lacks Car Access and Where: Rural-Nonrural Disparities in Socioeconomic and Mobility Characteristics by Car Access in the US (abstract)

16:40 Titayapa Meenapinunt (Newcastle University, UK)

Dilum Dissanayake (University of Birmingham, UK)

Gustav Bösehans (Newcastle University, UK)

Margaret Bell (Newcastle University, UK)

Studying travel behaviour in the Bangkok Metropolitan Region: How attitudes towards the Environment, Accessibility, Convenience, and Safety, vary among commuters (abstract)

17:00 Lea Heide Schwehn (Wiesbaden Business School, Germany)

Tobias Heußler (Wiesbaden Business School, Germany)

Towards Modern and Sustainable Mobility Behavior in Companies - An Acceptance Model of Mobility Budgets (abstract)

17:20 Usman Ahmed (University of Toronto, Canada)

Rolf Moeckel (Technical University of Munich, Germany)

Analysis of Travel Behavior Change Triggered by Life Events (abstract)

July 18th, 16:00-17:50 Session D3-S1: Travel Behaviour and Attitude - I: General Mobility Scenario [↑](#)

CHAIR: Varghese George (National Institute of Technology Karnataka, India)

LOCATION: 513E

16:00 Veronique Van Acker (Luxembourg Institute of Socio-Economic Research, Luxembourg)

Corinne Mulley (University of Sydney Business School, Australia)

Exploring stability in travel attitudes: Evidence from a repeated cross-sectional study in Sydney, Australia (abstract)

16:15 Kushagra Sinha (School of Planning and Architecture, India)

Sanjay Gupta (School of Planning and Architecture, India)

Mobility App Usage and Multimodality in Delhi (abstract)

16:35 Lisa Ecke (Karlsruhe Institute of Technology, Germany)

Bönisch Lisa (Karlsruhe Institute of Technology, Germany)

Katrin Braun (Karlsruhe Institute of Technology, Germany)

Peter Vortisch (Karlsruhe Institute of Technology, Germany)

Relationship Between the Participation in Activities and Multimodal Travel Behavior in Everyday Life (abstract)

16:55 Ignacio Tiznado-Aitken (University of Toronto, Canada)

Giovanni Vecchio (Pontificia Universidad Católica de Chile and Centro de Desarrollo Urbano Sustentable (CEDEUS), Chile)

Sebastian Astroza (Universidad de Concepción and Centro de Desarrollo Urbano Sustentable (CEDEUS), Chile)

Juan Antonio Carrasco (Universidad de Concepción and Centro de Desarrollo Urbano Sustentable (CEDEUS), Chile)

Mobility of care: Profiling the relationship among mobility patterns, care tasks, and sociodemographic characteristics (abstract)

17:15 Guanghui Zhou (Gifu University, Japan)
Fumitaka Kurauchi (Gifu University, Japan)

Pedestrian level of service estimation through Wi-Fi sensing data (abstract)

17:35 Pritee Agrawal (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore)
Vasundhara Jayaraman (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore)
Jeremy Oon (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore)
Feng Ling (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore)
Muhamad Azfar Bin Ramli (Institute of High Performance Computing, Agency for Science Technology and Research, Singapore)

Generation of Mobility Patterns for Private Vehicles using Multi-headed Sequence Generative Adversarial Networks (abstract)

July 18th, 16:00-17:50 Session D4-S1: Online shopping and teleworking [↑](#)

CHAIR: Muhammad Habib (Dalhousie University, Canada)

LOCATION: 512D

16:00 Leslie Belton Chevallier (Université Gustave Eiffel, France)
Benjamin Motte-Baumvol (Université Bourgogne Franche-Comté, France)
Anne Aguiléra (Univ. Gustave Eiffel, France)

Online Shopping and Mobility: Exploring the Determinants of Final Delivery Solutions by French Households (abstract)

16:20 Shivam Khaddar (The University of British Columbia, Canada)
Mahmudur Fatmi (The University of British Columbia, Canada)
Modeling Teleshopping and Telecommuting Preferences After the Pandemic (abstract)

16:40 Meilan Jiang (Nagoya university, Japan)
Naoki Takayama (Nagoya university, Japan)
Hitomi Sato (Nagoya University, Japan)
Takayuki Morikawa (Nagoya University, Japan)
Intention of teleworking considering risk perceptions of commuting and ICT use in three major metropolitan areas in Japan (abstract)

17:00 Leslie Belton Chevallier (Université Gustave Eiffel, France)
Anne Aguiléra (Université Gustave Eiffel, France)
Eugénia Cerqueira (Universidade Federal de Minas Gerais, Brazil)
Benjamin Motte-Baumvol (Université Bourgogne Franche-Comté, France)
Eléonore Pigalle (Université Gustave Eiffel, France)
Exploring current and desired teleworking frequency in the Paris Metropolitan Area (abstract)

17:20 Md Asif Hasan Anik (Dalhousie University, Canada)
Muhammad Ahsanul Habib (Dalhousie University, Canada)

Understanding Employee Preferences towards Flexible Work Arrangements for the COVID-19 Post-Pandemic Period (abstract)

July 18th, 16:00-17:50 Session E2-S4_SS: SPECIAL SESSION: TRANSPORT POLICY WORKSHOP (co-sponsored by E2 and DTE Network): The role of policy in achieving future sustainable transport [↑](#)

CHAIR: Georgina Santos (Cardiff University, UK)

LOCATION: 514A

The objective is to discuss the role of policy in achieving a sustainable transport (with a focus on electrification and mode change).

- **100% ZEV Sales by 2035? Policies to promote ZEV choice by consumers in California.** (David Bunch (UC Davis, USA))
- **Some methodological difficulties to ensure strategic coherence** (Alain Bonnafous (Centre National de la Recherche Scientifique, France))
- **Health arguments for sustainable transport: why active travel** (Ahmadreza Faghieh Imani (Imperial College London, UK))
- **Smart Policies for Sustainable Transport** (Todd Litman (Victoria Transport Policy Institute, Canada))

July 18th, 16:00-17:50 Session F1-S1: Location choice [↑](#)

CHAIR: Jean-Claude Thill (University of North Carolina at Charlotte, United States)

LOCATION: 518A

16:00 Maryam Bostanara (Research Center for Integrated Transport Innovation, School of Civil and Environmental Engineering, UNSW Sydney, Australia)

Amarin Siripanich (Research Center for Integrated Transport Innovation, School of Civil and Environmental Engineering, UNSW Sydney, Australia)

Milad Ghasri (School of Engineering and Information Technology (SEIT), UNSW Canberra, Australia, Australia)

Taha Hossein Rashidi (Research Center for Integrated Transport Innovation, School of Civil and Environmental Engineering, UNSW Sydney, Australia)

Machine Learning vs Conventional Specifications for Housing Relocation Decisions (abstract)

16:15 Preeti Saini (Indian Institute of Technology, Kharagpur, India)

Debapratim Pandit (Indian Institute of Technology, Kharagpur, India)

A quantitative exploration of linkages across the decision stages of Residential Relocation Process (abstract)

16:35 Katja Schimohr (TU Dortmund University, Germany)

Eva Heinen (TU Dortmund University, Germany)

Joachim Scheiner (TU Dortmund University, Germany)

Travel-based residential dissonance as a motivation for relocation: an analysis of movers in Germany (abstract)

16:55 Muntahith Orvin (The University of British Columbia, Canada)
Mahmudur Fatmi (The University of British Columbia, Canada)
Mohamad Khalil (The University of British Columbia, Canada)

VALIDATING THE RESIDENTIAL LOCATION COMPONENT OF AN INTEGRATED URBAN MODEL AND TESTING FOR COVID-19 (abstract)

17:15 D.H.M.K.S. Thalgaskotuwa (Department of Civil Engineering, The University of Tokyo, Japan)
Ayumi Maeda (Department of Civil Engineering, The University of Tokyo, Japan)
Rena Koseki (Department of Civil Engineering, The University of Tokyo, Japan)
Eiji Hato (Department of Civil Engineering, The University of Tokyo, Japan)

Pareto frontier analysis for pre-disaster recovery urban planning considering heterogeneity of residential location choices (abstract)

17:35 Mathilde Zanolini (Polytechnique Montréal, Canada)
Catherine Morency (Polytechnique Montréal, Canada)

Analyzing the characteristics of the residential relocation phenomenon through the willingness of households to move (abstract)

July 18th, 16:00-17:50 Session F2-S1: Environmental impacts by electric vehicles [↑](#)

CHAIR: Patrick Jochem (German Aerospace Center (DLR), Germany)

LOCATION: 520B

16:00 Sebastian Brun (Universität der Bundeswehr München, Germany)
Axel Schaffer (Universität der Bundeswehr München, Germany)
Wolfgang Schade (M-Five GmbH, Germany)

Physical costs of e-mobility – Mobility Return on Energy Investment for BEV (abstract)

16:20 Ann Mary Varghese (IIT KHARAGPUR, India)
Justin Paul (University of Reading Henley Business School, UK)
Rudra Prakash Pradhan (rudrap@vgsom.iitkgp.ac.in, India)

Research on Electric Vehicle Mobility: A Bibliometric Review and Research Agenda (abstract)

16:40 Rubal Dua (KAPSARC, Saudi Arabia)
Prateek Bansal (National University of Singapore, Singapore)
Utkarsh Anand (Delhi School of Economics, India)

Do households discontinue electric vehicle ownership and revert back to buying petroleum-fueled vehicles? How many, who, why and policy implications (abstract)

17:00 Ana Luiza S. de Sa (Faculty of Engineering and Information Technology, The University of Melbourne, Australia)
Patricia S. Lavieri (Faculty of Engineering and Information Technology, The University of Melbourne, Australia)
Yu-Tong Cheng (Faculty of Engineering and Information Technology, The University of Melbourne, Australia)
Elham Hajhashemi (Faculty of Engineering and Information Technology, The University of Melbourne, Australia)

Gabriel J. M. Oliveira (Faculty of Engineering and Information Technology, The University of Melbourne, Australia)

Consumer preferences for electric vehicle charging management and response to time-of-use tariff discounts (abstract)

17:20 Patrick Jochem (German Aerospace Center (DLR), Germany)

Regina Rabl (University of Mannheim, Germany)

Melanie Reuter-Oppermann (University of Darmstadt, Germany)

Charging Infrastructure for Electric Vehicles in New Zealand (abstract)

July 18th, 16:00-17:50 Session F2-S7: Emissions from driving cycles [↑](#)

CHAIR: Naina Gupta (School of Planning and Architecture, Vijayawada, India)

LOCATION: 522C

16:00 Asad Yarahmadi (Polytechnique Montréal, Canada)

Catherine Morency (Polytechnique Montréal, Canada)

Martin Trepanier (Polytechnique Montréal, Canada)

Identifying Optimal Sets of Driving Cycles in Different Driving Conditions Using Machine Learning (abstract)

16:15 Yingjie Guo (tongji University, China)

Xiaohong Chen (tongji University, China)

Haobing Liu (tongji University, China)

Quantifying the temperature impact on energy consumption and its interaction with operating conditions of gasoline vehicles (abstract)

16:35 Adam Clarke (Trinity College Dublin, Ireland)

Srinath Mahesh (Trinity College Dublin, Ireland)

Bidisha Ghosh (Trinity College Dublin, Ireland)

Aonghus McNabola (Trinity College Dublin, Ireland)

Ben Fowler (Ricardo, UK)

Rebecca Rose (Ricardo, UK)

Identifying high-polluting vehicles using real-world emission measurements (abstract)

16:55 Chandrashekar C (Indian Institute of Technology Hyderabad, India)

Dr. Pritha Chatterjee (Indian Institute of Technology Hyderabad, India)

Dr. Digvijay S. Pawar (Indian Institute of Technology Hyderabad, India)

Developing Speed-based Emission Models for Passenger Cars in India using a Portable Emission Measurement System (abstract)

17:15 Samuel Ajayi (Department of Civil Engineering, Kwame Nkrumah University of Science and Technology, PMB, Kumasi, Ghana, Ghana)

Charles Adams (Department of Civil Engineering, Kwame Nkrumah University of Science and Technology, PMB, Kumasi, Ghana, Ghana)

Gift Dumedah (Department of Geography and Rural Development, Kwame Nkrumah University of Science and Technology Kumasi, Ghana, Ghana)

Atinuke Adebani (Department of Statistics and Actuarial Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, Ghana)

The Impact of Vehicle Engine Characteristics on Vehicle Exhaust Emissions for Road Transport Modes in Lagos City (abstract)

17:35 Naina Gupta (School of Planning and Architecture, India)
Sewa Ram (School of Planning and Architecture, Delhi, India)

Vehicular Pollution Modeling: Comparative Analysis of CALINE and ANN based pollution models (abstract)

July 18th, 16:00-17:50 Session F3-S1: Autonomous vehicle and future trends [↑](#)

CHAIR: Christa Sys (University of Antwerp, Belgium)

LOCATION: 514B

16:00 Camilla Domenighini (University of Antwerp, Belgium)
Wouter Verheyen (University of Antwerp, Belgium)
Christa Sys (University of Antwerp, Belgium)

Autonomous inland navigation in Belgium and the Netherlands: a contractual perspective (abstract)

16:20 Eric Neidhardt (German Aerospace Center, Institute of Transportation Systems, Germany)
Autonomous driving and demand-oriented public transport for Sustainable cities (abstract)

16:40 Miguel Mujica Mota (Amsterdam University of Applied Sciences, Netherlands)
Aseem Kinra (University of Bremen, Germany)
Bogusz Wiśnicki (maritime university of szczecin, Poland)
Idalia Flores (UNAM, Mexico)
Alejandro Di Bernardi (National University of la Plata, Argentina)
Validation Methodology for addressing multimodal networks of the future: a Simulation-based approach (abstract)

17:00 Sandra Paola Montes Soriano (Grupo Cal y Mayor, Mexico)
Evaluation of microsimulation models with a gender perspective (abstract)

July 18th, 16:00-17:50 Session F4-S1: Liveability and non-motorized transport – 1 [↑](#)

CHAIR: Marie-Soleil Cloutier (Institut national de la recherche scientifique, Canada)

LOCATION: 512B

16:00 Norihiro Miwa (Vienna University of Technology, Austria)
Takeru Shibayama (Vienna University of Technology, Austria)
Kayo Tajima (Rikkyo University, Japan)

Exploring government open data: understanding contributions of better walkability to real estate pricing (abstract)

16:20 Hasan Shahrier (Dalhousie University, Canada)
Muhammad Habib (Dalhousie University, Canada)

Econometric Modelling Approach to Explore the EV Adoption and Charging Opportunities at Workplace (abstract)

16:40 Sairam Dasari (School of Planning and Architecture, India)
Sanjay Gupta (School of Planning and Architecture, India)

Integrated Approach for Active Transport Infrastructure Planning in City Mobility Plans (abstract)

17:00 Philippe Brodeur-Ouimet (Institut national de la recherche scientifique, Canada)
Audrey-Anne Lamarche (Institut national de la recherche scientifique, Canada)
Pierre-Maxime Leduc (Institut national de la recherche scientifique, Canada)
Marie-Soleil Cloutier (Institut national de la recherche scientifique, Canada)

Cyclist-pedestrian cohabitation: Lessons to learn from a pilot project on pedestrian streets in Montréal (Canada) (abstract)

17:20 Martin Lanzendorf (Goethe-Universität Frankfurt, Germany)
Annabell Baumgartner (Goethe-Universität Frankfurt, Germany)
Nora Luise Klinner (Goethe-Universität Frankfurt, Germany)

Do citizens support the transformation of urban transport? Evidence for the acceptability of parking management, car lane conversion and road closures from a German case study (abstract)

July 18th, 16:00-17:50 Session G1-S1: Governance and decision-making – 1 [↑](#)

CHAIR: Greg Marsden (University of Leeds, UK)

LOCATION: 522B

16:00 Agnieszka Stefaniec (Trinity College Dublin, the University of Dublin, Ireland)
Robert Egan (Trinity College Dublin, the University of Dublin, Ireland)
Keyvan Hosseini (Trinity College Dublin, the University of Dublin, Ireland)
Brian Caulfield (Trinity College Dublin, the University of Dublin, Ireland)

Estimating the ability of Irish households to avail of policy incentives for electric vehicles (abstract)

16:20 Danijela Doric (Université Polytechnique Hauts-de-France, France)
Yan Cimon (Université Laval, Canada)
Igor Crevits (Université Polytechnique Hauts-de-France, France)
Said Hanafi (Université Polytechnique Hauts-de-France, France)
Raca Todosijevic (Université Polytechnique Hauts-de-France, France)

Inclusion persons with disabilities to a public transport system: An integrative decision-aiding approach (abstract)

16:40 Jonty Whale (Massey University, New Zealand)
Imran Muhammad (Massey University, New Zealand)
New Zealand Public Transport Agencies' Responses to COVID-19 (abstract)

17:00 Francisco J. Bahamonde-Birke (Tilburg University, Netherlands)
Dennis M. Ernst (Goudappel, Netherlands)
Am I really willing to use my electric vehicle sustainably? A study on the charging preferences of electric vehicles users. (abstract)

July 18th, 16:00-17:50 Session G2-S1: Method and Behavior Analysis [↑](#)

CHAIR: Jan Ihrig (Karlsruhe Institute of Technology (KIT), Germany)

LOCATION: 514C

- 16:00 Toshihiro Sekihara (Pacific Consultants Co., Ltd, Japan)
 Yuji Kakimoto (Oriental Consultants Co., Ltd, Japan)
 Hideki Nakamura (Graduate School of Environmental Studies, Nagoya University, Japan)
 Miho Iryo (Graduate School of Environmental Studies, Nagoya University, Japan)
 Xin Zhang (Graduate School of Environmental Studies, Nagoya University, Japan)
A Method for Evaluating the Functional Hierarchy of Road Networks (abstract)
- 16:20 Jan Ihrig (Karlsruhe Institute of Technology (KIT), Germany)
 Patrick Jochem (German Aerospace Center (DLR), Germany)
How to apply the four-step model for 150,000 travel zones: The HIPAT model (abstract)
- 16:40 Sunkyoung Choi (Tokyo Institute of Technology, Japan)
 Rajali Maharjan (Japan Transport and Tourism Research Institute, Japan)
 Tran Thi Nhat Hong (Tokyo Institute of Technology, Japan)
 Shinya Hanaoka (Tokyo Institute of Technology, Japan)
Agent-Based Tsunami Evacuation Model to Investigate the Impact of Information Provision and Shelter Capacity Expansion in Japan (abstract)
- 17:00 Hironobu Adachi (Japan Transport and Tourism Research Institute, Japan)
 Hironori Kato (The University of Tokyo, Japan)
COVID-19 and Interurban Business Trips: Evidence from Nationwide Survey in Japan (abstract)
- 17:40 Tiziano Pavanini (University of Genoa, Italy)
 Alessio Tei (University of Genoa, Italy)
Digitalization and planning of NEXTGEN public transport: The case of Italy (abstract)

July 18th, 16:00-17:50 Session G3-S14_SS: SPECIAL SESSION: How “integration” in MaaS will contribute to urban policies? [↑](#)

CHAIR: Yurie Toyama (Yokohama National University, Japan)

LOCATION: 515A

Many cities have recently adopted or are trying to implement Mobility as a Service (MaaS), which combines different modes of transportation or related assets into a single service. As several discussions have highlighted, the key to move MaaS forward is “integration”. However, a crucial question has yet to be clear: how can MaaS be integrated into and contribute to urban policies? From urban planner's perspective, it is essential to position MaaS to contribute to urban societal goals. This session explores how the integration aspect of MaaS can promote urban policies and, as a result, societal goals. The term "policy" encompasses various viewpoints, including the transport system, urban planning, carbon-free, and social inclusion.

- Gen Hayauchi, Designated Assistant Professor, Nagoya University, as a academic researcher of urban transportation planning
- TBD (From Sweden) , as a academic researcher of the relationship between policy makers and transport operators
- TBD (From UK), as a academic researcher of KPI and framework for inclusive society
- Caleb Winter or his colleague, Portland METRO, as a policy maker to share its expectation for MaaS

July 18th, 16:00-17:50 Session G3-S2: Cycling [↑](#)

CHAIR: Stephen Ison (De Montfort University, UK)

LOCATION: 519B

- 16:00 Andreas Blitz (Goethe University Frankfurt, Department of Human Geography, Germany)
Aldo Arranz Lopez (Luxembourg Institute of Socio-Economic Research (LISER), Luxembourg)
Martin Lanzendorf (Goethe University Frankfurt, Department of Human Geography, Germany)
Simon Werschmöller (Goethe University Frankfurt, Department of Human Geography, Germany)

Grassroots movements as drivers for institutionalising cycling-related policies. The case of the “Radentscheid” initiative in Germany (abstract)

- 16:20 Arianne Robillard (Polytechnique Montreal, Canada)
Genevieve Boisjoly (Polytechnique Montreal, Canada)
Dea van Lierop (Utrecht University, Netherlands)

Transit-oriented development and bikeability: Classifying public transport station areas in Montreal, Canada (abstract)

- 16:40 Maria Attard (University of Malta, Malta)
Angela Stefania Bergantino (University of Bari Aldo Moro, Italy)
Mario Intini (University of Bari Aldo Moro, Italy)

Effects of local urban characteristics and driving behaviour on injuries among pedestrians and cyclists in Malta (abstract)

- 17:00 Lea Simon de Kergunic (McGill, Canada)
Luis Miranda Moreno (McGill, Canada)
Peter Furth (Northeastern University, United States)

Measuring Low Stress Bicycle Accessibility to Schools : a Montreal Case Study (abstract)

July 18th, 16:00-17:50 Session H1-S1: Transport Policy, Planning and Financing in Developing Countries 1



CHAIR: Muhammad Habib (Dalhousie University, Canada)

LOCATION: 518B

- 16:00 Niaz Mahmud (Dalhousie University, Canada)
K. B. M. Ibrahim (Islamic University of Technology, Bangladesh)
Sabrina Rashid Sheonty (University of Alberta, Canada)
Md Asif Hasan Anik (Dalhousie University, Canada)
Muhammad Ahsanul Habib (Dalhousie University, Canada)

Examining Travel Mode Preference for the COVID-19 Post-Vaccination Period: Insights from Dhaka, Bangladesh (abstract)

- 16:15 Luis Márquez (Universidad Pedagógica y Tecnológica de Colombia, Colombia)
Gema del Pilar García (Universidad de Granada, Spain)
Victor Cantillo (Universidad del Norte, Colombia)

Use and the intention to use BRT services before, during, and after the COVID-19 pandemic. The Colombian case. (abstract)

16:35 Paulose N. Kuriakose (School of Planning and Architecture, Bhopal, India)
Developing Metro Rail-Based Accessibility in India: Existing Challenges and Prospects (abstract)

16:55 Jiaorong Wu (Tongji University, China)
 Yongqi Deng (Tongji University, China)
 Jihao Deng (Tongji University, China)
 Meiting Tu (Tongji University, China)
 Yuqin Wang (Tongji University, China)
Exploring Influencing Factors on Railway Passenger Flow based on Flow Space Theory: A Case Study on Yangtze River Delta Megalopolis, China (abstract)

17:15 Luis A. Guzman (Universidad de los Andes, Colombia)
 Victor Cantillo-Garcia (Universidad de los Andes, Colombia)
 Oviedo Daniel (University College London, UK)
 Julian Arellaja (Universidad del Norte, Colombia)
How much is accessibility worth? Utility-based accessibility to evaluate transport policies in Latin America (abstract)

17:35 Olawale Hammed (Lagos State University, Nigeria)
 Rasak Oluwashekemi (Lagos State University, Nigeria)
 Mustaphar Balogun (Lagos State University, Nigeria)
 Raheem Olasupo Akewushola (Lagos State University, Nigeria)
Assesment of stakeholders' management on freight transport sustainability in a developing economy (abstract)

July 18th, 16:00-17:50 Session H2-S1: Infrastructure Operation and Traffic Management in Developing Countries – 1 [↑](#)

CHAIR: Ashish Verma (IISc, India)

LOCATION: 515B

16:00 Aditya Pitale (Indian Institute of Technology Roorkee, India)
 Shubhajit Sadhukhan (Indian Institute of Technology Roorkee, India)
 Manoranjan Parida (Indian Institute of Technology Roorkee, India)
Examining the Satisfaction of Existing Transit Systems: A Perspective for Regional Transit Systems (abstract)

16:15 Thobias Sando (University of North Florida, United States)
 Jubily Musagasa (Dar es Salaam Institute of Technology, Tanzania)
 Henrick Haule (University of Arizona, United States)
Crowd-Source Data for Real-Time Traffic Monitoring in Sub-Saharan Countries: Case Study of Dar es Salaam, Tanzania (abstract)

16:35 Ilia Papakonstantinou (NYUAD, UAE)
 Alain Tcheukam (NYUAD, UAE)
 Aaron Chow (NYUAD, UAE)
 Jiayun Sun (New York University Abu Dhabi, UAE)
 Samer Madanat (New York University Abu Dhabi, UAE)

Coastal Protection Strategies to Minimize Transportation Network Disruption from Sea Level Rise (abstract)

16:55 Nurul Hasan (NIT ROURKELA, India)
Manisha Biswal (NIT ROURKELA, India)
Prasanta Kumar Bhuyan (NIT ROURKELA, India)

Modelling Service Quality of Motorized Two-Wheelers at Signalized Intersections under Heterogeneous Traffic Flow Condition (abstract)

17:15 Subhada Nayak (NIT ROURKELA, India)
Mahabir Panda (NIT ROURKELA, India)
Prasanta Kumar Bhuyan (NIT ROURKELA, India)

Development of 3W-LOS Prediction Model for Urban Roadways using Adaptive Neuro Fuzzy Interface System (abstract)

17:35 Salini P N (College of Engineering Trivandrum, APJAKTU, India)
Sreelakshmi P V (College of Engineering Trivandrum, APJAKTU, India)
Ashalatha R (College of Engineering Trivandrum, APJAKTU, India)
Binu Sara Mathew (College of Engineering Trivandrum, APJAKTU, India)

MODELLING LATERAL PLACEMENT AND LATERAL CLEARANCE DURING PASSING MANOEUVRES (abstract)

July 18th, 16:00-17:50 Session H5-S1: Transit accessibility & connectivity [↑](#)

CHAIR: Dimantha De Silva (University of Moratuwa, Sri Lanka)

LOCATION: 524A

16:00 Mohit Kumar (National Rail and Transportation Institute, Vadodara, Gujarat, India)
Nikhil Singh (National Rail and Transportation Institute, Vadodara, Gujarat, India)
Hari Krishna Gaddam (National Rail and Transportation Institute, Vadodara, Gujarat, India)
Pradeep Kankeri (National Rail and Transportation Institute, Vadodara, Gujarat, India)

Universal Accessibility Index: A Pedestrian Centered Accessibility to Inclusive Transport System (abstract)

16:15 Niyatha Balan (IIT KHARAGPUR, India)
Debapratim Pandit (IIT KHARAGPUR, India)

Determination of bicycle service area around metro stations for dedicated bicycling infrastructure provision in congested urban areas (abstract)

16:35 Varameth Vichiensan (Kasetsart University, Thailand)
Thitapa Ponkhonburi (Kasetsart University, Thailand)
Masanobu Kii (Kagawa University, Japan)
Yoshitsugu Hayashi (Chubu University, Japan)

Association of the TOD Measures around Rail Transit Stations in Bangkok Metropolitan (abstract)

16:55 Abdur Raof Khan (Malaviya National Institute of Technology Jaipur, India)
Nand Kumar (Malaviya National Institute of Technology Jaipur, India)
Tarush Chandra (Malaviya National Institute of Technology Jaipur, India)

Performance of Public Transit Modes for Last Mile Connectivity near the Mass Rapid Transit System- a Case Study of Gurugram city (abstract)

17:15 Rohit Rathod (Sardar Vallabhbhai National Institute of Technology, India)
Gaurang Joshi (Sardar Vallabhbhai National Institute of Technology, India)
Shriniwas Arkatkar (Sardar Vallabhbhai National Institute of Technology, India)

Evaluation of Transit Accessibility for an Indian Metropolitan City: Case Study of Surat (abstract)

17:35 Akshay Gupta (Indian Institute of Technology Roorkee, India, India)
Bivina G.R. (Maulana Azad National Institute of Technology (MANIT), Bhopal, India, India)
Vivek Chauhan (Indian Institute of Technology Roorkee, India, India)
Manoranjan Parida (Central Road Research Institute (CRR)-CSIR, New Delhi, India)

How Metros' Catchment Area Affect Commuters Choice To Walk Or Use Feeder Modes? (abstract)

July 18th, 16:00-17:50 Session I1-S1: Sustainable Developments in Pavement Material and Performance [↑](#)

CHAIR: Zhen Luo (Beijing University of Technology, China)

LOCATION: 522A

16:00 Zhonghua Wei (Beijing University of Technology, China)
Zongze Li (Beijing University of Technology, China)
Jingxuan Peng (Beijing University of Technology, China)
Penghao Xu (Beijing University of Technology, China)
Wei Zhou (Beijing University of Technology, China)
Zhen Luo (Beijing University of Technology, China)
Houqiang Ma (Beijing University of Technology, China)
Yunxuan Li (Beijing University of Technology, China)

Two-factor ANOVA Method for the Determination of Sb in Glass Beads used for Pavement Marking via HG-HRCS-AAS (abstract)

16:40 Rohan Kumar (Thapar Institute of Engineering and Technology, India)
Tanuj Chopra (Thapar Institute of Engineering and Technology, India)
Rajesh Pathak (Thapar Institute of Engineering and Technology, India)

Laboratory Investigation of Cement Treated Bases (CTB) and Full-depth Reclamation (FDR) mixes. (abstract)

17:00 Michelle Grace Atipo Ngala (China Road And Bridge Corporation, Congo)
Xi Li Yan (Chang'an University, China)

Effect of Different Types of Asphalt Mixtures To the Mixing Flow Characteristics (abstract)

17:20 Surya Narayanan Sakhivel (Indian Institute of Technology Jammu, India)
Ankit Kathuria (Indian Institute of Technology Jammu, India)
Bhupendra Singh (Indian Institute of Technology Jodhpur, India)

Evaluation of Moisture Induced Damage of Hot Mix Asphalt Using Chemically Treated Inferior Quality Aggregates (abstract)

July 18th, 16:00-17:50 Session L-S2_SS: SPECIAL SESSION: The role of logistics industrial clusters in transport [↑](#)

CHAIR: Martin Trépanier (École Polytechnique, Canada)

LOCATION: 512C

With the increasing complexity of logistics in City, it becomes more and more difficult to coordinate the efforts of all players to have a more sustainable and efficient way to operate. Through the World, we now see the creation of industrial clusters that are aimed to regroup these players, namely: port authorities, airport, railway companies, logistic providers, port terminal operators, ground carriers, shippers, government officials, city officials, university researchers, etc. In this session, the discussion aims to inform the audience about the existence of industrial clusters, how they are created and managed, what is their role and which benefits they bring to the communities.

- **Welcome speech** – Martin Trépanier, CIRRELT
- **Logistics in Wallonia, the Innovation Cluster dedicated to the Transport, Logistics and Mobility sector in Wallonia** – Bernard Piette, head of Logistics in Wallonia
- **CargoM – The Montreal Metropolitan Logistics and Transportation Cluster** – Mathieu Charbonneau, head of CargoM
- Discussion, Q & A

Wednesday, July 19th

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SCHEDULE OVERVIEW

8:30-10:20	10:20-10:50	10:50-12:30	12:30-13:50	13:50-15:30	15:30-16:00	16:00-17:50	18:00-19:00
Plenary II (517AB)	Coffee break (516)	Sessions (see schedule)	Lunch (517CD)	General Assembly (517AB)	Coffee break (516)	Sessions (see schedule) Poster sessions (516)	WCTRS-STC meeting (521)

[Monday \(July 17th\)](#) * [Tuesday \(July 18th\)](#) * [Wednesday \(July 19th\)](#) * [Thursday \(July 20th\)](#) * [Friday \(July 21st\)](#)

DETAILED SCHEDULE

July 19th, 07:30-17:30 - Session REG3: Registration (Location: facing 517) ↑

July 19th, 08:30-10:20 Session PLEN II: Plenary session II: Showcasing WCTRS Distinguished Scholars ↑

CHAIR: Lori Tavasszy (Delft University of Technology, Netherlands)

LOCATION: 517AB

08:30 Tae Hoon Oum (The University of British Columbia, Canada)

Introductory remarks

08:35 Chandra Bhat (Joe J. King Endowed Chair Professor in Engineering, University of Texas Austin, United States)

What is Causality in Modeling? And What Data Do We Need to Extricate Causal Insights?

09:00 Haijun Huang (Vice President of Beihang University and Director of Key Laboratory of Complex System Analysis and Management Decision, China)

Behavior-Based Traffic Network Reliability Research Framework

09:25 Dan Sperling (Blue Planet Prize Professor of Engineering and Environmental Science and Policy, University of California at Davis, United States)

Science and Policy of Decarbonizing Transportation, As Seen by a Professor, Policy Wonk and ex-Regulator

09:50 Anming Zhang (Professor, Operations and Logistics Division, University of British Columbia, Canada)

Evolution of Aviation Network: Global Airport Connectivity Index since 2006, Impact of COVID-19 and future research



July 19th, 10:20-10:50 Coffee break (Location: 516) ↑

July 19th, 10:50-12:30 Session 02_SS: SPECIAL SESSION: WCTRS Global Subway Efficiency Benchmarking Task Force Awards ↑

CHAIR: Tae Hoon Oum (The University of British Columbia, Canada)

LOCATION: 515C

- **Purpose of the Task Force** (Promotion of Efficiency in our City's Transit System) Tae Hoon Oum, University of British Columbia, Canada
- **Methodology, Approaches, Scope:** Kun Wang, Hong Kong Polytechnic University & Chunyan Yu, Embry Riddle Aeronautical University, Daytona Beach, FL, USA
- **Country and Continental Team leaders:**
 - Europe: Prof. Pierluigi Coppola, Milan Polytechnic Univ, Italy
 - China: Prof. Xiao Luo, Tongji University, Shanghai, China
 - Japan: Assoc. Prof. Yiping Le, Shibaura Institute of Technology, Tokyo, Japan
 - S. Korea: Dr. Kyungtaek Kim, Korea Transport Institute, Seoul, Korea & Mr. Woojin Kim, Korea Transport Institute, Seoul, Korea
 - India: Prof. Gopal Patil, Indian Institute of Technology – Bombay, Mumbai, India
 - USA: Prof. Giovanni Circella, University of California-Davis and Gent Univ, Italy
 - Canada (and TF Secretariat): Clark Lim, Adjunct Professor, UBC Civil Engineering
- **Excellence Award Presentations:**
 - Europe - Madrid, the most efficient subway in Europe; presented by Prof. Ennio Casetta, Naples University, Italy
 - China – Shenzhen, the most efficient subway in China; presented by Prof. Meng Li, Tsinghua University, China
 - Japan – Kobe, the most efficient subway in Japan; presented by Prof. Hironori Kato, Tokyo University, Japan
 - S. Korea – Gwangju, the most efficient subway in Korea; presented by Prof. Kari Watkins, UC-Davis, USA
 - India – Hyderabad, the most efficient subway in India; presented by Prof. Dan Sperling, UC-Davis, USA
 - US/Canada – New York & Toronto, the most efficient subway systems in North America, Prof. Tae Oum, University of British Columbia, Canada
- **Most Improved Productivity Award Presentations:**
 - Europe - Lisbon, the most improved subway system in Europe; presented by Prof. Pierluigi Coppola, Milan Polytechnic Univ, Italy
 - China – Changsha, the most improved subway system in China; presented by Prof. Xiao Luo, Tongji University, China
 - Japan – Osaka, the most improved subway system in Japan; presented by Assoc. Prof. Yiping Le, Shibaura Institute of Technology, Tokyo, Japan
 - S. Korea – Daejeon, the most improved subway system in Korea; presented by Dr. Kyungtaek Kim, Korea Transport Institute, Seoul, Korea
 - US/Canada – Miami-Dade, the most improved subway system in North America, Prof. Giovanni Circella, University of California-Davis and Gent Univ, Italy
- **Panel Discussion** - Participants – moderated by Tae Oum

- All award winning city/metro representatives just received the excellence award listed above
- TF Advisory Committee members: Professors Dan Sperling, Ennio Casetta, Hirono Kato, Meng Li, Kari Watkins

July 19th, 10:50-12:30 Session A1-S2: Airport capacity, Flight Delays and Efficiency [↑](#)

CHAIR: Matthias Braun (German Aerospace Center (DLR), Germany)

LOCATION: 520D

10:50 Aitichya Chandra (Indian Institute of Science Bangalore, India)
Ashish Verma (Indian Institute of Science Bangalore, India)
K. P. Sooraj (Airport Authority of India, India)
Radhakant Padhi (Indian Institute of Science Bangalore, India)

To Delay or Not to Delay? An Analytical Relationship Between Departure Delay, En-route Conflict Probability, and Number of Conflicts (abstract)

11:05 Kailin Chen (Imperial College London, UK)
Daniel Graham (Imperial College London, UK)
Anupriya Anupriya (Imperial College London, UK)
Richard Anderson (Imperial College London, UK)
Prateek Bansal (National University of Singapore, UK)
Fangni Zhang (The University of Hong Kong, Hong Kong)

Estimating runway capacity via stochastic frontier analysis (abstract)

11:20 Janina Scheelhaase (German Aerospace Center (DLR), Germany)
Matthias Braun (German Aerospace Center (DLR), Germany)
Sven Maertens (German Aerospace Center (DLR), Germany)
Wolfgang Grimme (German Aerospace Center (DLR), Germany)

Delays and other irregularities at European airports in summer 2022 – causes, economic effects and options for improvement (abstract)

11:35 Sven Buyle (University of Antwerp, Belgium)

To unbundle or not to unbundle: Are European national Air Navigation Service Providers benefitting from scope economies? (abstract)

11:55 João Pedro Martins (CITTA/FEUP, Portugal)
Álvaro Costa (CITTA/FEUP, Portugal)

Airports and Spatial Planning: the Amsterdam Schiphol Airport case (abstract)

12:15 Aleksandra Colovic (Polytechnic University of Bari, Italy)
Mario Binetti (Polytechnic University of Bari, Italy)
Michele Ottomanelli (Polytechnic University of Bari, Italy)

Cluster segmentation of passengers' airport access mode behavior in European countries (abstract)

July 19th, 10:50-12:30 Session A2-S12_SS: SPECIAL SESSION: Key issues on maritime, port and hinterland digitalization [↑](#)

CHAIR: Thierry Vanellander (Department of Transport and Regional Economics (TPR), Antwerp, Belgium)

LOCATION: 524B

The point of view is taken of the enhancement of the vertical integration along the supply chains and of the horizontal integration among the port stakeholders. Key is the role of emerging ICT inside the Port Community Systems (PCS) for the solution of shared decisions among the port stakeholders. The levels of machine digitalisation and the evolution process from Product Manufacturer to System Integrator are important. The elements of virtual integration of the “vertical” chains for real-time visibility-tracking and the possibility to relate with “horizontal” chains will be essential. The necessity should be stressed to put at the center of analysis the human behaviour and the importance of having standards, in order to consider the technology as an instrument and not an end.

- **Introduction** (Thierry Vanelslander)
- **Smart Logistics solutions for increasing network resilience: the value of acceptance** (Alessio Tei)
- **Synchromodality as a Prospective Digitalization Scheme for Freight Logistics** (Satya Sahoo, Gang Chen, Dong-Wook Song)
- **Digital decision-making support for optimal railway node capacity: The case study of the Port of Trieste** (Caterina Caramuta)
- **When Smart Becomes Green: The Strategic Role of Digitalisation in Accelerating the Energy Transition in Maritime Transport** (Michele Acciaro)
- **Technological innovation and ports: opportunities and limitations from AI based services** (Alessio Tei, Marta Santagata and Claudio Ferrari)
- **Panel discussion on digitalisation**, involving government and sector representatives and academics, moderated by Francesco Russo.

July 19th, 10:50-12:30 Session A3-S2: Rail operations [↑](#)

CHAIR: Carl-William Palmqvist (Lund University, Sweden)

LOCATION: 512H

10:50 Sidhartha I Kumar (Indian Institute of Technology Bombay, India)
 Karim Shahbaz (Indian Institute of Technology Bombay, India)
 Mitul Tyagi (Indian Institute of Technology Bombay, India)
 Satwik V. Ramisetty (Indian Institute of Technology Bombay, India)
 Sudarshan Pulapadi (Indian Institute of Technology Bombay, India)
 Samay Pritam Singh (Indian Institute of Technology Bombay, India)
 Madhu N. Belur (Indian Institute of Technology Bombay, India)
 Narayan Rangaraj (Indian Institute of Technology Bombay, India)
 Merajus Salekin (Centre for Railway Information Systems, New Delhi, India)
 Raja Gopalakrishnan (Centre for Railway Information Systems, New Delhi, India)

Network-wide mixed-rail traffic scheduler: challenges and implementation aspects (abstract)

11:10 Shin Ying Ng (Centre of Transport Studies, University College London, UK)
 Yan Cheng (State Key Laboratory of Road and Traffic Engineering, Tongji University, China)
 Taku Fujiyama (Centre of Transport Studies, University College London, UK)
Investigating freight train path inefficiency in view of reduction of pollutant emissions (abstract)

11:30 Wang Entai (State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, Beijing 100044, China, China)
 Yang Lixing (State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, Beijing 100044, China, China)
 Yin Jiateng (State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, Beijing 100044, China, China)
 Zhang Jinlei (State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, Beijing 100044, China, China)
 Gao Ziyu (State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, Beijing 100044, China, China)

Passenger-oriented Rolling Stock Scheduling in the Metro System with Multiple Depots: Network Flow Based Approaches (abstract)

11:50 Karim Shahbaz (Indian Institute of Technology Bombay, India)
 Mohit Agarwala (Indian Institute of Technology Bombay, India)
 Madhu N. Belur (Indian Institute of Technology Bombay, India)
 Samay Pritam Singh (Indian Institute of Technology Bombay, India)
 Satwik V. Ramisetty (Indian Institute of Technology Bombay, India)
 Sayali R. Duragkar (Indian Institute of Technology Bombay, India)
 Narayan Rangaraj (Indian Institute of Technology Bombay, India)
 Merajus Salekin (Centre for Railway Information Systems, New Delhi, India)
 Raja Gopalakrishnan (Centre for Railway Information Systems, New Delhi, India)

Clustering techniques to optimize railway daily path utilization for non-daily trains (abstract)

12:10 Melody Khadem Sameni (Iran University of Science and Technology, Iran)
 Mohammad Reza Kashi Mansouri (University of Manitoba, Canada)
 Maryam Mohammadi Langerodi (Iran University of Science and Technology, Iran)

Comparing Relative Safety of Railway Transport Level Crossings by Data Envelopment Analysis (abstract)

July 19th, 10:50-12:30 Session A4-S1_SS: SPECIAL SESSION: Frontiers and Innovation for implementation of High-Speed Railways [↑](#)

CHAIR:

Ke Seetharam (Asian Development Bank Institute, Tokyo, Japan)

LOCATION: Hotel Monville, Room Monville 1-2 on Floor 20

A4-S1-Special Session (July 19 (Wed) 10:50-12:30) will be held at Hotel Monville at Room Monville 1-2 on Floor 20", which is located within 4 mins walk from the Palais.

The proposed session covers policy experiences and lessons from implementing High Speed Rail worldwide. The first part will be case study presentations on Network Extension and Urban Development & their Integrated Impacts of HSR. The second part will be a high-level panel discussion on the policy and development experiences.

- **Opening Remarks** Masafumi Shukuri, Chairman, JTTRI
- **Effects and critical issues of KTX** Jaehek Oh (President of KOTI: Korean Transport Institute)

- **Policies and Capacity Development Programs for constructing and operating HSR in India** Rajendra Prasad, NHSRCL (TBC)
- **Chuo Shinkansen Project - Japan's 500km/h Superconducting Maglev Line - Its technology, construction and socioeconomic effects** Tomoaki Seki (General Manager, Linear Shinkansen Project, Japan Rail Central)
- **A new method to evaluate HSR by individual's QOL and economic growth of industry and their mutual enhancement** Yoshitsugu Hayashi (Ex-President of WCTRS, Distinguished Prof., Chubu University)
- **Panel Discussion and Q&A** Tae Hoon Oum (President of WCTRS, Prof., University of British Columbia) Francesca Pagliara (Prof., University of Naples) Haixiao PAN (Prof., Tongji University) Krishna Rao (Deputy Director, Indian Institute of Technology, Bombay)
- **Closing remarks** KE Seetharam, Asian Development Bank Institute, Tokyo

July 19th, 10:50-12:30 Session A5-S2: Road traffic safety [↑](#)

CHAIR: Dr. Moluguram Kumar (Osmania University, India)

LOCATION: 513A

10:50 Adekunle Mofolasayo (University of Alberta (Student). Carnelian Ruby Inc (Owner), Canada)

Towards 'Vision-Zero' in Road Traffic Fatalities: The Need for Reasonable Degrees of Automation to Complement Human Efforts in Driving Operation (abstract)

11:10 Jaydip Goyani (Sardar Vallabhbhai National Institute of Technology, Surat, India)
Shriniwas Arkatkar (Sardar Vallabhbhai National Institute of Technology, Surat, India)
Gaurang Joshi (Sardar Vallabhbhai National Institute of Technology, Surat, India)
Said Easa (Toronto Metropolitan University, Toronto, Canada, Canada)

Improved Design Consistency Criteria based on Crash Severity for Varying Roadway Conditions (abstract)

11:30 Pubudu Damsara (University of Calgary, Canada)
Alexandre de Barros (University of Calgary, Canada)

A Systematic Review on User Acceptance of Advanced Driver Assistance Systems (ADAS) (abstract)

11:50 Sara Zein (McGill University, Canada)
Alejandro Perez Villasenor (McGill University, Canada)
Natalia Tinjaca Mora (McGill University, Canada)
Luis Miranda-Moreno (McGill University, Canada)
Lynn Scholl (Inter-American Development Bank, United States)
Manuel Rodriguez Porcel (Inter-American Development Bank, United States)

Examining motorcycle behavior & safety issues using video data in the Latin American context: A case study of Mexico City and São Paulo (abstract)

12:10 Harpreet Singh (IIT Jammu, India)
Ankit Kathuria (Indian Institute of Technology Jammu, India)

Cause of speeding and red-light violations among professional drivers: Extending the theory of Planned behavior for professional drivers. (abstract)

July 19th, 10:50-12:30 Session B1-S2 [↑](#)

CHAIR: Qu Qian (INFORMS, Singapore)

LOCATION: 512G

10:50 Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)

Oriana Calderon (Rensselaer Polytechnic Institute, United States)

Julia Amaral (Rensselaer Polytechnic Institute, United States)

Willingness to Limit “Panic Buying” Purchases during the COVID-19 Pandemic in the U.S. (abstract)

11:10 Mina Kazemi Miyangaskary (University of Tehran, Iran)

Samira Keivanpour (Polytechnique Montreal University, Canada)

Hossein Safari (University of Tehran, Iran)

A multi-objective optimization model of a closed-loop supply chain for supplier selection and order allocation under uncertainty: A case study of retail stores for protein products (abstract)

11:30 Qu Qian (INFORMS, Singapore)

Ming Hu (University of Toronto, Canada)

Alex Yang (London Business School, UK)

Financial pooling in a supply chain (abstract)

11:50 Chonchol Gupta (Antwerp Management School, Belgium)

Roel Gevaers (University of Antwerp, Belgium)

Literature Review on the interconnectedness of risk (abstract)

12:10 Ming-Hsiung Hsiao (Department of Information Management, Shu-Te University, Taiwan)

Resource integration and firm performance through organizational capabilities for digital transformation (abstract)

July 19th, 10:50-12:30 Session B1-S7_SS: SPECIAL SESSION: Travel behavior analysis and demand integration management of urban agglomeration [↑](#)

CHAIRS: Meng Xu (Beijing Jiaotong University, China) and Qiong Tian (Beihang University, China)

LOCATION: 519A

Findings will deepen the understanding and utilization of the complexity and emergence of travel behaviors in urban agglomerations, enrich and improve the theories and methodologies of travel behavior analysis and demand integration management of urban agglomerations, which have significant scientific value and broad application space in the realization of accurate prediction and smart management of urban agglomeration travel demand.

- **Modeling the effects of a new airport on a multi-airport system with air and high-speed rail integration service.** Wenjing Liu, PhD, Huazhong University of Science and Technology, China.
- **Optimal Charging Scheduling of an Electric Bus Fleet.** Chi Xie, Professor, Tongji University, China.
- **Effects of high-speed rail on intercity travels, utility and social welfare in urban agglomerations: A game-theoretic perspective.** Han Wang, Professor, Beihang University, China. (VIDEO AVAILABLE IN ROOM 516, poster session P_AB).
- **Travel demand integration management: A case study of Jing-jin-ji urban agglomeration.** Meng Xu, Professor, Beijing Jiaotong University, China.

- **Improving disruption management with passengers' air-HSR decision-making in urban agglomeration: A case study of Beijing.** Yuankai Zhang, Professor, Beihang University, China.

July 19th, 10:50-12:30 Session B3-S2: Information / ICT / Platforms - how do they enhance the performance of intermodal freight transport networks? [↑](#)

CHAIR: Gunnar Stefansson (Chalmers University of Technology, Sweden)

LOCATION: 518C

10:50 Elbert Ralf (Technical University of Darmstadt, Germany)
Felix Roeper (Technical University of Darmstadt, Germany)
Michael Rammensee (Center for Cognition and Computation, Goethe University Frankfurt am Main, Germany)

Decentralized coordination of platoons – A conceptual approach using deep reinforcement learning (abstract)

11:10 Maria Magdalena Piolenta Parhusip (Ministry Of Transportation, Indonesia)
Okto Risdianto Manullang (University of Diponegoro, Indonesia)
Herawati Basirpuly (Ministry of Transportation, Indonesia)
Irawati Adriani (Ministry of Transportation, Indonesia)
Marlia Herwening (Ministry of Transportation, Indonesia)
Suci Susanti (Ministry of Transportation, Indonesia)
Yuveline Aurora Claudia (Ministry of Transportation, Indonesia)
Anita Batubara (Ministry of Transportation, Indonesia)

Logistic Distribution: Supporting Connectivity and Regional Economy (abstract)

11:30 Ratnaji Vanga (TU Delft, Netherlands)
Nagasubramanian Thiyagarajan (TU Delft, Netherlands)
Sarah Gelper (TU Eindhoven, Netherlands)
Yousef Maknoon (TU Delft, Netherlands)
Mark B. Duinkerken (TU Delft, Netherlands)
Lorant A. Tavasszy (TU Delft, Netherlands)

A data-to-value framework for freight logistics: Insights from a living lab (abstract)

11:50 Mahnam Saeednia (HaCon, Germany)

A framework for integration of node and network operations in railway freight transportation (abstract)

12:10 Stefan Jacobsson (School of Business, Economics and Law at University of Gothenburg, Sweden, and Consenso Engineering, Sweden, Sweden)
Gunnar Stefansson (Chalmers University of Technology, Sweden, and University of Iceland, Iceland, Sweden)

A Bluetooth beacon system in a seaport terminal to evaluate effective access management (abstract)

July 19th, 10:50-12:30 Session B4-S2_SS: SPECIAL SESSION: The future for urban freight transport research: Opportunities and challenges. [↑](#)

CHAIR: Anne Goodchild (University of Washington, United States)

LOCATION: 521

Our intention is to build on the successful online WCTRS event held in July 2022 with a focus on further developing the urban freight transport research field. Urban freight transport research has grown dramatically in recent years (from a small base). There are many more conferences and journal papers and more researchers are now involved in this field. The session will identify the actions needed to support this growth and to extend it further. Actions could include both scaling up the research activities and identifying ways to involve researchers from countries and regions not currently widely represented in urban freight research. In addition, the transfer of research findings into practice will be explored.

Panellists (currently confirmed – two more panellists or discussants may be added):

- Prof. Laetitia Dablanc (University Gustave Eiffel, leader of the World Conference on Transport Research Society Young Researchers' Initiative WCTRS-Y)
- Dr. Per-Olof Arnäs (Director, Logistics Strategy Einride - formerly at Chalmers)
- Prof. Alison Conway (The City College of New York - CUNY) Prof. Gopal Patil (IIT Bombay)
- Prof. Johan Woxenius (University of Gothenburg)

July 19th, 10:50-12:30 Session B5-S2: Freight trip generation [↑](#)

CHAIR: Matthew Roorda (University of Toronto, Canada)

LOCATION: 520F

10:50 Farah Ghizzawi (University of Toronto, Canada)

Alia Galal (University of Toronto, Canada)

Matthew J. Roorda (University of Toronto, Canada)

Modelling parking behaviour of commercial vehicles: A scoping review (abstract)

11:10 Abel Kebede Reda (Swedish University of Agricultural Sciences, Sweden)

Lori Tavasszy (Delft University of Technology, Netherlands)

Girma Gebresenbet (Swedish University of Agricultural Sciences, Sweden)

David Ljungberg (Swedish University of Agricultural Sciences, Sweden)

Modelling the effect of spatial determinants on freight (trip) generation: A spatially autoregressive geographically weighted regression approach (abstract)

11:30 Adrián Esteban Ortiz-Valera (Instituto de Ingeniería - Universidad Nacional Autónoma de México (UNAM), Mexico)

Angélica Lozano (Universidad Nacional Autónoma de México, Mexico)

Initial approach for knowing the impact of informal trade on freight trips attraction estimates (abstract)

11:50 Luis Márquez (Universidad Pedagógica y Tecnológica de Colombia, Colombia)

Victor Cantillo (Universidad del Norte, Colombia)

Accessibility measures and freight generation of agricultural products (abstract)

12:10 Ajay Gangwal (Sardar Vallabhbhai National Institute of Technology, India)

Guarang Joshi (Sardar Vallabhbhai National Institute of Technology, India)

Developing Urban Freight Transport Demand Models Using EBFS For FMCG Sector in Surat City (abstract)

July 19th, 10:50-12:30 Session C2-S2: Public Transportation Operations and Evaluation [↑](#)

CHAIR: Bhargab Maitra (IIT Kharagpur, India)

LOCATION: 513B

10:50 Shervin Ataeian (University of Calgary, Canada)

Reza Mahmoudi (University of Calgary, Canada)

Saeid Saidi (University of Calgary, Canada)

Bus transit service operations planning: modular vs conventional fleet (abstract)

11:05 Laura Kolcheva (CIRRELT, Canada)

Antoine Legrain (CIRRELT, Canada)

Martin Trépanier (CIRRELT, Canada)

Data Driven Synchronization Strategies of a Bus Line in a Transit Network (abstract)

11:20 Kai-Chieh Hu (Soochow University, Taiwan)

Vera Salima (Soochow University, Taiwan)

Mingying Lu (Soochow University, Taiwan)

Combine Kano's model, IPA, and FMEA to Evaluate Service Quality Risk of Bus Service: Case of Bangkok Bus Service (abstract)

11:35 Kaveh Rezvani Dehaghani (Polytechnique Montreal, Canada)

Catherine Morency (Polytechnique Montreal, Canada)

A New Failure Strategy to Enhance the Vulnerability Assessment of Urban Metro Networks (abstract)

11:55 Suman Ganguly (IIT Kharagpur, India)

Bhargab Maitra (IIT Kharagpur, India)

Analysis of Spatio-Temporal Variations for Identifying Vulnerable Locations Contributing to Higher Journey Time and its Variability along a Bus Route (abstract)

12:15 Farah Awad (Imperial College London, UK)

Daniel Graham (Imperial College London, UK)

Ramandeep Singh (Imperial College London, UK)

Laila Aitbihiouali (University of Southampton, UK)

Predicting Urban Rail Transit Safety via Artificial Neural Networks (abstract)

July 19th, 10:50-12:30 Session C3-S2: Emerging technologies: Connected and autonomous vehicles-2 [↑](#)

CHAIR: Zong Tian (University of Nevada, Reno, United States)

LOCATION: 513C

10:50 Joshua Stipanovic (HEC Montreal, Canada)

Nicolas Saunier (Polytechnique Montreal, Canada)

Neda Navidi (Polytechnique Montreal, Canada)

Etienne B. Racine (Intact Insurance, Canada)

Luis Miranda-Moreno (McGill University, Canada)

Evaluating Map Matching Algorithms for Smartphone GNSS Data: Matching Vehicle Trajectories to an Urban Road Network (abstract)

11:10 Kinjal Bhattacharyya (Université Gustave Eiffel, France)
Pierre-Antoine Laharotte (Université Gustave Eiffel, France)
Nour-Eddin El Faouzi (Université Gustave Eiffel, France)

Impact of RoadSide Unit Network Coverage and Connected Vehicles Penetration Rate on Traffic Efficiency: Case study on a Variable Speed Limit Strategy (abstract)

11:30 Linhan Bai (Southwest Jiaotong University, China)
Fangfang Zheng (Southwest Jiaotong University, China)
Kangning Hou (Southwest Jiaotong University, China)
Xiaobo Liu (Southwest Jiaotong University, China)
Zhichen Fan (Southwest Jiaotong University, China)

Longitudinal control of automated vehicles: A hybrid approach by combining deep reinforcement learning and intelligent driver model (abstract)

11:50 Akshay Gupta (Indian Institute of Technology Roorkee, India, India)
Shreyansh Jain (Indian Institute of Technology Roorkee, India, India)
Pushpa Choudhary (Indian Institute of Technology Roorkee, India, India)
Manoranjan Parida (Central Road Research Institute (CRR)-CSIR, New Delhi, India)

Pipeline development to detect, classify and track surrounding vehicles using a single sparse LiDAR in dynamic condition (abstract)

July 19th, 10:50-12:30 Session C4-S11: Road Safety Policy and Education [↑](#)

CHAIR: Babak Mehran (University of Manitoba, Canada)

LOCATION: 520C

10:50 Wondwesen Girma Mamo (Qatar University and Hasselt University, Qatar)
Wael Alhajyaseen (Qatar University, Qatar)
Hélène Dirix (Hasselt University, Belgium)
Kris Brijs (Hasselt University, Belgium)
Tom Brijs (Hasselt University, Belgium)
Abdrabo Solima (Qatar University, Qatar)
Robert Makondo (Mowasalat's Karwa Driving School, Qatar)
Hani Sayed (Shafallah Center for Persons with Disabilities, Qatar)
Mohamed Tahir (Hamad Medical Corporation, Qatar)
Majid Alabdulla (Hamad Medical Corporation, Qatar)
Cox Daniel (University of Virginia, United States)
Veerle Ross (Hasselt University, Belgium)

Enhancing the learning-to-drive process for autistic learners in Qatar (abstract)

11:10 Navoda Rillagodage (University of Manitoba, Canada)
Christine Wickens (Institute for Mental Health Policy Research, Centre for Addiction and Mental Health, Canada)
Brian Jonah (Road Safety Canada Consulting, Canada)
Babak Mehran (University of Manitoba, Canada)
Brenda Suggett (Canadian Association of Road Safety Professionals, Canada)

Determinants of traffic safety enforcement behaviour among police officers: A narrative review (abstract)

11:30 Martyna Fidler (University of Natural Resources and Life Sciences, Austria)
Robin Palmberg (Integrated Transport Research Lab, KTH Royal Institute of Technology, Sweden)

Yusak Susilo (University of Natural Resources and Life Sciences, Austria)

An Exploration of the Applicability of Information Processing Theories in Road Hazard Perception Context (abstract)

11:50 Tara Saeidi (University of Manitoba, Canada)
Sushreeta Mishra (University of Manitoba, Canada)
Babak Mehran (University of Manitoba, Canada)

Influencing factors on drivers' support for traffic safety laws in Canada (abstract)

12:10 Navoda Rillagodage (University of Manitoba, Canada)
Babak Mehran (University of Manitoba, Canada)
Phani Kumar Patnala (University of Manitoba, Canada)
Jonathan Regehr (University of Manitoba, Canada)
Chaouki Regoui (National Research Council, Canada)

Development of Hazard-specific Truck Crash Modification Factors for Cold-region Rural Highways (abstract)

July 19th, 10:50-12:30 Session C4-S14_SS: SPECIAL SESSION C4&G2: Micro-E-Mobility in Modern Transportation Systems [↑](#)

CHAIR: Koji Suzuki (Nagoya Institute of Technology, Japan)

LOCATION: 520E

Various Micro-E-Mobilities systems have been developed, such as electric kickboards and ultra-compact mobility systems for sitting and riding. They are expected to become popular as next-generation mobility systems to realize a safe and comfortable transportation society. However, there are many issues and challenges to be considered, such as the acceptability of new mobility, safety issues on sidewalks and roadways that may arise due to coexistence with other existing travel modes, legal arrangements, and traffic space. In this special session, we would like to report about above-mentioned topics from the aspect of user psychology, behavior and policy in some countries and discuss about challenges and future expectations for Micro-E-Mobilities. This special session is jointly organized between IATSS, SIG G2, and SIG C4. This special session is built upon a previous workshop that was organized at TU Wien, Austria.

