

Day1 Agenda

Venue: Transport for London (Stratford)

[Link to Google Map](#)

Monday 01 July

09:00 - 10:00 Check in

09:00 - 10:00 Welcome Coffee

10:00 - 10:10 Opening (by Andrew Hyman, TfL)

10:10 - 10:50 **Keynote 1: Thomas Ableman (TfL), Room: AD123, Title: Every Journey Matters – How TfL are Leveraging Innovation to Drive Transport Strategy and Mode Shift in London and Deliver the Mayor’s Transport Strategy**

*Session Chair:
Mark Hickman (Queensland)*

10:50 - 11:30 **Keynote 2: Katherine Drayson (TfL), Room: AD123, Title: Data is the Lifeblood for a Sustainable London– Exploring the Pivotal Role Data Plays Informing How TfL Delivers a Strong Green Heartbeat for our City**

11:30 - 11:50 Coffee/ Room reconfiguration

Session ID: 101		Session ID: 102	
Room: AD1		Room: AD23	
Session Theme: Sustainability		Session Theme: Reliability	
Route: Research		Route: Practice + Research	
<i>Session Chair: Rebecca Powell (TfL)</i>		<i>Session Chair: Martin Trepanier (Polytechnique Montréal)</i>	
11:50 - 12:10	125 Shin-Hyung Cho, Kitae Jang, Inhi Kim and Shin Hyoung Park	11:50 - 12:10	79_ Vasiliki Bampi, Anton Boichenko and Harriet Grayson
	Evaluating the Sustainable Urban Mobility for Public Transit incorporating Geospatial Modeling Approach		Navigating the Unpredictable: Near Real-time Detection of Bus Diversions in London.
12:10 - 12:30	143 Shin Ying Ng and Taku Fujiyama	12:10 - 12:30	106_ John Moody and Haris Koutsopoulos
	Calculating emission and energy usage of freight trains from signal system data		Long-Term Impacts and Implications for the Design of Maintenance-Related Revenue Service Adjustments
12:30 - 12:50	120 Yash Kumar Mittal and Shreyata Khurana	12:30 - 12:50	136_ Meisam Ghasedi, Jinhyung Lee, Scott Bell and Ehab Diab
	A Synthesis of Passive Data to study the impact of reduced transport-based emission on Air Quality of Jaipur City during COVID-19 Lockdown		Exploring the interrelationship between transit service reliability measures and transit ridership at the route level
12:50 - 13:10	14 Jesper Bláfoss Ingvarsson and Otto Anker Nielsen	12:50 - 13:10	139_ Maximiliano Lizana, Charisma Choudhury and David Watling
	Evaluating the passenger impacts of electric buses in Denmark using smart card data		Modelling departure time of transit commuters using smart card data: an application on disruptive events

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13:10 - 13:55 Lunch

13:55 - 15:15		13:55 - 15:15	
Session ID: 111 Room: AD1 Session Theme: Sustainability Route: Practice		Session ID: 112 Room: AD23 Session Theme: Reliability Route: Research	
		<i>Session Chair: Hani Mahmassani (Northwestern)</i>	
		<i>Session Chair: Menno Yap (TfL)</i>	
13:55 - 14:15	76 Capucine-Marin Dubroca-Voisin and Dounia Idorane	13:55 - 14:15	96 Sethu Vinayagam Udhayasekar, Karthik K. Srinivasan and Bhargava Rama Chilukuri
	Which transit data for post-carbon societies? A global approach in French context		Joint Forecast of Expected Travel Time and its Reliability for Real-time Transit Applications Based on Sporadic Data
14:15 - 14:35	112 Mark Hickman	14:15 - 14:35	105 John Moody and Haris Koutsopoulos
	Measuring Transit Resilience to Severe Weather and Climate Change		Optimizing the Routing and Scheduling of Roadway Maintenance Machines
14:35 - 14:55	102 Nick Cork	14:35 - 14:55	41 Mostafa Abolfazli, Martin Trépanier and Aurélie Labbe
	Mapping of Climate Related Risk to Inform Regional Adaptation of Transportation Networks		A Data-Driven Approach for Characterizing Subway Delays
14:55 - 15:15	81 Sarah Greenham, Rebecca Powell and Katherine Drayson	14:55 - 15:15	137 Mohammad Maghrour Zefreh and Oded Cats
	Increasing decision-makers' capacity to adapt transport infrastructure to the impacts of heat and climate change: A TfL case study		Detection of metro service disruptions and their network-wide impact using vehicle location data

