

## **AIIT 4TH INTERNATIONAL CONFERENCE**

GREENING THE WAY FORWARD: SUSTAINABLE TRANSPORT INFRASTRUCTURE AND SYSTEMS

19TH - 20TH SEPTEMBER 2024, ROME (ITALY)



September 19-20, 2024 Roma, ACI Building, Via Marsala, 8









www.tisroma.aiit.it

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19TH - 20TH SEPTEMBER 2024, ROME (ITALY)

# **Program**

# Thursday, September 19, 2024

8.30-9.00	Registration			
9.00-10.30	Opening Ceremony – Plenary session 1 - Keynote speech - Hall 1			
10.30-11.00		Coffe	e Break	
11.00-13.00	Session 1 – Hall 1 Environmental, social and economic sustainability of transport systems	Session 4 – Hall 2 Road Asset Management and Road Safety Management (1)	Session 7 – Hall 3 Climate Change mitigation and adaptation strategies	Session 10 – Hall 4 Green ports and port-city interaction
13.00-14.00		Lu	ınch	
14.00-16.00	Session 2 – Hall 1  Sustainable urban mobility planning	Session 5 – Hall 2 Sustainable Road Design, Construction Practices and Management (1)	Session 8 – Hall 3  City logistics and urban freight transport (1)	Session 11 – Hall 4  Sustainable Railway Design, Construction and Maintenance
16.00-16.30		Coffe	e Break	
16.30-18.30	Session 3 – Hall 1  Shared mobility and mobility on demand	Session 6 – Hall 2  Human factors and Driving Simulation Studies for Safer Road Infrastructures	Session 9 – Hall 3  Mobility as a Service, Al and big data for transport models and planning	Session 12 – Hall 4  Air transport planning and management, Airp ort Infrastructures and Pavement Management Systems
20.00-22.30	Gala Dinner			



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## Friday, September 20, 2024

9.00-9.30		Registra	tion	
	Session 13 – Hall 1	Session 16 – Hall 2	Session 19 – Hall 3	Session 22 – Hall 4
9.30-11.30	Transport policy	Road Asset Management and Road Safety Management (2)	Public transport	Transport infrastructure and systems analysis
11.30-12.00		Coffee Bi	reak	
	Session 14 – Hall 1	Session 17 – Hall 2	Session 20 – Hall 3	Session 23 – Hall 4
12.00-14.00	City logistics and urban freight transport (2)	Sustainable Road Design, Construction Practices and Management (2)	Multimodal and integrated transport systems	Sustainable Infrastructure Design and Life Cycle Assessment
14.00-15.00		Lunch	າ	
15.00-17.00	Session 15 – Hall 1  Active mobility and micromobility	Session 18 – Hall 2 Safety Strategies for Vulnerable Road Users	Session 21 – Hall 3 Digitalization in transport, Intelligent Transport Systems	-
17.00-18.00	Closing ceremony – Hall 1			
18.00-19.00	Street food aperitif			

For Italian Participants (info on event accreditation for engineers): È in corso la richiesta di riconoscimento di 3 Crediti Formativi per giornata di evento (per un totale di 6 CFP) per ingegneri, rilasciati per il tramite di AIIT in qualità di Provider riconosciuto dal CNI (Parere Ministeriale n. 6777/2015) (cod. CNI 24p457950 e 24p60274). Il riconoscimento dei crediti formativi è subordinato alla verifica della presenza dei partecipanti per tutta la durata dell'intera giornata.

#### **DETAILED PROGRAM**

## Thursday, September 19, 2024

## **Opening Ceremony – Plenary session 1 - Keynote speech - Hall 1** (9.00-10.30)

Chairperson: Nadia Giuffrida, Organizing Committee member

# Welcome address of authorities Introduction

Enrico Pagliari, Conference Chair, Organizing Committee Coordinator

**Keynote speech:** "Navigating the Future: Strengths and Challenges of Emerging Urban Transport Services and Technologies"
Gonçalo Homem de Almeida Correia, TU Delft, Netherlands

#### **Conference Overview**

Michela Le Pira, Conference Chair, Scientific Committee Coordinator

Sessi	on <b>1 – Hall 1</b> (11.00-13.00)	Chairperson
Envir	onmental, social and economic	Nadia Giuffrida
susta	inability of transport systems	
1	Mariano Gallo (R)	Optimal location of refuelling stations for hydrogen-powered freight vehicles: models, methods and case studies
79	Jack Bradbury and Shohel Amin(R)	Exposure of bicyclists to vehicle emissions at bicycle routes of major roads in the UK cities
85	<u>Graham Parkhurst</u>	Automated urban buses: an application of autonomous vehicle technology on route to sustainable development?
88	Nuhamin Gezehagne Assefa, <u>Martina Carra(R)</u> , Roberto Ventura, Anna Richiedei, Giulio Maternini and Benedetto Barabino	Assessing Tram-Train feasibility via Multicriteria Approach: The Case of Brescia (Italy)
89	<u>Diana Naranjo</u> , Juan Nicolas Gonzalez, Laura Garrido, Thais Rangel and José Manuel Vassallo	Contribution of New Shared Mobility Services on achieving key sustainability goals
184	<u>José María de Ortuzar de Garate</u> and Miguel de Ortuzar de Garate	Tools for addressing the environmental, social and economic sustainability of transport systems in a metropolitan area, and their application to two road case studies in Biscay