- **Introduction of IATSS research project: Micro-E-mobilities in Japan and East Asia** by Dr. Koji SUZUKI (Nagoya Institute of Technology, JPN)
- **Perspectives on the role of Micro-E-Mobility in Europe** by Prof. Guenter Emberger (TU Wien.,AUT)
- **Perspectives on the role of Micro-E-Mobility in North America** by (to be defined)
- **Panel Discussion:** Dr. Koji SUZUKI (Nagoya Institute of Technology, JPN), Dr. Miho IRYO-ASANO (Nagoya University, JPN), Dr. Takeru SHIBAYAMA (TU Wien, AUT), Dr. Tatsuto SUZUKI (University College London - PEARL, UK), Prof. Guenter

July 19th, 10:50-12:30 Session D1-S1: Traffic data [↑](#)

CHAIR: Jean-Simon Bourdeau (Polytechnique Montréal, Canada)

LOCATION: 513D

10:50 Hoang Dat Pham (University of Manitoba, Canada)
Sharath Mysore Narasimhamurthy (University of Manitoba, Canada)
Babak Mehran (University of Manitoba, Canada)
Ahmed Ashraf (University of Manitoba, Canada)
Finding optimal sensor placements for traffic data reconstruction using QR pivoting and deep reinforcement learning. (abstract)

11:10 Jing Liu (Southwest Jiaotong University, China)
Fangfang Zheng (Southwest Jiaotong University, China)
Mian Wei (Jinan Municipal Engineering Design & Research Institute (Group) CO.LTD, China)
Linhan Bai (Southwest Jiaotong University, China)
Liang Lu (Southwest Jiaotong University, China)
A fundamental diagram reconstruction approach based on iterative nonlinear pattern extraction (abstract)

11:30 Yacong Gao (Beijing University of Technology, China)
Chenjing Zhou (Guangzhou University, China)
Jian Rong (Guangzhou University, China)
Yi Wang (Guangzhou University, China)
Xia Zhang (Beijing University of Technology, China)
Vehicle Speed Extraction Method Based on Machine Vision and Deep Learning Using Lane assistance line (abstract)

11:50 Tudor Stincescu (The University of Sheffield, UK)
Erica Ballantyne (The University of Sheffield, UK)
David Stone (University of Sheffield, UK)
Rui Zhao (The University of Sheffield, UK)
Martin Foster (The University of Sheffield, UK)
Predicting Energy Use of an Electric Vehicle using Vehicle Dashcam Telemetry Data (abstract)

12:10 Innocent Ogwude (Federal University of Technology Owerri, Nigeria)
Uche Ogwude (Aston Business School Aston University, Birmingham,, UK)
Sikiru Balogun (Federal Road Safety Corps, Nigeria)
Driver Behavior in Developing Countries: Evidence from Modeling Anger and Aggression Performance of Nigerian Drivers on Inter-city Trips (abstract)

July 19th, 10:50-12:30 Session D2-S2: Travel Behavior, Equity, and sustainability II [↑](#)

CHAIR: Andreas Hahn (Hochschule Bonn-Rhein-Sieg, Germany)

LOCATION: 520A

10:50 Andreas Hahn (Hochschule Bonn-Rhein-Sieg, Germany)
Christina Pakusch (Hochschule Bonn-Rhein-Sieg, Germany)
Gunnar Stevens (Hochschule Bonn-Rhein-Sieg, Germany)
Avoidance rather than change: What influence does the price shock for mineral oils have on the mobility behaviour of users of motorised private transport in Germany? (abstract)

- 11:10 Hesamoddin Razi-Ardakani (Sharif University of Technology, Iran)
 Mohammad Kermanshah (Sharif University of Technology, Iran)
Investigating the Travel Behavior of Different Genders by Using Structural Equation Modeling (abstract)
- 11:30 Tobias Heußler (Wiesbaden Business School, UAS Wiesbaden, Germany)
 Christof Backhaus (Edinburgh Napier University, UK)
 David Woisetschläger (Technische Universität Braunschweig, Germany)
Mobility and Well-being – An Analysis of Urban Mobility Environments and Citizens’ Assessments of Mobility Quality in the Top 35 German Cities (abstract)
- 11:50 Anna Fraszczyk (Non-public Catholic Primary School, Poland)
 Amelia Fraszczyk (Non-public Catholic Primary School, Poland)
Kids, mobility and sustainability: a case study from a primary school in Poland (abstract)

July 19th, 10:50-12:30 Session D3-S2: Commuters' Mode Choice and Preferences [↑](#)

CHAIR: Swati Maitra (IIT Kharagpur, India)

LOCATION: 513E

- 10:50 Varghese George (National Institute of Technology Karnataka, India)
 Akash Anand (National Institute of Technology Karnataka, India)
Modal Split and Cost-Sensitivity Analysis for Various Travel Modes Using Calibrated Parameters in NL Modeling (abstract)
- 11:10 Priyanka Das (IIT Kharagpur, India)
 Abhishek Chakraborty (IIT Kharagpur, India)
 Sudipta Pal (RITES Limited, Highway Division, India)
 Bhargab Maitra (IIT Kharagpur, India)
Commuters’ preference towards motorized feeder service for last-mile connectivity from metro stations in a commercial hub (abstract)
- 11:30 Tim Woerle (Karlsruhe Institute of Technology (KIT), Germany)
 Mehmet Emre Goerguelue (Karlsruhe Institute of Technology (KIT), Germany)
 Eckhard Szimba (Karlsruhe Institute of Technology (KIT), Germany)
 Martin Kagerbauer (Karlsruhe Institute of Technology (KIT), Germany)
 Peter Vortisch (Karlsruhe Institute of Technology (KIT), Germany)
Discrete Continuous Travel Mode Choices based on Simulated Travel Demand: a MDCEV Model Application (abstract)
- 11:50 Saptarshi Sen (Indian Institute of Engineering Science and Technology, Shibpur, India)
 Sudip Kumar Roy (Indian Institute of Engineering Science and Technology, Shibpur, India)
Commuters’ Perception of Air-Conditioned Public Bus Service Quality and their Choice Behaviour: A Case Study of Kolkata, India (abstract)
- 12:10 Aupal Mondal (The University of Texas at Austin, United States)
 Chandra Bhat (The University of Texas at Austin, United States)
Investigating Residential Built Environment Effects on Rank-Based Modal Preferences and Auto-Ownership (abstract)

July 19th, 10:50-12:30 Session E1-S1: Assessing Transportation Infrastructure Impacts: Tools and Research Agenda [↑](#)

CHAIR: Alain Bonnafois (Transport, Urban Planning and Economics Laboratory - LAET, France)

LOCATION: 513F

10:50 Ann Mary Varghese (Indian Institute of Technology, Kharagpur, India)

Rudra Prakash Pradhan (Indian Institute of Technology, Karagpur, India)

Transportation infrastructure and economic growth: Does there exist causality and spillover? A Systematic Review and Research Agenda (abstract)

11:10 Alain Bonnafois (LAET (University of Lyon & CNRS), France)

Minghui Chen (LISEA (Concession holder for the Sud Europe Atlantique high-speed line), France)

Wider economic benefits, ex-post assessment and the usefulness of permanent observatories (abstract)

11:30 Todd Litman (Victoria Transport Policy Institute, Canada)

Fair Share Transportation Planning: Estimating Non-Auto Travel Demands and Optimal Infrastructure Investments (abstract)

11:50 Wentao Huang (The Hong Kong University of Science and Technology, Hong Kong)

Yanyan Ding (The Hong Kong University of Science and Technology, Hong Kong)

Sisi Jian (The Hong Kong University of Science and Technology, Hong Kong)

Strategic Coopetition among Transportation Service Operators considering Supply-Demand Congestion Effects and Bargaining Power (abstract)

July 19th, 10:50-12:30 Session E2-S1: Taxes, permits, fares, shared mobility [↑](#)

CHAIR: Welf Lücke (German Aerospace Center (DLR), Germany)

LOCATION: 514A

10:50 Victor Cantillo (Universidad del Norte, Colombia)

Ivan Serrano (Universidad del Norte, Colombia)

Ariel Manuel Arteta Rúa (Universidad del Norte, Colombia)

Optimal fare model for inland waterways transport passengers' services: an analysis of the Magdalena River. (abstract)

11:10 Nicolas Schuete (Technical University of Applied Sciences Wildau, Germany)

Anna Buerklen (Technical University of Applied Sciences Wildau, Germany)

A cross-case comparison of the use of sharing mobility services in Germany (abstract)

11:30 Allan Penafiel-Mera (Cardiff University, UK)

Georgina Santos (Cardiff University, UK)

Formation of perceptual differences between fuel duties and emissions trading (abstract)

11:50 Michael Dirksen (FH Muenster, Germany)

Kai Kindsgrab (FH Muenster, Germany)

Franz Vallee (FH Muenster, Germany)

Hartmut Zadek (Otto von Guericke University Magdeburg, Germany)

The Fuel Emission Allowance Trading Act's Impact on the Earnings Situation of the Transportation Sector (abstract)

12:10 Welf Lücke (German Aerospace Center (DLR), Germany)

How do Environmental Fuel Taxes affect Carbon Emissions? Analysis of Fuel Tax Effects in Nordic European Countries (abstract)

July 19th, 10:50-12:30 Session F1-S2: Transit orient development [↑](#)

CHAIR: Haixiao Pan (Tongji University, China)

LOCATION: 518A

10:50 Jiangping Zhou (The University of Hong Kong, Hong Kong)

Yuling Yang (The University of Hong Kong, Hong Kong)

Accessibility and transit-Oriented development over time: An explorative study of Shenzhen, China (abstract)

11:10 Yusaku Yamane (Tokyo University of Science, Japan)

Shintaro Terabe (Tokyo University of Science, Japan)

Hideki Yaginuma (Tokyo University of Science, Japan)

Haruka Uno (Tokyo University of Science, Japan)

Yu Suzuki (Tokyo University of Science, Japan)

Relationship between Land Use around Railway Stations and Transit Ridership in Urban Areas: Cases of Tokyo and Sendai (abstract)

11:30 Jing Li (North China University of Technology, China)

Huaqi Shi (North China University of Technology, China)

Urban Renewal of Rail Transit Station Area from the Perspective of TOD: A Case Study of Urban Design of Lujia Station Area in Kunshan City (abstract)

11:50 Xiyan Yang (Tongji University, China)

Minyu Cui (Tongji University, China)

Yu Zhuang (Tongji University, China)

Practice of Station-city Synergy in European Rail Station Area Under the Trend of Green Mobility (abstract)

12:10 Yuka Otsuga (University of Toyama, Japan)

Hiroto Inoi (University of Toyama, Japan)

Dai Nakagawa (University of Toyama, Japan)

Relational Analysis of User Density, Number of Train Services and Population around Rail Stations on Local Railways in Japan (abstract)

July 19th, 10:50-12:30 Session F2-S2: Environmental impacts by electric busses [↑](#)

CHAIR: Maria Vittoria Corazza (Sapienza university of Rome DICEA, Italy)

LOCATION: 520B

10:50 Ahmed Foda (McMaster University, Canada)

Ali Salah (McMaster University, Canada)

Moataz Mohamed (McMaster University, Canada)

The impacts of optimization approaches on BEB system configuration in transit (abstract)

11:10 David Palma (University of Leeds, UK)
Jayita Chakraborty (CEPT University, India)
Shalini Sinha (CEPT University, India)
Ronghui Liu (University of Leeds, UK)
Shivanand Swamy (CEPT University, India)

A study on the factors affecting the adoption of electric buses among the non-Public Transit users in Ahmedabad, India (abstract)

11:30 Maria Vittoria Corazza (Sapienza university of Rome DICEA, Italy)
Gianmarco Giordano (Arriva Italia, Italy)
Antonio Musso (Sapienza university of Rome DICEA, Italy)
Anita Toni (Arriva UK, UK)
Matthew Robinson (Sapienza university of Rome DICEA, Italy)

Water as a new resource for bus operators (abstract)

11:50 Özgür Öztürk (Technical University of Darmstadt, Germany)
Regina Linke (Technical University of Darmstadt, Germany)
Ferdinand Schöpp (Technical University of Darmstadt, Germany)
Eva Kassens-Noor (Technical University of Darmstadt, Germany)

Methodological approach to analyze vehicle data in electric road systems: case study – ELISA, the eHighway project (abstract)

12:10 Yuxiao Wang (Beijing jiaotong University, China)
Reza Mahmoudi (University of Calgary, Canada)
Saeid Saidi (University of Calgary, Canada)
Nigel Waters (University of Calgary, Canada)

Sustainable public bus transit systems: Proof-of-concept (abstract)

July 19th, 10:50-12:30 Session F3-S2: Sustainability issues [↑](#)

CHAIR: Alan Wong (University of Southampton, UK)

LOCATION: 514B

10:50 Adarsh Yadav (Indian Institute of Technology Roorkee, India)
Manoranjan Parida (CSIR-Central Road Research Institute (CRR), New Delhi, India)
Brind Kumar (Indian Institute of Technology (BHU), Varanasi, India)
Pushpa Choudhary (Indian Institute of Technology Roorkee, India)

Effect of Influencing Variables on Traffic Noise at Intersections in a Mid-Sized City (abstract)

11:10 Xiao Luo (Tongji university, China)
Sutian Duan (Xiamen Land Space And Transport Research Center, China)
Tianren Ge (Tongji university, China)
Yoshitsugu Hayashi (Chubu University, Japan)
Cheng Xue (Tongji university, China)
Suhui Gan (Tongji university, China)

Access and Well-Being of the Marginal Middle Class: A Case Study of Shanghai (abstract)

11:30 Mustafa Mutahari (Toyohashi University of Technology, Japan)
Nao Sugiki (Toyohashi University of Technology, Japan)

Fumitaka Kurauchi (Gifu University, Japan)

Kojiro Matsuo (Toyohashi University of Technology, Japan)

Parameter Setting Examination of Social Dynamic Simulation Using a Multi-layer Network (abstract)

12:00 Lawrence Frank (UC San Diego, United States)

Behram Wali (Urban Design 4 Health, United States)

Linking local land use and regional transportation investment through a performance-based funding framework: An integrated approach to promote public health and reduce GHG emissions (abstract)

12:20 Alan Wong (University of Southampton, UK)

John Preston (University of Southampton, UK)

Marcus Young (University of Southampton, UK)

Linda Spanner (Solent Transport, UK)

Tim Forrester (Solent Transport, UK)

Can particular transport innovation schemes help to solve some of the environmental and sustainability challenges faced by a region? - Early lessons from the monitoring and evaluation of the UK's Solent Future Transport Zone Programme (abstract)

July 19th, 10:50-12:30 Session F4-S2: Liveability and non-motorized transport – 2 [↑](#)

CHAIR: Tanu Priya Uteng (Norwegian Centre for Transport Research, Norway)

LOCATION: 512B

10:50 Anindita Mandal (Luleå tekniska universitet, Sweden)

Charlotta Johansson (Luleå tekniska universitet, Sweden)

David Lindelöw (Sweco Sverige AB, Sweden)

How useful are new data sources in pedestrian planning? Lessons from Umeå, Sweden case study (abstract)

11:05 David Kohlrutz (Chair and Institute of Urban and Transport Planning RWTH Aachen University, Germany)

Tobias Kuhnimhof (Chair and Institute of Urban and Transport Planning RWTH Aachen University, Germany)

E-Bike Ownership and Usage – Results from Germany (abstract)

11:20 Kate Hosford (Simon Fraser University, Canada)

Meghan Winters (Simon Fraser University, Canada)

Kadia Saint-Onge (Université de Montréal, Canada)

Nazeem Muhajarine (University of Saskatchewan, Canada)

Lise Gauvin (Université de Montréal, Canada)

Acceptability of built environment interventions to support active travel in 17 Canadian Metropolitan Areas: Findings from the THEPA study (abstract)

11:35 Bing Liu (College of Architecture and Urban Planning, Tongji University, China)

Shuai Shi (Shanghai Branch of China Academy of Urban Planning & Design, China)

Junyu Zhu (Shanghai Tongji Urban Planning & Design Institute Co., Ltd, China)

Sijing Miao (College of Architecture and Urban Planning, Tongji University, China)

Research on Optimal Design of Cycling Network Based on Respiratory Exposure of NO₂ (abstract)

11:55 Sambit Kumar Beura (NIT Rourkela, India)
Ashish Kumar Patnaik (BIT Mesra, Ranchi, India)
Prasanta Kumar Bhuyan (NIT Rourkela, India)

Development of Artificial Intelligence-based Models for Bikeability Assessment at Unsignalized Intersections (abstract)

12:15 Martin Nabavi Niaki (Polytechnique Montreal, Canada)
Jean-Simon Bourdeau (Polytechnique Montreal, Canada)
Luis Miranda-Moreno (McGill University, Canada)
Nicolas Saunier (Polytechnique Montreal, Canada)

Cycling Network Discontinuities as Indicators for Performance Evaluation: Case Study in Four Cities (abstract)

July 19th, 10:50-12:30 Session G1-S2: Governance and decision-making – 2 [↑](#)

CHAIR: Louise Reardon (University of Birmingham, UK)

LOCATION: 522B

10:50 Julia Amaral (Rensselaer Polytechnic Institute, United States)
Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)
Influence of Design Features of Park-and-Ride Systems on the Potential Demand (abstract)

11:10 Fabio Borghetti (Politecnico di Milano, Italy)
Martina Carra (University of Brescia, Italy)
Carlotta Besson (Politecnico di Milano, Italy)
Elisabetta Matarrese (Politecnico di Milano, Italy)
Roberto Maja (Politecnico di Milano, Italy)
Benedetto Barabino (University of Brescia, Italy)
Evaluating alternative fuels for a bus fleet: An Italian case (abstract)

11:30 Collin Yarbrough (Southern Methodist University, United States)
Janille Smith-Colin (Southern Methodist University, United States)
Different journeys, same struggle: Environmental justice and community impact assessment practitioner experiences at state DOTs in the United States (abstract)

11:50 Kenneth Isaiah Abante (Ateneo de Manila University, Philippines)
Varsolo Sunio (University of Asia and the Pacific, Philippines)
Norbert Anthony Gerome Paranga (ALMEC, Philippines)
Assessing Transport Budget Allocation and Investments Pipeline from 2010-2025 in the Philippines from a Justice Perspective (abstract)

12:10 Anas Mohammad (Qatar University, Qatar)
Salwa Salam (Qatar Transportation and Traffic Safety Center, Qatar)
Shahram Tahmasseby (Qatar Transportation and Traffic Safety Center, Qatar)
Wael Alhajyaseen (Qatar University, Qatar)
Governance as Success Factor for Implementing MaaS in Countries with High Share of Expatriates: Qatar's Case Study (abstract)

12:30 Sophie Sturup (Xi'an Jiaotong-Liverpool University, China)
Shaohua Hu (Xi'an Jiaotong-Liverpool University, China)
Yina Sima (Xi'an Jiaotong-Liverpool University, China)

What does it take to make progress toward networked public transport? Some findings from mid-sized cities in China. (abstract)

July 19th, 10:50-12:30 Session G2-S2: Public Transport [↑](#)

CHAIR: Yacan Wang (School of Economics and Management, Beijing Jiaotong University, Beijing, China, China)

LOCATION: 514C

10:50 Herawati Basirpuly (Ministry of Transportation, Indonesia)
Gede Pasek Suardika (Ministry of Transportation, Indonesia)
Eny Yuliawati (Ministry of Transportation, Indonesia)
Ika Putra (Center for Transport and Logistic Studies UGM, Indonesia)
Dwi Widiyanti (Ministry of Transportation, Indonesia)
Reni Puspitasari (Ministry of Transportation, Indonesia)
Arbie Arbie (Ministry of Transportation, Indonesia)
Minda Mora (Ministry of Transportation, Indonesia)
Yati Nurhayati (Ministry of Transportation, Indonesia)
Antika Purnawan (Ministry of Transportation, Indonesia)

Integrated Transport Service in New Infrastructure Railway Makassar-Parepare: Strategies and Policy Imperatives (abstract)

11:10 Lulu Zhang (School of Economics and Management, Beijing Jiaotong University, Beijing, China, China)
Yu Wang (School of Economics and Management, Beijing Jiaotong University, Beijing, China, China)
Bingyu Zhao (Institute of Transportation Science, TU Wien, Austria)
Yacan Wang (School of Economics and Management, Beijing Jiaotong University, Beijing, China, China)

Exploring the effects of monthly pass in reducing peak-hour congestion using combined survey-modeling approaches: a case study of Beijing subway (abstract)

11:30 Kiyohito Utsunomiya (Kansai University, Japan)

An analysis of the value of travel time savings for children (abstract)

11:50 Hamed Naseri (Polytechnique Montreal, Canada)
Owen Waygood (Polytechnique Montréal, Canada)
Zachary Patterson (Concordia University, Canada)
Bobin Wang (Laval University, Canada)

Who Is More Likely to Buy Electric Vehicles? (abstract)

July 19th, 10:50-12:30 Session G3-S1: Rail [↑](#)

CHAIR: Jonas De Vos (Bartlett School of Planning, University College London, UK)

LOCATION: 519B

10:50 Yuan Lu (18602197738, China)

Xiaoze Yang (17710303429, China)

Shuangying Wang (18645601567, China)

Research on the evaluation of walking accessibility and Influencing Factors of Large Railway Passenger Transport Hub (abstract)

11:10 Mengqiu Cao (University of Westminster, UK)

Yuerong Zhang (University College London, UK)

Long Cheng (Ghent University, UK)

Yantao Ling (Chongqing University of Technology, China)

Jonas De Vos (University College London, UK)

Towards the public transport city. An exploration of transport mode choice for residents living in Underground station areas in Beijing and London (abstract)

11:30 Suryakant Buchunde (University of Calgary, Canada)

Shervin Ataeian (University of Calgary, Canada)

Saeid Saidi (University of Calgary, Canada)

Enhancing Performance of Simulation Models for Rail Transit Dwell Time Considering Passenger Flow Modeling (abstract)

11:50 Lorenzo Mussone (politecnico di milano, Italy)

Valeria Jocelyn Aranda Salgado (politecnico di milano, Mexico)

Roberto Notari (politecnico di milano, Italy)

A dynamic evaluation of an underground transportation system using image processing and centrality index computation (abstract)

12:10 Naohiko Hibino (National Graduate Institute for Policy Studies, Japan)

Shinya Yamada (National Graduate Institute for Policy Studies, Japan)

Masaki Hashimoto (Toyku Railways Co., Ltd., Japan)

Tomohiro Akutsu (Toyku Railways Co., Ltd., Japan)

Understanding Change in Passenger Behavior due to the Impact of COVID-19 Using Automatic Ticket Gate IC Card Data (abstract)

July 19th, 10:50-12:30 Session G4-S1: Mobility services and automation [↑](#)

CHAIR: Lea Ravensbergen (McMaster University, Canada)

LOCATION: 515A

10:50 Diego Hernandez (Universidad Catolica del Uruguay, Uruguay)

Santiago Rodriguez (Universidad Catolica del Uruguay, Uruguay)

When the network matters: How increased provision of wheelchair-accessible buses affects trip duration for wheelchair users in Montevideo, Uruguay (abstract)

11:10 Abraham Leung (Griffith University, Australia)

Claudia Burlando (University of Genoa, Italy)

Tiziano Pavanini (University of Genoa, Italy)

Willingness to pay for public transport among older adults and segmentation: Insights from Genoa, Italy (abstract)

11:30 Jens Schippl (Karlsruhe Institute of Technology (KIT), Institute for Technology Assessment and Systems Analysis (ITAS), Germany)

Maïke Puhe (Karlsruhe Institute of Technology (KIT), Institute for Technology Assessment and Systems Analysis (ITAS), Germany)

To what extent can urban mobility transitions be influenced by interventions on an urban scale? An empirical analysis of personal social networks and mobility patterns (abstract)

11:50 Jens Schippl (Karlsruhe Institute of Technology (KIT), Institute for Technology Assessment and Systems Analysis (ITAS), Germany)

Maïke Puhe (Karlsruhe Institute of Technology (KIT), Institute for Technology Assessment and Systems Analysis (ITAS), Germany)

Torsten Fleischer (Karlsruhe Institute of Technology (KIT), Institute for Technology Assessment and Systems Analysis (ITAS), Germany)

Who needs automated vehicles and for what reasons? Results of an interview study from Karlsruhe, Germany (abstract)

12:10 Tugsdelger Chinbat (Yokohama National University, Japan)

Fumihiko Nakamura (University of Tokyo, Japan)

Matsuyuki Mihoko (Yokohama National University, Japan)

Tanaka Shinji (Yokohama National University, Japan)

Development and implementation of equity: implication for Mobility-as-a-Service in Japan (abstract)

July 19th, 10:50-12:30 Session G6-S1: Transport and health # 1 [↑](#)

CHAIR: Lawrence Frank (UC San Diego, United States)

LOCATION: 522A

10:50 Mohamed Jassim Haroon (Qatar University, Qatar)

Mohamed Kharbeche (Qatar University, Qatar)

Wael Alhajyaseen (Qatar University, Qatar)

Alaa Alhawari (Qatar University, Qatar)

Quantifying the Effects of Traffic Calming Devices on Noise Levels (abstract)

11:10 Mio Suzuki (Tokai University, Japan)

A FUNDAMENTAL STUDY ABOUT THE BEHAVIOR OF DRIVERS WITH MILD COGNITIVE IMPAIRMENT (abstract)

11:40 Denise Kramer (University of Applied Sciences Wildau, Germany)

Investigating teenagers' perspective on cycling and urban design: A living lab experiment (abstract)

12:00 Alejandro Perez Villasenor (McGill University, Canada)

Luis F. Miranda-Moreno (McGill University, Canada)

A longitudinal study on carbon dioxide levels in public transit: Subway vs. buses in Montreal, Canada (abstract)

12:20 Xize Wang (National University of Singapore, Singapore)

The Roads One Must Walk Down: Commute and Depression for Beijing's Residents (abstract)

July 19th, 10:50-12:30 Session H1-S2: Transport Policy, Planning and Financing in Developing Countries 2



CHAIR: Luis Angel Guzmán (Universidad de los Andes, Colombia)

LOCATION: 518B

10:50 Rimpi Baro (IIT BOMBAY, India)

K.V. Krishna Rao (IIT BOMBAY, India)

Nagendra R. Velaga (IIT BOMBAY, India)

A study of travel wellbeing perception and mode shift behavior of private vehicle commuters towards an upcoming metro (abstract)

11:10 Victor Cantillo-Garcia (Universidad de los Andes, Colombia)

Luis A. Guzman (Universidad de los Andes, Colombia)

Julian Arellana (Universidad del Norte, Colombia)

Olga L. Sarmiento (Universidad de los Andes, Colombia)

Assessing relocation decisions after the implementation of an innovative cable car in Bogotá (abstract)

11:30 Marc Hasselwander (German Aerospace Center (DLR), Germany)

Joao Bigotte (University of Coimbra, Portugal)

Mobility as a Service (MaaS) in the Global South: research findings, gaps, and directions (abstract)

11:50 Manaswinee Kar (Indian Institute of Technology Roorkee, India)

Shubhajit Sadhukhan (Indian Institute of Technology Roorkee, India)

Manoranjan Parida (CSIR-Central Road Research Institute (CRR), India)

User Satisfaction-Based Prioritisation of Attributes Influencing Walk Accessibility to Metro Stations: A Multi-Attribute Decision Making Approach (abstract)

July 19th, 10:50-12:30 Session H2-S5_SS: SPECIAL SESSION: Are traditional Urban Road Infrastructure interventions any more relevant in fast growing Developing Economies? – Understanding from Sustainability lens ↑

CHAIR: Ashish Verma (IISc, India)

LOCATION: 515B

Many of the fast growing Developing Economies, like BRICS countries continue to experience exponential growth in car ownership, which continues to raise demands from aspiring society for more road infrastructure capacity to accommodate these ever increasing number of cars. However, it is creating unsustainable urban transportation system in these countries. This panel discussion will focus on what the aspiring economies need to do differently also leaning from the experiences and mistakes of rich economies.

- Panelist. Prof. Louise Reardon, University of Birmingham, UK Prof. Meng Li, Tsinghua University, China Prof. Ali Huzayyin, Cairo University, Egypt Prof. Samer Madanat, New York University Abu Dhabi, UAE Dr. Binyam Reja, World Bank, USA (TBC)

July 19th, 10:50-12:30 Session H5-S2: Transport & City Development [↑](#)

CHAIR: Thi My Thanh Truong (University of Transport Technology, Viet Nam)

LOCATION: 524A

10:50 Maryam Hasanpour (Toronto Metropolitan University (formerly Ryerson University), Canada)
Bilal Farooq (Toronto Metropolitan University (formerly Ryerson University), Canada)

Exploring the Effects of Urban Form on Public Transportation Demand in Developing Countries: Considering Spatially Varied and Nonlinear Combination of Covariates (abstract)

11:05 Thi Cam Van Nguyen (Ho Chi Minh City Institute for Development Studies, Viet Nam)
Thi My Thanh Truong (University of Transport Technology, Viet Nam)

Integrated Transport and Urban Development in Asian Developing Cities (abstract)

11:20 Luis A. Guzman (Universidad de Los Andes, Colombia, Colombia)
Daniel Oviedo (University College London, UK)
Daniela Castaño (Universidad de los Andes, Colombia)
Julián Arellana Ochoa (Universidad del Norte, Colombia)
Olga Sarmiento (Universidad de los Andes, Colombia)

Lifting urban mobility for the poor: decoding the links between mobility, neighborhood perceptions, and life satisfaction (abstract)

11:35 Zhengyue Wan (University College London, UK)
Helena Titheridge (University College London, UK)

A review of current social impact assessment practice for transport projects and plans in Chinese cities (abstract)

11:55 Shailesh Chandra (California State University, Long Beach, United States)
Sundaravalli Narayanaswami (Indian Institute of Management Ahmedabad, India)
R. Thirumaleswara Naik (INDIAN INSTITUTE OF SCIENCE, BENGALURU, India)
Vivek Mishra (California State University, Long Beach, United States)

Connectivity evaluations of Indian Railways zones with superfast express (SE) trains (abstract)

12:15 Julián Arellana Ochoa (Universidad del Norte, Colombia)
Maria Jose Nieto-Combariza (University College London, UK)
Maria Fernanda Lopez-Fabra (Universidad del Norte, Colombia)

The 15-minute city in the presence of informal settlements (abstract)

July 19th, 10:50-12:30 Session L-S3_SS: SPECIAL SESSION: Research and Applications on the Use of Passive Data from Public Transport (TransitData) # 1 [↑](#)

CHAIR: Timothy Spurr (GIRO, Canada)

LOCATION: 512C

- **TransitData Research into Practice: Challenges and Perspectives**, Brendon Hemily (University of Toronto)
- **Machine Learning techniques for more reliable bus schedules**, Timothy Spurr (GIRO)
- **The Impact of On-demand Transit on Ridership and Growth Rate**, Yili Tang (McGill University)

- **Abrupt Changes and Intraurban Human Mobility: COVID-19's Impacts on Metro Riders in Hong Kong**, Jiangping Zhou (University of Hong Kong)
- **Deployment of Work Trains for Overnight Maintenance Activities**, John Moody (Massachusetts Institute of Technology)

July 19th, 10:50-12:30 Session L-S5_SS: SPECIAL SESSION: Incremental progress or burn it all down? How research contributes to change and how we can do it better [↑](#)

CHAIR: Steven Farber (University of Toronto Scarborough, Canada)

LOCATION: 512D

Many careers in transportation research are motivated by a desire to improve the safety, sustainability, and wellbeing of travelers and societies. Many of our journals require authors to detail policy implications so our work remains relevant and influential among practitioners. But to what extent does research contribute to change in policy, politics, and culture? We invite transportation researchers at WCTR to join us in reflecting on how our work impacts the world, and to share strategies and lessons learned on how to make meaningful change through our research and knowledge mobilization practices. This special session will include a panel, followed by open discussion and a reflective activity. Attendees will leave the workshop with a deeper understanding of theories of change, along with links to resources on developing a theory for change for a research project.

- **Introduction Mobilizing Justice**, Making Change Through Partnered Research, Steven Farber, University of Toronto Scarborough
- **Panel** Facilitated by: Steven Farber, University of Toronto Scarborough
 - Ahmed El-Geneidy, McGill University
 - Meghan Winters, Simon Fraser University
 - Helena Titheridge, University College London
 - Maria Attard, University of Malta
 - Catherine Morency, Polytechnique Montréal



July 19th, 12:30-13:50 Lunch (Location: 517CD) [↑](#)

July 19th, 13:50-15:30 - Session GA: General Assembly (Location: 517AB) [↑](#)

Chair: Lori Tavasszy (Delft University of Technology, Netherlands)

All invited



July 19th, 15:30-16:00 Coffee break (Location: 516) [↑](#)

July 19th, 16:00-17:50 Session 04_SS: SPECIAL SESSION: WCTRS-EASTS-KOTI Joint Seminar: Public-Private Partnership for Transport Infrastructure Development – Focusing on Risk Management under Macro Economic Uncertainty [↑](#)

CHAIR: Jaehak Oh (President, KOTI / President, EASTS, South Korea)

LOCATION: 519A

Public-Private Partnership (PPP) has been widely considered an important instrument for financing transport infrastructures. Financing transport infrastructures can be effectively provided through PPP in developed and developing countries. However, PPPs face macroeconomic uncertainties resulting from low growth, high-interest rates, and high inflation. PPPs require risk management to control the uncertainties and to address the likely negative effects of PPP projects, to provide sustainable public transportation services for the people. This special session is motivated to share practical lessons and experiences of PPP in various countries, for risk management resulting from the economic uncertainties. Through presentations and discussion, innovative policies and practical lessons are to be drawn. Korea Transport Institute (KOTI), the national transportation research think tank, has been operating the Center for Private Highway Studies (CEPHIS), which tries to support the management of PPP project evaluations, concessions, and performance monitoring. Korea's achievements and experiences of PPP projects in the last two decades will be shared in the session.

- **Opening Remark:** Jaehak Oh (President, KOTI / President, EASTS)
- **Welcome Remark:** Tae Hoon Oum (President, WCTRS)
- **Presentations:**
 - Kyungtaek Kim (Associate Research Fellow, KOTI): **Build-Transfer Operate with risk-sharing approaches for railway project in Korea**
 - Hyejin Lee (Associate Research Fellow, KOTI): **Travel demand forecasting risk management method in toll reduction of private highways in Korea**
 - Shinya Hanaoka (Professor, Tokyo Institute of Technology): **Risk identification of PPP railway projects in Asia**
- **Panel Discussion:**
 - (Chair) Akimasa Fujiwara (Professor, Hiroshima University)
 - Vincent Robitaille (Assistant Deputy Minister, Transport Canada)
 - Yoshitsugu Hayashi (Professor, Chubu University)
 - Binyam Reja (Global Practice Manager, World Bank)
 - Hanbyul Jang (Chief Director, Korea Transport Institute)

July 19th, 16:00-17:50 Session A1-S3: Economics of Aviation [↑](#)

CHAIR: Kun Wang (The Hong Kong Polytechnic University, Hong Kong)

LOCATION: 520D

16:00 Kam To Ng (The Hong Kong Polytechnic University, Hong Kong)
Xiaowen Fu (The Hong Kong Polytechnic University, Hong Kong)
Jaewoon Lee (The Chinese University of Hong Kong, Hong Kong)
Katsuhiro Yamaguchi (The University of Tokyo, Japan)
Chuanyan Zhu (The Hong Kong Polytechnic University, Hong Kong)

The Effects of Bankruptcy on Airline Yield and Frequency: The case of the duopolistic domestic market in Japan (abstract)

16:15 Seock-Jin Hong (University of North Texas, United States)
Woongyi Kim (Hanseu University, South Korea)

Examining the Competitiveness and the Perception Changes of COVID-19 of Air Cargo Business Environment-The Case of Incheon International Airport (abstract)

16:35 Shiyuan Zheng (Shanghai Maritime University, China)
 Kun Wang (The Hong Kong Polytechnic University, Hong Kong)
 Anming Zhang (University of British Columbia, Canada)
 Achim Czerny (The Hong Kong Polytechnic University, Hong Kong)
Airport City and Downtown Store Competition and Regulation Under Incomplete Information (abstract)

16:55 Chunan Wang (Beihang University, China)
Air-HSR competition: The role of airline's objective function (abstract)

17:15 Sylvain Bourjade (Toulouse Business School, France)
 Catherine Muller-Vibes (Toulouse Business School, France)
 Megersa Abate (World Bank, United States)
Government holdings and performance in the airline industry: a focus on African and Middle East airlines (abstract)

17:35 Hans-Martin Niemeier (Hochschule Bremen, Germany)
 Shravana Kumar (Hochschule Bremen, Germany)
 Nicole Adler (Hebrew University, Jerusalem, Israel)
Does Regulation of Airports Improve Efficiency? (abstract)

July 19th, 16:00-17:50 Session A2-S8: Maritime planning [↑](#)

CHAIR: Johan Woxenius (University of Gothenburg, Sweden)

LOCATION: 512F

16:00 Milad Hematian (Université Laval, Canada)
 Jean-François Audy (University of Quebec at Trois-Rivieres, Canada, Canada)
 Mikael Rönnqvist (Université Laval, Canada)
Pilot scheduling and assignment to maritime vessels in the St. Lawrence River (abstract)

16:20 Andrea Medda (Università degli Studi di Cagliari, Italy)
 Patrizia Serra (University of Cagliari - Department of Civil Engineering - Transport Section, Italy)
 Marco Mandas (University of Cagliari - Dept. of Economics and Business, Italy)
 Gianfranco Fancello (University of Cagliari - Department of Civil Engineering - Transport Section, Italy)
A Risk Prediction Model for Maritime Casualties (abstract)

16:40 Elyakim Ben Hakoun (Technion - Israel Institute of Technology, Israel)
Trends in Emission Inventory of Marine Traffic for Port of Ashdod

17:00 Jesper Zwaginga (TU Delft, Netherlands)
 Benjamin Lagemann (NTNU, Norway)
 Stein Ove Erikstad (NTNU, Norway)
 Jeroen Pruyn (TU Delft, Netherlands)
Optimal ship fuel selection under life cycle uncertainty (abstract)

- 17:20 Francesco Russo (DIIES-Università Mediterranea di Reggio Calabria, Italy)
Girolamo Pedà (Engineering Degree, Università Mediterranea di Reggio Calabria, Italy)
Giuseppe Musolino (DIIES - Università Mediterranea di Reggio Calabria, Italy)
Main attributes influencing the times in port systems of the container ships (abstract)

July 19th, 16:00-17:50 Session A2-S9: Maritime routing [↑](#)

CHAIR: Bruce Lambert (University of Antwerp, United States)

LOCATION: 524A

- 16:00 Ke Zhao (Shanghai Jiao Tong University, China)
Di Zhang (Shanghai Jiao Tong University, China)
Jiangang Jin (Shanghai Jiao Tong University, China)
Guoxiang Dong (Shanghai Ship and Shipping Research Institute, China)
Der-Horng Lee (Zhejiang University, China)
Vessel Voyage Schedule Planning for Maritime Ore Transportation (abstract)

- 16:20 Trevor Heaver (University of British Columbia, Canada)
Derek Atkins (University of British Columbia, Canada)
The causes and costs of dry bulk ships anchored in Vancouver (abstract)

- 16:40 Davide Giglio (University of Genoa, Italy)
Valentino Palma (University of Genoa, Italy)
Alessio Tei (University of Genoa, Italy)
Investigating the application of route optimization algorithms (for weather routing) over e-navigation and S-100-based products (abstract)

- 17:00 Chourouk Gharbi (UQTR, Canada)
Jean-François Audy (UQTR, Canada)
Mikael Ronnqvist (ULaval, Canada)
Maritime vessel routing on the ST-Lawrence River (abstract)

- 17:20 Kaoutar Hajli (Université Laval, Canada)
Mikael Rönqvist (Université Laval, Canada)
Camélia Dadouchi (Polytechnique Montréal, Canada)
Jean-François Audy (Université du Québec à Trois-Rivières, Canada)
Jean-François Cordeau (HEC Montréal, Canada)
Gurjeet Warya (True North Marine, Canada)
Trung Ngo (True North Marine, Canada)
Fuel prediction model based on historical voyages and meteorological data : A case of a set of sister bulk carriers (abstract)

July 19th, 16:00-17:50 Session A3-S3: Innovation and the Environment [↑](#)

CHAIR: John Preston (University of Southampton, UK)

LOCATION: 512H

- 16:00 Carl-William Palmqvist (Lund University, Sweden)
Michelle Ochsner (Lund University, Sweden)
Sadegh Jamali (Lund University, Sweden)
Hossein Hashemi (Lund University, Sweden)

Faramarz Nilfouroushan (University of Gävle, Sweden)
Mohammad Bagherbandi (University of Gävle, Sweden)
Erik Toller (Swedish Transport Administration, Sweden)
Ravdeep Kour (Luleå University of Technology, Sweden)
Ramin Karim (Luleå University of Technology, Sweden)

Satellite Monitoring of Railways using Interferometric Synthetic Aperture Radar (InSAR): A Case Study in the North of Sweden (abstract)

16:20 Liz Cristaldo (Centre Génie Industriel, IMT Mines Albi - University of Toulouse, France)
Eva Petitdemange (Centre Génie Industriel, IMT Mines Albi - University of Toulouse, France)
Matthieu Lauras (Centre Génie Industriel, IMT Mines Albi - University of Toulouse, France)
Benoit Montreuil (Physical Internet Center, ISyE, Georgia Institute of Technology, United States)

Questioning the relevance of using Physical Internet for managing autonomous train shuttles in rural areas (abstract)

16:40 John Armstrong (University of Southampton, UK)
John Preston (University of Southampton, UK)

Covid-19 and CO2 – impacts on and implications for rail (abstract)

17:00 Zeinab Vosooghi (DeGroote school of business - McMaster University, Canada)
Manish Verma (DeGroote school of business - McMaster University, Canada)

A novel strategy to managing hazmat risk for rail shipments (abstract)

17:20 Shailesh Chandra (California State University, Long Beach, United States)
R. Thirumaleswara Naik (INDIAN INSTITUTE OF SCIENCE, BENGALURU, India)
Jose Torres-Aguilar (California State University, Long Beach, United States)

A methodology to locate and separate railroad-highway at-grade crossings for emissions reductions: A case study with California crossings (abstract)

July 19th, 16:00-17:50 Session A5-S3: Road traffic behavior [↑](#)

CHAIR: Marie-Soleil Cloutier (Institut national de la recherche scientifique, Canada)

LOCATION: 513A

16:00 Tona Pitt (University of Calgary, Canada)
Alison Macpherson (York University, Canada)
Liraz Fridman (University of Toronto, Canada)
Brent Hagel (University of Calgary, Canada)
Meghan Winters (Simon Fraser University, Canada)
Marie-Soleil Cloutier (Institut national de la recherche scientifique, Canada)
Tate Hubkarao (University of Calgary, Canada)
Pamela Fuselli (Parachute, Canada)
Andrew Howard (University of Toronto, Canada)
Linda Rothman (Toronto Metropolitan University, Canada)

Driving behaviours at school drop-off across Canadian municipalities: Findings from the Child Active Transportation Safety and the Environment (CHASE) study (abstract)

16:20 Adebambo Somuyiwa (LADOKE AKINTOLA UNIVERSITY OF TECHNOLOGY OGBOMOSO, OYO STATE, Nigeria)

Kayode Oyesiku (Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria)

Adewale Oduwole (FORSTECHE NIG. LTD, Nigeria)

Policy Matter-Enforcement of Regulation, Control of Operational and Management of Commercial Motorcycles as Public Transportation in Nigeria (abstract)

16:40 Jaime Suarez (JOINT RESEARCH CENTER EUROPEAN COMMISSION, Italy)

Markos A. Ktistakis (FINCONS Group, 20871 Vimercate, Italy, Italy)

Dimitrios Komnos (FINCONS Group, 20871 Vimercate, Italy, Italy)

Alessandro Tansini (JOINT RESEARCH CENTER EUROPEAN COMMISSION, Italy)

Andres Laverde (VRAIN, Universitat Politècnica de València, 46002, Spain, Spain)

Michalis Makridis (IVT ETH Zurich, Switzerland)

Biagio Ciuffo (JOINT RESEARCH CENTER EUROPEAN COMMISSION, Italy)

Georgios Fontaras (JOINT RESEARCH CENTER EUROPEAN COMMISSION, Italy)

The impact of drivers' acceleration style on the vehicle energy performance: a real-world case study (abstract)

17:00 Thomas Stringer (The University of British Columbia, Canada)

Halley Suarez (The University of British Columbia, Canada)

Hou Sang Cheng (The University of British Columbia, Canada)

Amy Kim (The University of British Columbia, Canada)

Evaluating the effect of subarctic weather conditions on road traffic intensity (abstract)

17:20 Dr. Moluguram Kumar (Osmania University, India)

Malathi Narra (Osmania University, India)

Reduction of Delays at Isolated Signalised Intersection using Novel Golden Eagle-Based Fuzzy Signal Controller (abstract)

July 19th, 16:00-17:50 Session B1-S3 [↑](#)

CHAIRS: Matthew Roorda (University of Toronto, Canada) and Adolf K.Y. Ng (Graduate School of International Studies, Université Laval, Quebec City, QC, Canada, Canada)

LOCATION: 512C

16:00 Huan Jin (University of Nottingham Ningbo China, China)

Ruibin Bai (University of Nottingham Ningbo China, China)

Shaoxuan Liu (Shanghai Jiaotong University, China)

Teodor Crainic (University of Quebec, Canada)

Service Network Design with Node Capacity for Urban Transportation (abstract)

16:20 Mawuli Afenyo (Department of Maritime Business Administration, Texas A & M University, Galveston, TX, USA, United States)

Yufeng Lin (Department of Management, Faculty of Business and Management, BNU-HKBU United International College, Zhuhai, China, China)

Roosbeh Panahi (Jacobs Engineering Group Inc, Toronto, ON, Canada, Canada)

Adolf K.Y. Ng (Graduate School of International Studies, Université Laval, Quebec City, QC, Canada, Canada)

Yui-Yip Lau (College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong, Hong Kong)

The Economic Impacts of the COVID-19 Pandemic on the For-Profit Sector in the Province of Manitoba (abstract)

16:40 Chaima Ben Rabah (Qatar University, Qatar)
Mengfei Chen (Rutgers University, United States)
Mohamed Kharbeche (Qatar University, Qatar)
Weihong Grace Guo (Rutgers University, United States)
Mohamed Haouari (Qatar University, Qatar)

Anticipating the impacts of mega events on host-country agri-food supply chains: a synthesis based on a simulation of the World Cup 2022 in Qatar (abstract)

17:00 Heike Flaemig (Hamburg University of Technology, Germany)
Sandra Tjaden (Hamburg University of Technology, Germany)

Impacts of driverless trucks on supply chains (abstract)

17:20 Changmin Jiang (University of International Business and Economics, China)

Engine option in aircraft: A three-echelon supply chain model (abstract)

July 19th, 16:00-17:50 Session B3-S3: The importance of terminals for intermodal freight transport networks [↑](#)

CHAIR: Violeta Roso (Chalmers University of Technology, Sweden)

LOCATION: 518C

16:00 Antoine Robichet (Gustave Eiffel University, France)
Patrick Nierat (Gustave Eiffel University, France)
Francois Combes (Gustave Eiffel University, France)

From road to rail: how combined transport can replace road transport, a French case study. (abstract)

16:20 Shigeki Ozawa (Daido University, Japan)
Akira Okada (Tokyo City University, Japan)
Kosuke Miyatake (Ryutsu Keizai University, Japan)

A Study on Efficient Rail Freight Terminal Use (abstract)

16:40 Adedotun Joseph Adenigbo (University of Johannesburg, South Africa)
Joash Mageto (University of Johannesburg, South Africa, South Africa)
Rose Luke (University of Johannesburg, South Africa, South Africa)

Factors affecting cargo logistics operations at Lagos International Airport, Nigeria (abstract)

17:00 Nathaniel Fuanbial (University of Greenwich London, UK)

The role of inland container depot (ICD) in facilitating modal shift from road to rail for the reduction of road carnage/ damage in Nigeria (abstract)

July 19th, 16:00-17:50 Session B4-S3: Waste transport and the circular economy (plus risk and terminal handling) [↑](#)

CHAIR: Bram Kin (TNO and HAN University of Applied Sciences, Netherlands)

LOCATION: 524C

16:00 Sofia Giasoumi (Significance B.V., Netherlands)
Michiel de Bok (Delft University of Technology, Netherlands)
Gonçalo Homem de Almeida Correia (Delft University of Technology, Netherlands)
Lóránt Tavasszy (Delft University of Technology, Netherlands)
Optimizing demand-responsive IoT-based waste collection services: a two-step clustering technique (abstract)

16:20 Paul Vilain (UGE, France)
Corinne Blanquart (UGE, France)
Thomas Zeroual (ESCE Paris, France)
The environmental impact of transport in biowaste collection (abstract)

16:40 Walther Ploos van Amstel (Amsterdam University of Applied Sciences, Netherlands)
David Lemiski (Amsterdam University of Applied Sciences, Netherlands)
City Logistics and Circular Supply Chains: Creating A Regional Ecosystem (abstract)

July 19th, 16:00-17:50 Session B4-S5: Interaction between goods movement and personal mobility [↑](#)

CHAIR: Johan Woxenius (University of Gothenburg, Sweden)

LOCATION: 514B

16:00 Fernando Zingler (Concordia University, Canada)
Navneet Vidyarthi (Concordia University, Canada)
A conceptual framework for integrating urban freight deliveries with public transportation and crowdsourcing (abstract)

16:20 Francesco Bruzzone (Università IUAV di Venezia, Italy)
Federico Cavallaro (IUAV University of Venice, Italy)
Silvio Nocera (IUAV University of Venice, Italy)
Integrating passenger and cargo flows in future urban mobility (abstract)

16:40 Jagienka Rzeźny-Cieplińska (WSB University in Gdansk, Poland)
Tomasz Tomaszewski (University of Gdansk, Poland)
Maja Kiba-Janiak (Wroclaw University of Economics and Business, Poland)
Assessment of Sustainable Urban Spatial Areas Related to Urban Freight Transport – the Potential for Micromobility (abstract)

17:00 Joris Beckers (Universiteit Antwerpen, Belgium)
Ivan Cardenas (Universiteit Antwerpen, Belgium)
Michela Le Pira (University of Catania, Italy)
Exploring Logistics-as-a-Service to integrate the consumer in urban freight (abstract)

July 19th, 16:00-17:50 Session B5-S3: Descriptive logistics [↑](#)

CHAIR: Lokesh Kalahasthi (IIT Delhi, India)

LOCATION: 520F

16:00 Usman Ahmed (University of Toronto, Canada)
Mehdi Nourinejad (York University, Canada)
Matthew Roorda (University of Toronto, Canada)
Freight Tour Modeling: A Novel Optimization Based Approach (abstract)

16:20 Lei Zhang (TU Berlin, Germany)

Tilman Matteis (German Aerospace Center (DLR), Institute of Transport Research, Germany)

Gernot Liedtke (TU Berlin, Germany)

A microscopic freight transport model for urban areas: a case of food retail in Berlin (abstract)

16:40 Lokesh Kalahasthi (Indian Institute of Technology Delhi, India)

Juan Castellon (Chalmers University of Technology, Sweden)

Iván Sánchez-Díaz (Chalmers University of Technology, Sweden)

Violeta Roso (Chalmers University of Technology, Sweden)

Ceren Altuntas-Vural (Chalmers University of Technology, Sweden)

Sara Rogerson (SSPA Sweden AB, Sweden)

Vendela Santén (SSPA Sweden AB, Sweden)

Truck Container Movements in Sweden: Payload and Empty Trip Modeling (abstract)

17:00 Abel Kebede Reda (Swedish University of Agricultural Sciences, Sweden)

Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)

Girma Gebresenbet (Swedish University of Agricultural Sciences, Sweden)

Lori Tavasszy (Delft University of Technology, Netherlands)

David Ljungberg (Swedish University of Agricultural Sciences, Sweden)

Temporal stability of shipment size decisions related to choice of truck type (abstract)

17:20 José Holguín-Veras (Rensselaer Polytechnic Institute, United States)

Lokesh Kalahasthi (IIT Delhi, India)

Abdelrahman Ismael (Rensselaer Polytechnic Institute, United States)

Wilfredo Yushimito (Universidad Adolfo Ibáñez, Chile)

Matías Herrera-Dappe (World Bank Group, United States)

Shamsul Hoque (Bangladesh University of Engineering and Technology, Bangladesh)

Integrated data collection and modeling with freight origin-destination synthesis: application to bangladesh (abstract)

July 19th, 16:00-17:50 Session C2-S3: Traffic State and Driver Behaviour Analysis [↑](#)

CHAIR: Hong Zhu (Key Laboratory of Road and Traffic Engineering, Tongji University, China)

LOCATION: 513B

16:00 Fan Wu (University of Alberta, Canada)

Zhanhong Cheng (McGill University, Canada)

Lijun Sun (McGill University, Canada)

Traffic State Imputation with Gaussian Processes (abstract)

16:15 Harish Kumar Saini (Indian Institute of Technology Jammu, India)

Shivam Singh Chouhan (Indian Institute of Technology Jammu, India)

Ankit Kathuria (Indian Institute of Technology Jammu, India)

Evaluating overtaking and filtering maneuver of motorcyclists and car drivers using advanced trajectory data analysis (abstract)

16:35 Mark McCord (The Ohio State University, United States)
Rabi Mishalani (The Ohio State University, United States)
Harsh Shah (The Ohio State University, United States)

Evaluating the use of bus-based video imagery to monitor VMT on an urban network (abstract)

16:55 Chih-Heng Yeh (National Taiwan University, Taiwan)
Yu-Ju Chung (National Taiwan University, Taiwan)
Yung-Cheng Lai (National Taiwan University, Taiwan)

Light Rail Capacity Computation Framework for Shared-use Right of Way and Multi-Lane Highway (abstract)

17:15 Naveed Farooz Marazi (Birla Institute of Technology and Science Pilani Hyderabad, Telangana, India – 500078, India)
Bandhan Bandhu Majumdar (National Institute of Technology Durgapur West Bengal, India – 721309, India)
Prasanta K. Sahu (Birla Institute of Technology and Science Pilani Hyderabad, Telangana, India – 500078, India)
Subhashree Panda (Birla Institute of Technology and Science Pilani Hyderabad, Telangana, India – 500078, India)
Siddardha Koramati (Birla Institute of Technology and Science Pilani Hyderabad, Telangana, India – 500078, India)

Quantifying Urban Traffic Congestion: A Traffic and Geometric Approach (abstract)

17:35 Yuxuan Wang (Polytechnique Montreal, Canada)
Catherine Morency (Polytechnique Montreal, Canada)
Martin Trépanier (Polytechnique Montreal, Canada)

Systemwide Variations and Factors Affecting Mixture Transit Travel Time Distributions (abstract)

July 19th, 16:00-17:50 Session C3-S3: Machine learning and AI [↑](#)

CHAIR: Eva Kassens-Noor (Technical University of Darmstadt, Germany)

LOCATION: 513C

16:00 Xinyu Chen (Polytechnique Montreal, Canada)
Zhanhong Cheng (McGill University, Canada)
Nicolas Saunier (Polytechnique Montreal, Canada)
Lijun Sun (McGill University, Canada)

Laplacian Convolutional Representation for Traffic Time Series Imputation (abstract)

16:20 Shuqing Wei (The Hong Kong University of Science and Technology, Hong Kong)
Siyuan Feng (The Hong Kong University of Science and Technology, Hong Kong)
Hai Yang (The Hong Kong University of Science and Technology, Hong Kong)

Traffic Prediction using Multi-view Spatial-temporal Data (abstract)

16:40 Eva Kassens-Noor (TU Darmstadt, Germany)
Kip Darcy (Michigan State University, United States)
Andreea Ion Cojocaru (Numena, Germany)

Ryan Rzepecki (Spectra, United States)
 Sunghun Jang (TU Darmstadt, Germany)
 Wei Jiang (TU Darmstadt, Germany)
 Tobias Monzert (TU Darmstadt, Germany)
 Meng Cai (TU Darmstadt, United States)
 Matthew Crittenden (Spectra, UK)

scAInce: eHighway and digital twins as artificially intelligent mega projects (abstract)

17:00 Elahe Sherafat (Toronto Metropolitan University, Canada)
 Bilal Farooq (Toronto Metropolitan University, Canada)
 Amir Hossein Karbasi (McMaster University, Canada)
 Seyedehsan Seyedabrishami (Tarbiat Modares University, Iran)

An Attention-Based LSTM for Multivariate Traffic Prediction on Rural Roads (abstract)

July 19th, 16:00-17:50 Session C4-S15_SS : SPECIAL SESSION : The Conflict, Power, and Promise for the Safety and Livability of Streets [↑](#)

CHAIR: Bruce Appleyard (San Diego State University, United States)

LOCATION: 520E

This session will celebrate over 40 years of this work on the conflict, power, and promise of our streets. Streets constitute the majority of our urban public spaces, yet we struggle everyday with how they should be designed and operated for travel, safety, and livability. This panel discussion will revolve around the importance of streets and streetspace, especially in the shadows of our experiences with COVID-19 which, in some instances, has forever changed our relationship with streets. Participants are invited to explore and share key findings from their own work on streets and reflect on the topics of street livability, complete streets and Vision Zero. To help generate group discussion, key findings from the body of research building on the book *Livable Streets 2.0* -- the seminal research leading to the general theory that streets are for people, not merely conduits for cars -- will be presented.