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15:15 - 15:40 Coffee

15:40 - 17:00		15:40 - 16:00		16:00 - 16:20		16:20 - 16:40		16:40 - 17:00											
Session ID: 121 Room: AD1 Session Theme: Sustainability Route: Research <i>Session Chair: Kurauchi Fumitaka (Gifu)</i>		Session ID: 122 Room: AD23 Session Theme: Reliability Route: Research <i>Session Chair: Otto Anker Nielsen (DTU)</i>		58 Wei Bi and Kristen MacAskill	A Network Modelling-Based Approach for Quantifying Flood Resilience of Urban Rail Transit Systems	6 Peter Baudains and Nicolas S. Holliman	Visualising road traffic congestion during disruption events using open bus data	60 Jahun Koo, Sujae Kim, Gyeongjae Lee and Sangho Choo	Do people choose public transportation for environmental reasons? The role of carbon reduction attitudes in mode choice	87 Yuxuan Wang, Catherine Morency and Martin Trépanier	Decomposition and sensitivity analysis of various factors affecting bus travel times	104 Maximiliano Lizana, Charisma Choudhury and David Watling	Investigating the potential of aggregated mobility indices for inferring public transport ridership changes	42 Zhanhong Cheng, Jiawei Wang, Martin Trépanier and Lijun Sun	Anomalies in metro passenger demand are predictable -- learning causality with ABtransformer	135_ Roger Chen, Amer Shalaby and Diego Da Silva	Transit Ridership Recovery in Toronto: Insights from Subway Wi-Fi Records	80 Nils Breyer and Anders Peterson	Predicting the reliability of train transfers

17:00 - 17:15 (Invitation only) Steering Committee + Organisational Committee

Day2 Agenda

Venue: Transport for London (Stratford)

[Link to Google Map](#)

Tuesday 02 July

08:00 - 09:00	(Invitation only) Steering Committee meeting		
09:00 - 09:40	Check in		
09:00 - 09:40	Welcome Coffee		
09:40 - 09:45	Day 2 Housekeeping		
09:45 - 10:00	Memorial Session for Yuval Hadas, Room: AD123		
10:00 - 10:45	Keynote 3: Oded Cats (TU Delft), Room: AD123, Title: Unravelling Collective and Segmented Travel Patterns, Preferences and Experiences using Individual Mobility Data		<i>Session Chair: Lauren Sager Weinstein (TfL)</i>
10:45 - 11:25	Keynote 4: Brendon Hemily (Independent), Room: AD123, Title: Applying Transit Analytics Research into Practice: Challenges and Perspectives		
11:25 - 11:50	Coffee/ Room reconfiguration		
11:50 - 13:10	Session ID: 201		Session ID: 202 +
	Room: AD1		Room: AD23
	Session Theme: Multi-modal		Session Theme: Customer
	Route: Research		Route: Research
	Session Chair: Erik Jenelius (KTH)		Session Chair: Amer Shalaby (Toronto)
11:50 - 12:10	84 Max T.M. Ng, Meredith Raymer, Hani Mahmassani, Ömer Verbas and Taner Cokyasar	Spatial and Vertical Equity Impacts of Public Transit Network Redesign with Shared Autonomous Mobility Services	122_ Hyungsub Jee, Jan Dirk Schmoecker, Andreas Keler, Kari Watkins, Wilson Lozano and Sean Barbeau
12:10 - 12:30	13 Abubakr Ziedan, Nitesh Shah, Chris Cherry and Candace Brakewood	Complement or compete? The effects of shared electric scooters on bus ridership in Nashville, TN	123_ Riccardo Fiorista, Awad Abdelhalim, Anson F. Stewart and Haris Koutsopoulos
12:30 - 12:50	31 Graham Currie, Alexa Delbosc, Ryan Cox, Mahesha Jayawardhena and James Reynolds	Matching Micromobility and GTFS service level data to explore Transit-Micromobility Interaction	140_ Arkadiusz Drabicki, Oded Cats and Constantinos Antoniou
12:50 - 13:10	72 Hyunsu Park, Shin-Hyung Cho, Inhi Kim, Kitae Jang and Shin Hyoung Park	Is it Possible to Substitute the Taxi Travel Demand to Demand Responsive Transport?	33 Sebastian Seriani, Vicente Aprigliano, Ariel Lopez and Gonzalo Garcia