- **The Conflict, Power, and Promise of our Streets** (Dr. Bruce -Appleyard, San Diego State University)
- **Traffic Calming Safety State of Practice** (Dr. Reid Ewing)
- **Greenways, Complete Streets, Livability, and Health** (Dr. Lawrence Frank)
- **A Tribute to Donald Appleyard** (Dr. Eduardo Vasconcellos)
- **Streets, Safety, and the Shaping of our Towns and Suburbs** (Dr. Eran Ben-Joseph)
- **Panel Discussion:** Bruce Appleyard Moderator w/o Q&A

July 19th, 16:00-17:50 Session C4-S3: Cyclist Safety Analysis [↑](#)

CHAIR: Serge Lamberty (RWTH Aachen University, Germany)

LOCATION: 520C

16:00 Christian Rudolph (Wildau University of Applied Sciences, Germany)
Perceived safety using multi-lane and canopied bicycles (velocars) (abstract)

16:20 Mustafa Ekmekci (University of Portsmouth, UK)
 Nima Dadashzadeh (University of Portsmouth, UK)
 Lee Woods (University of Portsmouth, UK)

**Does the reduced visibility at priority-controlled intersections influence cyclist safety?
Findings from a case study in the UK** (abstract)

16:40 Serge Lamberty (RWTH Aachen University, Germany)
Philipp-Armand Klee (RWTH Aachen University, Germany)
Adrian Fazekas (RWTH Aachen University, Germany)
Markus Oeser (RWTH Aachen University, Germany)

**System for Real-time Prevention of Accidents between Cyclists and Right-Turning Motor
Vehicles** (abstract)

17:00 Catherine Toulouse (Polytechnique Montreal, Canada)
Nicolas Saunier (Polytechnique Montreal, Canada)
Marie-Soleil Cloutier (INRS, Canada)

Cyclist Overtaking Safety Study Using Video Data (abstract)

17:20 Yoon-Young Choi (Samsung Traffic Safety Research Institute, South Korea)
Sang-Yeon Hong (The Seoul institute, South Korea)
Junhan Cho (Samsung Traffic Safety Research Institute, South Korea)

**Investigating the contributing factors of the pedestrian crash using a surrogate variable of
walking exposure** (abstract)

July 19th, 16:00-17:50 Session D1-S2: Transit Data [↑](#)

CHAIR: Léa Fabre (Laboratoire Aménagement Economie Transports - Université Lumière Lyon 2, France)
LOCATION: 513D

16:00 Saeid Amiri (Polytechnique Montreal, Canada)
James Goulet (Polytechnique Montreal, Canada)
Martin Trépanier (Polytechnique Montreal, Canada)
Catherine Morency (Polytechnique Montreal, Canada)
Nicolas Saunier (Polytechnique Montreal, Canada)

Modeling Transportation Time Series using Bayesian Dynamic Linear Models (abstract)

16:15 Léa Fabre (Laboratoire Aménagement Economie Transports - Université Lumière Lyon 2,
France)
Caroline Bayart (Laboratoire Sciences Actuarielles et Financières - Université Claude Bernard
Lyon 1, France)
Patrick Bonnel (Laboratoire Aménagement Economie Transports - ENTPE, France)
Alexandre Nicolas (Institut Lumière Matière - CNRS - Université Claude Bernard Lyon 1,
France)

**From boarding counting error to error in O-D matrix estimates: how to improve the
reliability of passive data?** (abstract)

16:35 Thibault Fourez (Citec - IRIT, France)
Nicolas Verstaebel (IRIT - Université Toulouse 1 Capitole, France)
Frederic Migeon (IRIT, France)
Frédéric Schettini (Citec, France)
Frédéric Amblard (IRIT - Université Toulouse 1 Capitole, France)

Transport Mode Detection on GPS and accelerometer data: a temporality based workflow (abstract)

16:55 Benjamin Cottreau (LAET, France)
Adel Adraoui (LAET, France)
Ouassim Manout (LAET, France)
Louafi Bouzouina (LAET, France)

Spatio-temporal patterns of the impact of COVID-19 on public transit: an exploratory analysis from Lyon, France (abstract)

17:15 An Ping (Southwest Jiaotong University, China)
Hongmin Wei (Southwest Jiaotong University, China)
Hongtai Yang (Southwest Jiaotong University, China)

Unique in the Metro System: The Likelihood to Reidentify a Metro User with Limited Trip Information (abstract)

17:35 Noriel Christopher Tiglao (University of the Philippines National College of Public Administration and Governance, Philippines)
Nestor Michael Tiglao (University of the Philippines Diliman, Philippines)
Erris Sanciangco (SafeTravelPH Mobility Innovations Organization Inc., Philippines)
Mark Angelo Tacderas (University of the Philippines National College of Public Administration and Governance, Philippines)

Crowdsourcing and Bus Telematics for Promoting Fuel Efficiency and Eco-Driving Practices on the EDSA Busway (abstract)

July 19th, 16:00-17:50 Session D2-S3: M: Methodological Contributions to Demand Analysis I [↑](#)

CHAIR: Hajime Watanabe (Tokyo University, Japan)

LOCATION: 520A

16:00 Hajime Watanabe (The University of Tokyo, Japan)
Abhilash C. Singh (Imperial College London, UK)

A probit instrumental variable model for addressing endogeneity in multinomial choice and its consideration set formation (abstract)

16:20 Ching-Fu Chen (National Cheng Kung University, Taiwan)
Ching-Ming Lai (National Cheng Kung University, Taiwan)

Affecting Factors of Acceptance of Using Vehicle-to-Grid (V2G) in Taiwan – Extending UTAUT2 with Risk Perceptions (abstract)

16:40 Prithvi Bhat Beeramoole (Queensland University of Technology, Australia)
Ryan Kelly (Queensland University of Technology, Australia)
Md. Mazharul Haque (Queensland University of Technology, Australia)
Alban Pinz (Queensland Department of Transport and Main Roads, Australia)
Alexander Paz (Queensland University of Technology, Australia)

Estimation of discrete outcome models simultaneously considering multiple objectives and complex data characteristics (abstract)

17:00 José Ángel Martín-Baos (University of Castilla-La Mancha, Spain)
Ricardo García-Ródenas (University of Castilla-La Mancha, Spain)

Luis Rodriguez-Benitez (University of Castilla-La Mancha, Spain)
Michel Bierlaire (Ecole Polytechnique Fédérale de Lausanne, Switzerland)

Nyström-based approximations for kernel logistic regression: Application to transport choice modelling (abstract)

17:20 Gabriel Nova (University of Chile, Chile)
C. Angelo Guevara (University of Chile, Chile)
Stephane Hess (University of Leeds, UK)
Thomas O. Hancock (University of Leeds, UK)

Random Utility Maximization model considering the information search process (abstract)

July 19th, 16:00-17:50 Session D3-S3: Tourism and Route Choice [↑](#)

CHAIR: Johan Holmgren (Molde University College, Norway)

LOCATION: 513E

16:00 Ching-Fu Chen (Department of Transportation and Communication Management Science, National Cheng Kung University, Taiwan)
Chiang Fu (Department of Transportation and Communication Management Science, National Cheng Kung University, Taiwan)
Yu-Chun Chen (Department of Transportation and Communication Management Science, National Cheng Kung University, Taiwan)

Exploring Tourist Preference For Mobility-as-a-Service (MaaS) at destinations- A latent class choice approach (abstract)

16:15 Diego Medina (Universidad de Concepcion, Chile)
Juan Antonio Carrasco (Universidad de Concepcion, Chile)
Sebastián Astroza (Universidad de Concepcion, Chile)

Social networks and activity-travel spaces: Insights from a productive and reproductive trip approach (abstract)

16:35 Priyanka Das (IIT Kharagpur, India)
Swati Maitra (IIT Kharagpur, India)

Quantifying the relationship between tourists' satisfaction and choice of walk at tourist destinations in India (abstract)

16:55 Florian Heinitz (Erfurt University of Applied Sciences, Germany)

Persistent Invariance of Person-Level Trip Generation Rates to Networks? (abstract)

17:15 Rabi Mohanty (IIT BHU, Varanasi, India)

Ashapraava Mohanta (KIIT School of Architecture and Planning, KIIT Deemed to be University Bhubaneswar, India, India)

Assessment of Tourists' Travel Experiences at Redeveloped Heritage Sites in Varanasi, India (abstract)

17:35 Jihao Deng (The Key Laboratory of Road and Traffic Engineering, Ministry of Education, China)

Tianhao Li (Hunan Communications Research Institute Limited Company, China)

Chris Bachmann (Department of Civil and Environmental Engineering, University of Waterloo, Canada)

Lei Gao (The Key Laboratory of Road and Traffic Engineering, Ministry of Education, China)
Xiaohong Chen (The Key Laboratory of Road and Traffic Engineering, Ministry of Education, China)

Discovering Route Choice Preferences and Classifying Route Choice Behavior Using Trajectory Data (abstract)

July 19th, 16:00-17:50 Session D4-S2: Networks and new trends in travel behaviour [↑](#)

CHAIR: João de Abreu E Silva (CERIS, Instituto Superior Técnico, Universidade de Lisboa, Portugal)

LOCATION: 512D

16:00 Rattanaporn Kaewkluengklom (Ubon Ratchathani University, Thailand)

Fumitaka Kurauchi (Gifu University, Japan)

Takenori Iwamoto (Shizuoka Sangyo University, Japan)

Application of passenger flow estimation based on network centrality indicators to reorganise the Shizuoka bus network (abstract)

16:20 Zhaohan Wang (The University of Sydney, Australia)

Mohsen Ramezani (The University of Sydney, Australia)

David Levinson (The University of Sydney, Australia)

How Mandatory are 'Mandatory' Lane Changes? An Empirical Study on the Costs of Missing Freeway Exits (abstract)

16:50 Lisa Ecke (Karlsruhe Institute of Technology, Germany)

Jan Vallée (Karlsruhe Institute of Technology, Germany)

Miriam Magdolen (Karlsruhe Institute of Technology, Germany)

Lukas Burger (Karlsruhe Institute of Technology, Germany)

Bastian Chlond (Karlsruhe Institute of Technology, Germany)

Peter Vortisch (Karlsruhe Institute of Technology, Germany)

Plunge and Changed Recurrence of Leisure Activities in the COVID-19 Era – An Analysis of Three Years of Panel Data (abstract)

17:10 Angela Haddad (The University of Texas at Austin, United States)

Aupal Mondal (The University of Texas at Austin, United States)

Chandra Bhat (The University of Texas at Austin, United States)

Eat-in or Eat-out? A Joint Model to Analyze the New Landscape for Dinner Meal Preferences (abstract)

17:30 João de Abreu E Silva (CERIS, Instituto Superior Técnico, Universidade de Lisboa, Portugal)

Julianno Amorim (CITUA, Instituto Superior Técnico, Universidade de Lisboa, Portugal)

The role Technophilia and user goals in the intention to use a mobility-management travel app (abstract)

July 19th, 16:00-17:50 Session E1-S2: Sustainable Future and Transportation [↑](#)

CHAIR: Fusun Ulengin (Sabanci University, Turkey)

LOCATION: 513F

16:00 Rudra P Pradhan (Indian Institute of Technology, Kharagpur-721302, India, India)

Mahendhiran S. Nair (Sunway Business School, Sunway University, Bandar Sunway, 47500, Selangor, Malaysia)

John H Hall (University of Pretoria, Pretoria 0028, South Africa)

Sara E. Bennett (University of Lynchburg, Lynchburg, VA 24501, United States)

Dynamics between Transportation Infrastructure, Institutional Quality, CO2 Emission on Economic Growth: Evidence from Developing Countries (abstract)

16:20 Hong Yang (University of California, Davis, United States)

Lewis Fulton (University of California, Davis, United States)

Retaking the lead in electric vehicle transition? Examining manufacturer investments for future battery and electric vehicle production to 2035 in Europe (abstract)

16:40 Maria de Oliveira Loureiro (Chalmers University of Technology, Sweden)

Maria Taljegard (Chalmers University of Technology, Sweden)

Erik Ahlgren (Chalmers University of Technology, Sweden)

Generating and validating non-urban road transport decarbonization: How to integrate a participatory approach into energy system modeling? (abstract)

17:00 Sule Onsel Ekici (Istanbul University-Cerrahpasa, Turkey)

Ozgur Kabak (Istanbul Technical University, Turkey)

Ilker Topcu (Istanbul Technical University, Turkey)

Fusun Ulengin (Sabanci University, Turkey)

Ozay Ozaydin (Dogus University, Turkey)

Analysis of Direct and Indirect Relations Among Sustainable Development Goals and Transportation Targets (abstract)

17:20 Julia Daley (exo - Réseau de transport métropolitain, Canada)

Anjeli Narrainen (exo - Réseau de transport métropolitain, Mauritius)

Farouk Laimour (exo - Réseau de transport métropolitain, France)

Converting fixed-route transit to on-demand transit: a case study in the Greater Montreal Area, Canada (abstract)

17:40 Rosario Macario (CERIS, Instituto Superior Tecnico, Universidade de Lisboa, Portugal)

Vasco Reis (CERIS - Instituto Superior Técnico - Universidade de Lisboa, Portugal)

Business Models for Smart Mobility Hub Development (abstract)

July 19th, 16:00-17:50 Session E2-S2: Transport infrastructure [↑](#)

CHAIR: Paolo Beria (Politecnico di Milano, Italy)

LOCATION: 514A

16:00 Marco Chitti (MGill University, Canada)

Paolo Beria (Politecnico di Milano, Italy)

A planning history of high-speed rail in Italy (abstract)

16:20 Paolo Beria (Politecnico di Milano, Italy)

Yves Crozet (LAET University of Lyon, France)

Laurent Guihery (CY Cergy Paris University, France)

“On Track” Competition in Passenger Rail Transport: Open Access is emerging in Europe (abstract)

16:40 Daniel Hörcher (Imperial College London, UK)
Daniel Graham (Imperial College London, UK)
Roger Vickerman (University of Kent, UK)

The optimal speed of rail: Velocity and its impact of fares, frequencies, and subsidies (abstract)

17:00 Fumitoshi Mizutani (Kobe University, Graduate School of Business Administration, Japan)
Empirical Analysis of Factors Affecting Rail Infrastructure Investment (abstract)

17:20 Alain Bonnafous (LAET, France)

Assessment and economic regulation of transport infrastructures in the case of PPP and PFI (abstract)

July 19th, 16:00-17:50 Session F1-S4: Land use and spatial pattern of activities [↑](#)

CHAIR: Gopal R. Patil (Indian Institute of Technology Bombay, India, India)

LOCATION: 518A

16:00 Mérédith Lacombe (Polytechnique Montréal, Canada)
Catherine Morency (Ecole Polytechnique Montreal, Canada)
Radhwane Boukelouha (Polytechnique Montréal, Canada)

Lessons from COVID-19 for tomorrow's cities: comparing scenarios improving the distribution of local opportunities (abstract)

16:15 Anuj Jaiswal (MANIT, India)
Anjali Yeole (MANIT Bhopal, India)
Shumaila Saleem (MANIT Bhopal, India)

Land Use Transformation Along BRTS Corridor: Case Of Pimpri- Chinchwad, Pune (abstract)

16:35 Meet Tabiyar (SVNIT, India)
Aarti Desai (Sardar Vallabhbhai National Institute of technology, India)
Krupesh Chauhan (SVNIT, India)

Interrelationship Between Land use and Traffic: Factors and Mitigation (abstract)

16:55 Jingming Liu (Xi'an Jiaotong University, China)
Jean-Claude Thill (University of North Carolina at Charlotte, United States)
Jinfeng Du (Xi'an Jiaotong University, China)
Kui Liu (Xi'an Jiaotong University, China)

Is higher density, intensity and mixed structures of urban land use associated with better Metrorail accessibility? — A spatial, TAZs-based assessment in Shanghai, China (abstract)

17:15 Mingming Cai (University of Washington, United States)
Arthur Acolin (University of Washington, United States)
Anne Moudon (University of Washington, United States)
Qing Shen (University of Washington, United States)
Anthony Buckley (Washington State Department of Transportation, United States)
Catalyzing TOD by leveraging publicly owned land: A multi-criteria planning tool for identifying promising locations (abstract)

17:35 Yi Guo (Department of Geography, Hong Kong Baptist University, Hong Kong)
Yuan Liang (Department of Geography, Hong Kong Baptist University, Hong Kong)
Donggen Wang (Department of Geography, Hong Kong Baptist University, Hong Kong)

The impacts of the station-level built environment on rail transit ridership: a study using longitudinal and non-traditional data (abstract)

July 19th, 16:00-17:50 Session F2-S3: eHighway- eTrucks with overhead lines [↑](#)

CHAIR: Eva Kassens-Noor (Technical University of Darmstadt, Germany)

LOCATION: 520B

16:00 Laurenz Bremer (Technische Universität Darmstadt, Germany)
Eva Kassens-Noor (Technische Universität Darmstadt, Germany)

Framework for the implementation of an innovation corridor for road freight transport in Germany (abstract)

16:15 Regina Linke (Technische Universität Darmstadt, Germany)
Özgür Öztürk (Technische Universität Darmstadt, Germany)
Eva Kassens-Noor (Technische Universität Darmstadt, Germany)

Analysis of the technical and operational integration of overhead contact line hybrid trucks by transport companies (abstract)

16:35 Jürgen K. Wilke (TU Darmstadt, Germany)
Ferdinand Schöpp (TU Darmstadt, Germany)
Regina Linke (TU Darmstadt, Germany)
Eva Kassens-Noor (TU Darmstadt, Germany)

Analysis of availability and downtimes reasons for an overhead contact line system for the electrification of road freight transport (abstract)

16:55 Ferdinand Schöpp (TU Darmstadt, Germany)
Özgür Öztürk (TU Darmstadt, Germany)
Eva Kassens-Noor (TU Darmstadt, Germany)

Impact of an eHighway on the directly emitted greenhouse gases by road freight transport (abstract)

17:15 Cristiam Gil (Universidad de los Andes, Colombia)
Andres Felipe Rey-Ladino (Kuhne Logistics University & Universidad de los Andes, Colombia)
Emrah Demir (Cardiff University, UK)
Wessam Abouarghoub (Cardiff University, UK)
Vasco Sanchez Rodrigues (Cardiff University, UK)
Gordon Wilmsmeier (Universidad de los Andes, Colombia)

From Road Freight Transportation Data To Simulating Future Fleet Configuration (abstract)

July 19th, 16:00-17:50 Session F2-S8: Emissions from urban vehicles [↑](#)

CHAIR: Sonia Mangones (Universidad Nacional de Colombia, Colombia)

LOCATION: 522C

16:00 Sabrina Hammiche (CREM- CNRS Université de Rennes 1, France)
Laurent Denant-Boemont (CREM CNRS Université de Rennes 1, France)

Javier Faulin (Public University of Navarra, Spain)

Adrian Serrano (Public University of Navarra, Spain)

Bargaining for the Last Mile Cost and Environmental Preferences of Stakeholders: An Economic Experiment (abstract)

16:20 Lanlan Wang (Central University of Finance and Economics, China)

Sheng Li (Central University of Finance and Economics, China)

Lingqian Hu (University of Florida, United States)

Looking for the Missing Link: Driving Restriction, Car Trips, and Air Pollution in Beijing (abstract)

16:40 Arse John Salison (University of the Philippines National Center for Transportation Studies, Philippines)

Jebus Edrei Taguam (University of the Philippines National Center for Transportation Studies, Philippines)

Sandy Mae Gaspay (University of the Philippines National Center for Transportation Studies, Philippines)

John Justine Villar (University of the Philippines National Center for Transportation Studies, Philippines)

Sheila Flor Javier (University of the Philippines National Center for Transportation Studies, Philippines)

Jerome Ballarta (University of the Philippines National Center for Transportation Studies, Philippines)

Estimation of Energy Demand and Emissions from the Tricycle Sector in Quezon City, Philippines (abstract)

17:00 Emily Farrar (University of Toronto, Canada)

Natalie Kobaaya (University of Toronto, Canada)

Weaam Jaafar (University of Toronto, Canada)

Sara Torbatian (University of Toronto, Canada)

Shayamila Mahagammulla Gamage (University of Toronto, Canada)

Bryan Bowen (City of Toronto, Canada)

Jeffrey Brook (University of Toronto, Canada)

Arthur Chan (University of Toronto, Canada)

Greg Evans (University of Toronto, Canada)

Marie-Monique Giroux (Bathurst Quay Neighbourhood Association, Canada)

Angela Homewood (Ports Toronto, Canada)

Cheol-Heon Jeong (University of Toronto, Canada)

Lesley Monette (Bathurst Quay Neighbourhood Association, Canada)

Joan Prowse (Bathurst Quay Neighbourhood Association, Canada)

Jeffrey Siegel (University of Toronto, Canada)

Beverly Thorpe (Bathurst Quay Neighbourhood Association, Canada)

Junshi Xu (University of Toronto, Canada)

Marianne Hatzopoulou (University of Toronto, Canada)

Campus-Community Partnership to Characterize Air Pollution in a Toronto Neighbourhood (abstract)

17:20 Sonia Mangones (Universidad Nacional de Colombia, Colombia)
Felipe Jaime (Universidad Nacional de Colombia, Colombia)

**Benefits of Transportation Strategies to Reduce On-road Traffic Pollution Emissions:
Evidence from Bogota, Colombia** (abstract)

July 19th, 16:00-17:50 Session F4-S7_SS: SPECIAL SESSION: Sustainable Transport and Livability [↑](#)

CHAIR: Ashish Verma (IISc, India)

LOCATION: 512B

There are 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. These connections have still not been researched enough and therefore requires special attention through special session invited presentations, to understand them better.

- **Introduction on the special session topic by the session chair**, Prof. Ashish Verma
- **Introductory remarks** by Ms. Flood Alexa from Taylor & Francis
- **A research framework to help attain sustainable transport**, Prof. Martin Trépanier, Polytechnique Montréal, Canada
- Dr. Tanu Priya Uteng, Senior Researcher, Institute of Transport Economics Oslo, Norway
- **Exploring the Paradoxes between Supply Chain Resilience and Sustainability in Times of Crises**, Prof. Aseem Kinra, Professor, University of Bremen, Germany
- Prof. Eva Heinen, Professor, Technische Universität Dortmund, Germany
- **Active travel research and community outreach**, Prof. Maria Attard, Professor, Institute of Climate Change and Sustainable Development, University of Malta
- **Summarizing and Closing Remarks** by Prof. Ashish Verma

July 19th, 16:00-17:50 Session G1-S4_SS: SPECIAL SESSION: Governing Hype [↑](#)

CHAIR: Greg Marsden (University of Leeds, UK)

LOCATION: 522B

The twin challenges of decarbonisation and decongestion have resulted in hugely ambitious, often described as ‘disruptive’ policy transition pathways being set out. Whilst technical analysis shows that there needs to be a careful blend of travel demand reduction, a shift away from the private car and a transition to zero emission mobility, such approaches prove elusive to stitch together. The politics of change which challenge the neo-liberal norms which have been established over the decades of the transition to car dominated cities is difficult. We therefore see governments reach for ever more fanciful adoption rates for electric vehicles, ever greater potential market benefits if they can be the global leaders in new mobility services, delivery robots or air taxis. This session asks what we can understand about the current hype cycles and how research can inform policy on how to take a more balanced view of both the opportunities and threats posed by these new mobility imaginaries. How should we understand and analyze policy hype as a governance strategy?

- **Governing Socio-technical Imaginaries: The case of Mobility as a Service** (Dr Kate Pangbourne, Institute for Transport Studies)

- **Electric Vehicles: Distraction or Solution** (Dr Brian Caulfield, Trinity College Dublin)
- Professor Anthony Perl, Simon Fraser University
- **Panel Discussion** with audience

July 19th, 16:00-17:50 Session G2-S3_SS: SPECIAL SESSION: Mobility development in Chinese cities: policy, planning and practice [↑](#)

CHAIRS: Nina Guan (China Highway & Technology Society, China)

Yacan Wang (School of Economics and Management, Beijing Jiaotong University, Beijing, China, China)

LOCATION: 521

In the face of the new requirements brought about by the global carbon neutral strategy and the concept of sustainable urban development, it is urgent for China's transport sector to discuss and study the relevant strategies from the perspectives of policy, planning and practice, to organize and coordinate the related functional departments, and to implement them properly, so that the development of cities and urban transport promote each other and develop in a coordinated manner. This Panel Session invites five internationally renowned leading scholars to share their experience and perspectives on important issues, challenges, and opportunities in the design, planning, development, and operations of future mobility development in Chinese cities, on both passenger and freight transportation, and from multicontinental perspectives.

- Dr. Xiaowen Fu, Professor and associate dean of the Faculty of Engineering, the Hong Kong Polytechnic University, China
- Dr. Haixiao Pan, Professor of the Department of Urban Planning, Tongji University
- Dr. Anming Zhang, Professor in Operations and Logistics and Vancouver International Airport Authority Chair Professor in Air Transportation at Sauder School of Business, University of British Columbia
- Dr. Yacan Wang, Professor of transportation economics and also Vice Director of Research Institute of China Transportation Economics at Beijing Jiaotong University, China
- Dr. Chi Xie, Professor in the School of Transportation Engineering and Urban Mobility Institute at Tongji University, China

July 19th, 16:00-17:50 Session G3-S4: Planning 1 [↑](#)

CHAIR: Owen Waygood (polytechnique Motreal, Canada)

LOCATION: 519B

16:00 Chris Barrington-Leigh (McGill University, Canada)

Adam Millard-Ball (UCLA, United States)

Tradeoffs in urban street networks: connectivity vs land consumption (abstract)

16:15 Eckhard Szimba (Karlsruhe Institute of Technology (KIT), Germany)

Johannes Pfeifer (Karlsruhe Institute of Technology (KIT), Germany)

Fabio Kurz (Karlsruhe Institute of Technology (KIT), Germany)

Jan Klenner (Norwegian University of Science and Technology (NTNU), Norway)

Nadège Blond (Université de Strasbourg, CNRS, France)

Paul Salze (Université de Strasbourg, CNRS, France)

Alexis Conesa (Université de Strasbourg, CNRS, France)

Kay Mitusch (Karlsruhe Institute of Technology (KIT), Germany)

Key Challenges of Sustainable Urban Transport Planning – Lessons Learnt from Surveys Among Local Authorities in a Transnational Context (abstract)

16:35 Giovanni Lanza (Politecnico di Milano-DASU, Italy)
Paola Pucci (Politecnico di Milano-DASU, Italy)
Luigi Carboni (Politecnico di Milano-DASU, Italy)

Planning for a fair and resilient city. An Inclusive Accessibility by Proximity index (abstract)

16:55 Sock-Yong Phang (Singapore Management University, Singapore)
Yen Cong Wong (Singapore Management University, Singapore)
Stephen Hoskins (The Center for Property Tax Reform, Princeton, NJ 08540, USA, United States)

The impact of commuting on wellbeing: Implications for transport planning (abstract)

17:15 Isabelle Wachter (TU Dortmund University, Germany)
Christian Holz-Rau (TU Dortmund University, Germany)
Eva Heinen (TU Dortmund University, Germany)

What about the context? Analyses of car use and ownership at aggregated city level accounting for transport policy invariant characteristics (abstract)

17:35 Abbas Sheikh-Mohammad-Zadeh (Civil, Geological and Mining Engineering Department, Polytechnique Montreal, Canada)
Nicolas Saunier (Civil, Geological and Mining Engineering Department, Polytechnique Montreal, Canada)
E.O.D. Waygood (Civil, Geological and Mining Engineering Department, Polytechnique Montreal, Canada)

A Methodology for the Evaluation of Street Functions Using Video Data: A Case Study on Speed Humps in Montreal (abstract)

July 19th, 16:00-17:50 Session G3-S8: Public Transport 1 [↑](#)

CHAIR: Silvio Nocera (IUAV University of Venice, Italy)

LOCATION: 515A

16:00 Paul Basnak (Pontificia Universidad Católica de Chile, Chile)
Ricardo Giesen (Pontificia Universidad Católica de Chile, Chile)
Juan Carlos Munoz (Pontificia Universidad Católica de Chile, Chile)

Do Chilean cities have the right set of public transport modes? (abstract)

16:15 Marco Petrelli (Roma Tre University, Italy)
Bus services in the urban areas (abstract)

16:35 Thilakshan Thisaiveerasingam (University of Moratuwa, Sri Lanka)
Saman Bandara (University of Moratuwa, Sri Lanka)

Need for an Improved Criteria to Evaluate Accessibility to Public Bus Transport Systems from a Sustainable Perspective (abstract)

16:55 Michael Lu (University of Saskatchewan, Canada)
Ehab Diab (University of Saskatchewan, Canada)

Understanding the Factors Affecting the Transit Use of Different Groups of Users (abstract)

17:15 Federico Cavallaro (IUAV University of Venice, Italy)

Laura Eboli (University of Calabria, Italy)

Gabriella Mazzulla (University of Calabria, Italy)

Silvio Nocera (IUAV University of Venice, Italy)

Integrated passenger-freight transport for urban and suburban buses (abstract)

17:35 Keren-Or Grinberg-Rosenbaum (Technion, Israel)

Yoram Shiftan (TECHNION - Israel Institute of Technology, Israel)

Francisco Camara Pereira (Technical University of Denmark, Denmark)

Bat Hen Nahmias-Biran (Ariel University, Israel)

Best Of Both Worlds: System Thinking Approach for Transportation Data-Driven Decision-Making (abstract)

July 19th, 16:00-17:50 Session G6-S3_SS: SPECIAL SESSION: Spatial disparities, health equity, and the role of transportation [↑](#)

CHAIR: Shima Hamidi (Johns Hopkins University, United States)

LOCATION: 522C

Negative health effects related to the transportation system can fall hardest on vulnerable members of the community. Households in low-income and underserved areas typically own fewer vehicles, have longer commutes, and have higher transportation costs and lack sidewalks, bikeways, safe crossings, trees, and other features that make active transportation safe and inviting. Inadequate or substandard infrastructure in low-income and minority communities can prevent people from using active transportation. Evidence shows that walking and bicycling is unsafe for transit captive residents leading to higher incidence rates of collisions involving pedestrians and cyclists. Underserved and minority communities are often located near highways and other transportation facilities that produce air pollution and noise leading to negative health effects such as heart disease, asthma, and diabetes. These communities are also less likely to have convenient services, parks, healthcare, and healthy food. This special session discusses some of the most recent research findings on these challenges and strategies that local governments and transportation agencies can take to increase active transportation, improve safety, improve air quality and increase transportation affordability for low-income and underserved communities.

- Dr. Shima Hamidi: Johns Hopkins University will provide an overview of the historical evolution and understanding of who benefits and who is burdened as traditionally underserved resulting from structural and systematic approaches to transportation investments that are inherently spatial in nature.
- Dr. Hamidi will further speak to the concentration of chronic disease burden found in the most underserved communities and potential benefits that could be realized through investments in underserved locations.
- Dr. Arlie Atkins: University of Arizona will present a novel approach to understanding factors influencing active travel within underserved communities applying qualitative research methods in a recent study in Arizona.
- Dr. Lindsay Braun: University of Illinois Champagne-Urbana will present a national U.S. based analysis showing systematic relationships between demographic factors and built, and natural environment features - basically who tends to live where.

- Dr. Bruce Appleyard: San Diego State University will present his work on re-imagining and re-designing Streets for Livability and Health.

July 19th, 16:00-17:50 Session H2-S2: Infrastructure Operation and Traffic Management in Developing Countries – 2 [↑](#)

CHAIR: Samer Madanat (New York University Abu Dhabi, UAE)

LOCATION: 515B

- 16:00 Salini P.N. (College of Engineering Trivandrum, APJAKTU, India)
 Archa S (College of Engineering Trivandrum, APJAKTU, India)
 Ashalatha R (College of Engineering Trivandrum, APJAKTU, India)
 Binu Sara Mathew (College of Engineering Trivandrum, APJAKTU, India)
Passing Characteristics of Vehicles on Undivided Two Lane Highways with Heterogeneous Traffic (abstract)
- 16:15 Ashish Kumar Patnaik (BIT Mesra, India, India)
 Sambit Kumar Beura (NIT Rourkela, India, India)
 Shibani Biswal (NIT Rourkela, India, India)
 Prasanta Kumar Bhuyan (NIT Rourkela, India, India)
Development of Delay models and Assessment of LOS categories for Roundabouts in Indian Traffic Scenario (abstract)
- 16:30 Dilini K. P. (General Sir John Kotelawala Defence University, Sri Lanka)
 Namali Sirisoma (General Sir John Kotelawala Defence University, Sri Lanka)
 Dimantha De Silva (University of Moratuwa, Sri Lanka)
Factors Influencing Tour Mode Decisions Related to Educational Tours in the Western Province, Sri Lanka (abstract)
- 16:45 Chintaman Bari (Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, India)
 Satish Chandra (IIT Roorkee, India)
 Ashish Dhamaniya (Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, India)
FASTag Lane Capacity and Level of Service Analysis Operating Under Mixed Traffic Conditions (abstract)
- 17:00 Poojari Yugendar (Ghani Khan Choudhury Institute of Engineering and Technology, India)
 K.V.R Ravi Shankar (National Institute of Technology Warangal, India)
Experimental Study on Estimation of Door Capacity under Emergency Situations (abstract)
- 17:15 Chintaman Bari (Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, India)
 Akash Kumawat (Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, India)
 Ashish Dhamaniya (Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, India)
Examination of Geometric Design Elements at Toll Plazas Under Mixed Traffic Environment (abstract)
- 17:30 Sebastiaan Beekes (TU Delft, Netherlands)
 Jan Anne Annema (TU Delft, Netherlands)
 Arjan van Binsbergen (TU Delft, Netherlands)
 Lóri Tavasszy (TU Delft, Netherlands)

A dynamic assessment framework for safety performance of Sidewalk Autonomous Delivery Robots on public sidewalks (abstract)

July 19th, 16:00-17:50 Session H5-S3: Traffic management & safety [↑](#)

CHAIR: Hemanthini Allirani (Indian Institute of Science, Bangalore, India)

LOCATION: 524A

16:00 Hemanthini Allirani (Indian Institute of Science, Bangalore, India)

Ashish Verma (Indian Institute of Science, Bangalore, India)

Modelling Traffic Fatalities to Assess the Significance of Gender in Road Safety (abstract)

16:15 Olga Sarmiento (Universidad de los Andes, Colombia)

Luis Angel Guzmán (Universidad de los Andes, Colombia)

Ignacio Sarmiento (Universidad de los Andes, Colombia)

D Alex Quistberg (Dornsife School of Public Health, Drexel University, United States)

Dario Hidalgo (Universidad Javeriana, Colombia)

The contribution of young and novice drivers to road traffic injuries and deaths in Colombia: A machine learning analysis of risk factors (abstract)

16:35 Siti Syazwani Ahmad Sofi (International Islamic University Malaysia, Malaysia)

Abdul Azeez Kadar Hamsa (International Islamic University Malaysia, Malaysia)

Field measurement and residents' perceptions on the effects of road humps on traffic noise (abstract)

16:55 Paulose N. Kuriakose (School of Planning and Architecture, Bhopal, India)

Madhuri Jawale (Nashik Smart City Development Corporation Limited, India)

Parking Management as Strategy to Reduce Congestion and Improving Mobility in Core Area: A Case of Bhopal, India (abstract)

17:15 Qudratullah Zwak (Senior Teaching Assistant, Shaikh Zayed University, Khost-Afghanistan, Afghanistan)

Hajime Watanabe (Tokyo University, Japan)

Investigating the Drivers' Behaviors on Legal and Illegal Vehicle Parking in Khost City, Afghanistan (abstract)

17:35 Rupesh Kumar Yadav (Indian Institute of Technology Roorkee, Nepal)

Akshay Gupta (Indian Institute of Technology Roorkee, India)

Manoranjan Parida (Central Road Research Institute (CRRI)-CSIR, New Delhi, India)

Pushpa Choudhary (Indian Institute of Technology Roorkee, India)

A Comparative Study on the Effects of Service Quality and Personal Attitudes on Overall Satisfaction with Public Buses: A Case Study of Kathmandu, Nepal (abstract)

July 19th, 16:00-17:50 Session H5-S5: Network and demand analysis [↑](#)

CHAIR: Pascal Pochet (LAET - Laboratoire Aménagement Economie Transports, France)

LOCATION: 515C

16:00 Omar Boussouf (Ecole Polytechnique de Montréal, Canada)

Maysoun Messaoudi (Ecole Polytechnique de Montréal, Canada)

Nizar El Hachemi (Université Mohammed V de Rabat, Morocco)

Issmail El Hallaoui (Ecole Polytechnique de Montréal, Canada)

Amina Lamghari (Université du Québec à Trois-Rivières, Canada)

François Soumis (Ecole Polytechnique de Montréal, Canada)

Integrated Network Design and Distribution Planning for Fertilizer: A Case Study in Ethiopia (abstract)

16:15 Pascal Pochet (LAET - Laboratoire Aménagement Economie Transports, France)

Gaele Lesteven (LAET - Laboratoire Aménagement Economie Transports, France)

The spread of motorcycles in sub-Saharan Africa: Dynamics and public issues (abstract)

16:35 Prerna Jain (Black Prix, Bangalore, India)

Vibhore Bakshi (School of Planning and Architecture, Bhopal, India)

Estimating Network Connectivity of Metropolitan cities in India: Case of Nagpur and Indore (abstract)

16:55 An Minh Ngoc (Kochi University of Technology, Japan)

Hiroaki Nishiuchi (Kochi University of Technology, Japan)

Pham Thi Kim Ngoc (Hanoi University of Science and Technology, Viet Nam)

Exploring the joint effects of vehicle ownership and transit proximity on mode choices in motorcycle-dependent cities (abstract)

17:15 Pubudu Damsara (University of Moratuwa, Sri Lanka)

Dimantha De Silva (University of Moratuwa, Sri Lanka)

Namali Sirisoma (General Sir John Kotelawala Defence University, Sri Lanka)

Development of A Demand Model for School Trips in Colombo, Sri Lanka (abstract)

July 19th, 16:00-17:50 Session I1-S2: Developments in Pavement Design and Analysis Approches [↑](#)

CHAIR: Adelino Ferreira (University of Coimbra, Portugal)

LOCATION: 522A

16:00 Tiago Tamagusko (University of Coimbra, Portugal)

Adelino Ferreira (University of Coimbra, Portugal)

Pavement Performance Prediction using Machine Learning: Supervised Learning with Tree-Based Algorithms (abstract)

16:15 Mirla Abi Aad (Virginia Tech, United States)

Montasir Abbas (Virginia Tech, United States)

An Optimization Framework for Pavement Treatment and Spatio-Temporal Distribution of Work Zone Closures (abstract)

16:35 Subhajit Banerjee (National Institute of Technology Rourkela, India)

Gourab Saha (National Institute of Technology Rourkela, India)

Evaluation Framework for Cost-Effective and Sustainable Maintenance and Rehabilitation Strategies of Flexible Pavements (abstract)

16:55 Dhritee Diksha Baroowa (IIT Kharagpur, India)

Swati Maitra (IIT Kharagpur, India)

An Investigation on Load Transfer Behaviour for Whitetopping Pavements (abstract)

17:15 Abdulhaq Alhaddad (Mustansiriyah University, Iraq)
Duaa Aqeel Ali (Mustansiriyah University, Iraq)

Development of Wheel Track Device to Real Simulation of Rutting in Flexible Pavement (abstract)

17:35 Junaid Altaf (Thapar Institute of Engineering and Technology, India)
Tanuj Chopra (Thapar Institute of Engineering and Technology, India)
Rajesh Pathak (Thapar Institute of Engineering and Technology, India)

Design approach for geogrid reinforced base and subbase layers in flexible pavement (abstract)

July 19th, 16:00-17:50 Session L-S3B_SS: SPECIAL SESSION: Research and Applications on the Use of Passive Data from Public Transport (TransitData) # 2 [↑](#)

CHAIR: Brendon Hemily (University of Toronto, Canada)

LOCATION: 512C

- **Deep Hybrid Model for Choice Modeling with Graph-Embedded Urban Road Network**, Dingyi Zhuang (Massachusetts Institute of Technology)
- **Integrating Real-time Bus Information for RL-based Dispatching Decision Support Tool**, Joseph Rodriguez (Massachusetts Institute of Technology)
- **Probabilistic forecasting of bus travel time and passenger occupancy with Bayesian continuous density hidden Markov model**, Xiaoxu Chen (McGill University)
- **Robust transit planning: responses to demand uncertainty and driver absenteeism**, Xiaotong Guo (Massachusetts Institute of Technology)
- **Incorporating the inertia effect into a route choice model using fare transaction data from a large-scale public transport network**, Jacqueline Arriagada (University of Leeds)

July 19th, 16:00-17:50 Session PS_AB: POSTER SESSION TOPICS A-B [↑](#)

LOCATION: 516

Anthonia Thopre (The Federal University of Technology, Akure, Nigeria, Nigeria)
Mobolaji Stephens (The Federal University of Technology, Akure, Nigeria, Nigeria)
Ikpechukwu Njoku (Federal University of Technology, Akure, Nigeri, Nigeria)
Chijioke Akpudo (The Federal University of Technology, Akure, Nigeria, Nigeria)
Chukwuemeka Enyinda (The Federal University of Technology, Akure, Nigeria, Nigeria)
Innocent Ogwude (Nigeria Maritime University, Okerenkoko, Nigeria, Nigeria)

The Perceived Challenges of Tourism in Nigeria (abstract)

Tomasz Tyc (Warsaw University of Technology, Poland)
Szymon Kajma (Warsaw School of Economics, Poland)

The efficiency of State Aid programs for Polish air carriers – Analysis of policy impact on two case studies (LOT Polish Airlines, ENTER Air) (abstract)

Bhavesh Dhonde (SVNIT Surat, India)
Chetan Patel (SVNIT Surat, India)
Samir Patel (SVNIT Surat, India)

Policy driven approach to reduce the freight traffic congestion on urban streets in developing nations (abstract)

Francesca Fermi (TRT Trasporti e Territorio srl, Italy)

Francesco Chirico (TRT TRASPORTI E TERRITORIO srl, Italy)

Davide Fiorello (TRT TRASPORTI E TERRITORIO srl, Italy)

Angelo Martino (TRT TRASPORTI E TERRITORIO srl, Italy)

Wolfgang Grimme (Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR) German Aerospace Center, Germany)

The DESAT Model for Estimating Demand for Small Air Transport in Europe (abstract)

Kailin Song (Harbin Institute of Technology Shenzhen, China)

Effects of driving pattern on carbon emission of urban delivery from company's perspective: an SEM analysis (abstract)

Aristi Karagkouni (Department of Economics, Democritus University of Thrace, Greece)

Maria Sartzetaki (Department of Economics, Democritus University of Thrace, Greece)

Dimitrios Dimitriou (Department of Economics, Democritus University of Thrace, Greece)

Airport Landsite Area Planning: An Activity-Based Methodology for Seasonal Airports (abstract)

Mustansir Farooq (IIT Delhi, India)

M Manoj (IIT Delhi, India)

Kalaga Ramachandra Rao (IIT Delhi, India)

Impact of COVID-19 on Indian civil aviation: Forecasting the temporal recovery (abstract)

Ish Kumar (School of Planning and Architecture, Delhi, India)

Pankaj Kant (School of Planning and Architecture, Delhi, India)

Zeeshan Ahmed (School of Planning and Architecture, Bhopal, India)

Cost Optimization in the Urban Distribution of Dairy Supply - Case of Sanchi, Bhopal (abstract)

Fabia Miorelli (German Aerospace Center (DLR), Germany)

Eugenio Salvador Arellano Ruiz (German Aerospace Center (DLR), Germany)

Patrick Jochem (German Aerospace Center (DLR), Germany)

Electric vehicle charging infrastructure in transportation research and energy systems analysis: Semantic interoperability of modelling approaches (abstract)

Kah Yong Tiong (Lund, Sweden)

Zhenliang Ma (KTH, Sweden)

Carl-William Palmqvist (Lund University, Sweden)

Real-time High-Speed Train Delay Prediction using Seemingly Unrelated Regression Models (VIDEO) (abstract)

Wenlong Li (Graduate School of Advanced Integrated Studies in Human Survivability (ShishuKan), Kyoto University, Japan)

Jan-Dirk Schmöcker (Graduate School of Engineering, Kyoto University, Japan)

Ali-Gul Qureshi (Graduate School of Engineering, Kyoto University, Japan)

Liang Zhao (Graduate School of Advanced Integrated Studies in Human Survivability (ShishuKan), Kyoto University, Japan)

Reconstructing the Transport Network of Ancient China and its Relationship to Social Networks (VIDEO) (abstract)

Han Wang (Beihang University, Beijing, China)

Effects of high-speed rail on intercity travels, utility and social welfare in urban agglomerations: A game-theoretic perspective (VIDEO)

Mahlet Demere Tadesse (Swedish University of Agricultural Sciences, Sweden)

Girma Gebresenbet (Swedish University of Agricultural Sciences, Sweden)

Lori Tavasszy (Delft University of Technology, Netherlands)

David Ljungberg (Swedish University of Agricultural Sciences, Sweden)

Digital traceability capabilities: The case of the Ethiopian coffee supply chain (VIDEO) (abstract)

Jingyuan Wang (Tokyo University of Science, Japan)

Shintaro Terabe (Tokyo University of Science, Japan)

Hideki Yaginuma (Tokyo University of Science, Japan)

Haruka Uno (Tokyo University of Science, Japan)

Yu Suzuki (Tokyo University of Science, Japan)

The Causal Effect of the Shinkansen on Population Change: An Application of Propensity Score Method (VIDEO) (abstract)

Ish Kumar (School of Planning and Architecture, New Delhi, India)

Chidambara Chidambara (School of Planning and Architecture, New Delhi, India)

Freight Patterns and Spatial Planning Requirements of Third Generation E-Commerce in Indian Cities (VIDEO) (abstract)

Jinyang Li (Tongji University, China)

Jing Teng (Tongji University, China)

Service-based and infrastructure-based relative route diversity in multilayer public transport networks (VIDEO) (abstract)

Lydia Novitriana Nur Hidayati (Institute for Transport Studies, UK)

Gerard De Jong (Institute for Transport Studies, Significance, UK)

Anthony Whiteing (Institute for Transport Studies, UK)

Logistics Model for Indonesia's National Freight Model System: From a Deterministic to a Stochastic Framework (VIDEO) (abstract)

Grace Mukunzi (Lund University, Sweden)

Carl-William Palmqvist (Lund University, Sweden)

The Impact of Switch Faults on Train Delays: A Case Study of the Swedish Railway Network (VIDEO) (abstract)

Helen Zewdie Kine (Swedish University of Agricultural Sciences (SLU), Sweden)

Girma Gebresenbet (Swedish University of Agricultural Sciences (SLU), Sweden)

Lorent Tavasszy (University of Delft, Netherlands)

David Ljungberg (Swedish University of Agricultural Sciences (SLU), Sweden)

GIS Based Multi-criteria Decision Making Approach for Dry Port Location Analysis: The Case of Ethiopia (VIDEO) (abstract)

Pankaj Kant (School of Planning and Architecture, New Delhi, India)

Pavan Kumar M N V (School of Planning and Architecture, New Delhi, India)

Ish Kumar (School of Planning and Architecture, New Delhi, India)

DEA Approach to Assess the Efficiency Assessment of Major Wholesale Markets in Case City of Jaipur, North India (VIDEO) (abstract)

Stanisław Iwan (Maritime University of Szczecin, Poland)

Maja Kiba-Janiak (Wroclaw University of Economics, Poland)

Kinga Kijewska (Maritime University of Szczecin, Poland)

Krzysztof Małecki (West Pomeranian University of Technology in Szczecin, Dept. of Computer Science, Poland)

Risk analysis in the implementation of IT-based tools for support of the city logistics systems (abstract)

Martin Aleksandrov (FU Berlin, Germany)

Fairness and Efficiency in Social Vehicle Routing Problems (VIDEO) (abstract)

July 19th, 18:00-19:00 Session STC-M3: STC Second WCTRS Steering committee meeting (part 3) [↑](#)

CHAIR: Tae Hoon Oum (The University of British Columbia, Canada)

LOCATION: 521

Reserved to the members of WCTRS Steering Committee.

Thursday, July 20th

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SCHEDULE OVERVIEW

8:30-10:20	10:20 10:50	10:50- 12:30	12:30- 13:50	13:50-15:30	15:30- 16:00	16:00-17:50
Sessions (see schedule)	Coffee break (516)	SIG meetings (see schedule)	Lunch CIRRELT (517CD)	Sessions (see schedule)	Coffee break (516)	Sessions (see schedule)
Poster sessions (516)		Sessions (see schedule)		Poster sessions (516)		

[Monday \(July 17th\)](#) * [Tuesday \(July 18th\)](#) * [Wednesday \(July 19th\)](#) * [Thursday \(July 20th\)](#) * [Friday \(July 21st\)](#)

DETAILED SCHEDULE

July 20th, 07:30-17:30 - Session REG4: Registration (Location: facing 517)

July 20th, 08:30-10:20 Session 03_SS: SPECIAL SESSION: WCTRS International Partners – Creating Positive Sum Results via Closer Collaboration [↑](#)

CHAIR: Tae Hoon Oum (The University of British Columbia, Canada)

LOCATION: 519A

While each organization serves its members' best interests (research, publications, and participation in policy discussions), for key global issues we would be more productive by acting together in the world stage. This session hope to brain storm those issues and find the ways to collaborate more closely, and hopefully find some avenues to accomplish such positive sum results.

Participants:

- WCTR Society: Tae Hoon Oum, the WCTRS President
- Transportation Research Board (TRB): Victoria Sheehan, Executive Director
- TRB-International Cooperating Council: Chair or Co-chair;
- International Transport Forum: Youngtae Kim, Secretary General
- World Bank: Binyam Reja, Global Practice Manager
- Club of Rome: Yoshi Hayashi, Full Member, immediate past president of the WCTRS
- ADBI (Asian Development Bank Institute): Dr. Seetha Ram
- CCTA (China Communications and Transportation Association): the President and/or Dr. Jin Mao
- EASTS (Eastern Asia Society for Transportation Studies): Dr. Jaehak Oh, President
- AET (Association of European Transport): Prof. Pierluigi Coppola, former Board Chair
- Pan-American Society of Transportation Research: Prof. Jose Holguin-Veras, president

- Air Transport Research Society (ATRS): Prof. Anming Zhang, President
- CODATU (Cooperation for urban mobility in the developing world): Prof. Ali Huzayyin, WCTRS Steering Committee member
- SLOCAT (Sustainable Low Carbon Transport): Holger Dalkmann, former president
- UNESCAP United Nations Economic and Social Commission Asia Pacific: Dr. Weishiuen Ng

Presentations:

- **Dealing with COP28 and the WEF** (proposed by Tae Oum, WCTRS)
- **Enabling inclusiveness in travel in diverse societies** (proposed by Pierluigi Coppola, Association of European Transport)
- **Transport decarbonization in developing countries** (proposed by Binyam Reja, World Bank)
- **Scientific knowledge-based transport policy-making** (proposed by Yoshitsugu Hayashi, Club of Rome & Immediate past WCTRS president)
- **The Need of Local Engagement in setting the Transportation Research Priorities: The Case of Latin-America** (proposed by Jose Holguin, President of Pan American Transport Association)
- **How do we work together in order to avoid and/or reduce damages from future pandemic** (proposed by Anming Zhang, President of ATRS)

July 20th, 08:30-10:20 Session A1-S4_SS: SPECIAL SESSION: Ecosystems in (cross-border) e-commerce and aviation [↑](#)

CHAIRS: Roel Gevaers (University of Antwerp, Belgium) and Wouter Dewulf (University of Antwerp, Belgium)

LOCATION: 521

The strong expected growth of the cross-border e-commerce market ($\pm 25\%$ annually) combined with the increased general increase in air cargo since the pandemic attracted many companies to participate in cross-border e-commerce logistics. This phenomenon had an impact on the entire classical logistic ecosystem. This session focuses on aviation and e-commerce ecosystems due to the recent growth in interest in both industries. The ecosystems will be discussed from different perspectives (maritime and aviation) in the first part, mainly to set the scene. In the second part, the panel participants will discuss the changing ecosystems based on statements/opinions. This special session aims to connect the industry with the academic world. This aim will be achieved through the introduction presentations and the panel discussion, containing three to five invited experts from the maritime/aviation industry/academic world.

- **Introduction + setting the scene** (Wouter Dewulf and Stijn Michielsen)
- **Panel discussion with selected discussants** (lead: Roel Gevaers)
- **Concluding remarks based on the panel discussion** (Roel Gevaers & Wouter Dewulf)

July 20th, 08:30-10:20 Session A2-S11_SS: SPECIAL SESSION: Key issues on maritime, port and hinterland greening [↑](#)

CHAIR: Michele Acciaro (Copenhagen Business School, Denmark)

LOCATION: 513A

There is no 'silver bullet' for the 'greening' and the decarbonization of maritime transport and there are different dimensions and measures that need to be considered, including technology and operational energy efficiency improvements onboard the vessels, the use of alternative fuels and energy sources (i.e. wind propulsion), the role of regulation and policy for the encouragement and the acceleration of the

various initiatives. The distinct and essential role of ports for the decarbonization of the sector – from the provision of onshore power supply and refueling points for alternative fuels to their potential role as hubs for the production of these fuels is also key. All these elements will be part of the presentations and discussion in this session.

- **Introduction** (Thierry Vanelslander)
- **The MAGPIE experience** (Jeroen Pruyn)
- **The PIONEERS experience** (Jeffrey Willems)
- **Modular cross-modal infrastructure for the supply of electricity and hydrogen** (Tino Buschmann)
- **The Daily Port & Shoreline Emission Inventory Model Revisit - Opportunities and Impact** (Elyakim Ben Hakoun)
- **Assessing the Impact of Demand Management Strategies on Emissions in Port-Related Traffic: A Case Study of the Port of Newark-Elizabeth Marine Terminal** (Julia Amaral)
- **Panel discussion on digitalisation**, involving government and sector representatives and academics, moderated by Michele Acciaro

July 20th, 08:30-10:20 Session A2-S5: Smart port [↑](#)

CHAIR: Claudio Ferrari (University of Genoa, Italy)

LOCATION: 524B

08:30 Basma Belmoukari (UQTR, Canada)
Jean-François Audy (UQTR, Canada)
Pascal Forget (UQTR, Canada)

SYSTEMATIC REVIEW ON INNOVATIVE TECHNOLOGIES MOBILIZED IN THE FRAMEWORK OF THE SMART PORT (abstract)

08:50 Erik Bergeron (Université du Québec à Trois-Rivières, Canada)
Jean-François Audy (Université du Québec à Trois-Rivières, Canada)
Pascal Forget (Université du Québec à Trois-Rivières, Canada)

Development of a methodology for simulating a port logistics system to identify bottlenecks (abstract)

09:10 Francesco Russo (DIIES-Università Mediterranea di Reggio Calabria, Italy)
Giuseppe Musolino (DIIES, Università Mediterranea di Reggio Calabria, Italy)

Transportation system models to analyse ports competition and cooperation (abstract)

09:40 Mehran Farzadmehr (Antwerp university, Belgium)
Valentin Carlan (Antwerp university, Belgium)
Thierry Vanelslander (Antwerp university, Belgium)

How AI can influence efficiency of port operation specifically ship arrival process: developing a cost-benefit framework (abstract)

10:00 Lorenzo Franchi (Antwerp Management School, Belgium)
Wouter Van Bockhaven (Antwerp Management School, Belgium)
Seyed Abolfazl Mosheni (University of Antwerp - Departement of Transport and Regional Economics, Belgium)
Valentin Carlan (University of Antwerp - Departement of Transport and Regional Economics,

Belgium)

Thierry Vanelslander (University of Antwerp - Departement of Transport and Regional Economics, Belgium)

Digital Capability Maturity: a model to understand smart port actors' digital maturity (abstract)

July 20th, 08:30-10:20 Session A3-S4: Users, Producers and Wider Impacts [↑](#)

CHAIR: John Armstrong (University of Southampton, UK)

LOCATION: 512H

08:30 Sudhanshu Pawar (National Rail and Transportation Institute, India)

Ananthkrishnan Tandyekkal (National Rail and Transportation Institute, India)

Hari Krishna Gaddam (National Rail and Transportation Institute, Vadodara, India)

Point Based System for Assessing Passenger Level of Service at Public Transport Terminals: A Railway Case Study (abstract)

08:50 Abderrahman Ait Ali (Linköping University, Sweden)

Anders Peterson (Linköping University, Sweden)

Assessing the effects of traffic information to passengers: a literature review (abstract)

09:10 John Preston (University of Southampton, UK)

The Socio-Economic Impacts of HS1: A Re-assessment (abstract)

09:30 Melody Khadem Sameni (Iran University of Science and Technology, Iran)

Erfan Ghorbanali (Iran University of Science and Technology, Iran)

Mohammad Jafari (University of Tehran, Iran)

Analyzing Status of Female workforce in the Railway Industry: A Case Study (abstract)

09:50 Farzana Rahman (United International University, Bangladesh)

Md. Abdullah Faruq (United International University, Bangladesh)

Service Quality Prediction & Ranking of Intercity Train by Structural Equation Model (SEM) (abstract)

July 20th, 08:30-10:20 Session A4-S2: Policy Approach to High Speed Railways [↑](#)

CHAIR: Yoshitsugu Hayashi (Center for Sustainable Development and Global Smart City, Chubu University, Japan)

LOCATION: 522C

08:30 Omkar Deepak Karmarkar (IIT BOMBAY, India)

Arnab Jana (IIT BOMBAY, India)

Nagendra Rao Velaga (IIT BOMBAY, India)

High Speed Railway and its Urban Growth Implications: Public Perception about Factors Inducing Urban Development (abstract)

08:45 Elisa Maria Tirindelli (Ecole Polytechnique Federale de Lausanne, Switzerland)

Paolo Beria (Politecnico di Milano, Italy)

Market segmentation and long-run competition: the case of the Italian rail market (abstract)

- 09:00 Paolo Beria (Politecnico di Milano, Italy)
Vardhman Lunkar (Politecnico di Milano, Italy)
Samuel Tolentino (Politecnico di Milano, Italy)
Vilém Pařil (Masaryk University, Czechia)
Michal Kvasnička (Masaryk University, Czechia)
The seeds of competition in long-distance rail transport. Comparing early European experiences (abstract)
- 09:20 Junmei Cheng (The Ohio State University, United States)
Zhenhua Chen (The Ohio State University, United States)
Wider Socioeconomic Impact Assessments of High-Speed Rail: A Perspective from City Attractiveness (abstract)
- 09:40 Francesco Russo (Università degli studi Mediterranea di Reggio Calabria, Italy)
Corrado Rindone (Università degli studi Mediterranea di Reggio Calabria, Italy)
Giuseppe Andrea Maiolo (independent researcher, Italy)
Carmelo Luca Sicilia (independent researcher, Italy)
HSR planning and designing: reduction of time from reduction of length (abstract)
- 10:00 Yifan Yue (School of Transportation, Southeast University, China)
Jun Chen (School of Transportation, Southeast University, China)
Tao Feng (Urban and Data Science, Graduate School of Advanced Science and Engineering, Japan)
Wei Wang (School of Transportation, Southeast University, China)
Classification and Determinants of High-Speed Rail Stations Using Multi-Source Data: A Case Study in Jiangsu Province, China (abstract)

July 20th, 08:30-10:20 Session B1-S4 [↑](#)

CHAIR: Girma Gebresenbet (Swedish University of Agricultural Sciences (SLU), Sweden)

LOCATION: 512G

- 08:30 Swapnil Garg (Indian Institute of Management Indore, India)
Medical Oxygen logistics in India: A pandemic response (abstract)
- 08:50 Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)
Trilce Encarnacion (University of Missouri- St. Louis, United States)
Sofia Perez-Guzman (Rensselaer Polytechnic Institute, United States)
Victor Cantillo (Universidad del Norte, Colombia)
Oriana Calderon (Rensselaer Polytechnic Institute, United States)
Tricia Wachtendorf (University of Delaware, United States)
The role and potential of trusted change agents and freight demand management in mitigating “panic buying” shortages (abstract)
- 09:10 Luis Reynaldo Mota Santiago (Instituto de Ingeniería UNAM, Mexico)
Angélica Lozano (Universidad Nacional Autónoma de México, Mexico)
Highlights to design a framework to carry out an early response in real time to an earthquake disaster in urban areas (abstract)

09:30 Chung-Shan Yang (Chang Jung Christian University, Taiwan)

Integrating Digitalization and Digital Logistics Platforms for the Digital Transformation of Maritime Shipping (abstract)

July 20th, 08:30-10:20 Session B3-S4: How can intermodal freight transport networks react to Covid-19 or other disruptions? [↑](#)

CHAIR: Carina Kehrt (German Aerospace Center, Germany)

LOCATION: 518C

08:30 Camilla Nyquist Magnusson (Lund University, Sweden)

Freight transportation security system: an integrative literature review connecting institutional pressure with performance (abstract)

08:50 John Magnus Roos (Centre for Consumer Research, School of Business, Economics and Law, University of Gothenburg, Sweden)

Jonas Flodén (Department of Business Administration, School of Business, Economics and Law, University of Gothenburg, Sweden)

Johan Woxenius (University of Gothenburg, Sweden)

Grocery hoarding in Sweden during the COVID-19 pandemic and its consequences for logistics (abstract)

09:10 Jonas Floden (University of Gothenburg, Sweden)

John Magnus Roos (University of Gothenburg, Sweden)

Johan Woxenius (University of Gothenburg, Sweden)

Consumers' perceived food supply chain resilience in urban and rural areas during crisis - Evidence from grocery hoarding during the COVID-19 pandemic (abstract)

09:30 Kesewa Opoku Agyemang (University of New South Wales, Australia)

Elnaz Irannezhad (University of New South Wales, Australia)

The Impact of the COVID-19 Pandemic on Global Freight Movement and Logistics (abstract)

09:50 Greta Hettich (German Aerospace Center, Institute of Transport Research, Germany)

Carina Kehrt (German Aerospace Center, Institute of Transport Research, Germany)

Extreme weather events and their impacts on logistics and freight transport. To what extent do extreme weather events influence logistics and freight transport infrastructure? A comprehensive review (abstract)

July 20th, 08:30-10:20 Session B4-S4: Business models and city logistics [↑](#)

CHAIR: Walther Ploos van Amstel (Amsterdam University of Applied Sciences, Netherlands)

LOCATION: 524C

08:30 Reinaldo Fioravanti (Inter-American Development Bank, United States)

Orlando Fontes Lima Jr (State Campinas University, Brazil)

Giset Natalia Montoya Moreno (Inter-American Development Bank, Brazil)

Janaina Antonino Pinto (State Campinas University, Brazil)

ULaaS: Urban Logistics as a Service – a conceptual platform for digital transformation of logistics services in urban areas (abstract)

08:50 Maja Kiba-Janiak (Wroclaw University of Economics and Business, Poland)
Katarzyna Cheba (West Pomeranian University of Technology in Szczecin, Poland)
Magdalena Mucowska (Wroclaw University of Economics and Business, Poland)
Leise Kelli Oliveira (Federal University of Minas Gerais, Brazil)
Maja Piecyk (University of Westminster, UK)
Pietro Evangelista (Institute for Studies on Mediterranean (ISMED), Italy)
Günter Prockl (Copenhagen Business School, Denmark)
Jagienka Rzeźny-Cieplińska (WSB University in Gdansk, Poland)

How to the design a Business Model for Sustainable Last-Mile Delivery and Returns from E-Customers' Expectations Perspective? (abstract)

09:10 Carla Nascimento (Molde University College, Norway)
Valerio Gatta (Molde University College, Norway)
Edoardo Marcucci (Molde University College, Norway)

Green Crowdsipping: critical business factors and research priorities (abstract)

09:30 Konstantina Katsela (University of Gothenburg, Sweden)

Viable business models for city logistics: exploring the cost structure and revenue streams of fourteen European cases (abstract)

09:50 Wouter Verheyen (University Antwerp, Belgium)
Helena Verhuyck (University Antwerp, Belgium)
Amber Waterschoot (University Antwerp, Belgium)

Legal answers to malpractices in last mile delivery chains – The Belgian case (abstract)

July 20th, 08:30-10:20 Session B4-S6_SS: SPECIAL SESSION: Integration of passengers and freight first-last mile towards more sustainable and desirable mobility and logistics [↑](#)

CHAIRS:

Yusak Susilo (University of Natural Resources and Life Sciences, Austria)
Silvio Nocera (IUAV University of Venice, Italy)
Lori Tavasszy (Delft University of Technology, Netherlands)

LOCATION: 513E

This special session builds on this special issue on Integration passenger-freight currently in progress in the journal Transportation Research Part A: Policy and Practice. The “Green Paper on Urban Mobility”, issued in 2007 by the European Commission, first highlighted how passenger-freight integration could improve the efficiency, sustainability, and desirability of short-distance transport in urban environments. For more than a decade, then, the idea of combining passenger and freight transport has been subject of academic discussions. Several EU-funded projects, moreover, have put a specific focus on the topic (e.g. NOVELOG) or have considered integrated passenger-freight transport among other first-last mile transport innovations (e.g. SMILE). Scholars have proposed optimization strategies, assessment methods, and contributed to the understanding of the main drivers for success and failure of integrated passenger/freight systems. Some of the main conclusions are that this type of integration is promising in terms of potential to reduce negative externalities of mobility and logistics, while positively responding to contemporary challenges such as the on-demand economy. However, normative/regulatory issues and, more in general, a lacking governance/policy framework put the viability of integrated settings at risk. Most scholars developed the conceptual framework, whereas the approach to real case studies and policy-related aspects has often been left behind. This special session intends to discuss the different approaches

proposed so far with regard to the topic of passenger-freight integration for short-haul first-last mile, focusing on implications on transport and logistics policy and practice. Topics of interest include: - Assessment and simulation of economic, environmental and social impacts deriving from the introduction of passenger-freight integration schemes; - Potential of the integration of passenger and freight transport in rural contexts; - Role and impact of new digital technologies on the feasibility of passenger-freight integration; - Role and practices of stakeholder engagement and mobility planning for successful passenger-freight integration; - Analysis of behavioral factors and willingness to support and join passenger-freight integrated schemes by users and stakeholders; - Models and studies on conditions concurring to the feasibility and operational convenience of passenger-freight integrated schemes.

July 20th, 08:30-10:20 Session B5-S4: Multimodality [↑](#)

CHAIR: Bart Jourquin (UCLouvain - CORE, Belgium)

LOCATION: 520F

08:30 Hao Liu (Tongji University, China)

Jiaqi Shen (Tongji University, China)

Lichao Zhu (Zhejiang University of Finance & Economics, China)

Rong Zhang (Tongji University, China)

Modeling and analysis of freight mode choice behavior integrating grouped and repeated observations (abstract)

08:50 Hsu Ya (Tokyo University of Marine Science and Technology, Japan)

Virgilio Ma Jr Ramos (Tokyo University of Marine Science and Technology, Japan)

Tetsuro Hyodo (Tokyo University of Marine Science and Technology, Japan)

Takanori Sakai (Tokyo University of Marine Science and Technology, Japan)

Joint modeling of transport mode and shipment size choice for inter-city freight: a case study using the Japan commodity flow survey data (abstract)

09:10 Nishit Bhavsar (McMaster University, Canada)

Elkafi Hassini (McMaster University, Canada)

Manish Verma (McMaster University, Canada)

Rail-Truck intermodal transportation for dangerous goods (abstract)

09:30 Bart Jourquin (UCLouvain - CORE, Belgium)

Is it worth integrating an accessibility measure in the modal choice model for interregional freight transport? (abstract)

08:30-10:20 Session C1-S1: Exploring Transport Systems: From Data Extraction to Traffic Modelling and Optimization [↑](#)

CHAIR: Xinwei Li (School of Economics and Management, Beihang University, Beijing, China, China)

LOCATION: 520E

08:30 Adham Badran (McGill University, Canada)

Ahmed El-Geneidy (McGill University, Canada)

Luis Miranda-Moreno (McGill University, Canada)

A Review of Techniques to Extract Road Network Features from Global Positioning System Data for Transport Modelling (abstract)

08:45 Jintao Ke (Department of Civil Engineering, the University of Hong Kong, Hong Kong, China, Hong Kong, China, Hong Kong)

Ce Wang (Department of Civil Engineering, the University of Hong Kong, Hong Kong, China, Hong Kong, China, Hong Kong)

Xinwei Li (School of Economics and Management, Beihang University, Beijing, China, China)

Equilibrium analysis for on-demand food delivery markets (abstract)

09:05 Adham Badran (McGill University, Canada)

Ahmed El-Geneidy (McGill University, Canada)

Luis F. Miranda-Moreno (McGill University, Canada)

Creating a Road Network Model from Global Positioning System Trajectory Data for Macroscopic Simulation (abstract)

09:25 Prasetyaning Diah Rizky Lestari (Institute for Transport Studies, University of Leeds, UK)

Ronghui Liu (Institute for Transport Studies, University of Leeds, UK)

Richard Batley (Institute for Transport Studies, University of Leeds, UK)

The effect of optimisation objectives on the outcome of line planning (abstract)

09:45 Yang Gao (The University of Sydney, Australia)

David Levinson (The University of Sydney, Australia)

The relationship between the spatial distribution of congestion and travel time reliability based on queueing theory (abstract)

10:05 Clement Jijoho Godonou (INDEPENDENT, Benin)

Auguste Tognidé Houinsou (Université Abomey-Calavi, Benin)

Housérou Djibril (Consultant, Benin)

Expansion of containerized traffic and economic dynamics in West Africa: the case of the main ports in the range from Dakar to Lagos (abstract)

July 20th, 08:30-10:20 Session C2-S4: Public transport [↑](#)

CHAIR: Wael Alhajyaseen (Qatar University, Qatar, Qatar)

LOCATION: 513B

08:30 Ioannis Karakikes (University of the Aegean, Greece)

Amalia Polydoropoulou (University of the Aegean, Greece)

Athena Tsimpa (University of the Aegean, Greece)

Ioannis Tsouros (University of the Aegean, Greece)

Anas Ahmad Nemer Mohammad (Qatar University, Qatar)

Salwa Salam (Qatar University, Qatar)

Shahram Tahmasseby (Qatar University, Qatar)

Wael Alhajyaseen (Qatar University, Qatar)

Assessing an automated people mover system in Qatar through traffic microsimulation (abstract)

08:45 Dennis Harmann (Institute of Transportation and Urban Engineering, TU Braunschweig, Germany)

Sefa Yilmaz-Niewerth (Institute of Transportation and Urban Engineering, TU Braunschweig, Germany)

Riklas Häbel (Institute of Transportation and Urban Engineering, TU Braunschweig, Germany)
Bernhard Friedrich (Technische Universität Braunschweig, Germany)

Impact of Demand and Fleet Size on Ridepooling Service Quality: A Simulation Study (abstract)

09:05 Xiaohan Zhou (Dalian University of Technology, China)
Yu Jiang (Technical University of Denmark, Denmark)
Shaopeng Zhong (Dalian University of Technology, China)

Modeling and Simulation of the Coupled Ridesourcing and Taxi Market (abstract)

09:25 Lijun Tian (Fuzhou university, China)
Xiaolan Jiang (Fuzhou university, China)
Wenxiang Wu (North China University of Technology, China)
Haijun Huang (Beihang University, China)

Becoming a freelancer or contractor? Drivers' contractual mode and schedule decisions in a dual sourcing market (abstract)

09:45 Aniket Wakhare (CEPT University, India)
H. M. Shivanand Swamy (CEPT University, India)
Laghu Parashar (GIZ India, India)

Comparative Assessment of E-bus Operations in Indian Cities (abstract)

10:05 Xinyan Zhang (Tongji University, China)
Kun An (Tongji University, China)
Lin Zeng (Tongji University, China)
Wanjing Ma (Tongji University, China)

Flexible bus optimal dispatching model under low passenger demand (abstract)

July 20th, 08:30-10:20 Session C3-S4: Advanced routing and control [↑](#)

CHAIR: Alexander Roocroft (University of Sheffield, UK)

LOCATION: 513C

08:30 Alexander Roocroft (University of Sheffield, UK)
Giuliano Punzo (University of Sheffield, UK)
Muhamad Azfar Ramli (A*STAR, Singapore)

System Optimal Routing and Distribution of Benefits on National Road Networks (abstract)

08:50 Jue Hou (Tongji university, China)
Chi Xie (Tongji university, China)

Design and Implementation of a Carsharing Operations Management System with the Internet of Vehicles and Cloud-Native Computing Technologies (abstract)

09:10 Grace O. Kagho (Institute of Transport Planning and Systems, ETH Zurich, Switzerland)
Milos Balac (Institute of Transport Planning and Systems, ETH Zurich, Switzerland)
Kay W. Axhausen (Institute of Transport Planning and Systems, ETH Zurich, Switzerland)

Understanding of group travel and weekend travel behavior for on-demand mobility services (abstract)

09:40 Yangang Zou (Southwest Jiaotong University, China)
Fangfang Zheng (Southwest Jiaotong University, China)
Can Liu (Southwest Jiaotong University, China)
Youhua Tang (Southwest Jiaotong University, China)
Zhichen Fan (Southwest Jiaotong University, China)

Cooperative eco-driving for mixed traffic at signalized intersections: a Nash-based distributed MPC approach (abstract)

10:00 Samara Leal (University Center of Belo Horizonte – UniBH, Brazil)
Paulo Almeida (Federal Center for Technological Education of Minas Gerais – CEFET-MG, Brazil)

OACTS: Mathematical Model For Optimizing The Active Control of Traffic Signals

Parameters (abstract) 

July 20th, 08:30-10:20 Session C4-S1: Pedestrian Safety Analysis (1) [↑](#)

CHAIR: Miho Iryo-Asano (Graduate School of Environmental Studies, Nagoya University, Japan)

LOCATION: 520C

08:30 Muhammad Faizan Ul Haq (Graduate School of Environmental Studies, Nagoya University, Japan)

Miho Iryo-Asano (Graduate School of Environmental Studies, Nagoya University, Japan)

Wael K.M Alhajyaseen (Department of Civil and Architectural Engineering, College of Engineering, Qatar University, Qatar)

Christian J. R. Samson (Department of Civil and Architectural Engineering, College of Engineering, Qatar University, Qatar)

Hong Zhu (Key Laboratory of Road and Traffic Engineering, Tongji University, China)

Impact of Refuge Island at Two-Lane Roads on Pedestrian Crossing Behavior: A Virtual Reality Study (abstract)

08:50 Jooyong Lee (Seoul National University, South Korea)

Kijong Eom (Seoul National University, South Korea)

Justin S. Chang (Seoul National University, South Korea)

Vehicle – Pedestrian Trajectory Estimation and Safety Evaluation at Intersections using Physics-informed Deep Neural Network (abstract)

09:10 Dipanjan Mukherjee (Thapar Institute of Engineering and Technology, India)

Sudeshna Mitra (The World Bank, United States)

Study of Factors Contributing to Vulnerable Road Users' Hit-and-Run Crashes in Urban Setup in a Developing Country (abstract)

09:30 Sangjin Han (Graduate School of Environment Studies, South Korea)

Kijong Eom (Graduate School of Environment Studies, South Korea)

Seungyeon Lee (Graduate School of Environment Studies, South Korea)

Identification of Factors Contributing to Elderly Pedestrian Fatalities Using Classification and Regression Tree (abstract)

09:50 Shubha Bamney (IIT Madras, India)

Gitakrishnan Ramadurai (IIT Madras, India)

Pedestrian Injury Severity Modelling with Additional Secondary Data Extracted using Satellite Images (abstract)

July 20th, 08:30-10:20 Session D1-S3: Survey methods [↑](#)

CHAIR: Steven Farber (University of Toronto Scarborough, Canada)

LOCATION: 513D

08:30 Rabi Mishalani (The Ohio State University, United States)

Mark McCord (The Ohio State University, United States)

Correcting biases in transit onboard survey determined socioeconomic and travel characteristics using origin-destination flow estimates (abstract)

08:45 Glenn Simon Latonero (University of the Philippines National Center for Transportation Studies, Philippines)

Sahid Kamid (University of the Philippines National Center for Transportation Studies, Philippines)

Jose Regin Regidor (University of the Philippines National Center for Transportation Studies, Philippines)

Assessment of Commuting Characteristics of Schoolchildren and Road Attributes as Inputs to National Data Collection to Improve Safe Journeys to and from School (abstract)

09:05 Anna Reiffer (Karlsruhe Institute of Technology, Germany)

Kim Kandler (Karlsruhe Institute of Technology, Germany)

Martin Kagerbauer (Karlsruhe Institute of Technology, Germany)

Peter Vortisch (Karlsruhe Institute of Technology, Germany)

Influence of Travel Diary Survey Period on Measuring Telecommuting Effects (abstract)

09:25 Vishwajeet Verma (Transportation Engineering Division, Dept. of Civil Engineering, IIT Roorkee, India)

Rajat Rastogi (Transportation Engineering Division, Dept. of Civil Engineering, IIT Roorkee, India)

Standardization of Commuter Perception Survey to Measure Transit Service Quality – An Indian Study (abstract)

09:45 Hedieh Keshavarz (Polytechnique Montreal, Canada)

Catherine Morency (Polytechnique Montreal, Canada)

An overview of methods for measuring respondent burden in surveys (abstract)

10:05 Matthew Palm (University of Toronto Scarborough, Canada)

Paromita Nakshi (University of Toronto, Canada)

Elnaz Yousefzadeh Barri (University of Toronto, Canada)

Steven Farber (University of Toronto Scarborough, Canada)

Michael Widener (University of Toronto, Canada)

Measuring unrealized travel and activity participation: a systematic review of existing surveys and options for innovation (abstract)

July 20th, 08:30-10:20 Session D2-S4: New Contributions to, and Reviews of, Mode Choice Modeling [↑](#)

CHAIR: Dominic Villeneuve (CIRRELT - Université Laval, Canada)

LOCATION: 520A

- 08:30 Dominic Villeneuve (CIRRELT - Université Laval, Canada)
Chamberland Maxime (CRAD - Université Laval, Canada)
Audate Pierre-Paul (CRAD - Université Laval, Canada)
Dubé Jean (CRAD - Université Laval, Canada)
Lebel Alexandre (CRAD - Université Laval, Canada)
Scoping review of the literature on modal shift from the car to alternative modes for 2010-2020 (abstract)
- 08:50 Camila Balbontin (The University of Sydney, Australia)
David Hensher (The University of Sydney, Australia)
Matthew Beck (Institute of Transport and Logistics Studies, University of Sydney, Australia)
How are life satisfaction, concern towards the use of public transport and other underlying attitudes affecting mode choice for commuting trips? A case study in Sydney from 2020 to 2022 (abstract)
- 09:10 Chantal Roucolle (ENAC, France)
Pierre Arich (ENAC, France)
Tatjana Bolic (University of Westminster, UK)
Isabelle Laplace (ENAC, France)
Nathalie Lenoir (ENAC, France)
Sébastien Parenty (TSE, France)
Annika Paul (Bauhaus Luftfahrt, Germany)
Substitution path between air and rail in Europe: measuring demand drivers (abstract)
- 09:30 Karl Hofer (Graz University of Technology, Austria)
Martin Fellendorf (Graz University of technology, Austria)
Cycling or Ropeway – two choices of environmentally friendly urban modes (abstract)
- 09:50 Maliheh Tabasi (School of Civil and Environmental Engineering, The University of New South Wales, Australia)
Alireza Raei (School of Civil and Environmental Engineering, The University of New South Wales, Australia)
Tim Hillel (Department of Civil, Environmental and Geomatic Engineering, University College London (UCL), UK)
Rico Krueger (Department of Technology, Management and Economics, Technical University of Denmark (DTU), Denmark)
Taha Hossein Rashidi (School of Civil and Environmental Engineering, The University of New South Wales, Australia)
A joint SP-RP transport mode choice model for smartphone travel diary data (abstract)

July 20th, 08:30-10:20 Session D4-S3: Social relations, time use, and equity [↑](#)

CHAIR: Matthew Palm (University of Toronto Scarborough, Canada)

LOCATION: 512D

- 08:30 Matthew Palm (University of Toronto Scarborough, Canada)
Jeff Allen (School of Cities, University of Toronto, Canada)
Steven Farber (University of Toronto Scarborough, Canada)

Shifted mobility: who works nights and evenings, how they travel, and what it means for equity and well-being (abstract)

08:50 Julie Pélata (DEST – Université Gustave Eiffel, France)
Jimmy Armoogum (DEST – Université Gustave Eiffel, France)
Catherine Gabaude (LaPEA – Université Gustave Eiffel, France)

Factors explaining frequent immobility in France (abstract)

09:10 Maïke Puhe (Institute of Technology Assessment and Systems Analysis, Germany)
Jens Schippl (Karlsruhe Institute of Technology, Institute of Technology Assessment, Germany)

Putting Social Relationships to People, Things, and Places Centre Stage – Insights from a Qualitative Social Network Analysis (abstract)

09:30 Lídia Montero (Universitat Politècnica de Catalunya (UPC), Spain)
Lucía Mejía Dorantes (Consultant, Germany)
Jaume Barceló (Universitat Politècnica de Catalunya (UPC), Spain)

Analysing gendered mobility patterns in Barcelona through spatiotemporal segmentation (abstract)

09:50 Negar Rezvany (École polytechnique fédérale de Lausanne (EPFL), Switzerland)
Tim Hillel (University College London (UCL), UK)
Michel Bierlaire (École polytechnique fédérale de Lausanne (EPFL), Switzerland)

Simulating multiple intra-household interactions (abstract)

July 20th, 08:30-10:20 Session E1-S3: Transport Economics: Scale and Demand Appraisal [↑](#)

CHAIR: Todd Litman (Victoria Transport Policy Institute, Canada)

LOCATION: 513F

08:30 Ayush Pandey (University of Illinois Urbana-Champaign, United States)
Lewis Lehe (University of Illinois Urbana-Champaign, United States)

Hyperdemand on highways with economies of scale (abstract)

08:50 Todd Litman (Victoria Transport Policy Institute, Canada)

Comprehensive Parking Supply, Cost and Price Analysis (abstract)

09:10 Anupriya Anupriya (Imperial College London, UK)
Daniel Graham (Imperial College London, UK)
Prateek Bansal (National University of Singapore, UK)

Quantification of non-linear effects in agglomeration economies for transport appraisals (abstract)

09:30 Keisuke Sato (FUKKEN CO., LTD., Japan)
Atsushi Koike (Kobe University, Japan)
Shintaro Katayama (Institute of System Science Research, Japan)

Analysis of Prediction Characteristics of GRP Change by the SCGE Model for the Linkage of Road Development and Regional Industrial Policy (abstract)

09:50 Shintaro Katayama (Institute of Systems Science Research, Japan)
Atsushi Koike (Kobe University, Japan)

SCGE Modeling Considering Passenger and Freight Transport (abstract)

July 20th, 08:30-10:20 Session E2-S3: Pricing [↑](#)

CHAIR: Ali Najmi (rCITI, School of Civil and Environmental Engineering, UNSW, Sydney, Australia, 2032, Australia)

LOCATION: 514A

08:30 Naville Geiriseb (Namibia University of Science and Technology, Namibia)
Smart Dumba (Namibia University of Science and Technology, Namibia)

The Potential and Limits of the Distance-Based Road User Charging System in Developing Countries: Empirical Evidence from Namibia (abstract)

08:50 Adekunle Mofolasayo (University of Alberta, Canada)

Traffic Congestion Pricing Techniques, Associated Equity Issues, and Sustainable Funding for Transportation Infrastructures (abstract)

09:10 Tak Chun Marcus Chan (Institute of Transportation Studies, UC Davis, United States)

Alimurtaza Kothawala (Institute of Transportation Studies, UC Davis, United States)

Giovanni Circella (Institute of Transportation Studies, UC Davis, United States)

Debapriya Chakraborty (Institute of Transportation Studies, UC Davis, United States)

Road Pricing in Los Angeles County: Understanding Stakeholder Views and Vision for Transportation Sustainability (abstract)

09:30 Ahmad Alitani (Technical University of Munich, Germany)

Allister Loder (Technical University of Munich, Germany)

Julia Kinigadner (Technical University of Munich, Germany)

Development of a novel pricing mechanism for road closures based on accessibility losses (abstract)

09:50 Ali Najmi (rCITI, School of Civil and Environmental Engineering, UNSW, Sydney, Australia, 2032, Australia)

Travis Waller (Dresden University of Technology, Germany, Australia)

Taga Rashidi (rCITI, School of Civil and Environmental Engineering, UNSW, Sydney, Australia, 2032, Australia)

A discretely-constrained MPEC problem for equity in network design and pricing (abstract)

July 20th, 08:30-10:20 Session F1-S8_SS: SPECIAL SESSION: Innovative integrated land-use transport modeling (i-ILUTM) for improved transportation system planning [↑](#)

CHAIR: Ming Zhong (ITS Research Center, Wuhan Univ. of Technology, China)

LOCATION: 518A

Policies related to climate (e.g., carbon peaking and neutral) and sustainability require more than just efficiency to be considered within the transportation planning process; Instead, a systematical consideration of a set of related factors is necessary, where those related to the economy, land-use/space pattern, environment and transportation and their interactive relationship must be represented and pertinent policies can be evaluated in such a unified decision-support system (DSS) – integrated land-use transport model (iLUTM). With an increased access to big data and AI technologies, better understanding to the behaviors of system and more accurate forecast of relevant variables can be done. Based on the

advances of the above fields, innovative ILUTM approaches are on their way to provide finer analysis results, in order to provide an improved transportation planning process. The proposed WCTR special session is dedicated to discuss and present the latest progress in this particular area by organizing renowned scholars in this area.

July 20th, 08:30-10:20 Session F2-S4: Sustainable road freight transport [↑](#)

CHAIR: Gopal R. Patil (Indian Institute of Technology Bombay, India, India)

LOCATION: 520B

08:30 Pham Thi Kim Ngoc (School of Economics and Management, Hanoi University of Science and Technology, Viet Nam)

An Minh Ngoc (Kochi University of Technology, Japan)

Hiroaki Nishiuchi (Kochi University of Technology, Japan)

Barriers to the adoption of electric cargo vehicles in Vietnamese cities (abstract)

08:45 Jiali Fu (The Swedish National Road and Transport Research Institute (VTI), Sweden)

Arne Nåbo (The Swedish National Road and Transport Research Institute (VTI), Sweden)

Harrison John Bhatti (The Swedish National Road and Transport Research Institute (VTI), Sweden)

Locating charging infrastructure for freight transport using multiday travel data (abstract)

09:05 Denise Beil (University of applied sciences Upper Austria, Austria)

Lisa-Maria Putz-Egger (University of applied sciences Upper Austria, Austria)

Silvia Dopler (University of applied sciences Upper Austria, Austria)

Freight mode choices for eco-friendly transport modes: An impact-analysis of modal shift measures (abstract)

09:25 Elmira Parviziomran (University of Gothenburg, Sweden)

Rickard Bergqvist (University of Gothenburg, Sweden)

Estimating the cost of sustainability transition of the road transport system: a case of Swedish heavy-duty fleet (abstract)

09:45 Maria Nunez Munoz (University of Sheffield, UK)

Erica Ballantyne (The University of Sheffield, UK)

David Stone (University of Sheffield, UK)

Tudor Stincescu (University of Sheffield, UK)

Using locally generated renewable energy to charge depot based electric freight fleets (abstract)

July 20th, 08:30-10:20 Session F3-S3: Public transport [↑](#)

CHAIR: Carl Johnsson (Lund University (LTH), Sweden)

LOCATION: 514B

08:30 Paola Pucci (Politecnico di Milano, Department of Architecture and Urban Studies, Italy)
Tactical experiments for upgrading spaces and services in a railway station (abstract)

08:50 Kareem Othman (University of Toronto, Canada)

Amer Shalaby (University of Toronto, Canada)

Baher Abdulhai (University of Toronto, Canada)

A Comprehensive Analysis of the Impacts of Transit Driver Advisory Systems with Space Priority on the Corridor Performance (abstract)

09:10 Xue Cheng (Tongji University, China)
Luo Xiao (Tongji University, China)

Decomposition Analysis of Emission of Jing-jin-ji Area Passenger transport Based on LMDI method (abstract)

09:30 Xiang Liu (Tongji University, China)
Xiaohong Chen (Tongji University, China)
Dimitris Potoglou (Cardiff University, UK)
Ying Fu (Tongji University, China)
Mingshu Tian (Tongji University, China)

Factors affecting the demand for customized bus: Empirical evidence using machine learning (abstract)

09:50 Thi My Thanh Truong (University of Transport Technology, Viet Nam)
Thi Cam Van Nguyen (Ho Chi Minh City Institute for Development Studies, Viet Nam)

Travel satisfaction of young people using electric buses: evidence from Hanoi, Vietnam (abstract)

July 20th, 08:30-10:20 Session F4-S3: Liveability and non-motorized transport – 3 [↑](#)

CHAIR: Eva Heinen (Technische Universität Dortmund, Germany)

LOCATION: 512B

08:30 David Kohlrutz (Chair and Institute of Urban and Transport Planning RWTH Aachen University, Germany)
Tobias Kuhnimhof (Chair and Institute of Urban and Transport Planning RWTH Aachen University, Germany)

A Joint Model of Cyclist Choice of Bicycle Parking Facilities (abstract) 

08:45 Yuebing Liang (The University of Hong Kong, Hong Kong)
Fangyi Ding (The University of Hong Kong, Hong Kong)
Guan Huang (The University of Hong Kong, Hong Kong)
Zhan Zhao (The University of Hong Kong, Hong Kong)

Predicting Potential Demand for Bike Sharing System Expansion using a Multi-Graph Attention Network (abstract)

09:05 Keyvan Hosseini (Trinity College Dublin, Ireland)
Agnieszka Stefaniec (Trinity College Dublin, Ireland)
Brian Caulfield (Trinity College Dublin, Ireland)

eHUBs: Operational Performance Assessment of Shared Electric Mobility Hubs (abstract)

09:25 Shumaila Saleem (MANIT, India)
Anuj Jaiswal (MANIT Bhopal, India)
Pooja Kumari (MANIT Bhopal, India)

Identifying Performance Indicators for a Beginner City to Encourage Active Mobility (abstract)

09:45 Norbert Anthony Gerome Paranga (University of the Philippines Diliman, Philippines)
Takanori Oda (ALMEC Corporation, Japan)

Correlating objective (road inventory) and subjective (user- perception) features in walkability and bikeability assessment (abstract)

10:05 Charlotte Lemieux (Polytechnique Montreal, Canada)
Geneviève Boisjoly (Polytechnique Montreal, Canada)
Françoise Bichai (Polytechnique Montreal, Canada)

Potential synergy between green stormwater infrastructure and active mobility: A systematic literature review (abstract)

July 20th, 08:30-10:20 Session G1-S3: Governance and decision-making – 3 [↑](#)

CHAIR: Louise Reardon (University of Birmingham, UK)

LOCATION: 522B

08:30 Nathan Korstanje (Independent scholar, Canada)
Anthony Perl (Simon Fraser University, Canada)

Policy learning and intergovernmental innovation following the 2015 Metro Vancouver Transportation and Transit Plebiscite (abstract)

08:45 Laingo Randrianarisoa (Kedge Business School, France)
Pierre Cariou (Kedge Business School, France)

Stakeholders' Participation at the IMO Marine Environmental Protection Committee (abstract)

09:05 Moayad Shammut (Massey University (School of People, Environment and Planning), New Zealand)
Muhammad Imran (Massey University (School of People, Environment and Planning), New Zealand)

Governance of automated mobilities in Aotearoa New Zealand (abstract)

09:25 Laura Molinari (Vrije Universiteit Brussel and Université libre de Bruxelles, Belgium)
Elvira Haezendonck (Vrije Universiteit Brussel and University of Antwerp, Belgium)
Michael Doods (Vrije Universiteit Brussel, Belgium)
Alain Verbeke (Vrije Universiteit Brussel and University of Calgary, Belgium)
Vincent Mabillard (Université libre de Bruxelles, Belgium)
Jean-Pierre Merckx (Vrije Universiteit Brussel, Belgium)

Social Economic Monitoring Instrument (SEMI): Making the right project investment decisions at the right moment (abstract)

09:45 Lisa Hansson (Molde University College, Norway)

Political Participation in Transport Governance (abstract)

10:05 Fred Amonya (Lyciar, UK)

Risk and trust: A Lyapunov view of public-private partnership (abstract)

July 20th, 08:30-10:20 Session G2-S4_SS: SPECIAL SESSION: Sustainable Rural Mobility PART 1 [↑](#)

CHAIR: Guenter Emberger (TU Wien, Austria)

LOCATION: 514C

In the urban area, Sustainable Urban Mobility Planning is – to a large extent – considered as a state-of-the-art approach addressing the current challenges of transport and mobility such as low-carbon transport systems, inclusiveness, participatory planning, and accessibility to facilities and amenities, and applied to a number of cities in Europe and worldwide. On the other hand, in rural areas, the car is a dominant mode of transport and the body of knowledge towards sustainable, inclusive and accessible transport is limited with many research gaps. Built upon the past and ongoing activities of SIG G2 and ITF, we aim to discuss principles for policy makers working in this area, and understand and discuss research needs and gaps in order to identify the research topics that could contribute not only to better understanding but also to policy implementation. The discussion outcomes will feed the general SIG G2 meeting during the WCTR2023, in which the next common research agenda and activities will be discussed, and will be taken into consideration during the final phase of the ITF Sustainable Accessibility for All Working Group.

08:30 Monika Bąk (University of Gdansk, Faculty of Economics, Poland)

Przemysław Borkowski (University of Gdansk, Faculty of Economics, Poland)

Michał Suchanek (University of Gdansk, Faculty of Economics, Poland)

Effect of beliefs and attitudes on public transport users' choices. The moderating role of perceived intermodal connectivity (abstract)

08:50 Takeru Shibayama (Vienna University of Technology (TU Wien), Austria)

Barbara Laa (Vienna University of Technology (TU Wien), Austria)

Development of a concept for Sustainable Mobility Guarantee (abstract)

09:10 Stephan Keuchel (Westphalian University, Germany)

David Lohrmann (Westphalian University, Germany)

Spatial effects of carbon pricing on transport equity (abstract)

09:30 Aryana Soliz (McGill University, Canada)

Thiago Carvalho dos Reis Silveira (McGill University, Canada)

Claudio Sarmiento-Casas (University of Toronto, Canada)

Jorge Sánchez-Rodríguez (Universidad Abierta y a Distancia de México, Mexico)

Ahmed El Geneidy (McGill University, Canada)

Scaling up active transportation across North America: A comparison of national policies through a social-equity framework (abstract)

09:50 Hideyuki Kita (Kobe University, Japan)

Satoshi Komoda (Hanshin Electric Railway Co. Ltd., Japan)

Rizumu Ozaki (ATEC Co. Ltd, Japan)

Practical methodology for planning local public transport services (abstract)

July 20th, 08:30-10:20 Session G3-S15_SS: SPECIAL SESSION: Interrogating a paradigm shift for transport planning in the era of smart cities and sustainable development [↑](#)

CHAIR: Sophie Sturup (Xi'an Jiaotong-Liverpool University, China)

LOCATION: 515C

The objective of this session is to discuss what paradigm shift is needed to bring about sustainable development in the era of smart cities. Starting from acceptance of the radical change to transport necessitated in response to climate change, sustainable development goals, and 'smart' technology, we aim to discuss the innovation necessary for a paradigm shift for transport planning. We will focus on

questioning how we might (re)define transport planning and how differently transport planning should address problems and opportunities related to mobility in cities.

- Dr Sophie Sturup, Senior Associate Professor, Xi'an Jiaotong-Liverpool University, **What is (NOT) transport planning, if it isn't enabling more movement**
- Dr Juhyun Lee, Technical Advisor for UN-Habitat Korean committee/ Assistant Professor, Xi'an Jiaotong-Liverpool University, **Critical investigation of future of urban mobility planning: A socio-spatial effects of AVs?**
- Dr Sangjin Han, Associate Professor, Seoul National University (Former position: The Korea Transport Policy Institute), **The Korea Transport Policy Institute), What should (not) be a solution to pedestrians-friendly cities?**
- Mathieu Goetzke, Ontario, Commissioner of transportation services, Region of Waterloo, Canada, **How transit and cities can support each other?**

July 20th, 08:30-10:20 Session G3-S9: Public Transport 2 [↑](#)

CHAIR: Johan Holmgren (Molde University College, Norway)

LOCATION: 515A

08:30 Alexander Kaiser (Bundeswehr University Munich, Germany)

Axel Schaffer (Bundeswehr University Munich, Germany)

Non-parametric efficiency analysis of urban transport systems (abstract)

08:45 Yu Suzuki (TOKYO University of Science, Japan)

Motohiro Yamazaki (Toyota Transportation Research Institute, Japan)

Yasuhiro Mimura (Toyota Transportation Research Institute, Japan)

Mu Rui (Toyota Transportation Research Institute, Japan)

Analysis of factors causing a decrease in the number of local bus users owing to COVID-19 using data from transportation system smart cards (abstract)

09:05 Mysore Narasimhamurthy Sharath (Alliance University, India)

Phani Kumar Patnala (University of Manitoba, Canada)

Babak Mehran (University of Manitoba, Canada)

Jonathan D. Regehr (University of Manitoba, Canada)

Effects of Covid-19 Pandemic Restrictions on Zonal Transit Demand: Evidence from a Low-demand Transit City (abstract)

09:25 Rômulo Filho (Universidade Federal do Rio de Janeiro, Brazil)

Daniel Couto (Empresa de Transporte e Trânsito de Belo Horizonte / Universidade Federal do Rio de Janeiro, Brazil)

Performance based contracts – A test, with results shared among users, operators and workers (abstract)

09:45 Ignacio Tiznado-Aitken (University of Toronto, Canada)

Matthew Palm (University of Toronto Scarborough, Canada)

Steven Farber (University of Toronto, Canada)

After COVID ends, will you continue riding transit? Profiles and motives behind prospective public transport use (abstract)

10:05 Johan Holmgren (Molde University College - Specialized University in Logistics, Norway)
Pernilla Ivehammar (Linköping University, Sweden)

Could Car Ownership Be Reduced Through Improved Public Transport? (abstract)

July 20th, 08:30-10:20 Session H1-S3: Transport Policy, Planning and Financing in Developing Countries 3



CHAIR: Rose Luke (University of Johannesburg, South Africa)

LOCATION: 518B

08:30 Jacomien Van der Merwe (Stellenbosch University, South Africa)
Stephan Krygsman (Stellenbosch University, South Africa)

Impact of Commute Distance on Employment Duration (abstract)

08:50 Brunno Gonçalves (INFRA S.A., Brazil)
George Lavor (INFRA S.A., Brazil)
Leandro Silva (INFRA S.A., Brazil)
Tito Livio Queiroz (Ministry of Infrastructure, Brazil)

The recent evolution of the transportation planning process and methods in Brazil (abstract)

09:10 Victor Cantillo (Universidad del Norte, Colombia)
Victor Cantillo (Proyectos Tecnicos Ltda., Colombia)
Rafael Polo (Unviersidad del Norte, Colombia)

Assessing the factors that drive the acceptance of transport policies among car-owners in Colombia (abstract)

09:30 Rose Luke (University of Johannesburg, South Africa)

Patterns of transport-related social exclusion scholarship in Africa: a research agenda (abstract)

July 20th, 08:30-10:20 Session H5-S4: COVID-19, mobility and transit 

CHAIR: Alexis Fillone (De La Salle University Manila, Philippines)

LOCATION: 524A

08:30 Pubudu Damsara (University of Moratuwa, Sri Lanka)
Dimantha De Silva (University of Moratuwa, Sri Lanka)
Hr Pasindu (University of Moratuwa, Sri Lanka)
Thilanka Munasinghe (Rensselaer Polytechnic Institute, United States)

Study on Variation in Mobility and Travel Behavior during the Covid-19 Pandemic: A Case Study in Western Province, Sri Lanka (abstract)

08:45 Krister Ian Daniel Roquel (De La Salle University, Philippines)
Nicanor Jr. Roxas (De La Salle University, Philippines)
Raymund Paolo Abad (De La Salle University, Philippines)
Maria Cecilia Paringit (De La Salle University, Philippines)
Alexis Fillone (De La Salle University, Philippines)
Jan Nicholas Beza (De La Salle University, Philippines)

Rosso Alejandro Legaspi (De La Salle University, Philippines)

Joseph Noel Nuqui (De La Salle University, Philippines)

Ramil Angelo Plata (De La Salle University, Philippines)

Evaluating Pre- and Mid-COVID-19 Urban Travel: The Case of Metro Manila, Philippines (abstract)

09:05 Lixun Liu (Hunan University, China)

Adam Dennett (University College London, UK)

Robin Hickman (University College London, UK)

Exploring travel mode choice of rail transit in Chongqing from a social equity perspective: A spatial analysis using GWR (abstract)

09:25 Tara Saeidi (University of Manitoba, Canada)

Mahmoud Mesbah (Amirkabir university of technology, Iran)

Meeghat Habibian (Amirkabir university of technology, Iran)

Amirali Soltanpour (Michigan State University, United States)

Mina Sahraei (Amirkabir university of technology, Iran)

Babak Mehran (University of Manitoba, Canada)

Passenger Satisfaction across Multiple Public Transit Modes (abstract)

09:45 Akshay Gupta (Indian Institute of Technology Roorkee, India)

Bivina G.R. (Maulana Azad National Institute of Technology (MANIT), Bhopal, India, India)

Manoranjan Parida (Central Road Research Institute (CRRI)-CSIR, New Delhi, India)

Prioritising Pedestrian's Needs Around Transit Stations Through Walkability Assessment: A walk audit tool approach (abstract)

10:05 Daniel Oviedo (The Bartlett Development Planning Unit, UCL, UK)

Clemence Cavoli (Civil, Environmental and Geomatic Engineering, UCL, UK)

Yasmina Yusuf (Civil, Environmental and Geomatic Engineering, UCL, UK)

Braima Koroma (Sierra Leone Urban Research Centre & Njala University, Sierra Leone)

Alexandria Chong (The Bartlett Development Planning Unit, UCL, UK)

Everyday accessibility practices and experiences in a context of transitions to sustainable urban mobility in Sub-Saharan Africa: Qualitative evidence from Freetown, Sierra Leone (abstract)

July 20th, 08:30-10:20 Session L-S1_SS: SPECIAL SESSION: Quebec's Advisory Committee on Climate Change: Recommendations on What Quebec should do to meet its GHG reduction targets in Transportation [↑](#)

CHAIR: Benoit Rigaud (Comité consultatif sur les changements climatiques - Québec, Canada)

LOCATION: 512C

The session's objective is to present the mandate and vision of the Quebec's Advisory Committee on Climate Change and to expose the most important recommendations stemming from some of its recent publications namely: recommendations related to the new Quebec's National Policy on Architecture and Land Development, recommendations with respect to carbon neutrality targets, recommendation related to heavy transportation.

Animation by Matthieu Mondou:

- **Opening speech: presentation of the Advisory Committee (mandate, vision, composition) and of the Quebec's target with GHG reduction and carbon neutrality**, Benoit Rigaud
- **Some trends on transportation with respect to GHG emissions in Quebec**, Catherine Morency:
- **Summary of the main recommendations with regards to the Quebec's National Policy on Architecture and Land Development**, Annie Levasseur
- **Summary of the main recommendations with regards to reducing the carbon footprint of heavy transportation**, Matthieu Mondou
- **Next steps** (upcoming publications and topics) Q&A, Benoit Rigaud

July 20th, 08:30-10:20 Session PS_CDE: POSTER SESSION TOPICS C-D-E [↑](#)

LOCATION: 516

Kuldeep Kalita (IIT Guwahati, India)
Akhilesh Maurya (IIT Guwahati, India)

Assessment of Driver Behavior on Hilly Roads through Critical Speed and Speed Position Analysis (abstract)

Sunday Ajemunigbohun (Lagos State University, Ojo, Lagos State, Nigeria)
Ibraheem Abdul-Azeez (LAGOS STATE UNIVERSITY, Nigeria)
Kehinde Abiodun (LAGOS STATE UNIVERSITY, OJO., Nigeria)

Assessing physical risk control techniques influencing motorists' behaviours towards road safety compliance in Lagos state, Nigeria (abstract)

Dr. Shawon Aziz (Transport Research Laboratory (TRL) UK, India)
Tony Mathew (Transport Research Laboratory (TRL) UK, India)
Dr. John Fletcher (Transport Research Laboratory (TRL) UK, UK)

Formulation of mass action plans as a targeted road safety intervention. Case study: Himachal Pradesh-India (abstract)

Robert Mansell (Toronto Metropolitan University, Canada)

Ranking Road Safety Improvement Projects Using a Multi-Criteria Approach (abstract)

Pranab Kar (IIT Guwahati, India)
Suvin P. Venthuruthiyil (Indian Institute of Technology Guwahati, India)
Mallikarjuna Chunchu (IIT Guwahati, India)

Review of proactive safety approach for the application in mixed traffic of low and middle income countries (LMICs) (abstract)

Dr. Sewa Ram (School of Planning and Architecture New Delhi, India)
Dr. Shawon Aziz (Transport Research Laboratory (TRL) UK, India)

Application of spatial analysis tools to study the clustering tendency of road traffic crashes and determination of the threshold period for formation of black spots. Case study: India (abstract)

Amol Patil (Tata Consulting Engineers, Pune, India)
Dhruv Kothari (Tata Consulting Engineers, Pune, India)
Prathamesh Joshi (Tata Consulting Engineers, Pune, India)

Case Study: Blackspots Study on National Highway-216, Andhra Pradesh (abstract)

Saroch Boonsiripant (Kasetsart University, Thailand)

Monthira Phamornmongkhonchai (Kasetsart University, Thailand)

Peraphan Jittrapirom (Radboud University, Netherlands)

Chuthathip Athan (Mobinary Company Limited, Thailand)

Identify Carsharing Users' Trip Activities with GPS Trajectory Data, a Big Data Approach (abstract)

Taha Rashidi (UNSW Sydney, Australia)

Seyedehsan Seyedabrishami (University Sydney, Australia)

Complex Network Enabled Time Series Analysis of Nightlight Data (abstract)

Yijia Hu (The University of Hong Kong, Hong Kong)

Zhan Zhao (The University of Hong Kong, Hong Kong)

Modeling cycling flows on street networks using a graph convolutional network-based spatial regression approach (abstract)

Abhishek Chakraborty (IIT Kharagpur, India)

Saptarshi Sen (IIT Kharagpur, India)

Sudipta Pal (RITES Limited, Highway Division, India)

Bhargab Maitra (IIT Kharagpur, India)

Priority areas of intervention for development of walking, bicycling and motorized feeder facilities as first-and-last mile connectivity with metro stations (abstract)

Pidathala Vaishnavi (Indian Institute of Technology Kharagpur, India)

Bhargab Maitra (Indian Institute of Technology Kharagpur, India)

Pulak Mishra (Indian Institute of Technology Kharagpur, India)

Improvement of inland water transport service based on users' perception (abstract)

Ouassim Manout (LAET, ENTPE-CNRS-University of Lyon, France)

Azise-Oumar Diallo (LAET, ENTPE-CNRS-University of Lyon, France)

Thibault Gloriot (LAET, ENTPE-CNRS-University of Lyon, France)

Implications of price and fleet size strategies on the demand and operation of shared bikes and e-scooters in Lyon, France (abstract)

Konstantinos Markos (University of Piraeus, Greece)

Amalia Polydoropoulou (University of the Aegean, Greece)

Athina Tsimpa (University of the Aegean, Greece)

Ioannis Maniatis (University of Piraeus, Greece)

Climate Change and Mode Choice Behavior: Design and Acceptance of a Zero Emission Zone (ZEZ) in Athens (abstract)

Justin Yiu (Imperial College London, UK)

Jacek Pawlak (Imperial College London, UK)

Ahmadreza Faghih Imani (Imperial College London, UK)

Aruna Sivakumar (Imperial College London, UK)

A Systematic Study of Battery Electric Vehicle Ownership in the UK (abstract)

Tomoki Ishikura (Tokyo Metropolitan University, Japan)

Estimation of the impact of the new high-speed rail in Japan from a spatial economic perspective (abstract)

Johannes Lohwasser (Bundeswehr University Munich, Germany)

Axel Schaffer (Bundeswehr University Munich, Germany)

What if the Eurotunnel had never been constructed? A counterfactual analysis (abstract)

Chao Yang (Urban Mobility Institute, Ministry of Education at Tongji University, China)

Chengcheng Yu (Urban Mobility Institute, Ministry of Education at Tongji University, China)

Wentao Dong (College of Transportation Engineering, Tongji University, China)

Quan Yuan (Urban Mobility Institute, Ministry of Education at Tongji University, China)

Yong Yin (Transport Department, China Railway Shanghai Group Co Ltd, China)

Multi-layer regional railway network and city economy: polarization, integration, and spillover (abstract)

Rishav Jaiswal (Indian Institute of Technology, Patna, India)

Anil Kumar Bachu (Indian Institute of Technology, Patna, India)

Manoj Jha (The Brite Group, United States)

A Statistical and Machine Learning Framework for Measuring the Economic Impact of Reduced Travel due to COVID-19 in Maryland (abstract)

Noleen Pisa (University of Johannesburg (UJ), South Africa)

Riaan Rossouw (University of Johannesburg (UJ), South Africa)

Chengete Chakamera (University of Johannesburg (UJ), South Africa)

The role of the transport sector in the linkages between the Northern Cape and the rest of South Africa: An economic base and network analysis approach (abstract)

Omid Owjimehr (University of Calgary, Canada)

Merkebe Getachew Demissie (University of Calgary, Canada)

Laleh Behjat (University of Calgary, Canada)

Road Traffic Accident Prediction Using Machine Learning Models (abstract)

Farah Abu Hamad (An-Najah National University, Palestine)

Rama Hasiba (An-Najah National University, Palestine)

Deema Shahwan (An-Najah National University, Palestine)

Huthaifa I Ashqar (Precision Systems, Inc. and Arab American University, United States)

How Do Drivers Behave at Roundabouts? A Case Study Using Machine Learning (abstract)

Rajesh Chouhan (SVNIT SURAT, India)

Ashish Dhamaniya (SVNIT SURAT, India)

Constantinos Antoniou (Technical University of Munich, Germany)

Conflict Assessment and Modeling Using Surrogate Safety and High-Quality Trajectory Data in Merging and Diverging Sections of Toll Plazas (abstract)

Ritvik Chauhan (Sardar Vallabhbhai National Institute of Technology (SVNIT) - Surat, India)

Ashish Dhamaniya (Sardar Vallabhbhai National Institute of Technology (SVNIT) - Surat, India)

Shriniwas Arkatkar (Sardar Vallabhbhai National Institute of Technology (SVNIT) - Surat, India)

Modelling Rear-end Conflicts at Signalized Intersection with Weak Lane-disciplined Mixed Traffic Condition (abstract)

Shally Jain (Technical University of Berlin, Germany)

Analysis of moral and legal aspects of dilemma situations in autonomous driving, based on existing legal frameworks in Germany. (abstract)

Yanli Wang (Tongji University, China)

Yuning Jin (Tongji University, China)

Chenxi Wang (Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji University, China)

Trip Distribution Method for Construction Projects Based on a Joint Model of Destination and Mode Choice—Taking Shanghai as an Example (abstract)

Yanli Wang (Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji University, China)

Chenxi Wang (Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji University, China)

Xu Miao (China Communications Press Co., Ltd., China)

Bing Wu (Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji University, China)

Analysis on influencing factors of traffic congestion in expressway exit ramp area —Take an exit ramp in Shanghai as an example (abstract)

Pranjal Ranpura (Pandit Deendayal Energy University, India)

Rajesh Gujar (Pandit Deendayal Energy University, India)

Sanyam Raj Singh (Pandit Deendayal Energy University, India)

Development of Mixed Traffic Microsimulation Model Calibration for Signalized Intersections (VIDEO) (abstract)

Patricio Salas (Universidad de Concepción, Chile)

Rodrigo De la Fuente (Research Data Scientist, Valencell Inc, United States)

Sebastian Astroza (Universidad de Concepcion, Chile)

Juan Antonio Carrasco (Universidad de Concepción and Instituto Sistemas Complejos de Ingeniería (ISCI), Chile)

Improving the Predictive Performance of the Multinomial Logit Model for Travel Mode Choice Using Conditional Variational Autoencoder (abstract)

Sandeep Singh (Indian Institute of Technology Roorkee, India)

Moses Santhakumar (National Institute of Technology Tiruchirappalli, India)

Evaluation of Level of Service for Indian Highways under Mixed Traffic using Clustering Technique (abstract)

Shah Khalid Khan (School of Engineering RMIT University Melbourne Australia, Australia)

Nirajan Shiwakoti (School of Engineering RMIT University Melbourne Australia, Australia)

Peter Stasinopoulos (School of Engineering RMIT University Melbourne Australia, Australia)

Matthew Warren (RMIT University Australia & University of Johannesburg South Africa, Australia)

Modelling Cybersecurity in Connected and Autonomous Vehicles (VIDEO) (abstract)

Alerik Ezekiel Ruiz (De La Salle University Manila, Philippines)
Nicanor Jr. Roxas (De La Salle University Manila, Philippines)
Krister Ian Daniel Roquel (De La Salle University Manila, Philippines)
Krista Danielle Yu (De La Salle University Manila, Philippines)
Kervin Joshua Lucas (De La Salle University Manila, Philippines)
Alexis Fillone (De La Salle University Manila, Philippines)

Transportation Infrastructure Impacts Calculator (TIIC): An Infrastructure Assessment Tool (VIDEO) (abstract)

Yifan Zhang (State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, Beijing 100044, China, China)
Meng Xu (State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, Beijing 100044, China, China)

Mobility Impact Analysis for MaaS: An Approach based on Users Utility (VIDEO) (abstract)

Lin Jiang (Beijing Jiaotong University, China)
Meng Xu (Beijing Jiaotong University, China)

Fire disaster resistance assessment of urban mass transit hubs: A case study of Beijing South Station (VIDEO) (abstract)

Fadi Shahin (Technion - Israel Institute of Technology, Israel)
Wafa Elias (Sami Shamon College of Engineering, Israel)
Tomer Toledo (Technion - Israel Institute of Technology, Israel)

Mitigating Highway Work Zone Risks: Controlled Experiments and Drivers' Risk Perception (VIDEO) (abstract)

Rui Mu (Toyota Transportation Research Institute, Japan)
Yasuhiro Mimura (Toyota Transportation Research Institute, Japan)
Motohiro Yamazaki (Toyota Transportation Research Institute, Japan)
Yu Suzuki (Faculty of science and Technology, TOKYO University of Science, Japan)
Toshiyasu Takakuwa (Toyota Transportation Research Institute, Japan)

Forecasting Traffic Flow with LSTM Considering Influence of COVID-19 Pandemic (VIDEO) (abstract)

Omid Shahram (Politecnico di Torino, Italy)
Marco Diana (Politecnico di Torino, Italy)

On the relationship between car sharing membership and car ownership levels: Insights from the German Mobility Panel (VIDEO) (abstract)

Apoorva Nawani (School of Planning and Architecture Bhopal, Bhopal, MP, India, India)
Akhil Nawani (Department of Architecture, Planning and Design, IIT (BHU) Varanasi, UP, India, India)
Harsimran Kaur (Department of Architecture, Planning and Design, IIT (BHU) Varanasi, UP, India, India)

Effect of Safety Perception on Mode Choice on First and Last Mile Connectivity: A Study of Lucknow Metro (VIDEO) (abstract)

Lidia Montero (Universitat Politècnica de Catalunya (UPC), Spain)

Lucía Mejía Dorantes (Consultant, Germany)

Jaume Barceló (Universitat Politècnica de Catalunya (UPC), Spain)

Analysing gendered mobility patterns in Barcelona through spatiotemporal segmentation (VIDEO) (abstract)



July 20th, 10:20-10:50 Coffee break (Location: 516) [↑](#)

July 20th, 10:50-12:30 Session A1-M: SIG A1 MEETING [↑](#)

CHAIRS:

Chikage Miyoshi (Cranfield University, UK)

Martin Dresner (University of Maryland, United States)

Yuichiro Yoshida (The IDEC Institute, Hiroshima University, Japan)

LOCATION: 520D

July 20th, 10:50-12:30 Session A2-M: SIG A2 MEETING [↑](#)

CHAIR: Thierry Vanelander (Department of Transport and Regional Economics (TPR), Antwerp, Belgium)

LOCATION: 524B

July 20th, 10:50-12:30 Session A3-M: SIG A3 MEETING [↑](#)

CHAIRS: John Preston (University of Southampton, UK) and Yung-Cheng Lai (National Taiwan University, Taiwan)

LOCATION: 512H

July 20th, 10:50-12:30 Session A4-M: SIG A4 MEETING [↑](#)

CHAIRS: Ke Seetharam (Asian Development Bank Institute, Tokyo, Japan) and Yoshitsugu

Hayashi (Center for Sustainable Development and Global Smart City, Chubu University, Japan)

LOCATION: 522C

July 20th, 10:50-12:30 Session B1-M: SIG B1 MEETING [↑](#)

CHAIRS: Kun Wang (The Hong Kong Polytechnic University, Hong Kong) and Aseem Kinra (Copenhagen Business School, Denmark)

LOCATION: 512G

July 20th, 10:50-12:30 Session B3-S6_SS: SPECIAL SESSION: Electric, autonomous, and automatic transport and logistics operations [↑](#)

(followed by SIG B3 meeting in the same session time)

CHAIR: Johan Woxenius (University of Gothenburg, Sweden)

LOCATION: 524C

The development of electric heavy trucks has been escalating in recent years and is currently already available commercial products from the major truck manufacturer as well as some smaller ones. At the same time autonomous driving has become a reality and with these two technologies merged we are seeing a disruption in the transport industry, both in terms of technology, but also in terms of cost

structure as fuel and drivers have until now made up most of the truck operation costs. In this session a representative from Einride (einride.tech) will give a speech and show their already available solution of electric and autonomous trucks.