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13:10 - 13:55 Lunch

13:55 - 15:15		13:55 - 15:15	
Session ID: 211 Room: AD1 Session Theme: Multi-modal Route: Research <i>Session Chair: Graham Currie (Monash)</i>		Session ID: 212 Room: AD23 Session Theme: Customer Route: Practice + Research <i>Session Chair: Avishai Cedar (Israel Inst of Tech)</i>	
13:55 - 14:15	85_ Fumitaka Kurauchi, Ran Du and Toshiyuki Nakamura	13:55 - 14:15	How flexible are travellers under flexible transportation services? - some insights from real-world observations -
14:15 - 14:35	109 Xin Chen, Ying Lu, Jake Whitehead and Mark Hickman	14:15 - 14:35	111 Howard Wong, Joseph Fenwick, Sophie Levi Kallin and Menno Yap
14:35 - 14:55	17 Thiago Carvalho and Ahmed El-Geneidy	14:35 - 14:55	61 Emily Moylan, Durba Kundu and Somwrita Sarkar
14:55 - 15:15	99 Alaa Itani and Amer Shalaby	14:55 - 15:15	92 Anastasios Skoufas, Oded Cats, Matej Cebecauer, Menno Yap and Erik Jenelius
			138 Axelle De Brito, Rémi Coulaud and Martin Trépanier

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15:15 - 15:40 Coffee

15:40 - 17:00		15:40 - 16:00		16:00 - 16:20		16:20 - 16:40		16:40 - 17:00			
Session ID: 221 Room: AD1 Session Theme: Data Governance&Upscale Route: Practice + Research <i>Session Chair: Chloe Davies (TfL)</i>		Session ID: 222 Room: AD23 Session Theme: Customer Route: Research <i>Session Chair: Rabi Mishalani (Ohio State)</i>		30 Daniel Harrington Expanding the National Transit Map: Navigating Challenges and Opportunities		43 Shahrom Sohi, Sri Harikrishnan, Axel Polleres and Verena Dörner The Potential of Open Data in The Railway Domain		151 Joseph Wright, Yihui Wang and Taku Fujiyama Utilising signal operation records for railway junction dispatching- an offline reinforcement learning framework		95 Bastián Henríquez-Jara, Jacqueline Arriagada, Alejandro Tirachini and Marcela Munizaga The Effects of a Real-Time Public Transport Information App on Travel Behaviour, Traffic Levels and the Environment	
		52_ Elisa Maria Tirindelli and Daniel Reck Estimating origin-destination matrices with sparse seed matrices		4 Menno Yap, Howard Wong and Oded Cats Passenger Valuation of Interchanges in Urban Public Transport		78_ David Arquati and Liam McGrath Panning for gold: Identifying opportunities for public transport interventions through machine learning and appraisal automation					

18.30 - 21.00 **Evening Reception (at London Transport Museum in Covent Garden) inc Speech by Lauren Sager Weinstein (TfL)**

[Link to Google Map](#)

Day3 Agenda

Venue: University College London (Roberts/Engineering Front Building)

[Link to Google Map](#)

Wednesday 03 July

08:30 - 09:00 Check in

09:00 - 09:45 **Keynote 5: Marcela Munizaga (Univ of Chile), Room:G06, Title: The Value of Disaggregate Data: Exploring Possibilities from Santiago Transit Data** Session Chair: Nigel Wilson (MIT)