- **Key note talk:** Einride presentation, Electrified and autonomous, Dr. Per-Olof Arnas, per-olof.arnas@einride.tech
- **Autonomous and automatization,** Dr. Gunnar Stefansson, gunnar.stefansson@chalmers.se
- **Autonomous and automatization,** requirements and effects, Dr. Michael Brown, Michael.brown@handels.gu.se
- **Autonomous and automatization,** the business case, Dr. Konstantina Katsela, konstantina.katsela@gu.se

Panel setup in the end

July 20th, 10:50-12:30 Session B3-M: SIG B3 MEETING [↑](#)

(following session B3-S6_SS in the same session time)

CHAIRS: Ralf Elbert (Technical University Darmstadt, Germany), Jason Monios (Kedge Business School, France), Gunnar Stefansson (Chalmers University of Technology, Sweden)

LOCATION: 524C

July 20th, 10:50-12:30 Session B4-M: SIG B4 MEETING [↑](#)

CHAIRS: Michael Browne (University of Gothenburg, Sweden) and Anne Goodchild (University of Washington, United States)

LOCATION: 520F

July 20th, 10:50-12:30 Session B5-M: SIG B5 MEETING [↑](#)

CHAIRS: Sushant Sharma (Texas A&M Transportation Institute, United States) and Lori Tavasszy (Delft University of Technology, Netherlands)

LOCATION: 518C

July 20th, 10:50-12:30 Session C1-M: SIG C1 MEETING [↑](#)

LOCATION: 520E

July 20th, 10:50-12:30 Session C2-M: SIG C2 MEETING [↑](#)

CHAIR: Zong Tian (University of Nevada, Reno, United States)

LOCATION: 513B

July 20th, 10:50-12:30 Session C3-M: SIG C3 MEETING [↑](#)

CHAIR: Ashish Bhaskar (Queensland University of Technology, Australia)

LOCATION: 513C

July 20th, 10:50-12:30 Session C4-M: SIG C4 MEETING [↑](#)

CHAIRS:

Wael Alhajyaseen (Qatar University, Qatar, Qatar)

Babak Mehran (University of Manitoba, Canada)

LOCATION: 520C

July 20th, 10:50-12:30 Session D1-M: SIG D1 MEETING [↑](#)

CHAIRS:

Caroline Bayart (Laboratoire Sciences Actuarielles et Financières - Université Claude Bernard Lyon 1, France)

Catherine Morency (Polytechnique Montréal, Canada)

LOCATION: 513D

July 20th, 10:50-12:30 Session D2-M: SIG D2 MEETING [↑](#)

CHAIR: Chandra Bhat (The University of Texas at Austin, United States)

LOCATION: 520A

July 20th, 10:50-12:30 Session D3-M: SIG D3 MEETING [↑](#)

CHAIR: Bhargab Maitra (IIT Kharagpur, India)

LOCATION: 513E

July 20th, 10:50-12:30 Session D4-M: SIG D4 MEETING [↑](#)

CHAIR: Juan Antonio Carrasco (Universidad de Concepción and Centro de Desarrollo Urbano Sustentable (CEDEUS), Chile)

LOCATION: 512D

July 20th, 10:50-12:30 Session E1-M: SIG E1 MEETING [↑](#)

CHAIRS:

Fusun Ulengin (Sabanci University, Turkey)

Ozay Ozaydin (Dogus University, Turkey)

LOCATION: 513F

July 20th, 10:50-12:30 Session E2-M: SIG E2 MEETING [↑](#)

CHAIRS:

Georgina Santos (Cardiff University, UK)

Paolo Beria (Politecnico di Milano, Italy)

LOCATION: 514A

July 20th, 10:50-12:30 Session F1-M: SIG F1 MEETING [↑](#)

CHAIR:

Masanobu Kii (Kagawa University, Japan)

LOCATION: 518A

July 20th, 10:50-12:30 Session F2-M: SIG F2 MEETING [↑](#)

CHAIR:

Patrick Jochem (German Aerospace Center (DLR), Germany)

LOCATION: 520B

July 20th, 10:50-12:30 Session F3-M: SIG F3 MEETING [↑](#)

LOCATION: 514B

July 20th, 10:50-12:30 Session F4-M: SIG F4 MEETING [↑](#)

LOCATION: 512B

July 20th, 10:50-12:30 Session G1-M: SIG G1 MEETING [↑](#)

CHAIRS:

Greg Marsden (University of Leeds, UK)

Louise Reardon (University of Birmingham, UK)

LOCATION: 522B

July 20th, 10:50-12:30 Session G2-M: SIG G2 MEETING [↑](#)

CHAIRS:

Guenter Emberger (TU Wien, Austria)

Takeru Shibayama (Vienna University of Technology (TU Wien), Austria)

Yacan Wang (School of Economics and Management, Beijing Jiaotong University, Beijing, China, China)

LOCATION: 514C

July 20th, 10:50-12:30 Session G3-M: SIG G3 MEETING [↑](#)

CHAIRS:

Stephen Ison (De Montfort University, UK)

Maria Attard (University of Malta, Malta)

LOCATION: 519B

July 20th, 10:50-12:30 Session G4-M: SIG G4 MEETING [↑](#)

CHAIR:

Helena Titheridge (University College London, UK)

LOCATION: 515A

July 20th, 10:50-12:30 Session G6-M: SIG G6 MEETING [↑](#)

CHAIR:

Lawrence Frank (UC San Diego, United States)

LOCATION: 522A

July 20th, 10:50-12:30 Session H1-M: SIG H1 MEETING [↑](#)

CHAIR:

Shinya Hanaoka (Tokyo Institute of Technology, Japan)

LOCATION: 518B

July 20th, 10:50-12:30 Session H2-M: SIG H2 MEETING [↑](#)

CHAIR:

Ashish Verma (IISc, India)

LOCATION: 515B

July 20th, 10:50-12:30 Session H5-M: SIG H5 MEETING [↑](#)

CHAIR:

Varameth Vichiensan (Kasetsart University, Thailand)

LOCATION: 524A

July 20th, 10:50-12:30 Session I1-M: SIG I1 MEETING [↑](#)

LOCATION: 515C



July 20th, 12:30-13:50 Lunch CIRRELT (Location: 517CD) [↑](#)

July 20th, 13:50-15:30 Session A1-S5: Sustainable Aviation [↑](#)

CHAIR: Chikage Miyoshi (Cranfield University, UK)

LOCATION: 520D

13:50 Manuela Nogueira (Federal University of Pernambuco, Brazil)

Leonardo Meira (Federal University of Pernambuco, Brazil)

Maurício Andrade (Federal University of Pernambuco, Brazil)

A critical evaluation on the sustainable performance of Brazilian airports participating in the “sustainable aerodromes” project (abstract)

14:05 David Warnock-Smith (Buckinghamshire New University, UK)

Joshua Fake (Buckinghamshire New University, UK)

BUILDING SUSTAINABLE JOURNEY TO WORK SOLUTIONS AROUND STATED AND REVEALED EMPLOYEE PREFERENCES: THE CASE OF BRISTOL INTERNATIONAL AIRPORT (abstract)

14:20 Stef Proost (Economics Department, KULeuven, Belgium)

Looking for winning policies to address the climate issue in aviation (abstract)

14:35 Mirlan Atabekov (GIZ Kyrgyzstan, Kyrgyzstan)

Volodymyr Bilotkach (Singapore Institute of Technology, Singapore)

Keisuke Kawata (Institute of Social Science, the University of Tokyo, Japan)

Chikage Miyoshi (Town Gown Institute of Innovation for the Future, Hiroshima University, Japan)

Miyu Sakamoto (Graduate School for International Development and Cooperation, Hiroshima University, Japan)

Yuichiro Yoshida (The IDEC Institute, Hiroshima University, Japan)

Ghulam Dastgir Khan (Hiroshima University, Japan)

Double-Edged Impacts of Carbon Footprint Information on Air Travel Demand (abstract)

14:55 Xibei Jia (University of Antwerp, Belgium)

Rosário Macário (CERIS – Instituto Superior Técnico, Portugal)

Sven Buyle (University of Antwerp, Belgium)

How do airports align with sustainability? An analysis of the world’s 150 busiest airports (abstract)

15:15 Hideki Fukui (Ehime University, Japan)

Chikage Miyoshi (Cranfield University, UK)

Estimating tactical surface metering management's effect on aircraft fuel savings at airport (abstract)

July 20th, 13:50-15:30 Session A2-S10: Macro [↑](#)

CHAIR: Harry Geerlings (Erasmus Universiteit Rotterdam, Netherlands)

LOCATION: 512F

13:50 Andri Mubarak (World Maritime University, Sweden)
Satya Sahoo (World Maritime University, Sweden)
Dong-Wook Song (World Maritime University, Sweden)

The Role of Maritime Logistics Systems in National Economies: Discussing Conceptual Issues from a Value Chain Perspective (abstract)

14:10 Wouter Schmidt (University of Antwerp, Belgium)

A typology of promising technological innovations for European container terminals

14:30 Britta Langer (Hamburg Süd, Germany)
Michele Acciaro (Copenhagen Business School, Denmark)

Value creation through sustainable supplier management in maritime transport (abstract)

14:50 Johan Woxenius (University of Gothenburg, Sweden)

Sustainable port-city interactions in Medium and Low Income Countries (abstract)

15:10 Yannis Smirlis (University of Piraeus, Greece)
Vangelis Tsioumas (The American College of Greece - Deree, Greece)
Stratos Papadimitriou (Department of Maritime Studies, University of Piraeus, Greece)
Ernestos Tzannatos (University of Piraeus, Greece)

An extreme value analysis of tanker freight rates (abstract)

July 20th, 13:50-15:30 Session A2-S2: Hinterland modes [↑](#)

CHAIR: Jeffrey Willems (University of Antwerp, Belgium)

LOCATION: 513A

13:50 Afef Lagha (University of Quebec at Trois-Rivières, Canada)
Bechir Ben Daya (University of Quebec at Trois-Rivières, Canada)
Jean-François Audy (University of Quebec at Trois-Rivières, Canada)

Simulation-Based Assessment of Road Transport GHG Emissions in Urban Port Context (abstract)

14:10 Ahmadreza Mahmoudzadeh (Texas A&M University, United States)
Ali Khodadadi (Texas A&M University, United States)
Magdalena Asborn (USACE, United States)
Bruce Wang (TAMU, United States)
Ned Mitchell (USACE, United States)
Michael Hartman (USACE, United States)
Chaolun Ma (TAMU, United States)

Statistical analysis of shoaling rates in the Ohio River (abstract)

14:30 Dhaneswara Al Amien (Nord University Business School, Norway)

Identifying diffusion factors and actors of the autonomous inland shipping innovation: a literature review (abstract)

14:50 Michael J. Izdebski (State University of New York at Delhi, United States)
Lokesh Kalahasthi (Indian Institute of Technology Delhi, India)
Andrés Regal-Ludowieg (Rensselaer Polytechnic Institute, United States)
José Holguín-Veras (Rensselaer Polytechnic Institute, United States)

Short Sea Shipping As A Sustainable Modal Alternative: Qualitative And Quantitative Perspectives (abstract)

15:10 James Merten (University of Antwerp, Belgium)

Enhancing Vessel Safety in the Columbia River Maritime Transportation System: A Case Study on the Impact of Stacked Wind Blades on Navigation

July 20th, 13:50-15:30 Session A2-S6: Maritime digitalization [↑](#)

CHAIR: Christa Sys (University of Antwerp, Belgium)

LOCATION: 524B

13:50 Angeliki Stathi (University of the Aegean, Greece)
Athena Rouboutsos (University of the Aegean, Greece)

Digitalization in Shipping: Perceptions of Risk (abstract)

14:10 Michael Sederlin (The Swedish National Road and Transport Research Institute (VTI) & Linköping University (LiU), Sweden)
Gunnar Flötteröd (The Swedish National Road and Transport Research Institute (VTI) & Linköping University (LiU), Sweden)

Estimation of near-coastal bathymetry using AIS ship movements (abstract)

14:30 Brian Slack (CIRRELT, Canada)
Claude Comtois (CIRRELT, Canada)

Information Technology Applications on the St. Lawrence River Corridor (abstract)

14:50 Sara El Mekkaoui (EMI, Mohammed V University in Rabat, Morocco)
Loubna Benabbou (Université du Québec à Rimouski, Canada)
Abdelaziz Berrado (EMI, Mohammed V University in Rabat, Morocco)

Deep learning based vessel arrivals monitoring via autoregressive statistical control charts for low-carbon shipping (abstract)

15 :10 Daniele Crotti (University of Insubria, Italy)
Claudio Ferrari (University of Genoa, Italy)
Alessio Tei (University of Genoa, Italy)

Alea iacta est. Welfare evaluations of port authorities dealing with terminals' vertical integration. (abstract)

July 20th, 13:50-15:30 Session A3-S5_SS: SPECIAL SESSION: Still on the Railroad to Recovery? Railways and Rail Research in a Post-Covid World [↑](#)

CHAIR: John Preston (University of Southampton, UK)

LOCATION: 512H

Invited presentations and workshop-style open floor discussion.

July 20th, 13:50-15:30 Session A4-S3: Analytic Approach to High Speed Railways

CHAIR: Shintaro Terabe (Tokyo University of Science, Japan)

LOCATION: 522C

13:50 Aurelie Mercier (Transport, Urban Planning and Economics Laboratory - LAET, France)
Nicolas Ovtracht (Transport, Urban Planning and Economics Laboratory - LAET, France)
Alain Bonnafous (Transport, Urban Planning and Economics Laboratory - LAET, France)

Contribution of accessibility measures to analyze impacts of a high-speed rail line on tourist attractiveness : the case of the Sud Europe Atlantique high-speed line (abstract)

14:05 Russo Francesco (DIIES-Università Mediterranea di Reggio Calabria, Italy)
Domenico Sgro (Engineering Degree, Università Mediterranea di Reggio Calabria, Italy)
Giuseppe Musolino (DIIES - Università Mediterranea di Reggio Calabria, Italy)

Demand Analysis in High Speed Rail: modelling the run service choice from daily evolution of tickets (abstract)

14:20 Yuqing Xu (School of Management, Shijiazhuang Tiedao University ; School of Management, Hebei GEO University, China)

Taoxing Zhu (School of Management, Shijiazhuang Tiedao University, China)
Jiameng Han (School of Management, Shijiazhuang Tiedao University, China)

Study on Logistics Development of Urban Agglomerations under the Condition of High-speed Railway: Empirical Analysis Based on three urban agglomerations (abstract)

14:40 Huanhuan Luo (Dalian University of Technology, China)
Shengchuan Zhao (Dalian University of Technology, China)

Accessibility and its spatial equity of high-speed rail network in China (abstract)

15:00 Jie Xu (Fudan University; Shanghai Urban Construction College, China)
Di Wang (Tongji Architectural Design Group, China)

Saved travel time and travel distance of city-cluster high-speed rail: Evidence from the passenger flow in the Yangtze River Delta (abstract)

July 20th, 13:50-15:30 Session B1-S1 [↑](#)

CHAIR: Kun Wang (The Hong Kong Polytechnic University, Hong Kong)

LOCATION: 512G

13:50 Rajali Maharjan (Japan Transport and Tourism Research Institute, Japan)
Hironori Kato (The University of Tokyo, Japan)

Willingness of Private Businesses to Implement Logistics and Supply Chain Resilience Strategies in Japan (abstract)

14:10 Valentin Carlan (University of Antwerp, Belgium)
Paul Matthyssens (University of Antwerp, Belgium)
Wouter van Bockhaven (Antwerp Management School, Belgium)

Contractual relationships shaped by smart logistics trends: are logistics stakeholders ready for changes? (abstract)

14:30 Rafael Arevalo-Ascanio (University of Antwerp, Belgium)
Annelies De Meyer (Flemish Institute for Technological Research, VITO, Belgium)
Roel Gevaers (University of Antwerp, Belgium)
Ruben Guisson (Flemish Institute for Technological Research, VITO, Belgium)
Wouter Dewulf (University of Antwerp, Belgium)

Integrated supply chain network design with first and last-mile distribution: Critical review on methods, challenges, and research opportunities (abstract)

14:50 Zheng Shiyuan (Shanghai Maritime University, China)
Xirong Chen (University of International Business and Economics, China)
Kangyin Dong (University of International Business and Economics, China)
Kun Wang (The Hong Kong Polytechnic University, Hong Kong)
Xiaowen Fu (The Hong Kong Polytechnic University, Hong Kong)
Joint Investment on Resilience of Cross-country Transport Infrastructure (abstract)

15:10 Hang Yuan (Henan University, China)
Changmin Jiang (University of International Business and Economics, China)
Hangjun Yang (University of International Business and Economics, China)
Peer effects in the construction of high-speed rail stations (abstract)

July 20th, 13:50-15:30 Session B3-S5: Decarbonization: developments and challenges for intermodal freight transport networks [↑](#)

CHAIR: Jason Monios (Kedge Business School, France)

LOCATION: 518C

13:50 Rickard Bergqvist (Gothenburg University, Sweden)
Jason Monios (Kedge Business School, France)
Jonathan Jönsson (Scania Group, Sweden)
Potential for rapid adoption of battery-electric vehicles in the heavy-duty truck market (abstract)

14:10 Rahul Iyer (Universite Laval, Canada)
Bobin Wang (Universite Laval, Canada)
Mikael Rönnqvist (Universite Laval, Canada)
The potential of heavy battery electric trucks in forest transportation (abstract)

14:30 Seraphim Kapros (University of the Aegean, Dept. of Shipping, Trade and Transport, Greece)
Panayiota Moraiti (National Technical University of Athens, Greece)
Vasiliki Lioumi (University of the Aegean, Dept. of Shipping, Trade and Transport, Greece)
Ioannis Pervanas (University of the Aegean, Dept. of Shipping, Trade and Transport, Greece)
Traffic attractiveness perspectives of alternative Sea-Rail Intermodal Corridors (abstract)

14:50 Adrian Hernandez (Northwestern University, United States)
Max Ng (Northwestern University, United States)
Pablo Durango-Cohen (Northwestern University, United States)
Hani Mahmassani (Northwestern University, United States)
Locating and sizing refueling facilities on networks to support freight rail decarbonization (abstract)

15:10 Cheri Rhodes (Suddath Corporation, United States)
Dawn Russell (University of North Florida, United States)

Post-pandemic workplace configuration in a transportation services firm: an in-depth case study informed by environmental comfort theory (abstract)

July 20th, 13:50-15:30 Session B4-S9: Planning perspectives and urban goods movement [↑](#)

CHAIR: Alison Conway (City College of New York, United States)

LOCATION: 524C

13:50 Alison Conway (City College of New York, United States)
Moira Conway (Kutztown University, United States)

E-Commerce Facility Development in Small Communities: Lessons Learned from Berks County, Pennsylvania, USA (abstract)

14:10 Adeline Heitz (CNAM LIRSA, France)
Caroline Adamy (Sogaris, France)
Juliette Berthon (Sogaris, France)

The key role of urban design in logistics development: Experimenting a new process for implementing logistics in urban project (abstract)

14:30 Laïla Abdelhaï (LAET - Transport Urban planning Economics Laboratory, France)
Danièle Patier (LAET - Transport Urban planning Economics Laboratory, France)

Emerging Sustainable Urban Logistics Concepts: A Case Study in France (abstract)

14:50 Michael Browne (University of Gothenburg, Sweden)
Jacqueline M Uruchima (University of Gothenburg, Sweden)
Oscar Niemann (University of Gothenburg, Sweden)

Investigating the feasibility of enhancing the efficiency and sustainability of event logistics in urban areas with application of Actor-Resource-Activity and Materials Flow Mapping (abstract)

15:10 Nguyen Thi Binh (Foreign Trade University, Viet Nam)
Trinh Thi Thu Huong (Foreign Trade University, Viet Nam)

Factors Affecting Public Support for the Development of Urban Consolidation Center: The Case of Hanoi City, Vietnam (abstract)

July 20th, 13:50-15:30 Session B5-S5: Optimization of freight systems [↑](#)

CHAIR: Kai Martins-Turner (Technische Universität Berlin, Germany)

LOCATION: 520F

13:50 Kai Martins-Turner (Technische Universität Berlin, Germany)
Kai Nagel (Technische Universität Berlin, Germany)

Agent-based solving of the 2-echelon Vehicle Routing Problem (abstract)

14:10 Ke Zhang (Department of Civil Engineering, Tsinghua University, Beijing 100080; China, China)
Meng Li (Department of Civil Engineering, Tsinghua University, Beijing 100080; China, China)

Two-stage Learning-based Method for Large-scale Pickup and Delivery Services with Late Penalties (abstract)

14:30 Max Ng (Northwestern University Transportation Center, United States)
Adrian Hernandez (Northwestern University, United States)
Pablo Durango-Cohen (Northwestern University, United States)
Hani Mahmassani (Northwestern University Transportation Center, United States)

Optimal Payload Problem with Energy Storage Tender Cars for Freight Rail Decarbonization (abstract)

14:50 Ameni Kraiem (University of Quebec at Trois-Rivieres, Canada)

Mixed integer linear programming model for a multi-depot arc routing problem with different arc types and flexible assignment of end depot (abstract)

15:10 Tomas A. Bas (Polytechnique Montréal, Canada)

Samira Keivanpour (Polytechnique Montréal, Canada)

Sustainability and Industry 4.0 driven business model for smart freight platforms: Multi strategic tools approach. (abstract)

July 20th, 13:50-15:30 Session C1-S2: Innovations in Traffic Management and Analysis [↑](#)

CHAIR: Jian Yuan (The Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji university, China)

LOCATION: 520E

13:50 Jacques Renaud (Laval University, Canada)

Leandro Coelho (Laval University, Canada)

Khaled Belhassine (Laval University, Canada)

Signal priority for improving freight fluidity and fuel consumption (abstract)

14:10 Syed Muzammil Abbas Rizvi (TU Braunschweig, Germany)

Framework for the Selection of Loop Detectors for Macroscopic Fundamental Diagram Estimation (abstract)

14:30 Eline Belt (CWI, Netherlands)

Thomas Koch (CWI, Netherlands)

Elenna Dugundji (MIT, United States)

Forecasting traffic flow by vehicle category on a major highway impacted by road maintenance works (abstract)

14:50 Zhe Zheng (The Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji university, China)

Jian Yuan (The Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji university, China)

Nan Zheng (Department of Civil Engineering, Monash University, Australia)

Kun An (The Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji university, China)

Wanjing Ma (The Key Laboratory of Road and Traffic Engineering of the Ministry of Education, Tongji university, China)

Increasing the Capacity of Signalized Intersections with Dynamic Shared Through and Right-turn Lane (abstract)

- 15:10 Koji Suzuki (Nagoya Institute of Technology, Japan)
Shumpei Iwao (Nagoya Institute of Technology, Japan)
Kazufumi Suzuki (Gunma College, National Institute of Technology, Japan)
Analysis of Behavior of General Vehicles in Road Spaces Where Autonomous Buses Coexist (abstract)

July 20th, 13:50-15:30 Session C3-S5: Transit operations and control [↑](#)

CHAIR: Takashi Oguchi (Institute of Industrial Science, The University of Tokyo, Japan)

LOCATION: 513C

- 13:50 Roberta di Pace (Univeristy of Salerno Italy, Italy)
Facundo Storani (Univeristy of Salerno Italy, Italy)
Claudio Guarnaccia (Univeristy of Salerno Italy, Italy)
Stefano de Luca (Univeristy of Salerno Italy, Italy)
Multi-objective urban traffic control framework for noise emission and travel time optimization (abstract)
- 14:10 Hsin-Kai Huang (National Taiwan University, Taiwan)
Yu-Ting Hsu (National Taiwan University, Taiwan)
Real-time Transit Signal Priority Control based on Queue estimation in a V2X Environment (abstract)
- 14:30 David López Flores (Instituto de Ingeniería, Universidad Nacional Autónoma de México, Mexico)
Angélica Lozano (Instituto de Ingeniería, Universidad Nacional Autónoma de México, Mexico)
Short-term estimation for transit vehicle locations using AVL information and historical data (abstract)
- 14:50 Roberto Ventura (University of Brescia, Italy)
Benedetto Barabino (University of Brescia, Italy)
Giulio Maternini (University of Brescia, Italy)
Real-time evaluation and management of extreme traffic load risk on main road's bridges (abstract)
- 15:10 Riku Viri (Tampere University, Finland)
Maiju Örmä (Tampere University, Finland)
Using GTFS-data to calculate the roadwork caused delays on public transport network (abstract)

July 20th, 13:50-15:30 Session C4-S5: Driver Behaviour Simulation and Modeling [↑](#)

CHAIR: Navoda Rillagodage (University of Manitoba, Canada)

LOCATION: 520C

- 13:50 Sudipa Chatterjee (Indian, India)
Sudeshna Mitra (The World Bank, United States)
Bhargab Maitra (IIT Kharagpur, India)
Effectiveness of Flexible Poles in Safety Improvement of Horizontal Curves on Two-lane Undivided Highways in India (abstract)

14:10 Haiyue Liu (Southwest Jiaotong University, China)
Chuanyn Fu (Harbin Institute of Technology, China)
Chaozhe Jiang (Southwest Jiaotong University, China)

Analyzing Contributing Factors and Spatial Effects of Speeding Likelihood with GPS Trajectories on Urban Road Networks (abstract)

14:30 Arka Dey (Indian Institute of Technology Roorkee, India)
Sanhita Das (Indian Institute of Technology Roorkee, India)

Classification of Driving Stress and its Effect on Driving Behavior Under Time Pressure Conditions (abstract)

14:50 Sunbola Zاتمeh-Kanj (ariel university, Israel)
Wafa Elias (shamoon college of engineering, Israel)
Tomer Toledo (Technion- Israel Institute of Technology, Israel)

Microsimulation of Distraction and air pollution in driving behavior (abstract)

July 20th, 13:50-15:30 Session C4-S9: Analysis of Contributing Factors to Road Crash [↑](#)

CHAIR: Phani Kumar Patnala (University of Manitoba, Canada)

LOCATION: 513B

13:50 Kaliprasana Muduli (Indian Institute of Technology Roorkee, India)
Deorishabh Sahu (Indian Institute of Technology Roorkee, India)
Indrajit Ghosh (Indian Institute of Technology Roorkee, India)

A GIS-Based Framework for Identification and Prioritization of Traffic Crash Hotspots (abstract)

14:05 Daniel Gonzalez Nuñez (UNIVERSIDAD NACIONAL DE COLOMBIA, Colombia)
Diego Alexander Escobar Garcia (UNIVERSIDAD NACIONAL DE COLOMBIA, Colombia)
Carlos Alberto Moncada Aristizabal (UNIVERSIDAD NACIONAL DE COLOMBIA, Colombia)

Road safety in Colombia? An exploratory data analysis of crashes and tickets in a medium sized capital city (abstract)

14:20 Jaya Varshini Kala (Department of Civil Engineering, The University of Tokyo, Japan)
Ryo Saito (Maintenance and Traffic Management Department, Metropolitan Expressway Company Limited, Japan)
Yusuke Sakayori (Maintenance and Traffic Management Department, Metropolitan Expressway Company Limited, Japan)
Takashi Oguchi (Institute of Industrial Science, The University of Tokyo, Japan)

Tracing Accident Time Using High-Resolution Traffic Data (abstract)

14:35 Muhammad Abdulazeez (United Arab Emirates University, UAE)
Aminu Abdullahi (United Arab Emirates University, UAE)
Abdel-Hamid Mourad (United Arab Emirates University, UAE)
Mohamed El-Sadig (United Arab Emirates, UAE)
Kassim Abdullah (United Arab Emirates University, UAE)

Child Vulnerable Road User Crash Injury Severity (abstract)

14:55 Shabnam Abdollahi (polytechnique Motreal, Canada)
Zahra Tavakoli (polytechnique Motreal, Canada)

Owen Waygood (polytechnique Motreal, Canada)

Marie-Soleil Cloutier (Institut National de la recherche scientifique, Canada)

Genevieve Boisjolye (polytechnique Motreal, Canada)

Identifying the Influence of Dangerous Intersections in Measuring Accessibility for Children's Independent Mobility, A Case Study in Montreal, Canada (abstract)

15:15 Debela Jima (Budapest University of Technology and Economics, Hungary)

Sipos Tibor (Budapest University of Technology and Economics, Hungary)

Long Term, Pre and Post Impacts of SARS-CoV-2 Pandemic on Road Traffic Crashes (In the case of Budapest City, Hungary) (abstract)

July 20th, 13:50-15:30 Session D1-S5_SS: SPECIAL SESSION: Navigating Uncertainty: Exploring the Challenges of Understanding and Modeling Post-Pandemic Travel Behavior from Quebec Practitioners' Perspective [↑](#)

CHAIRS:

Hamzeh Alizadeh (ARTM, Canada)

Vincent Dionne (Société de transport de Laval, Canada)

LOCATION: 521

This special session aims to present how Quebec transit agencies are leveraging different data sources to better understand new mobility behaviors, evaluate their consequences on the operations and develop new tools to adapt their transit networks accordingly. Attendees will come away with a better understanding of the challenges and opportunities presented by post-pandemic travel behavior.

- **Introductory presentation on the transit ecosystem in Quebec** (Pierre Lavigueur, Société de transport de Laval)
- **Post-pandemic travel demand modeling challenges at MTMD** (Marc-André Tessier MTMD)
- **Household travel surveys in a rapidly evolving landscape: Montreal's 2021 and 2022 pilots and how they shaped the design for the upcoming 2023 regional survey** (Chris Harding, ARTM)
- **Exploitation of new operational data and new tools for better decision-making in post-pandemic service planning** (Kim Mc Donough & Élisabeth Bouchard, Société de transport de Montréal)
- **Developing new transit ridership forecasting models based on new mobility patterns in Laval** (Vincent Dionne & Élodie Deschaintres, Société de transport de Laval)
- **How to use survey data to understand post-pandemic mobility behaviors in the context of a network redesign** (Julia Daley & Sébastien Dubois, exo)
- **Origin-destination survey adjustment based on telecommuting potential in Quebec region: input for the modal choice model** (Emmanuelle Reny-Nolin & Nomessi Kokutse, Réseau de transport de la Capitale)

July 20th, 13:50-15:30 Session D2-S5: Travel Behaviour in a Post-Pandemic Era [↑](#)

CHAIR: Eivind Tveter (Molde University College, Norway)

LOCATION: 520A

13:50 Eivind Tveter (Molde University College, Norway)

More Homeworkers After Covid? Evidence From Registry Data (abstract)

14:10 Marc Ivaldi (Toulouse School of Economics (TSE), France)

Walter Núñez (Toulouse School of Economics, France)

Covid-19 impact on Bike-sharing systems: Lessons from Toulouse, Lyon, and Montreal (abstract)

14:30 Noriel Christopher Tiglao (University of the Philippines Diliman National College of Public Administration and Governance, Philippines)

Sandy Mae Gaspay (University of the Philippines Diliman Institute of Civil Engineering, Philippines)

Niki Jon Tolentino (University of the Philippines Diliman Institute of Civil Engineering, Philippines)

Anne Clarice Ng (University of the Philippines National College of Public Administration and Governance, Philippines)

'Build it, but will they come?' Assessing the influence of pop-up bike lanes during the COVID-19 pandemic on bike-to-work decisions in Metro Manila (abstract)

14:50 Attiya Haseeb (Toronto Metropolitan University, Toronto, Canada)

Raktim Mitra (Toronto Metropolitan University, Toronto, Canada)

Travel behaviour changes among post-secondary students after COVID-19 pandemic – A case of Greater Toronto and Hamilton Area, Canada (abstract)

15:10 Hamed Malekzadeh (Polytechnique Montréal, Canada)

Catherine Morency (Polytechnique Montréal, Canada)

How will individuals travel post-COVID? A statistical framework to identify the determinants of different travel behaviors (abstract)

July 20th, 13:50-15:30 Session D3-S4: Sustainable Mode of Transport and Risk Perception [↑](#)

CHAIR: Fumitaka Kurauchi (Gifu University, Japan)

LOCATION: 513E

13:50 Neba C Tony (Indian Institute of Technology-Delhi, India)

Taku Fujiyama (University College London, UK)

Geetam Tiwari (Indian Institute of Technology-Delhi, India)

Manoj M (Indian Institute of Technology-Delhi, India)

Niladri Chatterjee (Indian Institute of Technology-Delhi, India)

Assessment of risk perception of pedestrians: An application of Rasch analysis (abstract)

14:05 Gabriel Nova (University of Chile, Chile)

C. Angelo Guevara (University of Chile, Chile)

In depth, breadth-first or both? Characterising the information search process in a public transport SP experiment (abstract)

14:20 Noleen Pisa (University of Johannesburg, South Africa)

Houshmand Masoumi (University of Johannesburg, South Africa)

Liberty Mapamba (University of Johannesburg, South Africa)

Chengete Chakamera (University of Johannesburg, South Africa)

Associations of Public Transport Ridership with Subjective Safety and Security in Johannesburg, South Africa (abstract)

14:35 Yaochen Ma (The Hong Kong University of Science and Technology, Hong Kong)
Hai Yang (The Hong Kong University of Science and Technology, Hong Kong)
Zhiyuan Liu (Southeast University, China)

Morning Commuters' Entry Time Scheduling Law with Ride Distance on Mass Transit Systems (abstract)

14:55 Hans Otto Hauger (Molde University College, Norway)
Johan Holmgren (Molde University College, Norway)

Demand for Public Transport - The Case of Oslo (abstract)

July 20th, 13:50-15:30 Session D4-S4: Transit, MaaS, and Autonomous vehicles [↑](#)

CHAIR: Giovanni Circella (Institute of Transportation Studies, UC Davis, United States)

LOCATION: 512D

13:50 Zaima Tasneem (University of Regina, Canada)
Yili Tang (University of Regina, Canada)

Evaluating the impacts of on-demand transit service on ridership (abstract)

14:10 Mio Hosoe (Tottori University, Japan)
Masashi Kuwano (Tottori University, Japan)
Taku Moriyama (Tottori University, Japan)

Relational analysis of route searches and transportation IC card use (abstract)

14:30 Kerstin Stark (German Aerospace Center (DLR), Institute of Transport Research, Germany)
Laura Gebhardt (German Aerospace Center (DLR), Institute of Transport Research, Germany)

Focusing on the mobility of elderly people and families: How well does shared mobility work for them? (abstract)

14:50 Muhammad Ali Nayeem (Bangladesh University of Engineering and Technology (BUET), Bangladesh)
Md Jahedul Alam (Dalhousie University, Canada)
Muhammad Habib (Dalhousie University, Canada)
M. Sohel Rahman (Bangladesh University of Engineering and Technology (BUET), Bangladesh)

Development of an Agent-based Simulation Modelling Framework for Mobility-as-a-Service (MaaS) (abstract)

15:10 Ilsu Kim (School of Civil and Environmental Engineering, Georgia Institute of Technology, United States)

Yongsung Lee (University of Hong Kong, Hong Kong)
Patricia Mokhtarian (Georgia Institute of Technology, United States)
Giovanni Circella (University of California, Davis, United States)

Heterogeneous Preferences for Activities while Traveling in Autonomous Vehicles (abstract)

July 20th, 13:50-15:30 Session E1-S4: Transport Strategies for Freight and Public Transportation and Mobility [↑](#)

CHAIR: Dimitrios Dimitriou (Department of Economics, Democritus University of Thrace, Greece)

LOCATION: 513F

- 13:50 Riku Viri (Tampere University, Finland)
Hanne Tiikkaja (Tampere University, Finland)
The costs of mobility: a data-based method for estimating cost and emissions per kilometre in Finland (abstract)
- 14:10 José Holguín-Veras (Rensselaer Polytechnic Institute, United States)
Diana Ramirez-Rios (University at Buffalo, The State University of New York, United States)
Trilce Encarnacion (University of Missouri, United States)
Urban Freight Externalities: Contributing Factors and Agent Responsibilities (abstract)
- 14:30 Luis A. Guzman (Universidad de los Andes, Colombia)
Santiago Gomez (University of Heidelberg, Germany)
Jorge Luis Ochoa (Universidad de los Andes, Colombia)
Two-sided public transport subsidy strategies in a developing context: experimental evidence of travelers welfare impacts (abstract)
- 14:50 Ryuichi Tani (Hokkaido University, Japan)
Kenetsu Uchida (Hokkaido University, Japan)
A small-scale microeconomic model to evaluate the road network policy under the mixed flow of autonomous vehicles and human-driven vehicles (abstract)
- 15:10 Maria Sartzetaki (Democritus University of Thrace, Greece)
Aristi Karagkouni (Department of Economics, Democritus University of Thrace, Greece)
Dimitrios Dimitriou (Department of Economics, Democritus University of Thrace, Greece)
Assortment of the Regional Business Ecosystem Effects Driven by New Motorway Projects (abstract)

July 20th, 13:50-15:30 Session F1-S6: Economic valuation / warehouse location [↑](#)

CHAIR: Eric Miller (University of Toronto, Canada)

LOCATION: 518A

- 13:50 Carlos Rivera (University of Toronto, Canada)
Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)
Oriana Calderon (Rensselaer Polytechnic Institute, United States)
Benjamin Caron (Rensselaer Polytechnic Institute, United States)
Econometric Modelling for Characterizing Spatial Distribution of Urban Economic Activities (abstract)
- 14:05 Edmund Zolnik (George Mason University, United States)
Capturing the Value of Walkability (abstract)
- 14:20 Matthieu Schorung (University Gustave Eiffel, France)
A multiscale and comparative analysis of warehousing development patterns and logistics sprawl in four metropolitan areas: Dallas, Houston (Texas Triangle) New York and Philadelphia (Northeast corridor) (abstract)
- 14:40 Carlos Rivera (University of Toronto, Canada)
Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)

A Facility Location Problem with Freight Tour Assignment to Support Freight-Efficient Land Use Planning (abstract)

15:00 Matthieu Schorung (University Gustave Eiffel, Logistics City Chair, SPLOTT, France)
Thibault Lecourt (Avignon University, UMR 7300 ESPACE, France)
Laetitia Dablanc (University Gustave Eiffel, Logistics City Chair, SPLOTT, France)

Multiscalar approach to the analysis of the spatial patterns of Amazon warehouses in the United States (abstract)

July 20th, 13:50-15:30 Session F2-S5: Sustainable modes [↑](#)

CHAIR: Stefan Baumeister (University of Jyväskylä, School of Business and Economics, Finland)

LOCATION: 520B

13:50 Gino D'Ovidio (University of L'Aquila, Italy)
Antonio Ometto (University of L'Aquila, Italy)
Giuseppe Fabri (University of L'Aquila, Italy)
Massimiliano Bruner (University of L'Aquila, Italy)
Giulio Antonini (University of L'Aquila, Italy)

Adaptive Power Management For Urban Hybrid Rail Train Hydrogen Fueled (abstract)

14:05 Bruno Franciscone (Universidade Federal do Rio de Janeiro (UFRJ), Brazil)
Elton Fernandes (Universidade Federal do Rio de Janeiro (UFRJ), Brazil)

Operational improvements and reduction of air traffic emissions in Brazil (abstract)

14:20 Marina Malavasi Silva (Escola Politécnica, University of São Paulo, Brazil)
Lucas Eduardo Araújo Melo (Escola Politécnica, University of São Paulo, Brazil)
Cassiano Augusto Isler (Escola Politécnica, University of São Paulo, Brazil)

Impacts of rainfall on cycling demand: a Brazilian case study (abstract)

14:35 Burkhard Schade (EC JRC, Spain)

Alternative fuels in international bunkers in a 1.5C scenario (abstract)

14:55 Manuel Chica (University of Granada, Spain)
Roberto R. Hermann (Nord University Business School, Norway)
Ning Lin (Nord University, Norway)

Adopting different wind-assisted ship propulsion technologies as fleet retrofit: an agent-based modeling approach (abstract)

15:15 Stefan Baumeister (University of Jyväskylä, School of Business and Economics, Finland)
Abraham Leung (Griffith University, Cities Research Institute, Australia)
Tim Ryley (Griffith University, School of Engineering and Built Environment, Australia)

The Impacts of COVID-19 on Domestic Aviation in Finland and the Potential Role of Electric Aircraft for a Green Recovery (abstract)

July 20th, 13:50-15:30 Session F2-S9: Emissions from different modes [↑](#)

CHAIR: Ilaria De Biasi (Autostrada del Brennero SpA, Italy)

LOCATION: 512C

13:50 Kapil Meena (Indian Institute of Technology, Kharagpur, India)
Arkopal Goswami (Indian Institute of Technology, Kharagpur, India)

Impact of Air Pollution Exposure on Travel Behaviour: A Review and Way Forward (abstract)

14:05 Qiong Chen (Jimei University, China)
Ying-En Ge (Chang'an University, China)
Yui-Yip Lau (The Hong Kong Polytechnic University, China)
Maxim A. Dulebenets (Florida A&M University-Florida State University (FAMU-FSU), United States)

The Effects of Emission Control Area (ECA) Regulations on Global Shipping Emissions (abstract)

14:20 Tianhao Liu (Southeast University, China)
Lei Xue (Southeast University, China)
Tiezhu Li (Southeast University, China)

Study on Emission Deterioration Model of Urban Light Vehicles: A Case Study of Nanjing (abstract)

14:35 Alberto Fabio (Università IUAV di Venezia, Italy)
Federico Cavallaro (IUAV University of Venice, Italy)
Ilaria De Biasi (Autostrada del Brennero SpA, Italy)
Carlo Costa (Autostrada del Brennero SpA, Italy)
Silvio Nocera (Università IUAV di Venezia, Italy)

Containment strategies of transport externalities from long-distance trips and infrastructural development (abstract)

July 20th, 13:50-15:30 Session F3-S6_SS: SPECIAL SESSION: AI technology application on human-centred perspective transport [↑](#)

CHAIR: Luo Xiao (Tongji University, China)

LOCATION: 514B

The purpose of transportation is to serve human travel demands and quality of life, rather than simply pursuing speed and efficiency. Human-centered transportation can ensure safety, health, comfort and convenience of people, while also reducing the negative impact on the environment, society and economy, and achieving sustainable development. And it is crucial to study transportation from the perspective of human behavior and psychology. In recent years, the development of big data technology and perception technologies such as image recognition, video recognition, intelligent camera, multimodal hybrid perception and networked collaboration provide a strong foundation for human-centered transportation research. Therefore, this special session hope to create opportunities for discussion on human-centered transportation researches that use advanced perception techniques to analyze the traffic environment, traffic behavior, and the complex relationship between them.

- **Detailed vehicle trajectory collection based on advanced sensors: theory and technologies**, Associate Prof.Peng Cao, Southwest Jiaotong University, China
- **Research on machine vision based measurement technology for marine floating bodies**, Prof.Xinyue REN, China
- **A study of the spatial and temporal variation of built environment on carpool intensity driven by big data - the case of Shanghai**, Associate Prof.iao LUO, Weihao BIAN, Tongji University, China

- **Unlocking Sufficiency with QoL-MaaS**, Titipakorn Prakayaphun, Yoshitsugu Hayashi and Hiroyuki Takeshita, Chubu University, Japan and Witsarut Achariyaviriya, Chiang Mai University, Thailand
- **Does mental health influence commuters' mode choice? A cross-sectional assessment from the Netherlands**, Jiakun Liu, Dick Ettema, Marco Helbich, Utrecht University (presented by video in poster session PS_FGHI)

July 20th, 13:50-15:30 Session F4-S4: Liveability and non-motorized transport – 4 [↑](#)

CHAIR: Ugo Lachapelle (Université du Québec à Montréal, Canada)

LOCATION: 512B

13:50 Vincent Obry-Legros (Polytechnique Montreal, Canada)
Ugo Lachapelle (Université du Québec à Montréal, Canada)
Kevin Manaugh (McGill University, Canada)
E.O.D Waygood (Polytechnique Montréal, Canada)
Genevieve Boisjoly (Polytechnique Montreal, Canada)

Does a bigger house make you more satisfied? Understanding the relationship between housing characteristics, local accessibility, and life satisfaction during the COVID-19 confinement period (abstract)

14:10 Jose Agustin Vallejo-Borda (Universidad de Cartagena, Colombia)
German A. Barrero (Self, United States)
Hernan Alberto Ortiz-Ramirez (Universidad de los Andes, Colombia)
Maria Margarita Valdelamar-Albornoz (Universidad de Cartagena, Colombia)
Alvaro Rodriguez-Valencia (Universidad de los Andes, Colombia)

Putting the pieces together: A comprehensive approach to uncover the sidewalk perceived service or performance (abstract)

14:30 Chun Yin (The Center for Modern Chinese City Studies, East China Normal University, China)
Disentangling importance and non-linear influence of built environment on walking in Shanghai (abstract)

14:50 Abraham Leung (Cities Research Institute, Griffith University, Australia)
Tiziano Pavanini (CIELI, Dept. of Economics, University of Genoa, Italy)
Matthew Burke (Cities Research Institute, Griffith University, Australia)
Xuna Zhu (Cities Research Institute, Griffith University, Australia)
Henry Trembath (Cities Research Institute, Griffith University, Australia)
Sophie Gadaloff (Cities Research Institute, Griffith University, Australia)

Which businesses are for and against "pop-up" cycleways: the case of Brisbane's CityLink Cycleway (abstract)

15:10 Eya Chekir (Eya Chekir, Canada)
Catherine Morency (Polytechnique Montreal, Canada)

How Good is Active Accessibility to Subway Stations in Montreal? (abstract)

July 20th, 13:50-15:30 Session G2-S5-SS: SPECIAL SESSION: Sustainable Rural Mobility PART 2 [↑](#)

CHAIR: Guenter Emberger (TU Wien, Austria)

LOCATION: 514C

In the urban area, Sustainable Urban Mobility Planning is – to a large extent – considered as a state-of-the-art approach addressing the current challenges of transport and mobility such as low-carbon transport systems, inclusiveness, participatory planning, and accessibility to facilities and amenities, and applied to a number of cities in Europe and worldwide. On the other hand, in rural areas, the car is a dominant mode of transport and the body of knowledge towards sustainable, inclusive and accessible transport is limited with many research gaps. Built upon the past and ongoing activities of SIG G2 and ITF, we aim to discuss principles for policy makers working in this area, and understand and discuss research needs and gaps in order to identify the research topics that could contribute not only to better understanding but also to policy implementation. The discussion outcomes will feed the general SIG G2 meeting during the WCTR2023, in which the next common research agenda and activities will be discussed, and will be taken into consideration during the final phase of the ITF Sustainable Accessibility for All Working Group.