09:50 - 11:10		Session ID: 301 Room: G06 Session Theme: Operation and Management Route: Practice + Research Session Chair: Nigel Wilson (MIT)		Session ID: 302 Room: 106 Session Theme: Equity and Accessibility Route: Research Session Chair: Zhenliang Ma (KTH)		+ Session ID: 303 Room: G08 Session Theme: Network design Route: Research Session Chair: Candace Brakewood (Tennessee Knoxville)	
09:50 - 10:10	5 Laura Kolcheva, Antoine Legrain and Martin Trépanier	Optimizing synchronization strategies in a public bus system with AVL and smart card data	48_ Yuan Qin, Yan Cheng and Sitao Wang	Exploring the change in station catchment area after opening new urban rail transit lines by using cellular signalling data	82 Rabi Mishalani, Mark Mccord, Aijing Chen and Hyunhwa Kim	Capturing Terminal Carryover Passenger Movements when Estimating Transit OD Flow Matrices using APC Data: Method and Impact on Results	
10:10 - 10:30	9 Konstantina Argyropoulou and Ioannis Lefas	Innovative Multimodal Traffic Management and Response Plan: A Case Study of Attiki Odos Motorway	51_ Joanne Yuh-Jue Lin, Erik Jenelius, Matej Cebecauer, Isak Rubensson and Cynthia Chen	Equity of Public Transport Crowding Exposure: Stockholm Before, During and After the Pandemic	108 Satoshi Sugiura, Kam-Fung Cheung, Michael Bell, Hitomi Nakanishi, Fumitaka Kurauchi, Supun Perera and Yogi Vidyattama	Urban transit network design using spanning tree: A case study of Canberra transit network	
10:30 - 10:50	54 Mehdi Baali, Christine Buisson, Rémi Coulaud and Mattéo Guillemard	Impact of passenger load on disruption probability in suburban railway services.	59_ Zaima Tasneem and Yili Tang	Spatial impacts of on-demand transit service on neighborhood economy and ridership	152 Fangyi Ding, Yan Tang, Yamin Wang and Zhan Zhao	Analyzing the Impact of Network Expansion on Metro Ridership Dynamics: Insights from Shanghai Metro	
10:50 - 11:10	114 Shin-Hyung Cho, Donghwa Shin and Jaemin Hwang	Determining the Logistic Facility Locations for Freight on Transit incorporating Genetic Algorithm	124_ Riccardo Fiorista, Dimitris Michailidis and Fernando P. Santos	Spatio-Temporal Access Equality Analysis of Public Transit Networks	83 Mark Mccord, Rabi Mishalani and Harsh Shah	Using Bus-based Video Imagery to Monitor VMT on Urban Roadway Networks: Approach and Evaluation	

Transit Data 2024



11:10 - 11:40 Coffee

	++ Session ID: 311 Room: G06 Session Theme: Prediction + ML Route: Practice+Research Session Chair: Kelly Yili Tang (Western)	++ Session ID: 312 Room: 106 Session Theme: Equity and Accessibility Route: Practice + Research Session Chair: Yan Cheng (Tongji)	++ Session ID: 313 Room: G08 Session Theme: Fare and Customer Route: Research Session Chair: Adrian McMullan (TfL)
11:40 - 13:20			
11:40 - 12:00	47_ Manuel Sánchez Torrón, Rubén Artime Torres, Miguel Picornell Tronch, Javier Burrieza-Galán, Aiga Stokenberga and Ellin Ivarsson A methodology for monitoring public transport demand from a combination of smart card data and mobile network data: application to three Latin American cities.	18 Vicente Aprigliano, Sebastian Seriani, Catalina Toro and Gonzalo Rojas Urban Influences on Mobility Patterns: Analyzing the Impact of Built Environment and Sociodemographic Factors in Valparaíso, Chile	3 Andrés Fielbaum On the relationship between free public transport, stop spacing, and optimal frequencies
12:00 - 12:20	10_ Zhenlin Qin, Pengfei Zhang and Zhenliang Ma LingoTrip: Spatiotemporal Context Prompt in Large Language Model for Individual Trip Prediction	25 Gregory Newmark Assessing GTFS Spatial Accuracy	12 Abubakr Ziedan, Candace Brakewood, Luiz Lima and Ashley Hightower The app or the cap? Which fare innovation affects bus ridership?
12:20 - 12:40	65 Qianyu Chen, Justin Yiu and Fraser Kennedy Learning to Predict Bus Arrival Time Based on Spatial-Temporal Analysis and Deep Learning	8 Sarith Kt, Trupti Mishra and Rangan Banerjee Balancing the Scales: A Methodological Framework for Transport Equity in Mumbai City	45 Hanne Rognebakke, Ola Haug and Magne Aldrin Statistical model of incomplete automated passenger counts (APC) in public transport.
12:40 - 13:00	35 Jonas Jostmann, Zhenliang Ma, Tong Mo and Giancarlo Herring-Calvo Extendable Digital Twin Architecture for Public Transport: A Prototype in Stockholm	132 Anastasios Skoufas, Matej Cebecauer, Wilco Burghout, Erik Jenelius and Oded Cats Assessing school students' contributions to public transport crowding	74 Saehim Kim, Seungbin Im, Minarta Roida and Joonho Ko Savings from integrated public transit fare systems and their spatial equity in Seoul, South Korea
13:00 - 13:20	64 Alex Drake, Menno Yap and Fraser Kennedy Predicting Bus Occupancy from real-time ticketing data using spatial-temporal analysis and machine learning	118 Howard Wong and Ed Manley Comparing the spatiotemporal variation of public transport connectivity between cities using origin-destination-based measures	86 Erika Ehmsen, Alan Rowe and Jeremy Dalton Capitol Corridor Tap2Ride: Rolling out contactless fare payments on Amtrak's Northern California commuter route, the first U.S. intercity passenger rail line to accept riders' bank cards onboard

13:20 - 14:10 Lunch

14:10 - 15:50		14:10 - 14:30		14:30 - 14:50		14:50 - 15:10		15:10 - 15:30		15:30 - 15:50	
Session ID: 321 Room: G06 Session Theme: Prediction + ML Route: Research <i>Session Chair: Sandra Weddell (TfL)</i>		Session ID: 322 Room: 106 Session Theme: Equity and Accessibility Route: Research <i>Session Chair: Howard Wong (TfL)</i>		Session ID: 323 + Room: G08 Session Theme: Fare and Customer Route: Research + Practice <i>Session Chair: Sebastian Seriani (Pontifical Valparaiso)</i>		2 Kah Yong Tiong, Zhenliang Ma and Carl-William Palmqvist Evaluation Method for Data-driven Train Delay Prediction Models		26 Gregory Newmark The Equity Implications of Bus Cancellations in Baltimore		11_ Yuanyuan Wu, Alex Markham, Leizhen Wang, Liam Solus and Zhenliang Ma Data-Driven Causal Behaviour Modelling from Trajectory Data: A Case for Fare Incentives in Public Transport	
55 Tara Saeidi, Babak Mehran and Ahmed Ashraf Estimating Transit Passenger Alighting Counts by Optimizing Symmetry through a Double DQN Clustering Framework		21 Jing Guo and Candace Brakewood Analysis of spatiotemporal transit accessibility and transit inequity of essential services in low-density cities, a case study of Nashville, TN		16_ Marianthi Kallidoni, Jesper B. Ingvardson and Otto A. Nielsen Estimating public transport pricing elasticities from smartcard data in the Copenhagen region		131 Kwangho Baek and Alireza Khani Changes in Pre- and Post-Pandemic Transit Commute Trips: Findings from Integrating Smart Card Data and Passenger Surveys with Machine Learning Models		145 Amelia Baum, Joseph Rodriguez and Haris Koutsopoulos Exploring the Effect of Duty Characteristic Desirability on Absenteeism and Work Satisfaction of U.S. Bus Drivers		144 Jiahao Wang and Amer Shalaby Deriving Insights from Transit Rider Messages through Simultaneous Topic-Based Sentiment Identification using Large Language Models	
133 Frida Carlvik, Peter T. Torstensson and Carl-William Palmqvist Tackling spatial uncertainties in satellite-based monitoring of railway infrastructure - a case study on the Iron Ore Line in northern Sweden		73 Abu Sayed, Roman Tilly, Thomas Buder, Fabian Schwarzenberger, Markus Klose, Nikola Bešinović, Erik Schubert and Niklas Werner Assessing Reachability of Multimodal Public Transport Stops Using a Novel Reachability Metric		15 Julia Bickel, Renate van der Knaap, Maxim Meijers and Niels van Oort Post-pandemic bus passenger demand pattern clustering to match supply and demand		128 Awad Abdelhalim and Michael Leong Transforming Open-Ended Customer Feedback into Insights with a Transit-Specific Language Model		57 Ka Kee Alfred Chu, Victor Nunzi and Julien Douville Assessing fare levels in a zonal fare structure using model-enhanced mobility survey and smart card data			
15:50 - 16:10 Closing by Taku Fujiyama (UCL) and CASPT/Transit Data 2025 Team, Room: G06											

Day4 Agenda

Venue: University College London (Roberts/Engineering Front Building)

[Link to Google Map](#)

Thursday 04 July

09:30 - 11:30

Session ID: W1

Room: G06

Session: Workshop: Transport Project Appraisal -Current Methodologies and Future Opportunities-

Lecturer/Panel members: Ryan Taylor (TfL), Peter Jones (UCL), David Metz (UCL)

Technical visits

[For the details, please see the symposium website](#)