- **Presentation about WCTRS SIG G2 activities and key recent findings** (Guenter Emberger and Takeru Shibayama – WCTRS SIG G2)
- **Presentations about ITF activities and the draft report on Sustainable Accessibility for All** (Orla McCarthy – Research Centre, ITF)
- **Panel discussion**

July 20th, 13:50-15:30 Session G3-S10: Case Studies 1 [↑](#)

CHAIR: Therese Bajada (Institute for Climate Change and Sustainable Development, University of Malta, Malta)

LOCATION: 519B

13:50 Alessandro Emilio Capodici (University of Palermo, Italy)

Martina Citrano (University of Palermo, Italy)

Gabriele D'Orso (University of Palermo, Italy)

Marco Migliore (University of Palermo, Italy)

Matteo Ignaccolo (University of Catania, Italy)

Pierfrancesco Leonardi (University of Catania, Italy)

Vincenza Torrisi (University of Catania, Italy)

Designing microtransit services in suburban areas: a case study in Palermo, Italy (abstract)

14:10 Therese Bajada (Institute for Climate Change and Sustainable Development, University of Malta, Malta)

Bernadine Satariano (University of Malta, Junior College, Malta)

From hectic and busy outdoors to hectic and busy indoors? Mobility and activity related insights of families with kids during the first weeks of the COVID-19 pandemic in Malta. (abstract)

14:30 Kai-Jen Yu (National Taiwan University, Taiwan)

Hone-Jay Chu (National Cheng Kung University, Taiwan)

Po-Yen Yu (National Taiwan University, Taiwan)

Hsin-Cheng Shih (National Taiwan University, Taiwan)

Yu-Ting Hsu (National Taiwan University, Taiwan)

Research on interactions between transportation and region development- a case study of Taoyuan Region, Taiwan (abstract)

- 14:50 Carlos Rivera (University of Toronto, Canada)
Julia Amaral (Rensselaer Polytechnic Institute, United States)
Assessment of freight accessibility in New York City: a spatial-temporal approach (abstract)

July 20th, 13:50-15:30 Session G3-S3: Air Quality and Transport [↑](#)

CHAIR: Greg Marsden (University of Leeds, UK)

LOCATION: 515A

- 13:50 Zhengtao Qin (Tongji University, China)
Yuan Liang (Tongji University, China)
Chao Yang (Tongji University, China)
Qingyan Fu (Shanghai Environment Monitoring Center, China)
Yuan Chao (Shanghai Environment Monitoring Center, China)
Ziang Liu (Tongji University, China)
Quan Yuan (Tongji University, China)
Externalities from Restrictions: Examining the Short-run Effects of Urban Core-focused Driving Restriction Policies on Air Quality (abstract)

- 14:10 Gina Yeonkyeong Park (Cornell University, United States)
JUST Clean Air: Measuring Changes of Environmental Justice in Energy Transition in New York and New Jersey (abstract)

- 14:30 Yaqi Yang (tongji university, China)
Xiaoning Zhang (tongji university, China)
Greg Marsden (university of leeds, UK)
Personal carbon allowances distribution and trading: a traffic demand management method (abstract)

- 14:50 Riccardo Ceccato (University of Padova, Italy)
Riccardo Rossi (University of Padova, Italy)
Massimiliano Gastaldi (University of Padova, Italy)
Urban Vehicle Access Regulations and sustainable mobility: acceptability and impacts of a new Low Emission Zone (abstract)

- 15:10 Abdur Raof Khan (Malaviya National Institute of Technology Jaipur (MNIT Jaipur), India)
Nand Kumar (Malaviya National Institute of Technology Jaipur (MNIT JAIPUR), India)
Tarush Chandra (Malaviya National Institute of Technology Jaipur, India)
System Dynamics Simulation Modelling for the Controlling of Vehicular Emissions in Indian City, Lucknow (abstract)

July 20th, 13:50-15:30 Session G6-S2: Transport and health # 2 [↑](#)

CHAIR: Lawrence Frank (UC San Diego, United States)

LOCATION: 522A

- 13:50 Barney H. Miao (Stanford University, United States)
Saied Saidi (University of Calgary, Canada)

Development of Public Transit Measures to Mitigate the Impact of COVID-19 on Pedestrians and Station Performance using PTV Vissim Simulation (abstract)

14:05 Daniel Oviedo (University College London, UK)

Orlando Sabogal-Cardona (University College London, UK)

Surya Pontanaugraha (University College London, UK)

More than a joyride: Subjective well-being on shared and private e-scooter trips (abstract)

14:20 Shailesh Chandra (California State University, Long Beach, United States)

Jose Torres-Aguilar (California State University, Long Beach, United States)

R. Thirumaleswara Naik (INDIAN INSTITUTE OF SCIENCE, BENGALURU, India)

Does living near public transport equate to food (in)security in the United States? – Evidence from the 2020 National Health Interview Survey (NHIS) (abstract)

14:35 Ya Gao (Tongji University, China)

Haixiao Pan (Tongji University, China)

Zhilin Xie (Tongji University, China)

Khandker Nurul Habib (University of Toronto, Canada)

Understanding Patients Heterogeneity in Healthcare Travel and Hospital Choice - A Latent Class Analysis with Covariates (abstract)

14:55 Kitty Kioskli (University of Aegean, Greece)

Athina Tsirimpa (University of Aegean, Greece)

Amalia Polydoropoulou (University of Aegean, Greece)

Human and psychosocial factors associated with natural hazard impacts and crisis response, management, and transportation: A narrative literature review (abstract)

15:15 Nicanor Jr Roxas (De La Salle University - Manila, Philippines)

Alexis Fillone (De La Salle University - Manila, Philippines)

Krister Ian Daniel Roquel (De La Salle University - Manila, Philippines)

Raymund Paolo Abad (De La Salle University - Manila, Philippines)

Maria Cecilia Paringit (De La Salle University - Manila, Philippines)

Robert John Almendral (De La Salle University - Manila, Philippines)

Ronald Anos (De La Salle University - Manila, Philippines)

Trisha Mari Joyce Naag (De La Salle University - Manila, Philippines)

Justine Eliza Rocha (De La Salle University - Manila, Philippines)

Transportation noise investigation and modeling in selected roads in Metro Manila, Philippines (abstract)

July 20th, 13:50-15:30 Session H1-S4: Transport Policy, Planning and Financing in Developing Countries 4



CHAIR: Alexis Fillone (De La Salle University Manila, Philippines)

LOCATION: 518B

13:50 Varsolo Sunio (University of Asia and the Pacific, Philippines)

Iderlina Mateo-Babiano (University of Melbourne, Australia)

Joyce Rivera (Department of Transportation, Philippines)

Anne Patricia Mariano (GIZ, Philippines)
Alexis Fillone (De La Salle University, Philippines)

Long-term service contracts for the mobilization of private financing for public transport sector reform in the Philippines (abstract)

14:10 Joaquim Aragao (University of Brasília, Brazil)
Anisio Dourado (Federal University of Pernambuco, Brazil)
Yaeko Yamashita (University of Brasília, Brazil)
Mauricio Andrade (Federal University of Pernambuco, Brazil)
Rodolpho Soares (Federal University of Pernambuco, Brazil)

Concession of transport infrastructure: the Brazilian case (abstract)

14:30 Alan Monteiro Borges Borges (UNIVERSIDADE FEDERAL DE PERNAMBUCO, Brazil)
Anísio Brasileiro de Freitas Dourado Brasileiro (UNIVERSIDADE FEDERAL DE PERNAMBUCO, Brazil)
Maurício Oliveira de Andrade Andrade (UNIVERSIDADE FEDERAL DE PERNAMBUCO, Brazil)
Joaquim José Guilherme de Aragão Aragão (Universidade de Brasília, Brazil)

Regional development and transport infrastructure in the Brazilian amazon region: a literature review on governmental plans for the Transamazon Highway (abstract)

14:50 Mukesh Parikh (Adani University, India)
Unmesh Abhyankar (Adani Ports & SEZ Ltd, India)
Rachna Gangwar (Adani University, India)
Vidya Mohan (Adani University, India)

Efficiency Improvement for Imported Fertilizer Logistics in India (abstract)

15:10 Carlo Beatrice (Institute of Science and Technology for Sustainable Energy and Mobility (CNR-STEMS), Naples, 80125, Italy, Italy)
Armando Carteni (Department of Engineering, University of Campania Luigi Vanvitelli, Caserta, 81031, Italy, Italy)
Ennio Cascetta (Faculty of Economics, Universitas Mercatorum, Rome, 00186, Italy, Italy)
Davide Di Domenico (Institute of Science and Technology for Sustainable Energy and Mobility (CNR-STEMS), Naples, 80125, Italy, Italy)
Ilaria Henke (DICEA, University of Naples Federico II, Naples, 80125, Italy, Italy)
Vittorio Marzano (DICEA, University of Naples Federico II, Naples, 80125, Italy, Italy)
Sergio Maria Patella (Faculty of Economics, Universitas Mercatorum, Rome, 00186, Italy, Italy)
Mariarosaria Picone (DICEA, University of Naples Federico II, Naples, 80125, Italy, Italy)
Daniela Tocchi (DICEA, University of Naples Federico II, Naples, 80125, Italy, Italy)
Roberto Zucchetti (PTSCLAS S.p.A., Milano, 20121, Italy, Italy)

Scenarios of road transport demand, energy consumption and greenhouse-gas emissions for Italy in 2030 (abstract)

July 20th, 13:50-15:30 Session H2-S3: Infrastructure Operation and Traffic Management in Developing Countries – 3 [↑](#)

CHAIR: Said Easa (Toronto Metropolitan University, Toronto, Canada, Canada)

LOCATION: 515B

13:50 Jaydip Goyani (S. V. National Institute of Technology, Surat, India)
 Rohan Mali (S. V. National Institute of Technology, Surat, India)
 Anjana Ramesh (S. V. National Institute of Technology, Surat, India)
 Sachin Elango (S. V. National Institute of Technology, Surat, India)
 Shriniwas Arkatkar (S. V. National Institute of Technology, Surat, India)
 Said Easa (Toronto Metropolitan University, Toronto, Canada, Canada)
Road Geometry and Vehicle Performance-Based Operating Speed Model for Horizontal Curves in Hilly Terrains (abstract)

14:10 Remya K Padinjarapat (Indian Institute of Technology Bombay, Mumbai, India)
 Darshana Othayoth (National Institute of Technology Tiruchirappalli, India)
 K V Krishna Rao (Indian Institute of Technology Bombay, Mumbai, India)
 Tom V Mathew (Indian Institute of Technology Bombay, Mumbai, India)
Developing Base Saturation Flow Model and Adjustment Factors for Signalized Intersections under Non-Lane based Mixed Traffic Conditions (abstract)

14:30 Vishal Patel (MS University, Baroda, India)
 Aninda Bijoy Paul (SVNIT, Surat, India)
 Shriniwas Arkatkar (SV NATIONAL INSTITUTE OF TECHNOLOGY, India)
Quantifying Drivers' Dilemma at Unsignalized Intersections in Developing Economies-Case Study from India (abstract)

July 20th, 13:50-15:30 Session H5-S6: Intelligent transport and technology [↑](#)

CHAIR: Saksith Chalermpong (Transportation Institute and Department of Civil Engineering, Faculty of Engineering, Chulalongkorn University, Thailand)

LOCATION: 524A

13:50 Saksith Chalermpong (Chulalongkorn University, Thailand)
 Phathinan Thaitatkul (Chulalongkorn University, Thailand)
 Apiwat Ratanawaraha (Chulalongkorn University, Thailand)
Trust and intention to use autonomous vehicles in Bangkok, Thailand (abstract)

14:05 Reema Bera (Indian Institute of Technology Kharagpur, India)
 Bhargab Maitra (Indian Institute of Technology Kharagpur, India)
Methodological Approach to Obtain Key Attributes Affecting the Adoption of Plug-in Hybrid Electric Vehicle (abstract)

14:20 Mirko Goletz (DLR - Institute of Transport Research, Germany)
 Marc Hasselwander (DLR - Institute of Transport Research, Germany)
Clean energy transition in informal transport: modeling drivers' interest to switch to electric vehicles (abstract)

14:35 Vajeeran Arunakirinathan (University of Moratuwa, Sri Lanka)
 S.M.P.M. Premasiri (University of Moratuwa, Sri Lanka)
 G.L.D.I. De Silva (University of Moratuwa, Sri Lanka)
Corridor Level Traffic Management Through Variable Messaging Systems: A Case Study on East-West Links Entering Colombo (abstract)

14:55 Fateme Hafizi (Tarbiat Modare University, Iran)
Seyedehsan Seyedabrishami (Tarbiat Modare University, Iran)
Elahe Sherafat (Toronto Metropolitan University, Canada)
Real-Time Prediction of Bus Inter-Stop Travel Time Using Deep Learning Approach (abstract)

15:15 Sujeet Sahoo (NIT ROURKELA, India)
Changati Sudha (NIT ROURKELA, India)
Prasanta Kumar Bhuyan (NIT ROURKELA, India)
Generalized Additive Models to assess Truck Driver's Perceived LOS of Signalized Intersections (abstract)

July 20th, 13:50-15:30 Session H5-S7: Public transport management & evaluation [↑](#)

CHAIR: Leonardo Meira (Federal University of Pernambuco, Brazil)

LOCATION: 515C

13:50 Ligia Rabay (Federal University of Pernambuco, Brazil)
Leonardo Herszon Meira (Federal University of Pernambuco, Brazil)
Leise Kelli Oliveira (Federal University of Minas Gerais, Brazil)
Diego Galdino (The Ohio State University, United States)
Equity evaluation of public transportation service by analysing the supply and demand data: The case of Jaraguá do Sul, Brazil (abstract)

14:05 Zhengyue Wan (University College London, UK)
Helena Titheridge (University College London, UK)
Socially sustainable transport under the context of different-sized cities in China: conceptualisation and operationalisation of equity (abstract)

14:20 Varsolo Sunio (University of Asia and the Pacific, Philippines)
Wilhansen Li (Sakay, Philippines)
Joemier Pontawe (University of the Philippines, Philippines)
Albert Dizon (Sakay, Philippines)
Alexis Fillone (De La Salle University, Philippines)
Transforming the public transport sector in the Philippines through service contracts: A program evaluation study (abstract)

14:35 Elearina Dolores Agustin (De La Salle University, Philippines)
Alexis Fillone (De La Salle University, Philippines)
Assessment of Inter-municipal Public Transport Services in Southern Iloilo, Philippines (abstract)

14:55 Purnima Chowdhury (Department of Architecture and Regional Planning, IIT Kharagpur, India)
Binayak Choudhury (School of Planning and Architecture Bhopal, India)
Paulose N. Kuriakose (School of Planning and Architecture Bhopal, India)
Impact of Subsidies to Private Vehicles on Public Bus Transport Operation - A Case of Ahmadabad, India (abstract)

15:15 Arturo Ardila Gomez (world bank, United States)

Georges Darido (world bank, United States)

Public Transport Reform in Developing Countries: Lessons From Experience (abstract)

July 20th, 13:50-15:30 Session PS_FGHI: POSTER SESSION TOPICS F-G-H-I [↑](#)

LOCATION: 516

Maria Cecilia Paringit (Gokongwei College of Engineering De La Salle University – Manila, Philippines)

Larry Jose Suzara (Gokongwei College of Engineering De La Salle University – Manila, Philippines)

Aaron Florogo (Gokongwei College of Engineering De La Salle University – Manila, Philippines)

Martin Wong (Gokongwei College of Engineering De La Salle University – Manila, Philippines)

Alexis Fillone (Gokongwei College of Engineering De La Salle University – Manila, Philippines)

Nicanor Jr. Roxas (Gokongwei College of Engineering De La Salle University – Manila, Philippines)

Krister Ian Daniel Roquel (Gokongwei College of Engineering De La Salle University – Manila, Philippines)

Raymund Paolo Abad (Gokongwei College of Engineering De La Salle University – Manila, Philippines)

Tricycle Zones Based on Socio-Economic and Physical Characteristics of Municipalities in the Island of Panay (abstract)

Orlean Dela Cruz (Graduate School, Polytechnic University of the Philippines, Philippines)

Alexis Fillone (De La Salle University, Philippines)

Public Transportation-Friendly Infrastructure: A review of its equitable development (abstract)

Patrick Moore (De Montfort University, UK)

Lipika Deka (De Montfort University, UK)

Amarachi Amaugo (De Montfort University, UK)

Lucy Budd (De Montfort University, UK)

Stephen Ison (De Montfort University, UK)

Bikeshare: A review of the trip determinants related to socio-economic disadvantage (abstract)

Hussein Lidasan (University of the Philippines, Philippines)

Aaron Michael Salang (University of the Philippines, Philippines)

Don Juan Arrishtottle Cariño (University of the Philippines, Philippines)

Urban Major Thoroughfare as a Critical Transport Infrastructure in Response to Impacts of Climate Change due to Urbanization: The Case of Circumferential Road 5 in Metro Manila (abstract)

Jonas De Vos (Bartlett School of Planning, University College London, UK)

Katrin Lättman (University of Gävle, Sweden)

Edward Prichard (University of Gävle, Sweden)

Anna-Lena van der Vlugt (ILS – Research Institute for Regional and Urban Development, Germany)

Janina Welsch (ILS – Research Institute for Regional and Urban Development, Germany)

Noriko Otsuka (ILS – Research Institute for Regional and Urban Development, Germany)

Analysing the determinants of perceived walkability, and its effects on walking (satisfaction) (abstract)

Bihua Niu (Suzhou University of Science and Technology, China)

Ting Sun (Suzhou University of Science and Technology, China)

Pujia Liu (Suzhou University of Science and Technology, China)

Research on the planning of rail transit in Shanghai metropolitan area facing Shanghai

2035 (abstract)

Catherine Morency (Polytechnique Montréal, Canada)

Jean-Simon Bourdeau (Polytechnique Montréal, Canada)

Spatial and Energy footprints of Cars in Cities: New Metrics and Illustrations for the Montreal Area (abstract)

Satoki Masuda (The University of Tokyo, Japan)

Eiji Hato (The University of Tokyo, Japan)

An empirical analysis of the forgetting mechanism in repeated evacuations with the recursive logit model (abstract)

Rubal Dua (KAPSARC, Saudi Arabia)

Prateek Bansal (National University of Singapore, Singapore)

Fuel consumption elasticities, rebound effect and feebate effectiveness in the Indian and Chinese new car markets (abstract)

Patanapong Sanghatawatana (Transportation Institute, Chulalongkorn University, Thailand)

Saksith Chalermpong (Transportation Institute and Department of Civil Engineering, Faculty of Engineering, Chulalongkorn University, Thailand)

Effects of online food delivery on restaurant travel and CO2 emissions: Evidence from Bangkok, Thailand (abstract)

Zia Wadud (University of Leeds, UK)

Muhammad Adeel (University of West of England, UK)

Jillian Anable (University of Leeds, UK)

Carbon emissions from long distance passenger travel (abstract)

Joel Asaju (Lagos State University School of Transport and Logistics, Nigeria)

Pedestrian infrastructure availability and accessibility on urban highways (abstract)

Khalil Ahmad Kakar (NITW, India)

Csrk Prasad (NITW, India)

Lowering the Share of Low-Capacity Vehicles (LCVs) by Introducing a Bus Rapid Transit system (BRTs) in Kabul (abstract)

Eva Van Eenoo (Vrije Universiteit Brussel, Belgium)

Zero-car households in Belgium: urban, single and low income? (abstract)

Luigi Pio Prencipe (Polytechnic University of Bari, Italy)

Nadia Giuffrida (Polytechnic University of Bari, Italy)

Leonardo Caggiani (Polytechnic University of Bari, Italy)

Michele Ottomanelli (Polytechnic University of Bari, Italy)

Passenger experience on an automated shuttle service: a survey study on a real test ride in Italy (abstract)

András Munkácsy (KTI Institute for Transport Sciences, Hungary)
Dávid Földes (Budapest University of Technology and Economics, Hungary)
Márk Miskolczi (Corvinus University of Budapest, Hungary)
Melinda Jászberényi (Corvinus University of Budapest, Hungary)

Cities of the future: text analysis of urban mobility plans (abstract)

Chelsea A. DeGuzman (University of Toronto, Canada)
Toka S. Mostafa (University of Toronto, Canada)
Birsen Donmez (University of Toronto, Canada)
Baher Abdulhai (University of Toronto, Canada)
Amer Shalaby (University of Toronto, Canada)
Jennifer Niece (The City of Toronto, Canada)

What influences intention to use an automated shuttle service in mixed traffic? A case study in Toronto, Canada (abstract)

Yechezkel Israeli (Kinneret Academic College in the Sea of Galilee, Israel)

Transport-Tourism Strategies for Accessibility Management in Tourist Cities (abstract)

Xiaoran Wen (Beijing Jiaotong University, China)
Yuan Lu (Beijing Jiaotong University, China)

Research On The Functional Localization Method of Regional Planning of Railway Station Based on Typology (abstract)

Jaikishan Damani (IIT Bombay, India)
Perumal Vedagiri (IIT Bombay, India)

Machine learning based prediction of filtering choice of Motorized Two Wheelers in urban mixed traffic (abstract)

Tushar Pramod Choudhari (Trinity College Dublin, Ireland)
Bharat Kumar Pathivada (Western Kentucky University, United States)
Malavika Jayakumar (Indian Institute of Technology Bombay, India)
Jaikishan Damani (Indian Institute of Technology Bombay, India)
Perumal Vedagiri (Indian Institute of Technology Bombay, India)
Avijit Maji (Indian Institute of Technology Bombay, India)
Nagendra Rao Velaga (Indian Institute of Technology Bombay, India)
Kurra Venkata Krishna Rao (Indian Institute of Technology Bombay, India)

Why Do Motorized Two-wheeler Users Avoid Using Helmets? An Investigation based on Public Opinion Surveys (abstract)

Dandan Xu (Beijing Municipal Institute of Planning and Design, China)
Xiaodong Zhang (Beijing Municipal Institute of Planning and Design, China)
Xinghua Zhang (Beijing Jiaotong University, China)
He Wei (Beijing Municipal Institute of Planning and Design, China)
Liang Wang (Beijing Municipal Institute of Planning and Design, China)
Xuehua Han (Beijing Municipal Institute of Planning and Design, China)

How polycentric urban structure is formed ? A case study of spatial emergence patterns of human mobility based on taxi data (VIDEO) (abstract)

Aline M. Fernandes Barata (Loughborough University, UK)

What is the role of participation in mobility planning in the Global South? Reflections from Rio de Janeiro and Porto Alegre, Brazil (VIDEO)

Jiakun Liu (Utrecht University, Netherlands)

Does mental health influence commuters' mode choice? A cross-sectional assessment from the Netherlands (VIDEO)

Stephen Kome Fondzenyuy (CTL Sapienza University of ROME, Italy)

Davide Shingo Usami (CTL Sapienza University of ROME, Italy)

Luca Persia (CTL Sapienza University of ROME, Italy)

Peter Taniform (Researcher & Infrastructure Program Leader, World Bank Group, Kenya)

Review of Speed and road crashes relationship in low-and -middle-income countries. Do the power and exponential model hold? (VIDEO) (abstract)

Shah Khalid Khan (School of Engineering RMIT University Melbourne Australia, Australia)

Nirajan Shiwakoti (School of Engineering RMIT University Melbourne Australia, Australia)

Peter Stasinopoulos (School of Engineering RMIT University Melbourne Australia, Australia)

Matthew Warren (RMIT University Australia & University of Johannesburg South Africa, Australia, Australia)

Cybersecurity Regulations for Automated Vehicles: A Conceptual Model Demonstrating the "Tragedy of the Commons" (VIDEO) (abstract)

Han Wang (Beihang University, China)

Qiong Tian (Beihang University, China)

Hai-Jun Huang (Beihang University, China)

Study on the effects of commuting subsidies in a competitive two-city system (abstract)

Mohammad Lutfur Rahman (Jahangirnagar University, Bangladesh)

Douglas Baker (Queensland University of Technology, Australia)

Afsana Haque (Jahangirnagar University, Bangladesh)

Md Sabbir Sharif (Western Sydney University, Australia)

Rowshan Jahan (Participatory Management Initiative for Development, Bangladesh)

Sociodemographic and travel-related correlates of individuals' residential relocation behaviour in Bangladesh (VIDEO) (abstract)

Afsana Haque (Jahangirnagar University, Bangladesh)

Transit Oriented Development (TOD) in Dhaka: Measuring Spatial Potential from Node Place Perspective (VIDEO) (abstract)

Pavan Kumar Machavarapu (School of Planning and Architecture New Delhi, India)

Sewa Ram (School of Planning and Architecture New Delhi, India)

Pankaj Kant (School of Planning and Architecture, New Delhi, India)

Ankit Kathuria (IIT Jammu, India)

Examining bike share usage trends in Metropolitan cities through App based data. A case study of Chennai, India (VIDEO) (abstract)

Zhonghua Wei (北京市, China)

Zhen Luo (北京市, China)

Jingxuan Peng (Beijing University of Technology, China)

Ming Lei (北京市, China)

Yunxuan Li (Beijing University of Technology, China)

Houqiang Ma (Beijing University of Technology, China)

Towards Failure Mechanism of Hot Melt Road Marking (VIDEO) (abstract)

Ülkü Tanriverdi (University of Antwerp, Belgium)

Wouter Verheyen (University of Antwerp, Belgium)

Esther van Zimmeren (University of Antwerp, Belgium)

Enhancing the Regulatory Framework for Platform-Based Mobility Services: Facilitating the Transition from Cars in Urban Mobility (VIDEO) (abstract)

Geowell Neil Gamaliel Caraos (De La Salle University Manila, Philippines)

Alexis Fillone (De La Salle University Manila, Philippines)

Establishing baseline travel data for an emerging city in a developing country: The case of Lipa city, Philippines (VIDEO) (abstract)

Adil Ata Azmi (School of Planning and Architecture, Delhi., India)

Sewa Ram (School of Planning and Architecture, Delhi., India)

Factors of road accident compensation and their relative importance: A case study of India (VIDEO) (abstract)

Sewa Ram (School of Planning and Architecture, New Delhi, India)

Dr Kim Leong Tan (3M, Singapore)

Rahul Tomar (3M, India)

Efficacy of Short-term Effective Measures for the Blackspot Improvement in a Peri-urban Area (VIDEO) (abstract)

Kinga Kijewska (Maritime University of Szczecin, Poland)

Karolina Nadolska (Maritime University of Szczecin, Poland)

Dispersion of air pollutants from urban freight transport (abstract)

Zhiyuan Liang (Beijing Jiaotong University, China)

Yili Tang (University of Regina, Canada)

Jianing Yu (Beijing Jiaotong University, China)

Yacan Wang (Beijing Jiaotong University, China)

Modeling and optimization of a collective incentive strategy for ridership rebound with peak congestion management in mass transit systems (VIDEO) (abstract)

Chandrashekar C (Indian Institute of Technology Hyderabad, India)

Dr. Pritha Chatterjee (Indian Institute of Technology Hyderabad, India)

Dr. Digvijay S. Pawar (Indian Institute of Technology Hyderabad, India)

Developing Speed-based Emission Models for Passenger Cars in India using a Portable Emission Measurement System (VIDEO)



July 20th, 15:30-16:00 Coffee break (Location: 516)

July 20th, 16:00-17:50 Session 07_SS: SPECIAL SESSION by WCTRS COVID-19 Task Force (2) [↑](#)

CHAIR: Junyi Zhang (Southeast University, China, Japan)

LOCATION: 519A

Panel discussion

- **Perspective 1: Data-driven methodologies for post-pandemic transportation research**, Xiao Fu, School of Transportation, Southeast University, China
- **Perspective 2: Technological innovations for post-pandemic transportation development**, Ozay Ozaydin, Department of Industrial Engineering, Doğuş University, Turkey
- **Perspective 3: International cooperation for the transportation recovery in developing countries from the COVID-19 pandemic**, Hussein Sinsuat Lidasan, School of Urban and Regional Planning, The University of the Philippines
- **Perspective 4: New theories/approaches for post-pandemic transport policy**, Junyi Zhang, School of Transportation, Southeast University, China
- **Perspective 5: Transforming Mobility for Climate and Pandemic Resilient New Normal**, Yoshitsugu Hayashi, Center for Sustainable Development and Global Smart City, Chubu University, Japan

Overall discussion with panelists and participants chaired by Yoshitsugu Hayashi and Junyi Zhang

- **Panelists:** Laetitia Dablanc, Xiao Fu, Hussein Sinsuat Lidasan, Ozay Ozaydin, Thierry Vanelslander, Varameth Vichiensan, Yacan Wang, Johan Woxenius, Huiyu Zhou

July 20th, 16:00-17:50 Session 09_SS: The Italian National Center for Sustainable Mobility (MOST) [↑](#)

CHAIR: Stefano Carrese (Università di Roma TRE, Italy)

LOCATION: 512H

MOST (National Center for Sustainable Mobility) is a “flagship” Italian project funded - with 320 billion-EUR - by the National Recovery fund (after Covid-19 pandemic) and involving 25 Italian Universities and 24 big firms of the Transportation and Telecommunication industries. Through specific research and innovation programs and activities, MOST aims to promote innovative sustainable mobility including advanced technological solutions to make the transport system more efficient, safe and inclusive. Among MOST objectives there are the resilience and efficiency of mobility systems, with solutions and services for public and private transportation, the creation of personalized and accessible mobility tools for a new social inclusion and the improvement of the supply chain.

- **MOST objectives, actors and approaches** (Pierluigi Coppola, Politecnico di Milano)

- **Panel 1 - Urban Mobility** (Gaetano Fusco, “Sapienza” University of Rome)
- **Panel 2 - MaaS and Innovative mobility services** (Riccardo Rossi, University of Padova)
- **Panel 3 - Cooperative Connected and Automated Vehicles** (Robert Di Pace, University of Salerno)
- **Panel 4 - Freight and Logistics** (Vittorio Marzano, “Federico II” University of Naples)

July 20th, 16:00-17:50 Session A1-S6: Demand for Aviation Services [↑](#)

CHAIR: Wouter Dewulf (University of Antwerp, Belgium)

LOCATION: 520D

16:00 Yingigba Akinyemi (University of Ibadan, Ibadan, Nigeria, Nigeria)

Impact of macroeconomic factors on international air passenger travel demand in Nigeria: cointegration and causality analysis (abstract)

16:15 Vincent Van Bockstaele (University of Antwerp, Belgium)

Wouter Dewulf (University of Antwerp, Belgium)

Sven Buyle (University of Antwerp, Belgium)

Defining the air cargo market dynamics. A literature review of the supply side (abstract)

16:35 Yu-Chun Chang (National Taiwan Ocean University, Taiwan)

Chien-You Hsiao (National Taiwan Ocean University, Taiwan)

Hsin-Yun Lin (Leeds University, UK)

Wen-Chun Tseng (CQ University, Australia)

Where is the potential market for Taiwanese carriers to launch new direct flight services in the US? (abstract)

16:55 Ola Shaver (University of Antwerp, Egypt)

Wouter Dewulf (University of Antwerp, Belgium)

Sven Buyle (University of Antwerp, Belgium)

Yasmine Rashed (Arab Academy for Science, Technology and Maritime Transport, Egypt)

Towards an improved air connectivity in the African continent: Air industry best practices. (abstract)

17:15 Jolien Pauwels (University of Antwerp, Belgium)

Wouter Dewulf (University of Antwerp, Belgium)

Sven Buyle (University of Antwerp, Belgium)

Challenges of Regional Airports: A stitch in time may save nine (abstract)

17:35 Ye Li (Urban Mobility Institute, Tongji University, China)

Zhefeng Wang (Urban Mobility Institute, Tongji University, China)

Zhongzhong Yang (Nanming District Government, China)

Jing Fan (The Key Laboratory of Road and Traffic Engineering, Ministry of Education, Tongji University, China)

Xinghua Liu (The Key Laboratory of Road and Traffic Engineering, Ministry of Education, Tongji University, China)

Guojian Zou (The Key Laboratory of Road and Traffic Engineering, Ministry of Education, Tongji University, China)

Analysis of Evolution and Driving Forces on Airport Connectivity in the Yangtze River Delta Region (abstract)

July 20th, 16:00-17:50 Session A2-S13_SS: SPECIAL SESSION: Key issues on maritime, port and hinterland geopolitics [↑](#)

CHAIR: Valentin Carlan (University of Antwerp, Belgium)

LOCATION: 513A

The main task of the section is to review the main issues of geopolitics in order to minimize the gap between academic research and practice. Geopolitical issues are under the scrutiny of politicians, businessmen, academics and military experts. Key for maritime transport, ports and hinterland connections are guarantees of the security of the supply chain, the reduction in the cost of transportation and the duration of the traffic. For international trade, it is essential to have stable trading volumes on exchange-traded commodities, regular sea transportation and developed port infrastructure, and longer, all year in prospect, navigation. These are items that will be touched upon in this session.

- **Introduction** (Thierry Vanelslander)
- **Resilience Capabilities of Ports and Maritime Supply Chains** (Jean-Paul Rodrigue)
- **Managing container capacity: legal and economic best practices** (Katrien Storms, Marta Katarzyna Kołacz, Christa Sys, and Wouter Verheyen)
- **Stakeholder identification and mapping for the establishment of governance frameworks for improving inland navigation in Europe** (Marie Cryns)
- **Navigating through the legal complexities of unmanned inland navigation: an exploration of the legal and regulatory framework of Remote Control Centers (RCCs)** (Amber Waterschoot, Camilla Domenighini and Wouter Verheyen)
- **Water transport planning and better transport management in relation to atmospheric conditions; on the Danube** (Aleksandar Valjarevic)
- **Balancing Port Development to With Different Goals for Operators and Communities** (Bruce Lambert)
- **Panel discussion on digitalisation**, involving government and sector representatives and academics, moderated by Valentin Carlan.

July 20th, 16:00-17:50 Session A2-S3: Port green [↑](#)

CHAIR: Aseem Kinra (Copenhagen Business School, Denmark)

LOCATION: 512H

16:00 Kamalashudhan Achuthan (University College London, UK)

Cheong Zhen (University College London, UK)

Pang Jian (University College London, UK)

Modelling and analysis of port operations for climate change related disruptions (abstract)

16:20 Flóra Zsuzsanna Gulyás (Institute of Shipping Economics and Logistics, Germany)

Aseem Kinra (University of Bremen, Germany)

What could make seaports more committed to air quality? A review of key drivers and barriers (abstract)

16:40 Marta Gonzalez-Aregall (University of Gothenburg, Sweden)

Environmental pricing strategies at European ports: A competitive factor to attract more traffic? (abstract)

17:00 Harry Geerlings (Erasmus Universiteit Rotterdam, Netherlands)
Bert Van Grieken (Private consultant, Netherlands)

Harboring Hydrogen; The significance of hydrogen for the transport sector and ports (abstract)

17:20 Noemi Van Meir (University of Antwerp, Belgium)
Christa Sys (University of Antwerp, Belgium)
Thierry Vanelslander (University of Antwerp, Belgium)

Energy transition impact on liquid bulk market and ports: a systematic literature review (abstract)

July 20th, 16:00-17:50 Session A2-S4: Port strategies [↑](#)

CHAIR: Alessio Tei (University of Genoa, Italy)

LOCATION: 524B

16:00 Hsiao-Chi Chen (National Taipei University, Taiwan)
Shi-Miin Liu (National Taipei University, Taiwan)

Optimal Investments of Port Authorities with Ambiguity on Uncertain Market Demand (abstract)

16:20 Claude Comtois (CIRRELT-UNIVERSITY OF MONTREAL, Canada)
Brian Slack (CIRRELT, Canada)

CLIMATE CHANGE AND ADAPTATION STRATEGIES OF PORTS AND SHIPPING IN THE ST. LAWRENCE- GREAT LAKES SYSTEM (abstract)

16:40 Daniele Crotti (University of Insubria, Italy)
Claudio Ferrari (University of Genoa, Italy)
Alessio Tei (University of Genoa, Italy)

Alea iacta est. Welfare evaluations of port authorities dealing with terminals' vertical integration. (abstract)

17:00 Yoshihisa Sugimura (Kyushu University, Japan)
Yasuhiro Akakura (National Institute for Land and Infrastructure Management, Japan)
Tatsuki Yotsushima (The University of Tokyo, Japan)
Tomoya Kawasaki (The University of Tokyo, Japan)

Evaluation of Japanese port policies through network analysis (abstract)

17:20 Prof Adebambo Somuyiwa (LADOKE AKINTOLA UNIVERSITY OF TECHNOLOGY OGBOMOSO, OYO STATE, Nigeria)
Olusegun Adepoju (Nigerian Army University, Biu, P.M.B 1500 Borno State, Nigeria, Nigeria)
Luqman Adedeji (Deputy Director; General Services, Tertiary Education Trust Fund (TETFUND) Abuja, Nigeria, Nigeria)

Container Cargo Throughput Efficiency of Selected Nigerian Seaports –A Stochastic Frontier Analysis (abstract)

July 20th, 16:00-17:50 Session B3-S7_SS: SPECIAL SESSION How to build and maintain the right kind of infrastructure for intermodal freight transport? – Evaluating the impact of geopolitical developments and climate change [↑](#)

CHAIRS: Ralf Elbert (Technical University Darmstadt, Germany)
Gunnar Stefansson (Chalmers University of Technology, Sweden)

LOCATION: 518C

The demand for transportation is at an all-time high. In this context, freight transport is especially affected. A contradictory picture is emerging: an increased demand for transport requires more traffic, but at the same time these transports should be as climate-neutral as possible and adhere to schedules and result in no delays. These demands are requested to be met regardless of what happens in the world. However, transportation and supply chains are not immune to external influences and disruptions, and are required to adapt to continue to function.

With this in mind, in this Special Session we look at intermodal freight transport, the challenges of climate change and geopolitical developments on freight transport in general and the need for resilient supply chains. With two paper presentations on "The Effect of Time of Travel on the Performance of Port Related Truck Traffic" and "The Footprint of Container Terminals: Automation and Yard Configuration," we are consolidating the findings of the Joint Session hosted by SIG B3 and TRB's AT045 at WCTRS Virtual Meet 2022, and extending these to include new perspectives on intermodal transport.

Invited talk: Eric Shen (AT045), Founder and CEO of Shen and Associates, LLC (California)

Summary and Outlook: Eric Shen (AT045), Founder and CEO of Shen and Associates, LLC and Adjunct Associate Professor at University of California

16:00 Jean-Paul Rodrigue (Hofstra University, United States)

The Footprint of Container Terminals: Automation and Yard Configuration (abstract)

16:20 Jose Holguin-Veras (Rensselaer Polytechnic Institute, United States)

Julia Amaral (Rensselaer Polytechnic Institute, United States)

Carlos Rivera-Gonzalez (University of Toronto, Canada)

The Effect of Time of Travel on the Performance of Port Related Truck Traffic (abstract)

July 20th, 16:00-17:50 Session B4-S7: Warehouse sharing and facility location issues in urban goods movement [↑](#)

CHAIR: Konstantina Katsela (University of Gothenburg, Sweden)

LOCATION: 512G

16:00 Luísa Tavares Muzzi de Sousa (Universidade Federal de Minas Gerais, Brazil)

Gracielle Gonçalves Ferreira de Araújo (Universidade Federal de Minas Gerais, Brazil)

Leise Kelli Oliveira (Federal University of Minas Gerais, Brazil)

Maria Leonor Alves Maia (Universidade Federal de Pernambuco, Brazil)

Jorge Luiz dos Santos Junior (Universidade Federal de Minas Gerais, Brazil)

Collection and delivery points as a strategy for equitable and accessible e-commerce deliveries: The case of Belo Horizonte (Brazil) (abstract)

16:20 François Sarrazin (Université de Montréal, Canada)
Martin Trépanier (Polytechnique Montréal, Canada)
Matthieu Gruson (Université du Québec à Montréal, Canada)
Potential of Warehouse Sharing and Electric Bicycles Deliveries in the Montreal Region (abstract)

16:40 Sung Ho Hur (Seoul National University, South Korea)
Youngbeom Kim (University of Seoul, South Korea)
Social cost reduction by optimizing the delivery network and changing the operational strategy: Study on Seoul-city cases (abstract)

17:00 Takanori Sakai (Tokyo University of Marine Science and Technology, Japan)
Kohei Santo (Tokyo University of Marine Science and Technology, Japan)
Shinya Tanaka (Tokyo University of Marine Science and Technology, Japan)
Tetsuro Hyodo (Tokyo University of Marine Science and Technology, Japan)
Locations of logistics facilities for e-commerce: a case of the Tokyo Metropolitan Area (abstract)

17:20 Ali Gul Qureshi (Kyoto University, Japan)
Tadashi Yamada (Kyoto University, Japan)
Tomomi Honda (Kyoto University, Japan)
Daichi Ikemiya (Kyoto University, Japan)
A Framework for Warehouse Sharing Platform System (abstract)

July 20th, 16:00-17:50 Session B4-S8: Case studies, COVID and legal issues in urban freight transport [↑](#)
CHAIR: Maja Kiba-Janiak (Wroclaw University of Economics and Business, Poland)
LOCATION: 524C

16:00 Suzanne Pirie (Polytechnique Montréal / CIRRELT, Canada)
Martin Trépanier (Polytechnique Montréal / CIRRELT, Canada)
Walter Rei (ESG UQÀM / CIRRELT, Canada)
Characterization of a COVID-fired urban bike delivery system: the Montreal experience (abstract)

16:20 Ruowei Li (University of Toronto, Canada)
Tho Van Le (Purdue University, United States)
Matthew Roorda (University of Toronto, Canada)
Simulating Behaviour of a Person-following Delivery Robot in Pedestrian Environments (abstract)

16:40 Alena Brettmo (University of Gothenburg, Sweden)
Michael Browne (University of Gothenburg, Sweden)
Comparative Study on Urban Freight Transport Sustainability Initiatives: Two Cases from Sweden (abstract)

17:00 Leise Kelli Oliveira (Federal University of Minas Gerais, Brazil)
Francisco Gildemir Ferreira Da Silva (Universidade Federal do Ceará, Brazil)
Bruno Vieira Bertoncini (Universidade Federal do Ceará, Brazil)
João Guilherme da Costa Braga França (Universidade Federal de Minas Gerais, Brazil)

Jorge Luiz dos Santos Junior (Universidade Federal de Minas Gerais, Brazil)
Gracielle Gonçalves Ferreira de Araújo (Universidade Federal de Minas Gerais, Brazil)
Isabela Kopperschmidt Oliveira (Universidade Federal de Pernambuco, Brazil)
Luísa Tavares Muzzi de Sousa (Universidade Federal de Minas Gerais, Brazil)

Analysis of the causal effect of the covid-19 pandemic on electronic commerce delivery: the case of Belo Horizonte, Brazil (abstract)

July 20th, 16:00-17:50 Session B5-S6: Data driven modelling [↑](#)

CHAIR: Andres Regal (Rensselaer Polytechnic Institute, United States)

LOCATION: 520F

16:00 Andres Regal (Rensselaer Polytechnic Institute, United States)

Learning to Route by using Graph Neural Networks and Reinforcement Learning (abstract)

16:20 Vivek V Gavimath (Center for Study of Science, Technology, and Policy (CSTEP) Bengaluru 560094, India)

Spurthi Ravuri (Center for Study of Science, Technology, and Policy (CSTEP) Bengaluru 560094, India)

Developing Real-World Drive Cycles for Heavy-Duty Freight Vehicles using On-Board Diagnostics Data (abstract)

16:40 Yang Su (Tsinghua University, China)

Chunyang Han (Tsinghua University, China)

Xin Pei (Tsinghua University, China)

Xu Han (Tsinghua University, China)

Yun Yue (Tsinghua University, China)

Danya Yao (Tsinghua University, China)

Huaxin Pei (Tsinghua University, China)

Yi Zhang (Tsinghua University, China)

A novel real-time weight estimation method for trucks using vehicle motion data in a deep-learning framework (abstract)

17:00 Jorge Mortes Alcaraz (IMT Atlantique, France)

Martin Cousineau (HEC Montréal, Canada)

Fabien Lehuédé (IMT Atlantique, France)

Jorge E. Mendoza (HEC Montréal, Canada)

María I. Restrepo (IMT Atlantique, France)

Learning implicit multiple time windows in the Traveling Salesman Problem (abstract)

July 20th, 16:00-17:50 Session C1-S3: Advancements in Traffic Flow Optimization and Data Analysis [↑](#)

CHAIR: Xiao Lin (Delft University of Technology, Netherlands)

LOCATION: 520E

16:00 Daichi Ogawa (The university of Tokyo, Japan)

Eiji Hato (The university of Tokyo, Japan)

Using quantized representation to low-rank approximation for traffic flow (abstract)

- 16:15 Namrata Gupta (IITB, India)
Gopal R. Patil (Indian Institute of Technology Bombay, Mumbai, India, India)
Hai L. Vu (Monash University, Clayton, VIC, Australia, Australia)
Three-ring and three-bin abstractions to analyze control policies in grid networks (abstract)
- 16:30 Ericka Mora Campos (University of Nevada, Reno, United States)
Aobo Wang (University of Nevada, Reno, United States)
Zong Tian (University of Nevada, Reno, United States)
How many trajectories should be collected to evaluate signal coordination performance? - Cluster analysis using Connected Vehicle Data (abstract)
- 16:45 Manoj Jha (The Brite Group Inc, United States)
D. Sai Kiran Varma (Shiv Nadar University, Delhi, India)
Rishav Jaiswal (Indian Institute of Technology, Patna, India)
Shalini Rankavat (Shiv Nadar University, Delhi, India)
Anil Kumar Bachu (Indian Institute of Technology, Patna, India)
A Machine Learning Approach to Traffic Congestion Hotspot Identification and Prediction (abstract)
- 17:00 Nicholas Taylor (Independent Transport Researcher, UK)
Form of the equilibrium speed-flow-density relationship (abstract)
- 17:15 Xiao Lin (Delft University of Technology, Netherlands)
Ludovic Leclercq (University Gustave Eiffel, France)
Lóránt A. Tavasszy (Delft University of Technology, Netherlands)
Optimal Speed Limit under Multi-class User Equilibrium: A Prescriptive Approach using Mathematical Programming (abstract)
- 17:30 Moritz Berghaus (RWTH Aachen University, Institute of Highway Engineering, Germany)
Serge Lamberty (RWTH Aachen University, Institute of Highway Engineering, Germany)
Jörg Ehlers (RWTH Aachen University, Institute of Highway Engineering, Germany)
Eszter Kalló (RWTH Aachen University, Institute of Highway Engineering, Germany)
Markus Oeser (RWTH Aachen University, Institute of Highway Engineering, Germany)
Vehicle Trajectory Dataset from Drone Videos Including Off-Ramp and Congested Traffic – Analysis of Data Quality, Traffic Flow and Accident Risk (abstract)

July 20th, 16:00-17:50 Session C2-S5_SS: Shrinking trend of highway capacity? - Special session by Japan Society of Traffic Engineers [↑](#)

CHAIR: Keshuang Tang (College of Transportation Engineering, Tongji University, China)

LOCATION: 513B

Knowing highway capacity appropriately is a classic, but an essential issue in all the aspects of traffic engineering, i.e. road planning and design and traffic operations. In recent years, several interesting evidences showing a shrinking trend of highway capacity compared to decades ago, through various empirical analyses in motorway sections and signalized intersections in Japan. This session is jointly organized with the Japan Society of traffic Engineers (JSTE) aiming at reporting these phenomena recently observed and exchange information internationally. And likely reasons of this trend and future perspectives for considering highway capacity including mixed traffic flows with automated vehicles will be discussed with audiences.

- **Introduction**, Hideki Nakamura (Nagoya University, Japan)
- **A long-term shrinking trend of speed-flow relationship of motorway basic segments**, Takashi Ishida (Highway Planning Inc., Japan)
- **Analysis of the long-term variations in capacity of motorway bottleneck sections**, Yasuhiro Shiomi (Ritsumeikan University, Japan)
- **Capacity drop phenomenon and countermeasures in Japanese expressways** (Kentaro Wada (University of Tsukuba, Japan))
- **Reductions in saturation flow rates at signalized intersections in Tokyo**, Eri Aoyama (Nihon University, Japan)
- **Increasing trends of minimum spacing in waiting queues at signalized intersections in Tokyo**, Shinji Tanaka (Yokohama National University, Japan)

July 20th, 16:00-17:50 Session C4-S12: Applications of Surrogate Safety Measures [↑](#)

CHAIR: Carmelo D'Agostino (LTH Lund University, Sweden)

LOCATION: 514A

16:00 Anamika Yadav (Indian Institute of Technology Jammu, India)
Ankit Kathuria (Indian Institute of Technology Jammu, India)
Sambhav Goyal (Indian Institute of Technology Jammu, India)
Dilum Dissanayake (University of Birmingham, UK)

Safety Analysis of Roundabouts using Surrogate Safety Measures: A Review (abstract)

16:15 Iyad Sahnoun (University of Calgary, Canada)
Alexandre de Barros (University of Calgary, Canada)
Lina Kattan (University of Calgary, Canada)

Evaluating Surrogate Measures of Safety of Implementing Connected Cruise Control in a Connected Vehicle Environment (abstract)

16:35 Shahana Avathkattil (Indian Institute Of Technology Bombay, India)
Vedagiri Perumal (Indian Institute Of Technology Bombay, India)

Transferability of Conflict Prediction Models at Signalized Intersections under Disordered Traffic Conditions (abstract)

16:55 Shubha Bamney (IIT Madras, India)
Gitakrishnan Ramadurai (IIT Madras, India)

A Deep Learning Model for Automatic Data Collection of Road Characteristics (abstract)

17:15 Dimitrios Tselentis (Delft University of Technology, Netherlands)
Eleonora Papadimitriou (Delft University of Technology, Netherlands)

Discovering driver profiles using naturalistic driving data: a machine learning approach (abstract)

17:35 Maryam Hasanpour (Toronto Metropolitan University (formerly Ryerson University), Canada)
Zhankun Chen (LTH Lund University, Sweden)
Bhagwant Persaud (Toronto Metropolitan University (formerly Ryerson University), Canada)
Carmelo D'Agostino (LTH Lund University, Sweden)
Craig Milligan (MicroTraffic Inc., Canada)

Investigation of a Hybrid Framework for Evaluating Surrogate Measures of Safety based on Machine Learning and Extreme Value Theory (abstract)

July 20th, 16:00-17:50 Session C4-S6: Driving Behaviour Analysis (1) [↑](#)

CHAIR: Akshay Gupta (Indian Institute of Technology Roorkee, India)

LOCATION: 520C

16:00 Mohamed Ibrahim Elsayyad (Qatar University, Qatar)

Deepti Muley (Qatar University, Qatar)

Wael Alhajyaseen (Qatar University, Qatar, Qatar)

Determinants of road user behavior at marked midblock crosswalks (abstract)

16:20 Yoshihiko Hashino (Nihon University, Japan)

Sidney Schreiner (Nihon University, Japan)

Atsushi Fukuda (Nihon University, Japan)

Driving Behavior and the Aging Society: A Framework for Microsimulation

Approach (abstract) 

16:40 Akshay Gupta (Indian Institute of Technology Roorkee, India, India)

Pushpa Choudhary (Indian Institute of Technology Roorkee, India, India)

Manoranjan Parida (Indian Institute of Technology Roorkee, India, India)

Does Type of Car Really Influence Driver Behaviour? A Comparative Study of Risky Driving Behaviors between SUVs and other Types of Cars (abstract)

17:00 Someswara Rao Bonela (National Institute of Technology Warangal, India)

Dr. B Raghuram Kadali (National Institute of Technology Warangal, India)

Exploring the contributing factors over the distractions of right-turn vehicular driving paths at unsignalized T-intersections (abstract)

17:20 Hua Liu (Southeast University, China)

Chuanyun Fu (Harbin Institute of Technology, China)

Exploring the deterrence effect of automated speed camera using taxi GPS trajectories (abstract)

July 20th, 16:00-17:50 Session C4-S8: Crash Data Modeling [↑](#)

CHAIR: Phani Kumar Patnala (University of Manitoba, Canada)

LOCATION: 513C

16:00 Radmila Magusic (not applicable, Croatia)

Multivariate Techniques In Analysis Of Crash Event Involving Drivers Of Personal Vehicle in Vienna, Austria (abstract)

16:20 Vinayaraj V S (Indian institute of Technology Bombay, India)

Vedagiri Perumal (Indian institute of Technology Bombay, India)

Investigating the Factors Affecting Crash Severity of Angle- Collision Manner at Roundabouts Under Non- Lane based Heterogeneous Traffic Conditions (abstract)

16:40 Zeke Ahern (Queensland University of Technology, Australia)
Paul Corry (Queensland University of Technology, Australia)
Alexander Paz (Queensland University of Technology, Australia)
Simultaneous multiple objectives for the estimation of crash frequency models (abstract)

17:00 Mahsa Jafari (Toronto Metropolitan University, Canada)
Bhagwant Persaud (Toronto Metropolitan University, Canada)
Structural Equation Modeling to Investigate Behavioral Factors Contributing to Crash Involvement: A Systematic Review (abstract)

17:20 Nasim Deljouyi (University of Manitoba, Canada)
Phani Kumar Patnala (University of Manitoba, Canada)
Babak Mehran (University of Manitoba, Canada)
Jonathan D. Regehr (University of Manitoba, Canada)
Application of Reliability Models for Crash Frequency Analysis: Implications for Network-wide Safety Performance (abstract)

July 20th, 16:00-17:50 Session D1-S4: Activity-based models and time-series [↑](#)

CHAIR: Daniel Opoku Mensah (Toronto Metropolitan University, Canada)

LOCATION: 513D

16:00 Ziyu Wang (Southwest Jiaotong University, China)
Xiuxian Wu (Southwest Jiaotong University, China)
Hontai Yang (Southwest Jiaotong University, China)
De-anonymization of metro users based on the Markov and hidden Markov models (abstract)

16:20 Pierluigi Coppola (Politecnico di Milano, Italy)
Fulvio Silvestri (Politecnico di Milano, Italy)
Francesco De Fabiis (Politecnico di Milano, Italy)
Luca Barbierato (Politecnico di Milano, Italy)
Disaggregate travel demand analysis using big data sources: unsupervised learning methods for data-driven trip purpose estimation (abstract)

16:40 Benjamin Gramsch (ETH Zurich, Switzerland)
Kay W. Axhausen (ETH Zurich, Switzerland)
Place Generator & Place Interpreter: A New Survey Method to Understand Regular Destination Choice (abstract)

17:00 Ioannis Tsouros (University of the Aegean, Greece)
Amalia Polydoropoulou (University of the Aegean, Greece)
Athena Tsimpa (University of the Aegean, Transportation and Decision Making Laboratory, Greece)
Francesca Fermi (TRT, Italy)
Francesco Chirico (TRT, Italy)
Konstantinos Kamargiannis (MOBY X, Cyprus)
Angelo Martino (TRT, Italy)
Loredana Zani (TRT, Italy)

Dimitrios Pappellis (UCL, UK)

Maria Kamargianni (UCL, UK)

Manos Chaniotakis (UCL, UK)

The HARMONY Model Suite application in Turin: activity-based modelling supported by smartphone-based travel survey (abstract)

17:20 Daniel Opoku Mensah (Toronto Metropolitan University, Canada)

Godwin Badu-Marfo (Toronto Metropolitan University, Canada)

Bilal Farooq (Toronto Metropolitan University, Canada)

Robustness Analysis of Deep Learning Models for Population Synthesis (abstract)

July 20th, 16:00-17:50 Session D2-S6: Recent Innovations in Travel Demand Modeling [↑](#)

CHAIR: Nicole Reinfeld (Frankfurt University of Applied Sciences, Germany)

LOCATION: 520A

16:00 Nicole Reinfeld (Frankfurt University of Applied Sciences, Germany)

Hagen Tobias (Frankfurt University of Applied Sciences, Germany)

Using cluster analysis to identify behaviorally homogeneous groups in multiple stages of the four-stage model (abstract)

16:15 Ariane Kehlbacher (German Aerospace Center DLR, Germany)

Kerstin Stark (German Aerospace Center DLR, Germany)

Laura Gebhardt (German Aerospace Center DLR, Germany)

Jan Weschke (German Aerospace Center DLR, Germany)

Estimating socio-demographic and experiential differences in willingness to share a ride: A hierarchical Bayesian approach (abstract)

16:35 Siti Raudhatul Fadilah (Graduate School of Engineering, Kochi University of Technology, Japan)

Hiroaki Nishiuchi (School of Systems Engineering, Kochi University of Technology, Japan)

An Minh Ngoc (School of Systems Engineering, Kochi University of Technology, Japan)

A Preliminary Analysis of Motorcycle Route Choice Behavior in Response to Traffic Information (abstract)

16:55 Janak Parmar (Università degli Studi Niccolò Cusano, Italy)

Paolo Delle Site (Università degli Studi Niccolò Cusano, Italy)

A comparative assessment of predictive models through internal validation: a case of MNL models (abstract)

17:15 Clémence de Rolland (Polytechnique Montreal, Department of Civil, Geological and Mining Engineering, Canada)

Catherine Morency (Polytechnique Montreal, Department of Civil, Geological and Mining Engineering, Canada)

Jean-Simon Bourdeau (Polytechnique Montreal, Department of Civil, Geological and Mining Engineering, Canada)

Developing a route calculator for E-bikes based on GPS data (abstract)

17:35 Jonas Hamann (Frankfurt University of Applied Sciences, Germany)
Tobias Hagen (Frankfurt University of Applied Sciences, Germany)
Siavash Saki (Frankfurt University of Applied Sciences, Germany)

Understanding Traffic Patterns using Clustered Semantic Trajectories and Local Geographic Units (abstract)

July 20th, 16:00-17:50 Session D2-S7: All About Public Transportation [↑](#)

CHAIR: Owen Waygood (polytechnique Montreal, Canada)

LOCATION: 512D

16:00 Bogdan Kapatsila (University of Alberta, Canada)
Francisco J. Bahamonde-Birke (Tilburg University, Netherlands)
Dea van Lierop (Utrecht University, Netherlands)
Emily Grisé (University of Alberta, Canada)

Impact of the COVID-19 Pandemic on the Comfort of Riding a Crowded Bus in Metro Vancouver, Canada (abstract)

16:15 Pierre Leviaux (LAET - CNRS, France)
Pierre-Yves Péguy (LAET - CNRS, France)

The determinants of modal shift from car to public transit: A literature review and some insights for future research (abstract)

16:35 Charlotte Poirier (Polytechnique Montréal, Canada)
Catherine Morency (Polytechnique Montréal, Canada)

Assessing the Quality and Diversity of Transit Route Options (abstract)

16:55 Seiki Ito (Meijo University, Japan)
Yukimasa Matsumoto (Meijo University, Japan)

Characteristics of Individual Passenger and OD Trip of Community Bus Focusing on Round Trip - Case Study on Nisshin City in Aichi Prefecture (abstract)

17:15 Rakhi Manohar Mepparambath (Institute of High Performance Computing, Singapore)
Joseph John Pyne Simons (Institute of High Performance Computing, Singapore)
Pritee Agrawal (Institute of High Performance Computing, Singapore)
Kum Seong Wan (Institute of High Performance Computing, Singapore)
Jeremy Oon (Institute of High Performance Computing, Singapore)
Ilya Farber (Institute of High Performance Computing, Singapore)
Le Thi Diem Trinh (Institute of High Performance Computing, Singapore)
Muhamad Azfar Bin Ramli (Institute of High Performance Computing, Singapore)

Modelling the travel plan choices made by transit passengers under unplanned train service disruptions (abstract)

17:35 Long Pan (Beijing Jiaotong University, China)
E.O.D. Waygood (Polytechnique Montreal, Canada)
Zachary Patterson (Concordia University, Canada)

How Bus Crowding Information Affects Bus Transit User Itinerary Choice (abstract)

July 20th, 16:00-17:50 Session D3-S5: Modern Mobility: Automated and Electric Vehicles [↑](#)

CHAIR: Veronique Van Acker (Luxembourg Institute of Socio-Economic Research, Luxembourg)

LOCATION: 513E

16:00 Tilmann Schlenther (Technische Universität Berlin, Germany)
Chengqi Lu (Technische Universität Berlin, Germany)
Simon Meinhardt (Technische Universität Berlin, Germany)
Christian Rakow (Technische Universität Berlin, Germany)
Kai Nagel (Technische Universität Berlin, Germany)

Autonomous Mobility-on-Demand in a Rural Area: Calibration, Simulation and Projection based on Real-world Data (abstract)

16:20 Vikas Nimesh (Alliance for an Energy Efficient Economy (AEEE), India)
Manoj B S (IIT Kharagpur, India)
Eeshan Bhaduri (IIT Kharagpur, India)
V. Mahendra Reddy (IIT Kharagpur, India)
Arkopal Kishore Goswami (IIT Kharagpur, India)

Estimating personal electric vehicle demand and its adoption timeframe: A study on consumer perception in Indian Metropolitan cities (abstract)

16:40 Andrés Fielbaum (University of Sydney, Australia)
Baiba Pudane (TU Delft, Netherlands)

Will shared automated vehicles reduce the total vehicle kilometres? A theoretical analysis (abstract)

17:00 Azise-Oumar Diallo (LAET, ENTPE-CNRS-University of Lyon, France)
Mathilde Moliner (Polytechnique Montreal, Canada)
Ouassim Manout (LAET, ENTPE-CNRS-University of Lyon, France)
Francesco Ciari (Polytechnique Montreal, Canada)

Implications of three autonomous mobility scenarios: a comparison between Lyon, France and Montreal, Canada. (abstract)

17:20 Umm E Hanni (Department of Civil Engineering, Nagoya University, Japan)
Toshiyuki Yamamoto (Institute of Materials and Systems for Sustainability, Nagoya University, Japan)
Toshiyuki Nakamura (Institute of Innovation for Future Society, Nagoya University, Japan)

Analysis of the consumers' EV charging behavior at different locations in Japan (abstract)

July 20th, 16:00-17:50 Session F1-S5: Transport network and location [↑](#)

CHAIR: Matthieu Schorung (University Gustave Eiffel, France)

LOCATION: 518A

16:00 Haixiao Pan (Tongji University, China)
Miao Hu (Tongji University, China)
Xiyin Deng (Tongji University, China)
Ailing Liu (Tongji University, China)

How does Multiscale Metro Network-wide Attributes Impact on Peak Hour Station Passenger and Flow Balancing? (abstract)

16:15 Zi Lei (Tongji University, China)
Weifeng Li (Tongji University, China)

The Spatial Relationship between Urban Public Transport Network and Residents' Job-Housing Distribution: A Case Study in Shenzhen, China (abstract)

16:35 Elisabeth Fokker (Centrum Wiskunde & Informatica, Netherlands)
Thomas Koch (Centrum Wiskunde & Informatica, Netherlands)
Elenna Dugundji (Massachusetts Institute of Technology, United States)

Analysis of the impact of policy measures on parking behavior using interpretable time series models (abstract)

16:55 Mirian Greiner (CEFET-MG, Brazil)
Guilherme Leiva (CEFET-MG, Brazil)
André Guerra (CEFET-MG, Brazil)
Renato Ribeiro (CEFET-MG, Brazil)

NETWORK CENTRALITY: A methodological application to the public bus transport network in the municipality of Poços de Caldas (abstract)

17:15 Takanori Arai (MaaS Tech Japan K.K., Japan)
Kazuhiro Takaya (MaaS Tech Japan K.K., Japan)
Taichi Furukawa (Institute of Urban Innovation, Yokohama National University, Japan)
Takuya Osaki (MaaS Tech Japan K.K., Japan)
Tetsushi Watanabe (MaaS Tech Japan K.K., Japan)

Proposal of accessibility index for city planning and public transportation planning with using the synthetic transportation network (abstract)

17:35 Qiang Ma (Shanghai Tongji Urban Planning & Design Institute Co., Ltd., China)
Jing Liang (Shanghai Tongji Urban Planning & Design Institute Co., Ltd., China)
Feiqiong Wu (Shanghai Tongji Urban Planning & Design Institute Co., Ltd., China)

Practical Reflection on Trams and Prospect of Its Application under Strategic Goals of "Emission Peak and Carbon Neutrality" (abstract)

July 20th, 16:00-17:50 Session F2-S6: Scenarios for sustainable transportation [↑](#)

CHAIR: Fiore Tinessa (University of Naples Federico II, Italy)

LOCATION: 520B

16:00 Elmira Parviziomran (University of Gothenburg, Sweden)
Rickard Bergqvist (University of Gothenburg, Sweden)

Cost and financing of the sustainability transition of the road transportation system: a systematic literature review (abstract)

16:15 Sudarmanto Budi Nugroho (Institute for Global Environmental Strategies - Japan, Japan)
Tomoko Ishikawa (Institute for Global Environmental Strategies - Japan, Japan)
Junichi Fujino (Institute for Global Environmental Strategies - Japan, Japan)

Decarbonisation of road transport in sub-national level in Indonesia case study Jakarta City, West Java Province and Semarang City, Indonesia (abstract)

16:35 James Beregi (SOLAR TRANSPORTATION TECHNOLOGIES, United States)
Proposal to Decarbonize Transportation (abstract)

16:55 Aaron Michael Salang (University of the Philippines Diliman, Philippines)
Virgilio Ma. Jr. Ramos (University of the Philippines Diliman, Philippines)
Arse John Salison (University of the Philippines Diliman, Philippines)
John Justine Villar (University of the Philippines Diliman, Philippines)

Analysis of Different Methods for Forecasting Transport Carbon Dioxide Emissions in the Philippines (abstract)

17:15 Danielle Maia de Souza (Université de Montréal, Canada)
Radhwane Boukelouha (Polytechnique Montréal, Canada)
Emma Frejinger (Université de Montréal, Canada)
Catherine Morency (Polytechnique Montréal, Canada)
Normand Mousseau (Université de Montréal, Canada)
Martin Trépanier (Polytechnique Montréal, Canada)

A review of methods and models to assist in the design of national strategies and policies to reduce greenhouse gas emissions (abstract)

17:35 Davide Shingo Usami (Sapienza University of Rome, Italy)
Luca Persia (Sapienza University of Rome, Italy)
Brayan Gonzalez Hernandez (Sapienza University of Rome, Italy)
Roberto Carroccia (Sapienza University of Rome, Italy)
Andrea Papola (University of Naples Federico II, Italy)
Vittorio Marzano (University of Naples Federico II, Italy)
Fiore Tinessa (University of Naples Federico II, Italy)
Paolo Delle Site (Niccolò Cusano University, Italy)
Ciro Buonocore (Techné SPA, Autostrade per l'Italia Group, Italy)
Robert Lisinge (United Nations Economic Commission For Africa (UNECA), PSDFD- Energy Infrastructure & Services Section, Ethiopia)

Towards the African Continental Free Trade Area: An Analysis of the Impacts on Intra-continental Goods Mobility (abstract)

July 20th, 16:00-17:50 Session F3-S4: Mobility as a service 

CHAIR: Valtteri Ahonen (University of Oulu, Finland)

LOCATION: 514B

16:00 Shahid Hussain (University of Oulu, Finland)
Valtteri Ahonen (University of Oulu, Finland)
Pekka Leviäkangas (University of Oulu, Finland)

Sustainability Assessment of Smart Mobility Projects in Finland: A Comparative Analysis (abstract) 

16:20 Italo Meloni (University of Cagliari, Italy)
Daniele Giubergia (IUSS Pavia\ University of Cagliari, Italy)
Francesco Piras (University of Cagliari, Italy)
Eleonora Sottile (University of Cagliari, Italy)

Can MaaS encourage travel behavior change? The role of cognitive, motivational factors in sustainable and pro-environmental choices. (abstract)

16:40 Bregtje Dikker-Pavlovski (University of Antwerp/ Ministry of Infrastructure, Netherlands)
Transport Services and Consumer Protection: Mobility as a Service in the Digital Era (abstract)

17:00 Hiroshi Shimamoto (University of Miyazaki, Japan)
 Masato Kitazono (Maeda Corporation (Former student of University of Miyazaki), Japan)
Feasibility assessment of ride-sharing system in mountainous area in Japan using a matching model (abstract)

July 20th, 16:00-17:50 Session F4-S5: Liveability and non-motorized transport – 5 [↑](#)

CHAIR: Meng Li (Tsinghua University, China)

LOCATION: 512B

16:00 Joao Bigotte (University of Coimbra, Portugal)
 Filipa Ferrao (University of Coimbra, Portugal)
The future role of shared e-scooters in urban mobility: insights from Portugal (abstract)

16:20 Gebhard Wulfhorst (Technical University of Munich, Germany)
 Ana Rivas de Gante (Technical University of Munich, Germany)
 David Duran-Rodas (Technical University of Munich, Germany)
A Place to Stay: exploring the potential of mobility hubs as urban spaces (abstract)

16:40 Qiang Ma (Shanghai Tongji Urban Planning & Design Institute Co., Ltd., China)
 Xiao Wei (Shanghai Tongji Urban Planning & Design Institute Co., Ltd., China)
 Guannan Ren (Shanghai Tongji Urban Planning & Design Institute Co., Ltd., China)
Street Design Guidelines and Urban Road System Improvement: From Traffic Volume to Space Quality (abstract)

17:00 Raymund Paolo Abad (De La Salle University, Philippines)
 Alexis Fillone (De La Salle University, Philippines)
 Krister Ian Daniel Roquel (De La Salle University, Philippines)
 Nicanor Jr. Roxas (De La Salle University, Philippines)
 Maria Cecilia Paringit (De La Salle University, Philippines)
 Seandon Armada (De La Salle University, Philippines)
 Moreen Munoz (De La Salle University, Philippines)
 Michael Vincent Bonito (De La Salle University, Philippines)
 Andrea Isabelle Villanueva (De La Salle University, Philippines)
Transit use perceptions and a potential shift to cycling during COVID-19 restrictions in Metro Manila, Philippines (abstract)

17:20 Siroos Shahriari (University of New South Wales, Australia)
 Amarin Siripanich (University of New South Wales, Australia)
 Taha Rashidi (University of New South Wales, Australia)
Estimating the Impact of Cycling Infrastructure Improvement on Cycling infrastructure Usage: A Fixed Effect Spatial Lag Model Approach (abstract)

July 20th, 16:00-17:50 Session G1-S5_SS: SPECIAL SESSION: Embracing Disruption in Transport and Transportation [↑](#)

CHAIRS: Athena Roumboutsos (University of the Aegean, Greece), Thierry Vanelslander (Department of Transport and Regional Economics (TPR), Antwerp, Belgium) and Claudio Ferrari (University of Genoa, Italy)

LOCATION: 522B

Disruption is the action of preventing something, especially a system, process or event from continuing as usual or as expected [Cambridge dictionary]. This session addresses topics that are sources of disruption in the transport field.

- **Alternative Fuels: The energy crisis as a disruption drive**, Chair: Jeroen Pruyn, University of Delft
 - Jeroen Pruyn, University of Delft, **Betting on the right horse; identification of the right disruptive technology to champion the energy transition in transport.**
 - Edwin van Hassel, University of Antwerp, **Regulation and Alternative Fuels mix in Maritime**
 - Athena Roumboutsos, University of the Aegean, **Partnering Risks in the delivery of alternative fuels.**
- **Digitalisation: Addressing disruptions sustainably**, Chair: Thierry Vanelslander, University of Antwerp
 - Sys Christa, University of Antwerp, **Industry 4.0 related technologies: no longer a hype OR beyond the hype**
 - Maria Lambrou, University of the Aegean, **AI for maritime transport: are we close to really addressing disruption?**
 - Alessio Tei, University of Genoa, **Soft technologies as drivers for increasing port efficiency while reducing physical infrastructure needs. Trade-offs, Opportunities, and barriers**
- **Disruptions triggering behaviour change**, Chair: Claudio Ferrari, University of Genoa
 - Greg Marsden, University of Leeds, **Travel Behaviour and Disruptions**
 - Amalia Polydoropoulou, University of the Aegean **Innovative data and models for policy making accounting for the effect of disruptions on behavioural change**
 - Rosario Macario, Technical University of Lisbon **Human behaviour and quality of governance**
 - Seraphim Kapros, University of the Aegean, **Sanctions and Shipping Business Practices**
- **Embracing Disruption, Discussion**, Chair: Athena Roumboutsos, University of the Aegean, Panel: Jeroen Pruyn, Thierry Vanelslander, Claudio Ferrari

July 20th, 16:00-17:50 Session G2-S6: Freight/Road/National Planning [↑](#)

CHAIR: Daniela Tocchi (University of Naples Federico II, Italy)

LOCATION: 514C

16:00 Vittorio Marzano (Università Federico II di Napoli, Italy)
 Fulvio Simonelli (Università Federico II di Napoli, Italy)
 Matteo Celentano (Università Federico II di Napoli, Italy)
 Daniela Tocchi (Università Federico II di Napoli, Italy)
 Francesco Grasso (Università Federico II di Napoli, Italy)
 Angela Romano (Università Federico II di Napoli, Italy)
 Sabrina Cestaro (Università Federico II di Napoli, Italy)

The Road Freight Transport And The Need Of Safe And Secure Truck Parking Areas (abstract)

16:20 Vittorio Marzano (University of Naples Federico II, Italy)
Fulvio Simonelli (University of Naples Federico II, Italy)
Claudio Sterle (University of Naples Federico II, Italy)
Adriano Masone (University of Naples Federico II, Italy)
Daniela Tocchi (University of Naples Federico II, Italy)
Angela Romano (University of Naples Federico II, Italy)
Sabrina Cestaro (University of Naples Federico II, Italy)

Towards a new incentive scheme for freight transport: a case study in Italy (abstract)

16:40 Da Un Yun (Vienna University of Technology, Austria)

History of Transport Policies and their Planning Processes in Seoul and South Korea (abstract)

17:00 Hiroyoshi Morita (Nippon Engineering Consultants Co., Ltd., Japan)
Tsuyoshi Takano (Nippon Engineering Consultants Co., Ltd., Japan)
Yoshitsugu Hayashi (Chubu University, Japan)

Long-Term Effects of Highway Network Improvement Focusing on Quality of Life (abstract)

17:20 Tsuyoshi Takano (Nippon Engineering Consultants Co., Ltd, Japan)
Hiroyoshi Morita (Nippon Engineering Consultants Co., Ltd, Japan)
Yoshitsugu Hayashi (Center for Sustainable Development and Global Smart City, Chubu University, Japan)

Road Improvement Effectiveness from a Quality of Life (QOL) Perspective (abstract)

July 20th, 16:00-17:50 Session G3-S12: Theoretical Frameworks and Approaches [↑](#)

CHAIR: Lancelot Rodrigue (McGill University, Canada)

LOCATION: 515A

16:00 Lancelot Rodrigue (McGill University, Canada)
Meredith Alousi-Jones (McGill University, Canada)
Hisham Negm (McGill University, Canada)
Rodrigo Victoriano-Habit (McGill University, Canada)
Merrina Zhang (National Research Council Canada, Canada)
Isabella Jimenez (National Research Council Canada, Canada)
Ahmed El-Genaidy (McGill University, Canada)

Planning for accessibility by transit: A methodology to prioritize interventions applied to older adults in Canada (abstract)

16:15 Elnert Coenegrachts (University of Antwerp, Belgium)
Thierry Vanelslander (University of Antwerp, Belgium)
Ann Verhetsel (University of Antwerp, Belgium)
Joris Beckers (University of Antwerp, Belgium)

Expansion strategies of shared mobility providers – understanding the relevant location decision factors (abstract)

16:35 Huayan Shang (Capital University of Economics and Business, China)
Yi Chang (Capital University of Economics and Business, China)

A New Framework for Transit Route Network Design: A Multimodal Multilevel System (abstract)

16:55 Sindi Haxhija (Technical University of Munich, Germany)
David Duran-Rodas (Technical University of Munich, Germany)
Maria Teresa Baquero Larriva (Universidad Politécnica de Madrid, Spain)
Gebhard Wulfhorst (Technical University of Munich, Germany)

Mobility (in)equalities framework to identify areas for policy interventions (abstract)

17:15 Ziang Feng (University of Toronto, Canada)
Hasan Bayanouni (University of Toronto, Canada)
Carlos Rivera (University of Toronto, Canada)
Kevin Carr (University of Toronto, Canada)
Matthew Roorda (University of Toronto, Canada)

A Freight Data Repository as Foundational Pillar for Sustainable Urban Freight Research (abstract)

July 20th, 16:00-17:50 Session G3-S16_SS: SPECIAL SESSION: Mobility as a Service in a multi-city context: The UK Solent Future Transport Zone [↑](#)

CHAIR: John Preston (University of Southampton, UK)

LOCATION: 519A

The session will see representatives from the Universities of Southampton and Portsmouth introduce the wider project, the overall aims and objectives of the personal mobility aspect, and some of the specific activities that are being undertaken as part of the monitoring and evaluation of the scheme as well as the broader research being undertaken alongside and in connection with the MaaS roll-out. Five speakers will provide different perspectives on the work being undertaken, with each presenter having 15 minutes to present and five minutes for questions.

- Professor John Preston, University of Southampton **Can MaaS and FTZs provide solutions to the transport problems of City Regions?**
- Dr Rich McIlroy, University of Southampton
- Dr Chris Bayliss, University of Portsmouth **MaaS: Personalised Multi-Modal Multi-Objective Journey Planning**
- Dr Jisun Kim, University of Southampton **MaaS interface design considerations for behaviour change towards sustainable travel**
- Dr Alan Wong, **Capacity building insights for the evaluation of MaaS and other innovative sustainable mobility projects**

July 20th, 16:00-17:50 Session G3-S7: Modelling [↑](#)

CHAIR: Alessia Rigonat (INRIA de Paris, France)

LOCATION: 522A

16:00 Hiroaki Inokuchi (Kansai University, Japan)
Xuyang Gao (Kansai University, Japan)

Effective combinations of urban transportation policies using an artificial society model (abstract)

- 16:20 Fei-Fei Sun (School of Economics and Management, Beijing Jiaotong University, Beijing 100191, PR China, China)
Rong-Xuan Zhang (School of Economics and Management, Beijing Jiaotong University, Beijing 100191, PR China, China)
Nan Lin (School of Economics and Management, Beijing Jiaotong University, Beijing 100191, PR China, China)
Yue Luo (School of Economics and Management, Beijing Jiaotong University, Beijing 100191, PR China, China)
Ling-Ling Xiao (School of Economics and Management, Beijing Jiaotong University, Beijing 100191, PR China, China)

A reservation-based departure time choice model for morning commute problem (abstract)

- 16:35 Hamed Naseri (Polytechnique Montreal, Canada)
Owen Waygood (Polytechnique Montréal, Canada)
Zachary Patterson (Concordia University, Canada)
Meredith Alousi-Jones (Polytechnique Montréal, Canada)
Bobin Wang (Laval University, Canada)

Travel Mode Choice Prediction: Developing New Techniques to Prioritize Variables and Interpret Black-box Machine Learning Techniques (abstract)

- 16:50 Hanene Mohamed (Université Paris Nanterre, France)
Christine Fricker (INRIA de Paris, France)
Martin Trépanier (École Polytechnique, Canada)
Alessia Rigonat (INRIA de Paris, France)

A new stochastic model for carsharing suited to free-floating (abstract)

- 17:05 Arsham Bakhtiari (Polytechnique Montreal, Canada)
Ashraf Uz Zaman Patwary (Polytechnique Montreal, Canada)
Francesco Ciari (Polytechnique Montreal, Canada)

Electric Vehicle Charging Pricing Design for Agent-Based Traffic Microsimulation (abstract)

- 17:20 Sergio Jara-Diaz (Universidad de Chile, Chile)
Esteban Muñoz-Paulsen (Universidad de Chile, Bolivia)

Strategic design of two-technology transit lines-structures using the parametric city model (abstract)

July 20th, 16:00-17:50 Session G4-S2: Cultures and experiences in the transport industry [↑](#)

CHAIR: Helena Titheridge (University College London, UK)

LOCATION: 519B

- 16:00 Genta Araki (Tokyo University of Science, Japan)
Kosuke Tanaka (Kyoto University, Japan)
Shintaro Terabe (Tokyo University of Science, Japan)
Hideki Yaginuma (Tokyo University of Science, Japan)
Haruka Uno (Tokyo University of Science, Japan)

Opinions of college-educated workers in transportation and civil engineering associations with attitude toward work and perceptions of public opinion (abstract)

16:15 Qiyang Liu (Peking University, China)

Moths to the Flame: Delivery Workers' Pursuit of Masculinity During the Early Covid-19 Outbreak (abstract)

16:35 Ugo Lachapelle (Université du Québec à Montréal, Canada)

David Carpentier-Laberge (Institut National de la Recherche Scientifique, Canada)

Jérémy Gelb (Institut National de la Recherche Scientifique, Canada)

Philippe Apparicio (Institut National de la Recherche Scientifique, Canada)

Marie-Soleil Cloutier (Institut National de la Recherche Scientifique, Canada)

A pilot study for measuring roadway exposure through GPS watches worn by bicycle messengers and food delivery workers during work shifts (abstract)

16:55 Wouter Van den Berghe (Tilkon Research & Consulting, Belgium)

Interpreting the association between national culture and road safety (abstract)

17:15 Ioannis Karakikes (University of the Aegean, Greece)

Helen Thanopoulou (University of the Aegean, Greece)

Amalia Polydoropoulou (University of the Aegean, Greece)

Cristina Pronello (Politecnico di Torino, Italy)

Automation and digitalisation on the transport workforce: How can the shock be prevented? (abstract)

17:35 Ziyi Qin (The Japan Transport and Tourism Research Institute, Japan)

Daisuke Fukuda (Graduate School of Engineering, The University of Tokyo, Japan)

How Does Public Transport Use Affect Social Capital Building? The Case of Japan (abstract)

July 20th, 16:00-17:50 Session H1-S6_SS: SPECIAL SESSION: Freight Flow Modelling in Developing Countries



CHAIR:

Shinya Hanaoka (Tokyo Institute of Technology, Japan)

LOCATION: 518B

The sessions will discuss techniques and methods for modelling freight transport in data scarce environments. It will consider (a) sources and modelling techniques appropriate for the available data; (b) approaches to validating and testing models to ensure accurate reflection of real-world conditions; and (c) limitations and uncertainties associated with the exploration of different scenarios and policy options.

- **Chair:** Binyam Reja, Practice Manager, Transport, World Bank
- **Proposal for a Global Freight Flow Mode:** Charles Kunaka and Megersa Abate, World Bank
- **Tour-de-table:** Experiences with modelling freight in emerging economies.

July 20th, 16:00-17:50 Session H2-S4: Infrastructure Operation and Traffic Management in Developing Countries – 4



CHAIR:

Prasanta Kumar Bhuyan (NIT ROURKELA, India)

LOCATION: 515B

16:00 Keval Joshi (NIT ROURKELA, India)

Manisha Biswal (NIT ROURKELA, India)

Prasanta Kumar Bhuyan (NIT ROURKELA, India)

Critical Gap of Two-Wheeler in Heterogeneous Traffic: Comparing Occupancy-time Method and Raff's Method (abstract)

16:20 Kritika Karwasra (Industrial Engineering and Operations Research, IIT Bombay, India)

Narayan Rangaraj (Industrial Engineering and Operations Research, IIT Bombay, India)

Karuna Singh (Central Railway, Indian Railways, India)

System analysis of train operations and resource occupancy on an Indian sub-network with mix-traffic (abstract)

16:40 B.A.C. Rathnasoma (University of Moratuwa, Sri Lanka)

G.L. Dimantha I. De Silva (University of Moratuwa, Sri Lanka)

S.M.P.M. Premasiri (Sri Lanka Technological Campus Research University, Sri Lanka)

Impact of Truck Routes on an Urban Network in a Developing Country (abstract)

July 20th, 16:00-17:50 Session H5-S8: Urban transport behavior & strategies [↑](#)

CHAIRS:

Mihoko Matsuyuki (Yokohama National University, Japan)

Matsuyuki Mihoko (Yokohama National University, Japan)

LOCATION: 524A

16:00 Mihoko Matsuyuki (Yokohama National University, Japan)

Chotib Chotib (Universitas Indonesia, Indonesia)

Renny Nurhasana (Universitas Indonesia, Indonesia)

Irene Sondang Fitrinitia (Yokohama National University, Indonesia)

Toshiki Negama (CBRE K.K., Japan)

Shoya Kuwayama (Hase Architect, Inc., Japan)

Ni Made Shellasih (Universitas Indonesia, Indonesia)

Fadhilah Rizky Ningtyas (Universitas Indonesia, Indonesia)

How Does Motorcycle Ride-Hailing Complement Train and Substitute Modes of First/Last-Mile Travel in Greater Jakarta? (abstract)

16:15 Somnath Bhui (Indian Institute of Technology, Kharagpur, India)

Debapratim Pandit (Indian Institute of Technology, Kharagpur, India)

Impact of Life-course events on hierarchical Vehicle transaction durations: Case of a Developing country. (abstract)

16:35 Jorge Montoya (UNIVERSIDAD NACIONAL DE COLOMBIA - SEDE MANIZALES, Colombia)

Diego Escobar (Comparación en cobertura de área para las ciudades de estudio., Colombia)

Carlos Moncada (UNIVERSIDAD NACIONAL DE COLOMBIA - SEDE BOGOTÁ, Colombia)

A COMPARATIVE ANALYSIS, THROUGH GEOGRAPHICAL ACCESSIBILITY, OF URBAN PUBLIC TRANSPORT SYSTEMS IN CITIES OF COLOMBIA'S COFFEE-GROWING REGION (abstract)

16:55 Ndakhona Bashingi (Central University of Technology, Free State, South Africa)

Jacob Adedayo Adedeji (Durban University of Technology, South Africa)

Dillip Kumar Das (University of KwaZulu Natal, South Africa)
 Mohamed Mostafa Hassan Mostafa (University of KwaZulu Natal, South Africa)
Challenges and Opportunities for Private-to-Public Transportation Modal Shift and Integrated Multimodal Passenger Transportation Systems in Gaborone (abstract)

17:15 Jyoti Mandhani (Heriot-Watt University, Edinburgh, UK, UK)
 Jogenra Kumar Nayak (Indian Institute of Technology Roorkee, India)
 Manoranjan Parida (CSIR-Central Road Research Institute (CRRI), New Delhi, India)
Service quality model for Metro rail transit system: A tale of two Indian cities (abstract)

17:35 Dharitri Kahali (Indian Institute of Technology Roorkee, India)
 Vishwajeet Verma (Indian Institute of Technology, Roorkee, India)
 Siva K Bathina (Indian Institute of Technology Gandhinagar, India)
An Insight On Capacity Analysis of Escalators Installed At Metro Rail Stations in India (abstract)

July 20th, 16:00-17:50 Session L-S4_SS: SPECIAL SESSION: Transition: an open-source platform for transit network design and simulations [↑](#)

CHAIR: Catherine Morency (Polytechnique Montréal, Canada)

LOCATION: 521

Various commercial tools exist to model travel demand on networks. However, they do not necessarily propose the adapted models, methods and functionalities to meet the expectations and needs of transit operators namely for network design purposes (lack of precision and design approaches). Hence, they are also typically highly expensive and are not accessible to small and medium size operators and authorities. Hence, it is not always possible to have access to educational versions for teaching and research purposes. In this context, Chair Mobilité from Polytechnique Montreal is co-developing, with 6 transit operators from the Quebec Province, an open-source platform called Transition to support transit network simulation needs. This open-source platform includes various modules to assist in the design, planning and analysis of transit networks. The code is freely available on GitHub. This is a hands-on session where participants will have the chance to see how to use transition and experiment it on their own computer through various exercises.

- Prof Catherine Morency and Prof Martin Trépanier, **Presentation of the Transition Platform: what it is, development strategy, partners**
- Geneviève Bastien: **the main fonctions of the Transition platform and access to the open-source code**
- Geneviève Bastien, Pierre-Léo Bourbonnais, Yannick Brosseau: **Demonstration and experimentation of the platform using simple tasks**
- **Upcoming developments**

July 20th, 18:45-22:00 ARTM Evening Gala (710) – Only for those who purchased the Gala dinner ticket [↑](#)

LOCATION: 710

Friday, July 21st

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SCHEDULE OVERVIEW

8:30-10:20	10:20-10:50	10:50-12:30	12:30-13:50	14:20-17:00
Sessions (see schedule)	Coffee break (facing 517)	Closing sessions (517AB)	Lunch (517CD)	Technical visits

[Monday \(July 17th\)](#) * [Tuesday \(July 18th\)](#) * [Wednesday \(July 19th\)](#) * [Thursday \(July 20th\)](#) * [Friday \(July 21st\)](#)

DETAILED SCHEDULE

July 21st, 07:30-10:30 - Session REG5: Registration (Location: facing 517)

July 21st, 08:30-10:20 Session A1-S7: Operational Issues in Aviation [↑](#)

CHAIR: Xiaoqian Sun (Beihang University, China)

LOCATION: 520D

08:30 Aitichya Chandra (Indian Institute of Science Bangalore, India)
Nipun Choubey (Indian Institute of Science Bangalore, India)
Ashish Verma (Indian Institute of Science Bangalore, India)

Some Comments on the Aircraft Landing Problem: How Optimal is the First Come First Serve Policy? (abstract)

08:45 Shuoyu Yue (Beihang University, China)
Guangzu Yu (Beihang University, China)
Xu Wang (Beihang University, China)
Xiaoqian Sun (Beihang University, China)
Sebastian Wandelt (Beihang University, China)

Towards Deep neural network-based guided variable neighborhood search for hub location problems (abstract)

09:05 Miguel Urdanoz (TBS Education, France)
Chantal Roucolle (ENAC, France)
Buffer choices among US carriers: a Southwest effect? (abstract)

09:25 Pierluigi Coppola (Politecnico di Milano, Italy)
Fulvio Silvestri (Politecnico di Milano, Italy)
Francesco De Fabiis (Politecnico di Milano, Italy)

Investigating travelers' perceptions and value of time for Urban Air Mobility services: modeling results from a large-scale survey in the metropolitan area of Milan (Italy) (abstract)

09:45 Afaq Khattak (Tongji University China, China)
Pak-Wai Chan (Hong Kong Observatory, Hong Kong)
Feng Chen (Tongji University China, China)

Prediction of Low-Level Wind Shear Severity in the Vicinity of Airport Runway: Application of Machine Learning Models and LiDAR (abstract)

10:05 Richard Klophaus (Worms University of Applied Sciences, Germany)
Matthias Viehmann (Worms University of Applied Sciences, Germany)

Survival analysis of new intra-European scheduled air services (abstract)

July 21st, 08:30-10:20 Session A2-S15_SS: SPECIAL SESSION: Enhancing Maritime Transport and Logistics Resilience in the Post-Pandemic World [↑](#)

CHAIR: Adolf K.Y. Ng (Graduate School of International Studies, Université Laval, Quebec City, QC, Canada, Canada)

LOCATION: 512F

The world has experienced different types of uncertainties and risks, of which some have led to serious disruptions in maritime transport and logistics. The vulnerability to disruptions was not only due to obsolete systems and facilities, but also short of reliable methods for enhancing the quality of resilience planning in maritime facilities. Hence, the session aims to: 1) explore and quantify climate-related risks and develop a rational planning methodology for the adaptation of maritime transport and logistics to climate change, 2) design security risk diagnosis and prediction tools and establish robust procedures for the assessment of threats and vulnerabilities associated with maritime transport and logistics, 3) identify maritime transport and logistics hazards due to the emergence of new technologies and operational environments, 4) develop new theoretical analysis frameworks for risk-based resilience in maritime transport and logistics, 5) rebuild port and resilient maritime supply chain networks, and 6) propose a new resilience system dedicated to maritime supply chains and ports in the post COVID-19 pandemic.

- **Climate Change Adaptation Projects of Transport Facilities: Is a Demonstrator Necessary?** (Kun Wang (The Hong Kong Polytechnic University))
- **The effects of Emission Control Area (ECA) Regulations on global shipping emissions** (Qiong Chen (Jimei University))
- **The Economic Impacts of the COVID-19 Pandemic on the For-Profit Sector in the Province of Manitoba** (Yui-yip Lau (School of Professional Education and Executive Development, The Hong Kong Polytechnic University))
- **Reimagining monitored natural attenuation as an oil spill response strategy: An socio-economic perspective on Arctic shipping** (Changmin Jiang)
- **A Bayesian Network based Approach for Modeling and Assessing Container Supply Chain Resilience under Climate Change** (Adolf K.Y. Ng (BNU-HKBU United International College and Université Laval))

July 21st, 08:30-10:20 Session A2-S7: Maritime green [↑](#)

CHAIR: Jeroen Pruyn (TU Delft, Netherlands)

LOCATION: 524B

08:30 Fan Gao (Centre for High North Logistics, Norway)
Roberto Rivas Hermann (Centre for High North Logistics, Norway)

Decarbonizing Shipping: What Drives Shipowners' Decision to Adopt Energy Saving Technologies (ESTs) for Ship Retrofitting? (abstract)

08:50 Bruce Lambert (University of Antwerp, United States)
James Merten (University of Antwerp, United States)

The Development of a Sustainability Operations Monthly Matrix, A Case Study for the Mobile County Maritime Sector (abstract) 

09:10 Erin van Rheenen (Delft University of Technology, Netherlands)
Evelien Scheffers (Delft University of Technology, Netherlands)
Jesper Zwaginga (Delft University of Technology, Netherlands)
Klaas Visser (Delft University of Technology, Netherlands)

Hazard identification of hydrogen based alternative fuels onboard ships (abstract)

09:30 Hesam Naghash (TU Delft, Netherlands)
Jeroen Pruyn (TU Delft, Netherlands)
Dingena Schott (TU Delft, Netherlands)

Future of International Shipping: A Review of Projections and Methodologies of Supply, Demand, and Emissions in the Shipping Sector (abstract)

09:50 Dimitris Georgoudakis (University of Antwerp, Belgium)
Christa Sys (University of Antwerp, Belgium)
Theodore Syriopoulos (National and Kapodistrian University of Athens, Greece)

Green investments and financial decisions in the newbuilding maritime segment: A systematic literature review (abstract)

July 21st, 08:30-10:20 Session B1-S6_SS: SPECIAL SESSION: Global cold chain & pharma supply chains 

CHAIRS: Roel Gevaers (University of Antwerp, Belgium)
Wouter Dewulf (University of Antwerp, Belgium)
LOCATION: 512G

July 21st, 08:30-10:20 Session B4-S10: Urban freight transport and emissions 

CHAIR: Alison Conway (City College of New York, United States)
LOCATION: 524C

08:30 Bram Kin (TNO / HAN, Netherlands)
Hans Quak (TNO / BUAS, Netherlands)

The impacts of alternative last mile delivery networks: exploring the options besides zero emission technology (abstract)

08:50 Adrien Beziat (Université Gustave Eiffel, France)
Cyrille François (Université Gustave Eiffel, France)

Measuring the impacts of distribution systems coupling transport modeling and life-cycle assessment (abstract)

09:10 Francisco José Pinheiro Santos (Federal University of Ceará, Brazil)
Bruno Vieira Bertoncini (Federal University of Ceará, Brazil)

Assessment of CO2 emission levels resulting from adoption of "Parcel Lockers" and "Pickup Points" (abstract)

09:30 Annette Rondaij (TNO, Netherlands)

Hans Quak (TNO and Breda University of Applied Sciences (BUAs), Netherlands)

Bram Kin (TNO and HAN University of Applied Sciences, Netherlands)

Capturing a hidden part of urban traffic: an approach to get a grip on urban goods movement (abstract)

09:50 Supriya Bhutani (School of Planning and Architecture, Vijayawada, India)

Dhivya Prabhakaran (School of Planning and Architecture, Vijayawada, India)

Naina Gupta (School of Planning and Architecture, Vijayawada, India)

Electrification of Light commercial vehicles in Urban Areas (abstract)

July 21st, 08:30-10:20 Session B5-S7: Impact evaluation and improvement: case studies [↑](#)

CHAIR: Jean-Francois Audy (University of Quebec at Trois-Rivières, Canada)

LOCATION: 520F

08:30 Bechir Ben Daya (University of Quebec at Trois-Rivières, Canada)

Jean-Francois Audy (Universite du Quebec a Trois-Rivieres, Canada)

Simulation-Based Assessment of Port Access Fluidity During a Major Expansion Project (abstract)

08:50 Peter Shobayo (University of Antwerp, Belgium)

Edwin van Hassel (University of Antwerp, Belgium)

Thierry Vanelslander (University of Antwerp, Belgium)

Modeling the Impact of Inland Waterway Innovations for the Rhine Alpine Corridor (abstract)

09:10 Paulus Aditjandra (Heriot-Watt University, UK)

Cold chain: what problem? Where we are and what we do not know (abstract)

09:30 Riches Bacero (De La Salle University, Philippines)

Alexis Fillone (De La Salle University, Philippines)

Impact of Proposed Truck Route Improvements on Urban Travel in Metro Manila, Philippines (abstract)

09:50 Cristiam Gil (Universidad de los Andes, Colombia)

Gordon Wilmsmeier (Kühne Logistics University - Hamburg, Germany)

Ian Numa-Navarro (Kühne Logistics University - Hamburg, Germany)

Improving empty container management using street-turn: a case study of the Colombian logistics network (abstract)

July 21st, 08:30-10:20 Session C1-S4_SS: SPECIAL SESSION: Innovative technologies and analytical methods for transportation [↑](#)

CHAIRS: Xiaopeng Li (University of Wisconsin-Madison, United States)

Kai Wong (Tsinghua University, China)

LOCATION: 513B

Transportation systems are experiencing unprecedented transformations due to the advent of new vehicle technologies (e.g., autonomous vehicles, electric vehicles), and advances in sensing and information technologies and big data techniques. At the same time, the transportation sector is facing increasing pressure to meet sustainability goals, from cutting greenhouse gas emissions to creating equitable access to mobility. As a result, analyzing, operating and planning transportation systems are becoming far more complex than in the past. In this special session, we broadly discuss the innovative technologies applied to transportation modes and methodologies proposed to handle complex transportation problems, resulting from the applications of the technologies. This special session will include invited talks and paper presentations selected by the SIG C1 Chair from the WCTR conference.

- **Smart Technologies for all Transportation Modes: Applications and Case Study** (Prof. Said M. Easa)
- **Analyzing the Impacts of Intersection Treatments and Traffic Characteristics on Bicyclist Safety: Development of Data-Driven Guidance on the Application of Bike Boxes, Mixing Zones, and Bicycle Signals** (Prof. Edward Smaglik)
- **Heavy-duty Truck Electrification with Charging Infrastructure Decisions** (Dr. Lingxiao Wu)
- **Routing Optimization for Moving Charging Vehicles** (Dr. Kai Wang)

08:30 Shubham Parashar (Queensland University of Technology, Australia)

Ninad Gore (Toronto Metropolitan University, Canada)

Said Easa (Toronto Metropolitan University, Canada)

Shriniwas Arkatkar (Sardar Vallabhbhai National Institute of Technology, India)

Stochastic Extension of Single Regime Traffic Flow Models: Integrating Travel Time Uncertainty (abstract)

08:50 Omkar Bidkar (Sardar Vallabhbhai National Institute of Technology, Surat, India)

Shriniwas Arkatkar (Sardar Vallabhbhai National Institute of Technology, Surat, India)

Gaurang Joshi (Sardar Vallabhbhai National Institute of Technology, Surat, India)

Said Easa (Toronto Metropolitan University, Canada)

Investigating the Effect of Variation in Work-Zone Roadway Geometry On Traffic Capacity Using Simulation Technique (abstract)

09:10 Katherine Riffle (Northern Arizona University, United States)

Edward Smaglik (Northern Arizona University, United States)

Steven Procaccio (Northern Arizona University, United States)

Steven Gehrke (Northern Arizona University, United States)

Brendan Russo (Northern Arizona University, United States)

David Hurwitz (Oregon State University, United States)

Applying Traffic Flow Theory in Assessing Detector Performance (abstract)

July 21st, 08:30-10:20 Session C3-S6_SS: SPECIAL SESSION: Big data analytics for transport modelling and simulation ↑

CHAIR: Edward Chung (Hong Kong Polytechnic University, Hong Kong)

LOCATION: 513C

This SIG-C3 plenary session has invited presentations from US, Japan and Australia to initiate discussions on the recent advancements and research needs for transport modelling and simulation in the era of big data. The session will cover both scientific advancements and real world best practice.

- **Arterial management and control in the era of big data** (Prof Anuj Sharma, Iowa State)
- **Case Studies on Building Advanced Demand Models and Traffic Simulation Models With Big Data Support** (Dr Ramachandran Balakrishna, Caliper Corporation)
- **Outline of the TDM and TSM for TOKYO 2020 Olympic and Paralympic games** (Prof Oguchi, University of Tokyo, Japan)
- **Towards transport network digital twin: Leveraging traditional and emerging transport data** (Associate Professor Ashish Bhaskar, Queensland University of Technology, Australia)

July 21st, 08:30-10:20 Session C4-S10: Road Safety Management [↑](#)

CHAIR: Meng Xu (Beijing Jiaotong University, China)

LOCATION: 514A

08:30 Alok Nikhil Jha (Indraprastha Institute of Information Technology Delhi, India)

Rajesh Kumar Gupta (GoSemantic Pvt Ltd, United States)

Niladri Chatterjee (Indian Institute of Technology Delhi, India)

Geetam Tiwari (Indian Institute of Technology Delhi, India)

A Domain Ontology For Safety of Road Users – SafeOn: Overview & Design (abstract)

08:50 Guocong Zhai (Old Dominion University, United States)

Kun Xie (Old Dominion University, United States)

Hong Yang (Old Dominion University, United States)

Di Yang (Morgan State University, United States)

Comparing the safety performance of ride-hailing services and taxis (abstract)

09:10 Sandeep P (school of planning and architecture Vijayawada, AP, India)

Sachin T (school of planning and architecture Vijayawada, AP, India)

Development of Road Safety Index for Urban Roads (abstract)

09:30 Lai Zheng (Harbin Institute of Technology, China)

Tarek Sayed (University of British Columbia, Canada)

Application of Extreme Value Theory in Road Safety Analysis: A Case Study (abstract)

July 21st, 08:30-10:20 Session C4-S16_SS: SPECIAL SESSION: Applying artificial intelligence to improve the safety and resilience of road freight transport: Canadian Prairies and Northern Region [↑](#)

CHAIR:

Chaouki Regoui (National Research Council, Canada)

LOCATION: 513D

In this special session, we aim to bring together experts from various fields to discuss the challenges and opportunities for enhancing the safety and resilience of the road freight transport network in the Canadian Prairies and Northern Region. The economy of the Canadian Prairies and Northern Region heavily relies on the efficient and safe transportation of goods (e.g., agricultural, energy, and natural resource commodities) through its road freight transport system. However, the region's road network, which is

spread out over a wide area with varying geography and weather conditions, is susceptible to risks and hazards such as road accidents, HAZMAT incidents, wildlife crashes, and extreme weather events. These hazards pose significant risks to commercial vehicles and can disrupt the fluidity and reliability of the supply chains. We will present and discuss the latest research, technologies, and best practices for analyzing the risks and hazards that threaten the road freight transport system in the context of the Canadian Prairies and Northern Region.

- **Background, Motivations, and Objectives**, Babak Mehran (UMTIG)
- **Canadian Logistics AI-powered Modelling: Use Cases & Data Collection to Evaluate Road Freight Transportation Safety and Resilience**, Chaouki Regoui (NRC-CNRC)
- **Exploring the Impact of Disruptive Events on Road Freight Transportation Network Resilience in the Canadian Prairies and Northern Region**, Phani Kumar Patnala & Sina Abolhoseini (UMTIG)
- **Application of Reliability Models for Crash Frequency Analysis: Implications for Network-wide Safety Performance**, Nasim Deljouyi & Phani Kumar Patnala (UMTIG)
- **Development of Hazard-specific Truck Crash Modification Factors for Cold-region Rural Highways**, Rillagoda Yasanthi (UMTIG)

July 21st, 08:30-10:20 Session C4-S2: Pedestrian Safety Analysis (2) [↑](#)

CHAIR: Arkopal Goswami (Indian Institute of Technology Kharagpur, India)

LOCATION: 513F

08:30 Sai Baba Darbamulla (National Academy of Indian Railways, Lalbaugh, Vadodara-390004, Gujarat, India, India)

Geetam Tiwari (Indian Institute of Technology Delhi, New Delhi, India)

Influence of socio-economic factors on risk-taking behaviour of pedestrians on railway tracks in Mumbai (abstract)

08:50 Angela Haddad (The University of Texas at Austin, United States)

Aupal Mondal (The University of Texas at Austin, United States)

Chandra Bhat (The University of Texas at Austin, United States)

Angie Zhang (The University of Texas at Austin, United States)

Madison Liao (The University of Texas at Austin, United States)

Lisa Macias (The University of Texas at Austin, United States)

Min Kyung Lee (The University of Texas at Austin, United States)

S. Craig Watkins (The University of Texas at Austin, United States)

Pedestrian Crash Frequency: Unpacking the Effects of Contributing Factors and Racial Disparities (abstract)

09:10 Md Saddam Hussain (Indian Institute of Technology, Kharagpur, India)

Geetman Bahrha (Indian Institute of Technology Kharagpur, India)

Arkopal Goswami (Indian Institute of Technology Kharagpur, India)

An Integrated VISSIM-SSAM Approach to Predicting and Mitigating Pedestrian Crashes and Severity along Urban Crossings (abstract)

July 21st, 08:30-10:20 Session C4-S7: Driver Behaviour Analysis (2) [↑](#)

CHAIR: Gianfranco Fancello (University of Cagliari - Department of Civil Engineering - Transport Section, Italy)

LOCATION: 520C

08:30 Motofumi Tsuru (Central Nippon Highway Engineering Nagoya Company Limited, Japan)
Takahiro Muranaka (Central Nippon Highway Engineering Nagoya Company Limited, Japan)
Hideki Takahashi (Central Nippon Highway Engineering Nagoya Company Limited, Japan)
Toshiya Sumida (Central Nippon Expressway Company Limited, Nagoya Branch, Japan)

Effect of Emergency Braking Reduction for Following Vehicles by Providing Upstream Information on Traffic Congestion (abstract)

08:50 Danijela Baric (University of Zagreb, Faculty of Transport and Traffic Sciences, Croatia)
Artur Kalin (University of Zagreb, Faculty of Transport and Traffic Sciences (master student), Croatia)

An Analysis of Road Users' Perception of Road Traffic Safety, Croatian Case (abstract)

09:10 Gianfranco Fancello (University of Cagliari - Department of Civil Engineering - Transport Section, Italy)
Patrizia Serra (University of Cagliari - Department of Civil Engineering - Transport Section, Italy)

Marta Adamu (University of Cagliari, Italy)

Analysis of visual distraction related to smartphone use while driving (abstract)

09:30 Shishupal Singh (IIT Kharagpur, India)
Swati Maitra (IIT Kharagpur, India)

Investigating the Feasibility of Dynamic Speed Limit: A Case Study on Indian Highways (abstract)

09:50 Nishant Mukund Pawar (Indian Institute of Technology (IIT) Bombay, India)
Nagendra R. Velaga (Indian Institute of Technology (IIT) Bombay, India)
Sabyasachee Mishra (The University of Memphis, United States)

Impact Assessment Of Drivers' Speed Compliance And Speed Adaptation With Posted Speed Limits In Different Driving Environments And Driving Conditions (abstract)

July 21st, 08:30-10:20 Session D2-S8: Methodological Contributions to Demand Analysis II [↑](#)

CHAIR: Jerome Laviolette (Polytechnique Montreal, Canada)

LOCATION: 520A

08:30 Jerome Laviolette (Polytechnique Montreal, Canada)
Catherine Morency (Polytechnique Montreal, Canada)
Owen Waygood (Polytechnique Montreal, Canada)

Car ownership, carsharing, neighbourhood types and travel attitudes: a latent-cluster analysis (abstract)

08:50 Marcus Klein (Goethe University Frankfurt/Main, Germany)
Thomas Klinger (ILS - Research Institute for Regional and Urban Development, Germany)
Martin Lanzendorf (Goethe University Frankfurt/Main, Germany)

Residential Self-Selection and the relative importance of travel considerations in the choice of a car-reduced neighbourhood. (abstract)

09:10 Katherine Asmussen (The University of Texas at Austin, United States)
Aupal Mondal (The University of Texas at Austin, United States)

Chandra Bhat (The University of Texas at Austin, United States)

Ram Pendyala (Arizona State University, United States)

On Modeling Future Workplace Location Decisions: An Analysis of Texas Employees (abstract)

09:40 Debapriya Chakraborty (University of California Davis, United States)

David Bunch (University of California Davis, United States)

David Brownstone (University of California, Irvine, United States)

Choice of Vehicle Technology and Use: Joint analysis of the choice of Plug-in Electric Vehicle ownership and miles traveled (abstract)

July 21st, 08:30-10:20 Session D3-S6: Travel Behaviour and Attitude - II: Pre & Post COVID-19 Scenario [↑](#)

CHAIR: Francesco Ciari (Polytechnique Montréal, Canada)

LOCATION: 513E

08:30 Yichun Du (McGill University, Canada)

Murtaza Haider (Toronto Metropolitan University, Canada)

Transit Ridership in Toronto and COVID-19: Statistical and Spatial Analysis of Ridership Changes During the Pandemic (abstract)

08:50 Md Asif Hasan Anik (Dalhousie university, Canada)

Muhammad Ahsanul Habib (Dalhousie university, Canada)

Development of an Integrated Urban Modelling Framework (IUMF) for Examining the Impacts of Work from Home on Travel Behavior: Case of the COVID-19 Pandemic (abstract)

09:10 Eleonora Sottile (University of Cagliari, Italy)

Giovanni Tuveri (University of Cagliari, Italy)

Francesco Piras (University of Cagliari, Italy)

Italo Meloni (University of Cagliari, Italy)

Travel behavior before and after COVID-19. A hybrid choice model applied to a panel dataset. (abstract)

09:30 Hasan Shahrier (Dalhousie University, Canada)

Nazmul Arefin Khan (Argonne National Laboratory, United States)

Muhammad Habib (Dalhousie University, Canada)

Investigating Travel Behaviour during COVID-19: A Microsimulation Approach (abstract)

July 21st, 08:30-10:20 Session F1-S3: Urban structure [↑](#)

CHAIR: Gopal R. Patil (Indian Institute of Technology Bombay, India, India)

LOCATION: 518A

08:30 Abhilash Chandra Singh (Imperial College London, UK)

Ahmadreza Faghih Imani (Imperial College London, UK)

Aruna Sivakumar (Imperial College London, UK)

Yang Xi (University of Toronto, Canada)

Eric Miller (University of Toronto, Canada)

A joint analysis of accessibility and household trip frequencies by travel mode (abstract)

08:50 Qian Liu (Shenzhen University, China)

Yulin Jiang (Shenzhen University, China)

Identifying key factors associated with commuting efficiency in a dense urban context and modeling their nonlinear relationships (abstract)

09:10 Samarth Bhatia (Indian Institute of Technology Bombay, India)

Kirtesh Gadiya (Indian Institute of Technology Bombay, India)

Gopal Patil (Indian Institute of Technology Bombay, India)

Buddhiraju Krishna Mohan (Indian Institute of Technology Bombay, India)

Urban Growth Prediction of Urban Clusters for an Unplanned Metropolitan Region in India using Markov Chain, Logistic Regression and Cellular Automata (abstract)

09:30 Yotam Barlach (NTA, Israel)

The effects of urban density's expansion On the transit usage (abstract)

09:50 Ashritha K (Indian Institute of Technology Bombay, Mumbai, India)

Samarth Bhatia (Indian Institute of Technology Bombay, Mumbai, India)

Gopal Patil (Indian Institute of Technology Bombay, Mumbai, India)

Buddhiraju Mohan (Indian Institute of Technology Bombay, Mumbai, India)

Spatial Centroid Shift and Fractal Dimension for Understanding the Built-up Evolution and Complexity: A Study on Fast Growing Built-up Agglomeration (abstract)

July 21st, 08:30-10:20 Session F2-S11_SS: SPECIAL SESSION: Germany's pilot eHighway: findings from the ELISA project [↑](#)

CHAIRS:

Patrick Jochem (German Aerospace Center (DLR), Germany)

Wei Shiuon (International Transport Forum, OECD, France)

LOCATION: 520B

The eHighway system is one solution for a significant reduction of greenhouse gas emissions in the transport sector. The eHighway system enables so-called overhead contact line trucks (O-trucks) to drive while charging electric energy. In this session, we provide the very latest pilot project results on the longest O-truck track in the world. Drawing on data and insights from more than three years of field test operation on public roads in Germany, we are covering the topics of greenhouse gas emission savings during field test operations, information on the technical and operational integration potential of O-trucks by transport companies, availability and downtime reasons of the overhead contact line system, as well as the basic procedure for the analysis of the high amount of vehicle data. With this session we contribute to the ongoing discussion about the strengths and weaknesses of different alternative drive technologies by considering the eHighway as well as other promising solutions.

- **Introduction** (Eva Kassens-Noor and Patrick Jochem)
- **ERS activities in Europe and beyond: feasibility studies, test tracks and more** (VDI/VDE, Britta Sommer)
- **Summary of key findings of the eHighway ELISA pilot over the past three years** (Pecha Kucha Stil, Eva Kassens-Noor)
- **Business case for overhead contact lines as dynamic charging infrastructure** (Siemens Mobility team)
- **Scaling of the ELISA system from the manufacturer's perspective** (Nils-Gunnar, Scania)

- **Discussion: A path forward for ERS**

July 21st, 08:30-10:20 Session F3-S5: Two-wheels mobility [↑](#)

CHAIR: Tamara von Sawitzky (Technische Hochschule Ingolstadt, Germany)

LOCATION: 514B

08:30 Hannah Hook (Ghent University, Belgium)

Yannick Cornet (University of Žilina, Slovakia)

Eva Malichová (University of Žilina, Slovakia)

Experiences, valuable activities, and worthwhile travel: A comparison of e-cycling and conventional cycling trips (abstract)

08:50 Carolina Moore (University College London, Development Planning Unit, UK)

Daniel Oviedo (University College London, Development Planning Unit, UK)

Anastasia Trofimova (University College London, Development Planning Unit, UK)

Toy or tool? Expectations, impacts, and contradictions of e-scooters from a social-exclusion perspective (abstract)

09:10 Carl Johnsson (Lund University (LTH), Sweden)

Hampus Norén (Lund University (LTH), Sweden)

Carmelo D'Agostino (Lund University (LTH), Sweden)

Validation of a low-cost virtual reality bicycle simulator based on trajectory similarity (abstract)

09:40 Tamara von Sawitzky (Technische Hochschule Ingolstadt, Germany)

Andreas Löcken (Technische Hochschule Ingolstadt, Germany)

Thomas Grauschopf (Technische Hochschule Ingolstadt, Germany)

Andreas Riener (Technische Hochschule Ingolstadt (THI), Germany)

Introducing an Early Hazard Awareness System for Cyclists: Comparing Bi-modal Cues in Mixed Reality and on a Test Track (abstract)

July 21st, 08:30-10:20 Session F4-S6: Liveability and non-motorized transport – 6 [↑](#)

CHAIR: Ashish Verma (IISc, India)

LOCATION: 512B

08:30 Premjeet Das Gupta (School of Planning and Architecture, Bhopal, India)

Role of subjective factors in the preference for cycling in rural areas: A study of selected rural regions in Madhya Pradesh (abstract)

08:50 Saharsh Chaube (Maulana Azad National Institute of Technology Bhopal, India)

Bivina G R (Maulana Azad National Institute of Technology Bhopal, India)

Siddhartha Rokade (Maulana Azad National Institute of Technology Bhopal, India)

Modelling Pedestrians' Difficulty in Crossing near Roundabouts: A Case of Bhopal City (abstract)

09:10 Qiao Zhao (McGill University, Canada)

Meghan Winters (Simon Fraser University, Canada)

Trisalyn Nelson (University of California, Santa Barbara, United States)

Karen Laberee (Simon Fraser University, Canada)

Colin Ferster (Simon Fraser University, Canada)

Kevin Manaugh (McGill University, Canada)

Who has access to cycling infrastructure in Canada? A social equity analysis (abstract)

09:30 Lukas Ballo (ETH Zurich, Switzerland)

Lucas Meyer de Freitas (ETH Zurich, Switzerland)

Adrian Meister (ETH Zurich, Switzerland)

Kay W. Axhausen (ETH Zurich, Switzerland)

Introducing the E-Bike City: Sustainable Mobility through Urban Design? (abstract)

09:50 Mariana Batista (Institute of Transportation and Urban Engineering, TU Braunschweig, Germany)

Frauke Luise Berghoefter (Traffic and Engineering Psychology, TU Braunschweig, Germany)

Bernhard Friedrich (Institute of Transportation and Urban Engineering, TU Braunschweig, Germany)

Reimagining shared (space) street design: Segregating to better integrate? (abstract)

July 21st, 08:30-10:20 Session G2-S7-SS: SPECIAL SESSION: COVID-19 PT Response [↑](#)

CHAIR: Takeru Shibayama (Vienna University of Technology (TU Wien), Austria)

LOCATION: 521

SIG G2 is gathering international experiences on public transport (PT) responses to COVID-19, which will be published as a WCTR/Elsevier Book in Q3/Q4 2023. During the lockdown, PT is the most affected transport sector with often more than 90% customers staying at home without using PT. In a long-term, rapid diffusion of working from home triggered by the pandemic seem to reduce the number of commuters to a certain extent but differently depending on the national or urban context of public transport. The book consists of national chapters, in which authors inform national or urban responses as case studies, and overview/thematic chapters, in which authors analyzes and discusses COVID-19 PT responses from different points of views. In this special session, we will present an overview of the book contents, which is expected to be largely finished by the time of WCTR2023. We also invite the chapter authors who attend to WCTR to discuss key findings in a panel discussion.

July 21st, 08:30-10:20 Session G3-S6: Mobility and Accessibility [↑](#)

CHAIR: Yixue Zhang (University of Toronto, Canada)

LOCATION: 519B

08:30 Shaila Jamal (McMaster University, Canada)

K. Bruce Newbold (McMaster University, Canada)

Darren M. Scott (McMaster University, Canada)

Developing a Typology of Daily Travelers based on Transportation Attitudes: Application of Latent Class Analysis using a Survey of Millennials and Older Adults in Hamilton, Ontario (abstract)

08:45 Manish Yadav (Indian Institute of Technology Bombay, Mumbai, India)

Gopal R. Patil (Indian Institute of Technology Bombay, Mumbai, India)

Rakhi Manohar Mepparambath (INSTITUTE OF HIGH PERFORMANCE COMPUTING, Singapore, Singapore)

Investigating Spatial Distribution of Public Transit Accessibility for Elderly People in Singapore (abstract)

09:05 Abdul Wasay Memon (Dalhousie University, Canada)
Muhammad Habib (Dalhousie University, Canada)

Microsimulation-based Evacuation Modelling for Persons Needing Mobility Assistance (abstract)

09:25 Yixue Zhang (University of Toronto, Canada)
Steven Farber (University of Toronto Scarborough, Canada)
Mischa Young (Université de l'Ontario français, Canada)
Ignacio Tiznado-Aitken (University of Toronto Scarborough, Canada)
Timothy Ross (Holland Bloorview Kids Rehabilitation Hospital, Canada)

Exploring travel patterns of people with disabilities: a multilevel analysis of accessible taxi trips in Toronto, Canada (abstract)

09:45 Jose Arturo Jasso Chávez (McGill University, Canada)
Geneviève Boisjoly (Polytechnique Montréal, Canada)
Kevin Manaugh (McGill University, Canada)

Access to Green and Gray Urban Nature Amenities: Exploring Equity in Montreal's Built Environment (abstract)

10:05 Anastasia Soukhov (McMaster University, Canada)
Antonio Paez (McMaster University, Canada)

The implications of school closure policies on singly-constrained walkable accessibility and carbon emissions (abstract)

July 21st, 08:30-10:20 Session G4-S3: Examining demographic differences [↑](#)

CHAIR: Helena Titheridge (University College London, UK)

LOCATION: 522B

08:30 Lea Ravensbergen (McMaster University, Canada)
Gender and Cycling in the “Global North” (abstract)

08:45 Juliane Stark (University of Natural Resources and Life Sciences (BOKU), Institute for Transport Studies, Austria)
Jelena Gašpar (University of Natural Resources and Life Sciences (BOKU), Institute for Transport Studies, Austria)

Cycling courses as a building block for self-determination? - Stories of female immigrants (abstract)

09:05 Keiko Porath (Pontificia Universidad Católica de Chile, Chile)
Patricia Galilea (Pontificia Universidad Católica de Chile, Chile)

Giving Voice to Women in Public Transport: Understanding “(In)Mobility of Care” and female travel partners (abstract)

09:25 Camille Garnier (Ecole Polytechnique de Montreal, Canada)
Martin Trépanier (Ecole Polytechnique de Montreal, Canada)
Catherine Morency (Ecole Polytechnique de Montreal, Canada)

Analyzing Mobility Gaps Between People with and without Disabilities using Oaxaca-Blinder Decomposition Method (abstract)

09:45 Gregory Newmark (Kansas State University, United States)
Emma Rearick (Independent Researcher, United States)

Does Metropolitan Motorization Reflect Regional Religious Affiliations? A Social Reference Consideration of Car Ownership (abstract)

10:05 Hannah Hook (Ghent University, Belgium)
Gender differences in travel experiences (abstract)

July 21st, 08:30-10:20 Session H1-S5: Transport Policy, Planning and Financing in Developing Countries 5



CHAIR: Meghna Verma (Ramaiah Institute of Management, Bengaluru, India)

LOCATION: 518B

08:30 Furqan Bhat (Indian Institute of Science, Bengaluru, India)
Meghna Verma (Ramaiah Institute of Management, Bengaluru, India)
Ashish Verma (Indian Institute of Science, Bengaluru, India)

Who will buy electric vehicles? Segmenting the young educated Indian buyers using cluster analysis (abstract)

08:50 Hemanthini Allirani (Indian Institute of Science, Bangalore, India)
Ashish Verma (Indian Institute of Science, Bangalore, India)
Dona James (Indian Institute of Science, Bangalore, India)

Study on Exposure to Particulate Matter (PM2.5) in a Pedestrianized Street (abstract)

09:10 Roberta Prosini Cadena (Federal University of Pernambuco UFPE, Brazil)
Mauricio Oliveira de Andrade (Federal University of Pernambuco UFPE, Brazil)
Anísio Brasileiro de Freitas Dourado (Federal University of Pernambuco UFPE, Brazil)
Study of the current law and of the groundings of sustainable urban mobility applied on Joaquim Amazonas Campus, UFPE, Brazil (abstract)

09:30 Marlon Era (De La Salle University, Philippines)
Alexis Fillone (De La Salle University, Philippines)
Raymund Paolo Abad (De La Salle University, Philippines)

Academe-Industry-Government Partnership in Research and Training: Case of Local Public Transport Route Planning in Western Visayas (abstract)

July 21st, 08:30-10:20 Session I1-S3: Important Aspects of Road Safety Measures 

CHAIR: Kazunori Munehiro (CERI, PWRI, Japan)

LOCATION: 522A

08:30 Kazunori Munehiro (CERI, PWRI, Japan)
Kazuyuki Kurata (CERI, PWRI, Japan)
Yasuhiko Ito (CERI, PWRI, Japan)

Changes in driving performance and safety evaluation of heavy vehicle drivers at a roundabout (abstract)

08:50 Jinhwan Jang (Korea Institute of Civil Engineering and Building Technology, South Korea)

Empirical Study on Optimal Spread Rate of Pre-wetted Salt for Snow and Ice Control (abstract)



July 21st, 10:20-10:50 Coffee break (Location: 516) [↑](#)

July 21st, 10:50-12:30 Session CLOS-C: Closing sessions [↑](#)

CHAIR: Martin Trépanier (École Polytechnique, Canada)

LOCATION: 517AB

- **Closing scientific plenary session**, Lory Tavasszy (WCTR Scientific Committee Chair)
 - Main scientific conclusions of the conference
 - Announcement of the winners of the TA's Awards
- **Closing ceremony**, Sergio Jara-Dias (Chair of the PSC) and Greg Marsden (WCTRS Secretary General)
 - **Prizes and certificates**, Sergio Jara-Diaz (Chair of the PSC)
 - WCTRS Prizes (WCTRS Grand Prize, WCTRS Young Prize, WCTRS Poster Prize, Cairo University Prize) - Tae Hoon Oum (WCTRS president)
 - TP Prize Winner – Haijun Huang (Editor in chief of TP) and Tae Hoon Oum (WCTRS president)
 - WCTRS-Y PhD Student's Grants (Y-II) holders – Laetitia Dablanc (WCTRS-Y leader) and Tae Hoon Oum (WCTRS president)
 - Bursaries Winners – Gopal Patil (CPC Chair) and Tae Hoon Oum (WCTRS president)
 - **Closing & Handover to the next WCTR**, Greg Marsden (WCTRS Secretary General)
 - Closing speech – Catherine Morency (WCTR2023 CDT Chair)
 - Closing speech and thanks - Tae Hoon Oum (WCTRS president)
 - Site Selection Report of the next year WCTR - Ali Huzayyin (SSSC Chair)
 - Announcement of the selected host site of the next year WCTR
 - Chair of the next WCTR invited to stage
 - Ceremony of signature of the next WCTR Agreement - Ali Huzayyin (SSSC Chair) and Tae Hoon Oum (WCTRS president)
 - Reading and signature of the Agreement.
 - Welcome speech and host site video of the CDT Chair of the next WCTR
 - WCTR token and flag hand over – Catherine Morency (WCTR2023 CDT Chair), Tae Hoon Oum (WCTRS president), CDT Chair of the next WCTR.



July 21st, 12:30-13:50 Lunch (Location: 517CD)

3.4 Technical visits

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For more details on how to register for the visits: <http://wctr2023.ca/visits.html>

Technical visit 1: Montreal Port Authority (1st group)

Description: Visit the state-of-the-art facilities of the Port of Montreal. Accompanied by Daniel Dagenais, vice-president of port performance and sustainable development as well as Julien Baudry, director of public affairs, this visit will showcase the Viau container terminal, grain terminal and the control centre. The visit will end at the Grand Quay (old Port of Montreal) with a visit of the Port of Montreal Tower.

Date: Monday, July 17th, from 8:30 to 12:00

Important: You will need to bring your metro ticket provided by the WCTR conference in order to take the Montreal subway and bus.

Technical visit 2: Montreal airport REM station, under construction

Description: Come visit the construction site of the Réseau express métropolitain (REM) station, which will provide fast, direct service between Montréal-Trudeau Airport (YUL) and Downtown Montreal. This new light metro-type mode of transport will have 26 stations and will cross the greater Montreal region over 67 km. During the visit, you will have an exclusive view of the scale of this major project and learn more about the progress made so far. In 2027, YUL will be connected via this transportation system to downtown in less than 25 minutes.

Date: Monday, July 17th, from 9:00 to 12:00

Important: You will need to bring your metro ticket provided by the WCTR conference in order to take the 747 bus.

Technical visit 3: Colibri: cargo-bike delivery logistics hub

Description: We invite you to visit the Colibri Iberville center, inaugurated in 2022. The Colibri Iberville center is a shared logistics space for sustainable last-mile delivery, and this visit will be conducted in partnership with Coop Carbone. You will have the opportunity to learn and discuss about last-mile logistics and also see some cargo bikes!

Date: Monday, July 17th, from 9:00 to 12:00

Important: You will need to bring your metro ticket provided by the WCTR conference in order to take the Montreal subway and bus.

Technical visit 4: STM metro control centre, electrical and ventilation plant

Description: Thanks to the Centralized Command and Control Centre, the STM provides integrated management of the metro's data. The visit will give you an overview of modern, high-performance and scalable facilities, nothing less than the nerve center of the metro system. We also invite you to visit the technical premises of our underground network, which houses the equipment necessary for the

ventilation, power supply and electrical distribution of the tracks. Visit of the centralized command and control center of the metro (75 minutes), followed by the visit of the Providence district, recovery and ventilation station (75 minutes) Centralized Command and Control Centre.

Date: Monday, July 17th, from 12:30 to 16:00

Important: You will need to provide a your passport number for safety reasons. You will also need to wear pants and bring closed work shoes (or, in last resort, provide your shoe size number so we can find a pair for you). You will also need to bring your metro ticket provided by the WCTR conference.

Technical visit 5: Exo commuter rail maintenance centre in Pointe-St-Charles

Description: This visit will showcase Exo's train maintenance center in Pointe-Saint-Charles. Exo is the public operator of commuter train lines in the Greater Montreal area.

This facility features modern buildings and infrastructures near downtown Montreal. This 23,500 m² site includes a parking area for several trainsets in an outdoor garage, an inspection shop, a major repair shop, and a wheel profiling shop. This visit also features two new CRRC cars will be on display during the technical visit.

Date: Monday, July 17th, from 12:30 to 16:00

Important: You will need to provide a copy of your passport for safety reasons. You will also need to bring closed shoes and wear pants.

Technical visit 6: Montreal Port Authority (2nd group)

Description: Visit the state-of-the-art facilities of the Port of Montreal. Accompanied by Daniel Dagenais, vice-president of port performance and sustainable development as well as Julien Baudry, director of public affairs, this visit will showcase the Viau container terminal, grain terminal and the control centre. The visit will end at the Grand Quay (old Port of Montreal) with a visit of the Port of Montreal Tower.

Date: Monday, July 17th, from 12:30 to 16:00

Important: You will need to bring your metro ticket provided by the WCTR conference in order to take the Montreal subway and bus.

Technical visit 7: Walking tour of the Saint Henri neighborhood

Description: Embark on a 2.5 km walking tour of Montreal's Saint-Henri neighborhood and discover projects and infrastructures that promote pedestrians' accessibility. Starting at the Lionel-Groulx Metro station, this immersive tour takes you through the vibrant streets, back alleys and parks of this lively and surprising community. Ending at the revitalized Lachine Canal, you will witness the transformation of urban spaces, encouraging a more active and engaging way of experiencing the surroundings while improving people's overall health and well-being.

Date: Tuesday, July 18th, from 17:00 to 19:00

Important: You will need to bring your metro ticket provided by the WCTR conference in order to take the Montreal subway and bus.

Technical visit 8: Bicycle tour of Montreal's cycling infrastructure

Description: Join us for a wonderful urban biking tour accompanied by Jean-François Pronovost, ex-vice-president at Vélo Québec and now transportation advisor at the city of Montreal. This biking tour will showcase the key elements of Montreal's cycling infrastructure and will be mostly in downtown and in the Plateau-Mont-Royal neighborhood. A BIXI bicycle will be provided to you (the bikes used in the Montreal bikesharing network) and the tour will be about 2 hours long (around 7 km).

Date: Wednesday July 19th, 18:00 to 20:15

Important: Unfortunately, we cannot provide any helmets. Therefore, you must be comfortable riding a bicycle without a helmet or you must find your own. By signing up for this tour, you understand and agree that any injury that may occur while riding the bike is your responsibility.

Technical visit 9: Brand new REM light rail metro

Description: Accompanied by CDPQ Infra's Vice President Operations, Denis Andlauer, participants will have a privileged tour of the REM network's central station (Gare Centrale), the terminal station of the southern branch (Brossard) and the network's control center. The Réseau express métropolitain (REM) is a new fully automatic light rail transit system. It will comprise 26 stations and run 67 km through the Greater Montreal area. Commissioning of the first antenna is scheduled for the coming weeks.

Date: Friday, July 21st, from 13:30 to 17:00

Technical visit 10: Montreal airport cross-border baggage sorting facility and de-icing center

Description: Come and witness the cross-border luggage room, a unique place of its kind! This room, whose baggage handling system was developed by ADM Aéroports de Montréal and Alstef Group, brings together all the most advanced technologies – both for handling equipment and for the management computer system. It also meets all the very specific requirements of US Customs and Border Protection.

Following the visit to the cross-border baggage room, you will have the chance to visit Aero Mag, a dedicated entity specializing in aircraft de-icing and glycol recycling. The glycol recycling plant is located within the facilities of the de-icing center at YUL, so that the glycol used is completely recycled, reduced to a concentration and recertified by regulatory agencies for aircraft de-icing. YUL was also the first airport in the world to reduce glycol to a minimum concentration of 99.5% and to reuse it as a certified product for de-icing aircraft.

Date: Friday, July 21st, from 14:00 to 15:30

Important: You will need to provide a picture of your passport (or other official ID) ahead of time in order to attend. You will also need to bring your metro ticket provided by the WCTR conference in order to take the Montreal subway and bus.

Technical visit 11: BusPas: technological platform for mobility and the smart city

Description: BusPas developed a cutting-edge smart display integrated into bus stops, called SCiNe. Fully equipped with IoT sensors and powered by battery and solar panel, collecting valuable data and using AI

to enhance users' experience and operators' efficiency. It's the foundation of larger ecosystem for sustainable mobility in smart cities. We would like to share our innovative smart display to show how we can improve passenger's experience, operator efficiency, and city operations. Our product enhance also the security at the Bus Stop.

Date: Friday, July 21st, from 14:00 to 15:30

Technical visit 12: Vélo Québec: cycling programs and Montréal cycling infrastructure

Description: Accompanied by Stéphane Blais, director of expertise and research, hear about Vélo Québec's various cycling programs and outreach campaigns in the province of Quebec. This visit includes a tour of Velo Québec's HQ, named the House of cyclists, a visit of Vélo Québec's cycling education facility and finally a quick tour of some cycling infrastructures in the city of Montreal. Please note that this visit will be done by foot. For more information about Vélo Québec: <https://www.velo.qc.ca/en/>

Date: Friday July 21st, from 13:45 to 16:45

Technical visit 13: BIXI Montreal's bikeshare network

BIXI Montréal is a non-profit organization created in 2014 by the city of Montreal to manage its bike-sharing system. The BIXI network has more than 10,000 bikes (including 2,600 electric BIXIs) and almost 800 stations spread out across the greater Montreal area.

Digital transformation always sounds big. Should you acquire expensive tools? Or try to innovate by inventing something that doesn't yet exist? For BIXI Montréal, this meant focusing on the essentials. Creating an environment in which users feel confident in sharing their data, ensuring that the BIXI service is a digital experience from start to finish, generating this data, then centralizing and interpreting it via dynamic behavioral segmentation to gain fresh insight into business decisions.

For more information about BIXI: <https://bixi.com/en/>

In this visit, participants will be able to learn about BIXI, how it works and its path towards digital transformation. Participants will also see BIXI's storage and bike maintenance centre.

Date: Friday July 21st, from 13:45 to 16:15

Technical visit 14: Communauto: North America's oldest car-sharing service

Accompanied by Marco Viviani, vice-president of strategic development, visit the offices and garage of Communauto, North America's oldest and Canada's largest carsharing service. Communauto has now around 3,000 vehicles in Montreal. This visit will present the history of Communauto and its mission, followed by a brief demonstration of how it works and the various aspects of the logistical complexity.

For more information about Communauto: <https://montreal.communauto.com/?lang=en>

Date: Friday July 21st, 14:00 to 16:20

3.5 Keynote speakers

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Professor Foutse Khomh, FRQ-IVADO Research Chair on Software Quality Assurance for Machine Learning Applications, Polytechnique Montréal

Title: *Artificial Intelligence in Transportation: Challenges and Opportunities*



He received a Ph.D in Software Engineering from the University of Montreal in 2011, with the Award of Excellence. He also received a CS-Can/Info-Can Outstanding Young Computer Science Researcher Prize for 2019. His research interests include software maintenance and evolution, machine learning systems engineering, cloud engineering, and dependable and trustworthy ML/AI. His work has received three ten-year Most Influential Paper (MIP) Awards, and six Best/Distinguished paper Awards. He initiated and co-organized the Software Engineering for Machine Learning Applications (SEMLA) symposium and the RELENG (Release Engineering) workshop series.

Professor Annie Levasseur, Canada Research Chair in Measuring the Impact of Human Activities on Climate Change, École de technologie Supérieure de Montréal

Title: *Toward decarbonized transport systems: carbon accounting methods to support the development of effective policies and increase mobilization*

The mission of her Chair is to develop innovative measuring tools based on the most advanced knowledge to better quantify the impact of human activities on climate change. Stakeholders from the various levels of government can then use these tools to develop and implement their climate change action plans. Prof. Levasseur is also member of the CERIEC – Center for Intersectoral Studies and Research on the Circular Economy and the Interuniversity Research Centre on Sustainable Development Operationalization (CIRODD).



Professor Eric Miller, Director of the University of Toronto Transportation Research Institute (UTTRI), University of Toronto

Title: *Disruption: Travel Behavioural Changes & Transportation System Challenges in a Post-COVID World*



Professor Eric Miller is a pioneer in the development and application of agent-based microsimulation model systems in large urban contexts. As director of the University of Toronto Transportation Research Institute (UTTRI), his research is centered in the implementation of activity-based travel models for use in operational practice. This includes the development of integrated transportation-land use models that permit the analysis of the two-way interaction between transportation systems and urban form. His work serves to improve urban transportation best practices and policy decision-making and, thereby improves the quality of life in urban settings.

Professor Benoit Montreuil, Coca-Cola Material Handling & Distribution Chair and Professor and Co-Director Supply Chain & Logistics Institute, Georgia Tech

Title: *On the Emerging Physical Internet: Progress and Challenges Toward Resilient, Sustainable, Hyperconnected Freight Transportation and Logistic Ecosystems*

Benoit Montreuil is the Coca-Cola Material Handling & Distribution Chair and Professor in the H. Milton Stewart School of Industrial and Systems Engineering at Georgia Tech. He is also Director of the Physical Internet Center and Co-Director of the Supply Chain & Logistics Institute. Dr. Montreuil is leading the International Physical Internet Initiative, engaging academic, industry and government leaders worldwide into research and innovation projects on smart, hyperconnected and sustainable logistics, supply chains, transportation, businesses and regions. His main research interests generically lie in developing concepts, methodologies and technologies for creating, optimizing, transforming and enabling businesses, supply chains and value creation networks to thrive in a fast evolving hyperconnected world.



Professor Chandra Bhat, University of Texas, Austin, TX, USA; WCTRS Steering Committee member (STC), University Distinguished Teaching Professor, Joe J. King Endowed Chair Professor in Engineering

Title: *What is Causality in Modeling? And What Data Do We Need to Extricate Causal Insights?*



Dr. Chandra R. Bhat has been a pioneer in the formulation and use of statistical and econometric methods to analyze human choice behavior for transportation and urban policy design. His current research includes the social and environmental aspects of transportation, planning implications of emerging technology and mobility options, equity considerations in transportation safety, and data science and predictive analytics. He is a recipient of many awards, including the 2022 Institute of Transportation Engineers (ITE) Theodore M. Matson Memorial Award, the 2017 Council of University Transportation Centers (CUTC) Lifetime Achievement Award, the 2015 American Society of Civil Engineers (ASCE) Frank M. Masters Award, and the 2013 German Humboldt Award. He was listed in 2017 as one of the top ten transportation thought leaders in academia by the Eno Foundation. His former students are now leaders in the travel modeling field, and many have received national-level dissertation/thesis awards for their research under Dr. Bhat's guidance. Dr. Bhat currently serves as the Editor-in-Chief of Transportation Research – Part B.

Professor Haijun Huang, Beihang University, Beijing, China; Vice President of Beihang University and Director of Key Laboratory of Complex System Analysis and Management Decision, China Ministry of Education

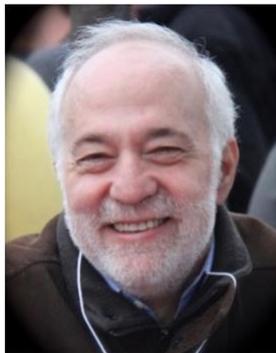
Title: *Behavior-Based Traffic Network Reliability Research Framework*

Prof. Hai-Jun Huang received a Ph.D in transport operations research from Beihang in 1992. His research interests include road traffic flow models, transport network modeling, travel behavior analysis and congested road-use pricing. He has been the principal investigator of more than 10 national research grants and published more than 270 papers in such journals as Transportation Research series, Transportation Science and Operations Research. In 2011, he got the national prize for achievements in natural science, and in 2012 the Fudan prize for excellent research in management sciences. In 2011, he was selected as the IAC member of ISTTT, and in 2020 the member of WCTRS Steering Committee. He is now serving as the editor-in-chief of Transport Policy, the associate editors of Transportation Research Part E and Transportation Science, the editorial board member of Transportation Research Part C.



Professor Dan Sperling, Distinguished Blue Planet Prize Professor of Engineering and Environmental Science and Policy and founding Director of the Institute of Transportation Studies, University of California at Davis, and next WCTRS Secretary General designate

Title: *Science and Policy of Decarbonizing Transportation, As Seen by a Professor, Policy Wonk and ex-Regulator*



Dr. Sperling is a global leader on sustainable transportation policy and technology. He has launched 4 international centers within ITS-Davis, which he founded over 30 years ago—in China, Europe (Paris), Mexico, and India. In addition to his faculty position, he held the transportation seat on the California Air Resources Board for 16 years and served as Chair of the Transportation Research Board (TRB) of the National Academies in 2015-16. He was inducted into the National Academy of Engineering in 2022, and won the 2018 Roy Crum award from TRB, its highest research award and the 2013 Blue Planet Prize from the Asahi Glass Foundation for being “a pioneer in opening up new fields of study to create more efficient, low-carbon, and environmentally beneficial transportation systems.” He served twice as lead author for the IPCC (sharing 2007 Nobel Peace Prize), has authored or co-authored over 250 technical papers and 13 books, and has made over 1000 public presentations.

Professor Anming Zhang, Vancouver International Airport Authority Professor in Air Transportation, Professor, Operations and Logistics Division, University of British Columbia, Vancouver, Canada

Title: *Evolution of Aviation Network: Global Airport Connectivity Index since 2006, Impact of COVID-19 and future research*

Anming Zhang is a Professor in Operations and Logistics and holds Vancouver International Airport Authority Chair Professor in Air Transportation at Sauder School of Business, University of British Columbia. He is the President of the World Air Transport Research Society (ATRS) and was, in 2020, the President of Transportation and Public Utilities Group (TPUG) of American Economic Association. Prof. Zhang has published widely in the areas of transportation and industrial organization. He is the recipient of the “Yokohama Special Prize for Outstanding Young Researcher” awarded at the 7th World Conference on Transportation Research (WCTR) in Sydney, Australia in 1995, and of the Best Paper Prize at the International Transport Economics Association (ITEA) Conference on Transportation Economics, Toulouse, France in 2014. Currently, he is also in the Executive Committees of WCTR and ITEA, Associate Editor of Transportation Research Part A and the Co Editor-in-Chief of Transport Economics and Management (TEAM).



3.6 Sponsors

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DIAMOND SPONSOR



With a perspective of sustainable development and regional cohesion, the **ARTM** plans, organizes, finances, develops and promotes public transit in the Montreal metropolitan area in order to offer a simple, integrated, fluid and efficient mobility experience. The ARTM will provide all participants with a zone A public transit pass during the conference.

PLATINUM SPONSORS

AGENCE DE MOBILITÉ DURABLE MONTRÉAL

The **Agence de mobilité durable**, a paramunicipal organization, breaks new ground for more sustainable mobility by managing curbside and off-street parking spaces it is assigned, by monitoring public space across Montréal and by providing better information to the community. It lends its sustainable mobility expertise to the City of Montréal in order to improve quality of life and contribute to Montréal's economic vitality by ensuring that space is shared equitably, and that the city is accessible to all.



Transport
Canada

Transports
Canada

Transport Canada is responsible for transportation policies and programs. They promote safe, secure, efficient, and environmentally responsible transportation.

GOLD SPONSORS



The **Québec government** is proud to participate in this world conference through the **ministère des Transports et de la Mobilité durable**. The Ministère's mission is to ensure the sustainable mobility of people and goods throughout Québec's territory using efficient and safe transportation systems that contribute to the development of the province.



InfinityQ is a Montreal based company that specializes in quantum-inspired optimization solutions for the transport and logistics industry. Our unique technology makes it possible to directly converge towards the optimal solution, making your business more efficient, more secure and more profitable.



IVADO generates, stimulates and supports initiatives in artificial intelligence (AI), by bringing together the research community, organizations and institutions.

SILVER SPONSORS



CargoM's mission is to bring together all Greater Montreal freight transport and logistics stakeholders whose activities promote Montreal as an industry hub around common goals and concerted actions to increase its cohesion, competitiveness, growth and reach.

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at **Stantec**, we always design with community in mind.



CIRODD is a research, development and reference center in the operationalization of sustainable development whose mission is to accelerate the transformation of society in order to support socio-ecological transition through sustainable innovation and transdisciplinarity.

Aéroports de Montréal is a private, not-for-profit and financially independent corporation responsible for the management, operation and development of the facilities of the Montréal Pierre-Elliott Trudeau airport.



True North Marine is Canada's only ship-routing service provider, an expert in optimized weather routing and decarbonization solutions for ocean-going vessels. TNM uses an AI-enabled software to provide the safest, most efficient routes for vessels while helping bring down the carbon footprint of each voyage.

CIMA is an employee-owned, Canadian firm. An agile and multidisciplinary approach. An entrepreneurial culture that supports innovation. A socially responsible firm. A leader in sustainable and responsible engineering.



BRONZE SPONSORS

Port Montréal - a North American ocean port at the heart of the continent and a hub for international trade that contributes to the well-being of its clients and partners and to the economic development of Greater Montreal, Quebec, Ontario and Canada while respecting the environment.



Communauto is the largest car sharing operator in Canada, with more than 4,500 cars available in station-based or free-floating services in more than 18 cities.

The mission of **Civilia** is to be at the heart of the urban mobility transformation by providing cities and public transit authorities the tools and knowledge to drive a more fluid and efficient mobility.



Kiewit is one of North America's largest and most respected engineering and construction organizations.



SPECIAL PARTNERS



Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation (CIRRELT). A group of 120 professors from 15 universities of the province of Quebec.

CIRRELT

Tourisme Montréal - The synergy of 900 members, partners and tourism industry stakeholders who collectively aim to maximize the economic benefits of tourism in Montréal and across all of Québec.

**TOURISME /
MONTRÉAL**



The **convention centre** that combines the very best in experiential trends and knowhow with Montréal's trademark creativity. Always at the service of international visitors looking for a unique and safe experience, the Palais promises unforgettable events and memories.

The **Fonds de recherche du Québec** ensure the funding and the promotion of excellence in research and training in the fields of natural sciences, mathematics, engineering, healthcare, social and human sciences, arts and letters.

Québec 
Fonds de recherche – Nature et technologies
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Fonds de recherche – Société et culture

4 GETTING AROUND MONTREAL: CITY OVERVIEW AND HINTS

4.1 City overview and local information

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Montreal's history and facts

Montreal is Canada's second most populous city, with around 4.3 million inhabitants (metropolitan area), and one of the largest French-speaking cities in the world. In fact, French is the only official language - and the most widely spoken - of the province of Quebec, although a large part of the population also speaks English. Its history dates to the 16th century and its important role in the fur trade, when Samuel de Champlain, a French explorer, established a fur trading post on the Island (present-day Pointe-à-Callière). Before that, another French explorer, Jacques Cartier, visited Hochelaga in 1532, and claimed the area for France. Founded in 1642, as Ville-Marie, it officially became a city in 1832. The English have also contributed to the city's history. To get to know a bit more about their contribution, [click here](#). In addition, long before the Europeans made their way to what is currently Montreal, the indigenous peoples of Canada had this region as their home.

Every evening, historical characters tell the history of Montreal on Old Montreal's trees, walls, streets, and buildings through the Cité Mémoire project. The Cité Mémoire is the largest [video projection circuit](#) in the world, with 27 projected scenes. The [Montréal en Histoires](#) app is also available (in English, French, Spanish and Mandarin), so as you can enjoy the full soundtrack of each scene. The projections are available from May 17 to September 5, from Tuesday to Sunday. Montreal's history and archaeology is also well documented in the [Pointe-à-Callière museum](#), located at the Old Port of Montreal.



Video projection of the Cité Mémoire project at Champ-de-Mars (Source: Art Public Montreal)

Montreal is a vibrant city, well known for its multicultural environment, great food, and music. More than 120 distinct ethnic communities make up the population of Montreal, making it a very international city. This is also reflected in the gastronomic character of Montreal's restaurants, cafés, and markets. Getting around the city is easy, given the many options on offer: a shared bike system, buses, four subway lines, car-sharing systems, etc. You'll find more details on these options in this guide.

Montreal weather

Montreal has a warm-humid continental climate during summer, with daily mean temperatures of 21.2°C (70.2 F). The average low for the month of July is 13.2°C (55.8 F) and the average high is 26.3°C (79.3 F). July is the rainiest month of the year, with an average precipitation of 89.3 mm (3.52 inches), mostly from thunderstorms.

Light clothing is advisable in July, but warmer clothes (e.g., pants, sweatshirts) can be useful if the weather changes, or for evenings, which can be quite cool. Layering several garments is a good option. A raincoat or a breathable light jacket could be a good option for rainy days. Don't forget your hat, cap, and sunscreen! Oh, and a good pair of walking shoes, because there is a lot to see in Montreal!

Local time zone

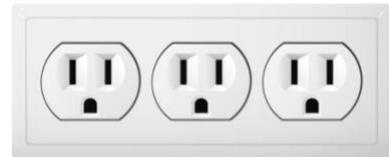
During summer, Montreal operates in the Eastern Daylight Saving time (EST), i.e., time zone offset UTC/GMT-4.

Montreal free Wi-Fi

The city of Montreal offers free Internet access via 825 access points located throughout the island. ([Click here for the map](#) with the locations where you can access MTLWIFI). In addition, many businesses (e.g., stores, cafés, restaurants), as well as the city's underground network sectors (e.g., Montreal Trust, Centre Eaton, etc.), offer free Wi-Fi access.

Electronic devices (voltage and socket type)

Canada operates on a 120V supply voltage and 60Hz. In general, electronic devices from other countries outside North America require an adapter. It's a good idea to organize your adapter purchase in advance, as most adapters sold in Canada are intended for North American electronic devices (e.g., to be used in European sockets, for example). However, if you forgot to bring your adapter, please note that some souvenir stores in the Old Port sell them.



4.2 Getting around

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Public transportation system

Along with your conference registration, you received a weekly public transport pass (from Saturday to Saturday), that will cover all your trips during the week, including the bus between the airport and downtown. **The pass, offered by ARTM, the main sponsor of WCTR2023, is valid for 7 days.** To plan your trip with the STM public system (subway and/or bus), you can use the following [link](#).

How does it work? Please validate your card each time you enter the bus or subway. If a friend, partner, or family member is accompanying you to Montreal, please note that passes cannot be purchased inside buses, but only in subway stations, or at the airport.

Pricing: For more details on fares, please visit the [STM website](#).

Schedules: For more details on schedules, please visit the [STM website](#).

Montreal has four subway lines (the orange, green, blue, and yellow lines) connecting different parts and districts of the city. The nearest subway station to Palais des congrès is **Place d'Armes station**, in the orange line. The following bus lines also have routes that pass near the Palais des congrès: 55, 129, and 747 (airport line). Night buses are also available: 361, 363 and 365. A full map of the subway and bus network is available [here](#).



Public transit users can use the [Transit app](#), available to IOS and Android, to find public transport options.

Montreal on foot!

Montreal offers a unique experience for residents and visitors alike! In addition to its well-known tourist attractions, it also boasts several hidden gems, which can be explored on short or long walks! The Park de Dieppe, for example, is a 15-acre park that offers a peaceful experience. From the park you can see the Old Port. Montreal also has many scenic walking tours (e.g., Old Port and Underground City)!

BIXI bike sharing system

BIXI is Montreal's official bike-sharing system, with 800 [stations](#) throughout the city.

How does it work? Please visit the BIXI website to understand [how to rent a BIXI bike](#). An app is available for download (e.g., Apple store).

Pricing: Buy a [one-way pass per rental](#) (CAD \$1.25 + taxes) or a [monthly membership](#) (CAD \$20 + taxes). Other rates are available on the BIXI website.

Montreal with a rented bike

Montreal has a network of 901 km of bike paths and lanes. Here is a [map showing how to get to the network of paths and lanes](#). A [pdf file](#) is also available for download.

Uber services

Uber services are available in Montreal. Simply use the Uber app to request a ride. As an example, a trip from the Montreal Pierre Elliott Trudeau airport (YUL) to the Palais des congrès usually costs between CAD \$41 and \$45, with Uber X. However, these rates may vary according to demand for Uber services.

Taxi/Cab services

Various companies operate in Montreal, such as [Bonjour Taxi](#) (514-366-3333 or 514-364-3333), [Taxi Coop](#) (514-725-9885), [Taxi Diamond](#) (514-836-0000), etc. For some cab companies, booking can be done via apps or the company's website. To find out more about cab fares and services in Montreal, from and to the airport, as well as approximate taxi waiting times, please [click here](#).

Wheelchair accessible taxis are also available in Montreal, but it is recommended to book ahead: [Taxi Para-Adapté](#) (514-277-3344), [Taxi Van Médic](#) (514-739-9933), [Taxi Diamond](#) (514-322-5160, option #1) and [Taxi Coop](#) (514-725-9885).

Car rentals

For car rentals, here follows the [list of companies](#) and their phone numbers. Please note that demand for vehicles is high during the summer months. It is therefore advisable to plan ahead.

Montreal with your own vehicle (or parking a rented vehicle)

If you're coming to Montreal by car (or if you're renting a car on site), it's important to understand Montreal's parking system. Parking may be free of charge (e.g., on many residential streets) or paid (e.g., in permit parking zones and streets with parking meters). Here is a short guidance to [understand the road signs](#). For more information on paid on-street parking, please [click here](#) to see the map. Please note that the map does not provide real-time information on parking spot availability. The **P\$ Mobile Service app** (available for IOS and Android) enables you to pay for your parking spot with your smartphone.

There are parking spaces reserved for motorcycle in certain streets in the city center (Ville-Marie, downtown area). In the this [map link](#), click on layer “stationnement sur rue pour moto” to find these reserved areas.

If you own an electric vehicle, you'll find a link to the interactive map of the charging station network [here](#). The network has over 4,200 charging stations, 700 of which are fast charging stations.

4.3 Dinning

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Google maps containing the restaurants and attractions in this booklet:

[GOOGLE MAP](#)

Montreal's gastronomic scene is unique: the city boasts a renowned gastronomic culture, with innovative international and local culinary traditions that can lead to spectacular experiences! Eating out is one of Montrealers' favorite activities, and when summer arrives, restaurants can get very busy! **Therefore, it's a good idea to plan ahead to visit your favorite restaurants (i.e., by booking a table in advance).** We've put together a list of first-rate restaurants with fine local cuisine (terroir Québécois), as well as restaurants around the Palais des congrès, and a few specialized restaurants (e.g., vegetarian or vegan). But before we get into this list, here are a few pointers to some of Quebec's most popular dishes.

According to [Montreal's guide](#), some unmissable eats for visitors are:

1. Bite into a fresh bagel.
2. Browse our many public markets (a list is included in this guide).
3. Try one the city's many microbreweries.
4. Taste the smoked meat sandwich from Schwartz's delicatessen or other smoked meat restaurants.
5. Try maple products: from maple syrup to maple butter and maple ice-cream (you may find some of them for sale in the Old Port). For that, you can visit [Délices Érable & Cie](#), in the Old Port (84 Saint-Paul Street East).
6. Indulge in poutine (see the description below).

A well-known regional dish in Quebec is **poutine**, a dish of French fries topped with cheese curds and gravy. The best-known restaurant serving poutine is [La Banquise](#) (open 24hrs!), or the upscale restaurant [Au Pied de Cochon](#), which serves poutine au fois gras.

Other local dishes include the famous **smoked meat sandwich**, served in different restaurants, such as [Schwartz's Deli](#), [Dunn's Famous](#) or [Reuben's Deli & Steakhouse](#), the **tourtière** (a meat pie found in bakeries in Québec, e.g., Première Moisson), the **cretons** (a pork pâté, made from ground pork, spices and onions, similar to French rillettes), the **bagels**, and the **tarte au sucre** (a sweet dish made of flour, eggs, maple syrup and cream, also found in bakeries). If you fancy a good bagel, the following restaurants/breakfast locations may be an option: [Bagel Etc](#) , [Beautysmtl](#), and [La fabrique de bagel](#) (at the [Centre de commerce Mondial de Montreal](#)).



Poutine, a popular Québécois dish

Terroir Québécois (fine dining) – advanced booking is usually required!

Many restaurants are dedicated to representing Quebec's terroir on the plate. These include:

Au Pied de Cochon *(by Chef Martin Picard)*

536 Avenue Duluth Est

Montréal, QC, H2L 1A9

For reservations: [Visit the reservation section of their website](#) or call +1 514-281-1114

Nearest subway stations: Mont Royal station (**orange** line) or Sherbrooke (**orange** line)

Bouillon Bilk

1595 Boulevard St-Laurent

Montréal, QC, H2X 2S9

For reservations: [Visit the reservation section of their website](#) or call +1 514-845-1595

Nearest subway station: Saint-Laurent station (**green** line)

Candide *(by Chef John Winter Russell)*

551 Rue Saint Martin

Montréal, QC, H3J 2L6

For reservations: [Visit the reservation section of their website](#)

Nearest subway station: Georges-Vanier (**orange** line)

Caribou Gourmand

5308 Boulevard Saint-Laurent

Montréal, QC, H2T 1S1

For reservations: [Visit the reservation section of their website](#) or call +1 438-387-6677

Nearest subway station: Laurier (**orange** line)

Hoogan et Beaufort *(by Chef Marc-André Jetté)*

4095 Rue Molson

Montréal, QC, H1Y 3L1

For reservations: [Visit the reservation section of their website](#) or call +1 514-903-1233

Nearest subway station: Préfontaine (**green** line)

Le Club Chasse et Pêche

423, rue St-Claude

Montréal, QC, H2Y 3B6

For reservations: [Visit the reservation section of their website](#) or call +1 514-861-1112

Nearest subway station: Champ-de-Mars (**orange** line)

Le Mousso

1025 Rue Ontario Est

Montréal, QC, H2L 1P8

For reservations: lemousso@videotron.ca

Nearest subway stations: Sherbrooke (**orange** line) or Beaudry (**green** line)

Le St-Urbain (by Chef Marc-André Royal and Chef Lindsay McLaren)

96 Rue Fleury Ouest
Montréal, QC, H3L 1T2

For reservations: info@lesturbain.com or call +1 514-504-7700

Nearest subway station: Sauvé (**orange** line)

L'Original

479 Rue Saint Alexis
Montréal, QC, H2Y 2N7

For reservations: [Visit the reservation section of their website](#) or call +1 514-303-0479

Nearest subway stations: Square Victoria-OACI (**orange** line) or Place d'Armes (**orange** line)

Montréal Plaza (by Chef Charles-Antoine Crête)

6230 Rue St-Hubert
Montréal, QC, H2S 2M2

For reservations: [Visit the reservation section of their website](#) or call +1 514-903-6230.

Nearest subway station: Beaubien (**green** line)

Toqué Restaurant (by Chef Normand Laprise)

900, place Jean-Paul-Riopelle
Montréal, QC, H2Z 2B2

For reservations: [Visit the reservation section of their website](#)
or call +1 514-499-2084.

Nearest subway stations: Square Victoria-OACI (**orange** line)
or Place d'Armes (**orange** line)



Toqué Restaurant

French and international cuisine

The Eater Montreal guide – an ultimate visitor's guide to eating in Montreal - recommends several French restaurants in Montreal. Here you'll find, [their locations in a map](#), along with links to their websites.

The [Eater Montreal guide](#) also features reviews of many international cuisines.

Vegan options

Various Montreal restaurants offer delicious meatless dishes, from hamburgers to salads to more refined dishes.

Aux Vivres

4631 Boulevard Saint-Laurent
Montreal, QC, H2T 1R2

For reservations: [Visit the reservation section of their website.](#)

Nearest subway station: Mont-Royal (**orange** line)

Bistro Tendresse

1259 Rue Sainte-Catherine Est
Montréal, QC, H2L 2H3

For reservations: visit the website.

Nearest subway station: Beaudry (**green** line)

Café Tuyo

370 Rue Marie-Anne
Montreal, QC, H2W 1B3

Nearest subway station: Mont-Royal (**orange** line)

Lola Rosa

276 Sainte-Catherine Ouest
Montreal, QC, H2X 2A1

Nearest subway station: Place-des-Arts (**green** line)

LOV

464 Rue McGill
Montreal, QC, H2Y 2H2

Nearest subway station: Square-Victoria-OACI (**orange** line)

Mimi & Jones (Veggie burgers)

5149 Avenue du Parc
Montreal, QC, H2V 4G3

Nearest subway station: Laurier (**orange** line)

Sushi Momo

3609 Rue Saint-Denis
Montreal, QC, H2X 3L6

Nearest subway station: Sherbrooke (**orange** line)

Umami Ramen & Izakaya

6660 Rue Clark
Montreal, QC, H2S 3E7

For reservations: [Visit the reservation section of their website](#) or call +1 438-375-6660.

Nearest subway station: De Castelnau (**blue** line)

Halal restaurants

Tasty

8899 Rue Berri
Montreal, QC, H2M 2T9

Baguette Brochette

3800 Rue Saint-Denis
Montreal, QC,

KazaMaza

4629, ave. du Parc,
Montreal, QC

786 Halal Restaurant

850, rue Jean-Talon O.
Montreal, QC

Restaurants around Palais des congrès (including vegan and vegetarian options)

Burger Fiancé (*Vegan burgers, salads, and more*)

417 Rue Notre Dame
Montréal, QC, H2Y 1V2

For reservations: [Visit the reservation section of their website](#) or call +1 514-840-3614.

Nearest subway station: Champ-de-mars (**orange** line)

Crew Collective & Café (*Upscale café located in a former Bank*)

360 Rue Saint-Jacques
Montréal, QC, H2Y 2N1

Nearest subway station: Square Victoria-OACI (**orange** line)

La Finca Coffee & office (*Specialty coffee and our homemade pastries*)

1067 Rue de Bleury
Montréal, QC, H2Z 1N1

Nearest subway station: Place d'Armes (**orange** line)



Vegan burger at Burger Fiancé

L'Original (*Rustic Québec cuisine*)

479 Rue Saint Alexis
Montréal, QC, H2Y 2N7

For reservations: [Visit the reservation section of their website](#) or call +1 514-303-0479

Nearest subway stations: Square Victoria-OACI (**orange** line) or Place d'Armes (**orange** line)

LOV (*Plant-based, eco-friendly restaurant, with all-vegan options, vegetarian*)

464 Rue McGill
Montréal, QC, H2Y 2H2

For reservations: [Visit the reservation section of their website](#) or call +1 514-287-1155

Nearest subway station: Square Victoria-OACI (**orange** line)

Monarque

406 Rue Saint-Jacques
Montreal, QC

For reservations: [Visit the reservation section of their website](#) or email info@restaurantmonarque.ca or call +1. 514-875-3896

Nearest subway station: Square Victoria-OACI (**orange** line)

Nouilles de Lan Zhou (*Chinatown's best options for noodles*)

1006 Boulevard St-Laurent

Montreal, QC, H2Z 9Y9

Nearest subway stations: Champ-de-Mars (**orange** line) or Place d'Armes (**orange** line)

Olive & Gourmando (*Mix of bakery and café, with a small menu on sandwiches, ricotta plates, brioche bread, patisseries, paninis, etc.*)

351 Rue Saint-Paul Ouest

Montréal, QC, H2Y 2A7

Nearest subway station: Square Victoria-OACI (**orange** line)

Qing Hua Dumpling (*Chinatown's best options for dumplings*)

1019 Boulevard St-Laurent

Montreal, QC, H2Z 1J4

Nearest subway stations: Champ-de-Mars (**orange** line) or Place d'Armes (**orange** line)

Tiradito (*Japanese-Peruvian restaurant; ceviches, yucca fries, papas rellenas, for 18 yrs or older*)

1076 Rue de Bleury

Montréal, QC, H2Z 1N2

For reservations: [Visit the reservation section of their website](#) or call +1 514-866-6776

Nearest subway station: Place d'Armes (**orange** line)

Toqué Restaurant (*by Chef Normand Laprise – fine dining*)

900, place Jean-Paul-Riopelle

Montréal, QC, H2Z 2B2

For reservations: [Visit the reservation section of their website](#) or call +1 514-499-2084

Nearest subway stations: Square Victoria-OACI (**orange** line) or Place d'Armes (**orange** line)

4.4 Food markets and food courts

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Time Out Market, Le Central and Food trucks

The [Time Out market](#), located in 705 Rue Sainte-Catherine Ouest, at the core of Centre Eaton, is a hip-food hall, upscale food court, that offers lunch and dining options. It has been once described as “the concentration of the city’s best chefs under one roof”. **Nearest subway station:** Peel station (**green** line).

[Le Central](#) is a unique and emblematic venue on the Montreal culinary scene, with 25 restaurant-kiosks, all under one roof, open 7 days a week. **Nearest subway station:** Saint Laurent (**green** line).

Street food is all the rage in Montreal and a place you can easily find your favorite dishes. Food trucks are generally spread throughout the city, parked in authorized areas. One of these areas is located near the Palais des congrès, at 715 Square Victoria. [Check the calendar](#) to see the trucks at this location on conference days.

Public markets of Montréal: Marché Atwater and Marché Jean-Talon

Located in different parts of the city, the two markets offer a wide variety of produce, from fruit and vegetables to meat and bread, plants, and delicatessen products.

Marché Atwater

Address: 138 Avenue Atwater, H4C 2H6, Montréal, QC

Nearest subway station: Lionel-Groulx station ([green line](#)/[orange line](#))

Marché Jean-Talon

Address: 7070 Avenue Henri-Julien, H2S 3S3, Montréal, QC

Nearest subway stations: De Castelnau station ([blue line](#)) or Jean-Talon station ([blue line](#))

The location of these and other public markets is available [here](#).

4.5 Shopping

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Montreal counts with various shopping areas.

Marché Bonsecours

The traditional [Marché Bonsecours](#), located in the Old Port, is a place where you can buy local products, from native arts and crafts to clothing and accessories made by local designers.

Location: 350 Rue Saint-Paul E, Montréal, QC H2Y 1H2, Canada

Open: Sunday to Wednesday from 10:00 to 18:00, and Thursday to Saturday from 10:00 to 19:00.

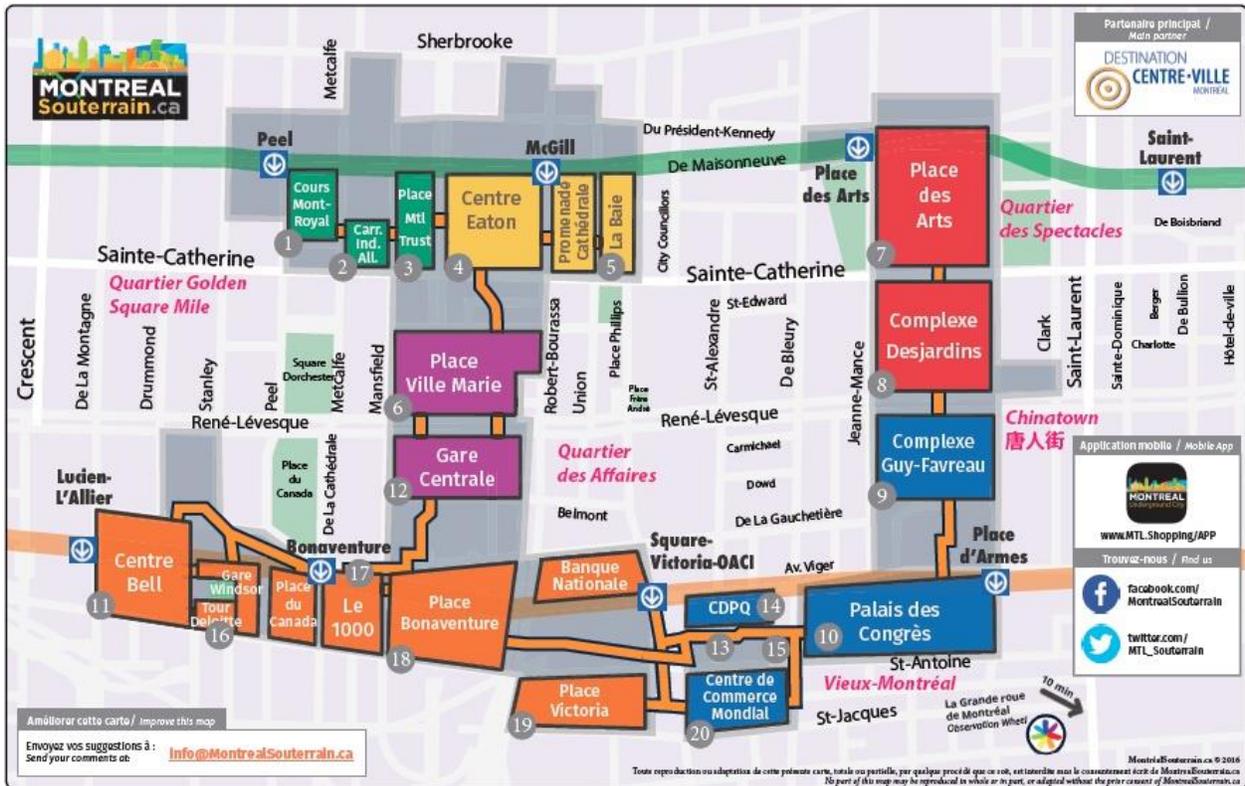
Nearest subway station: Champ de Mars ([orange line](#))



Montreal's Underground City (RÉSO)

[Montreal's underground network](#) links several shopping centers (e.g., Cours Mont-Royal, Place Montreal Trust, Centre Eaton, Place Ville Marie, Promenade Cathédrale, Complexe Les Ailes, Complexe Desjardins, etc.), hotels, restaurants, transportation systems and more. It stretches over 33 km and contains some 1,700 stores and 200 restaurants.

Sainte-Catherine Street is a well-known shopping destination for clothes, electronics, etc.



4.6 Local tourist attractions

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In this guide you'll find links to some of Montreal's best-known tourist attractions, organized by sector: Old Port, Parc Jean Drapeau, Parc du Mont-Royal, and Olympic Park. If you intend to do more than one paid activity, it's worth taking a look at the options offered by the [Passeport Montreal](#).

The Palais des congrès is surrounded by interesting Montreal neighborhoods such as [Chinatown](#), the [Old Port of Montreal](#), and the [Quartier des spectacles](#). At the [Place Jean-Paul-Riopelle](#), near the Palais, you can enjoy 35-minute presentations combining lights, mist, and fire, at 17:30, 18:30, 19:30, 20:30, 21:30, and 22:30.

Old Port of Montreal

Place d'Armes, Montreal's Notre-Dame Basilica, Saint-Sulpice Seminary, and Bank of Montreal

Montreal's Notre-Dame Basilica, of Catholic origin, is the first Gothic Revival church in Canada. It was built between 1824 and 1829 (main structure) and 1872 and 1879 (interior). Instead of biblical scenes, its stained-glass windows depict scenes from Montreal's religious history.

The **Saint-Sulpice Seminary**, located next to Notre-Dame Basilica and founded in 1657, is the second oldest structure in Montreal. Its clock is one of the oldest of its kind in North America. It also features the oldest (private) garden in North America.



*Montreal's Notre-Dame Basilica and Place d'Armes.
(Source: Montreal in pictures)*

The square opposite to the Basilica is **Place d'Armes**, Montreal's second oldest public site, first laid out in 1693. It was acquired by the city in 1863, but before that it was the scene of various military events and served as a lumber market. The monument on the square is in memory of Paul de Chomedey, one of the founders of Montreal.

The oldest banking institution of Canada, the **Bank of Montreal**, is located nearby. It was founded in 1817 and redesigned in 1905.

Nearest subway station: Place d'Armes station (**orange** line), a few steps away from Palais des congrès.

Champ-de-Mars, City Hall (Hôtel de Ville), Place Vauquelin, and Place Jacques-Cartier

Walking north-east from the Montreal's Notre-Dame Basilica, along Notre-Dame Street, you reach Montreal City's Hall. The **Hôtel de Ville (City Hall)** was built between 1872 and 1878, and has gone through different renovations (e.g., a severe fire in 1922). Currently, the political and democratic functions of the city hall have been relocated to the Lucien Saulnier building. Close to it is the Vauquelin Square, a small urban square. Vauquelin was a French naval captain who fought in the Seven Years' War. Behind the City Hall lies the **Champ-de Mars**, a public park and former military maneuvers ground.



Montreal's City Hall (Hôtel de Ville)

Place Jacques-Cartier and Place de la Dauversière link the City Hall to the waterfront. It's a lively place, with many artists and good restaurants.

Nearest subway station: Champ-de-Mars station (**orange** line).

Saint Paul and de la Commune Streets

Filled with restaurants, art galleries, and souvenir stores, the [Saint Paul Street](#) is one of Montreal's prettiest streets. During summer, it is a car-free street. Saint Paul and Commune cobblestone streets link Marché Bonsecours to Boulevard Robert-Bourassa. Many of their Greystone buildings date back to the 19th century.



Old Port of Montréal (Source : Tourisme Montréal)

Waterfront (Rue Commune and Promenade du Old Port)

It's one of Montreal's summer hotspots: a place full of activities for tourists and residents alike. This is where [Cirque du Soleil](#) pitches its tents every summer, with breathtaking shows! Whether you go for a walk or bike ride in summer, or go ice skating in winter, you can admire the view of the St. Lawrence River, discover, and learn at the Montréal Science Centre, see the Clock Tower and much more!

At the old Port you can also find a Big Ben replica: the [Clock Tower](#), built in 1922, to commemorate the courage of sailors, who were lost at sea during World War I.

Centre de commerce mondial de Montréal (Montréal World Trade Centre)

The [Centre](#) was inaugurated in 1992 and features modern architecture that integrates several historic buildings. Part of the Berlin Wall, donated to Montreal for its 350th anniversary, can be found inside the building.

Nearest subway station: Square Victoria-OACI ([orange](#) line).

Parc Jean Drapeau: St Helen's Island and Notre-Dame Island

[Parc Jean Drapeau](#) is the third largest park in Montreal, comprising two islands: the St Helen's and the Notre-Dame Islands.

Built during the 1967 International and Universal Exposition, the [Biosphère](#) is a museum dedicated to multiple activities associated with the environment, social innovation and science. For more information on the admission fees, [click here](#).

Located in the Notre-Dame Island, the [Casino de Montréal](#) may be an option for those who want to spend some time in Montreal and enjoy games and entertainment. On the same island is the 4 361 m long [Circuit Gilles Villeneuve](#), home to the Grand Prix du Canada (Formula 1) since 1978. When not in use for this event, it serves as a training venue for paracyclists, cyclists and inline skaters.



Biosphère (in St. Helen's Island)

Nearest subway station: Jean-Drapeau station ([yellow line](#)).

Parc Mont-Royal and Oratoire St-Joseph



Park Mount Royal and Beaver Lake (Lac des Castors)

Inaugurated in 1876, the Mount Royal Park ([Parc Mont-Royal](#)), with its 200 hectares, is an ideal place to take a break, picnic, run or cycle. From the Kondiaronk Belvedere, where the Chalet du Mont-Royal is located, you can take breathtaking views of Montréal.

Nearby, you can take a stroll on [Beaver Lake \(Lac des Castors\)](#), as well as rent paddleboats on the lake.

From the [Camillien-Houde Lookout](#) one can also appreciate great views to the eastside of Montréal. For instance, one can see the Montréal Tower at the Olympic Stadium, from the lookout.

On summer weekends, the area around the [George-Étienne Cartier monument](#) in the north-east of the park is the site of Tam-Tams, a traditional informal gathering of drum players.

A map of the park is [available here](#), in pdf format. You can also discover a bit more about the mountain [here](#).

How to get there: From the Palais des congrès (*Saint-Laurent/Saint-Antoine, 52918 bus stop*), take [bus 129 direction NORTH](#), to the **Georges-Étienne Cartier monument** (*Monument Sir-George-Étienne-Cartier, 58702 bus stop*). To return to the Palais des congrès, take [bus 129, direction SOUTH](#), on the other side of avenue du Parc.

[Bus 11 direction WEST](#) (Parc-du-Mont-Royal/Ridgewood), from Mont-Royal metro station (orange line) takes you to the Beaver Lake (Lac des Castors) and the Remembrance Road, where the Camillien-Houde Lookout is located.

Nearest subway stations: Guy-Concordia or Peel station (green line) - access through the southeast side of the mountain | Edouard-Montpetit (blue line) – access through the northwest side of the mountain.

[Saint Joseph's Oratory of Mount Royal](#), built in 1904, is Canada's largest church. Today it is a national historic site and one of Montreal's most iconic landmarks. For more information, please [click here](#).

Nearest subway station: Côte-des-Neiges station ([blue](#) line).

Parc Olympique, Biodôme, Botanical Garden, Insectarium, Planétarium

Montreal hosted Canada's first Olympic Games in the summer of 1976. The **[Olympic Stadium](#)** was then built, and construction was resumed in the 80's. The [history of its construction](#) can be consulted at this link.

It is a multi-purpose stadium, one of the largest in Canada in terms of capacity. Some of the post-Olympic uses include gridiron football, baseball, soccer, and office space.



Montreal's Olympic Stadium (Source: Daily Hive)



Biodôme (Source : CTV news)

The **[Botanical Garden](#)** has more than 22 000 plants species and cultivars, and around 30 thematic gardens. The **[Insectarium](#)** offers guided activities and special encounters with insects. The **[Planétarium](#)** offers many exhibitions and unique experiences.

Nearest subway stations: Pie-IX station, green line (entrance to the Olympic Stadium, Botanical Garden) or Viau station, green line (closest to the Tower). Please note that the Montreal Tower is closed for renovation.

Habitat 67

[Habitat 67](#) was designed, by architect Moshe Safdie, for the 1967 International and Universal Exposition, as a housing complex. It became one of Montreal's skylines. The terrain where it sits, the Cité-du-Havre, was built to protect the harbor from currents and ice. You can see Habitat 67, on the other side of the St Lawrence River, from the waterfront, the Old Port.

How to get there: Take **[bus 168 direction SOUTH](#)** from the Station Square Victoria-OACI (*bus stop 52705*) and stop at *Des Moulins/Pierre-Dupuy, 54312 bus stop*, from there, walk all the way to Habitat 67 (15 min walk). A BIXI station (bike sharing system in Montreal) is also located nearby.

Montreal's parks

Montreal is a very green city. For more information on the various parks around the city, [click here](#).

4.7 Summer festivals!

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Cirque du Soleil ECHO (from April 30 to August 20, 2023)

Every summer, under the big top in the Old Port of Montreal (waterfront), Cirque du Soleil offers a new circus experience. This year, Cirque du Soleil brought its [Echo show](#) to Montreal, with performances about life's symbiotic relationships. Tickets are [available for purchase](#) on the Cirque du Soleil website.

Nearest subway station: Champ-de-Mars (**orange** line)

Montréal complètement cirque (from July 6 to 16, 2023)

If you arrive in Montreal a few days before WCTR2023, you can get a taste of the circus performers taking to the streets and indoors! For more information, [click here](#).

Nearest subway station: Berri-UQAM (**orange** and **green** lines)

L'International des Feux Loto-Québec (from June 29 to August 10, 2023)

From June 29 to August 10, Montreal receives the International des Feux Loto-Québec, a fireworks festival, which happens every year. Although the fireworks are set off from La Ronde (St Helen's Island), [they can be seen from other parts of the city](#), such as the Old Port or the Jacques Cartier bridge.

During the WCTR2023, Belgium will be making a presentation, on Thursday, July 20th, starting at 22:00. For more details, [click on the link](#).

Festival International Nuits d'Afrique (from July 11 to 23, 2023)

This festival, full of African, Caribbean, and Latin American music and culture, takes place in July, with an amazing array of free concert events and activities, such as open-air dance workshops. A free of charge program is [available online](#).

Nearest subway station: Place-des-arts (**green** line) | [Quartier des spectacles](#)

Just for Laughs (from July 14 to 29, 2023)

For those who like comedy, the famous Hahaha or [Just for Laughs festival](#) is an option. It also includes outdoor shows.