Sessi	on 2 – Hall 1 (14.00-16.00)	Chairperson
Susta	inable urban mobility planning	Riccardo Ceccato
32	Sina Shaffiee Haghshenas, Giuseppe	Evaluating Determinants of Sustainable
	Guido, Sami Shaffiee Haghshenas,	Urban Transportation Development Using
	Vittorio Astarita and Vladimir Simic	the FAHP Method: A Case Study of Calabria
		Region, Southern Italy
54	Lambros Mitropoulos, Andreas	An accessibility-driven method for planning
	Nikiforiadis, Katerina Fotiou, <u>Annie</u>	first and last mile micromobility services
	Kortsari and Georgia Ayfantopoulou	
124	Yuri Calleo, Nadia Giuffrida, Michela	From spatial to visual outputs: Adopting
	Le Pira and Francesco Pilla	Real-Time Spatial Delphi and Text-to-Image
		models for safe school zones
160	<u>Giovanni Calabrò</u> , Michela Le Pira,	Measuring the readiness to become a "30
	Giuseppe Inturri and Salvatore	km/h city"
	Cavalieri	
173	Alessandro Nalin, Margherita Pazzini,	Citizen-science approach for an
	Roberto Battistini, Andrea Simone,	environmental analysis: the case study of
	Valeria Vignali and Claudio Lantieri	university cyclists in Bologna.
198	Atusa Javaheri(R), Sai Sneha	Predictive analysis of parking behavior after
	Channamallu, Sharareh Kermanshachi,	implementation of smart parking system
	Jay Michael Rosenberger, Apurva	
	Pamidimukkala, Chen Kan and Greg	
	Hladik	
203	Vincenza Torrisi, <u>Pierfrancesco</u>	Modeling network-based accessibility to
	<u>Leonardi</u> and Matteo Ignaccolo	analyze the transport network vulnerability:
		the case study of Catania (Italy)

Sessi	on <b>3 – Hall 1</b> (16.30-18.30)	Chairperson
Share	ed mobility and mobility on demand	Graham Parkhust
19	Pavlos Tafidis, Nadia Giuffrida and	Empirical Evidence and Policy Insights from
	Francesco Pilla	Smart Mobility Hubs Implementation for
		Public Office Staff in Dublin City
20	Sam Reker, Raffaele Alfonsi, Gabriele	The potential of micromobility in the Italian
	Giustiniani and Trigaluh Prastyana Tika	cities of L'Aquila, Palermo, and Florence
43	Eleni Karakitsou, <u>Panagiotis G.</u>	A first investigation of perceived safety
	Tzouras, Ioannis Chatziioannou and	spatial patterns in Athens, Greece
	Konstantinos Kepaptsoglou	
72	Sapan Tiwari(R), Samarth Ghoslya and	A Cost-Based Assignment of Demand-
	Janak Parmar	Responsive Transportation: A Comparative
		Study with Public Transportation
		Alternatives

117	Sapan Tiwari(R)	Analyzing Ride-Hailing Services Utilization in
11/	<u>Sapan nwantny</u>	, 3
		Greater Melbourne: Influences of Service
		Area and Vehicle Capacity
174	Simona De Bartolomeo, Michele	An equity parking area location model for
	Ottomanelli and Leonardo Caggiani	the transition from free-floating to station-
		based shared micromobility systems
201	Gabriele D'Orso(R), Vincenza Torrisi,	Transforming travel experience in low
	Pierfrancesco Leonardi, Marco	density areas: evidence from a DRT pilot
	Migliore, Matteo Ignaccolo and	study and simulation model
	Riccardo D'Angelo	

	on 4 – Hall 2 (11.00-13.00)	Chairperson	
	Asset Management and Road Safety	Cristina Oreto	
Man	agement (1)		
15	Manuel De Rose, Joel R.M. Oliveira,	A study on the development of	
	Cesare Sangiorgi and Rosolino Vaiana	microsurfacing surface performance under laboratory-scale traffic simulation	
25	Salvatore Bruno, Giuseppe Cantisani,	Innovative Road Repair: Pothole	
	Antonio D'Andrea, Paola Di Mascio,	Maintenance through Advanced Robotic	
	Nicola Fiore, Giuseppe Loprencipe,	Systems	
	Laura Moretti, Carlo Polidori and	Systems	
	Giulia Del Serrone		
29	Brayan Gonzalez-Hernandez, Sevket	Validation of a simplified road assessment	
23	Oguz Kagan Capkin, <u>Davide Shingo</u>	programme methodology	
	Usami and Luca Persia	programme methodology	
60	Junxiang Xu(R) and Divya Jayakumar	Reevaluating Network Connectivity: The	
00	Nair	Critical Role of the Relative Size of Largest	
	Ivali		
82	Civarana Cantinani Dagla Balvas	Connected Component (RSLCC)	
82	Giuseppe Cantisani, <u>Paolo Peluso</u> ,	A GIS-based methodology to observe driver	
	Andrea Pompigna and Giulia Del	behaviors and infrastructure characteristics	
	Serrone	through operating speeds	
101	<u>Sara Siverio</u> , Benedykt Szozda, Manuel	Integrating Floating Car Data in a Pavement	
	Ponzoni, Giulio Maternini and	Management System: Some Empirical	
	Benedetto Barabino	Evidence from Brescia (Italy)	
105	Eugenio Mariani, Lorenzo Paolo	Interpretation of pavement skid resistance	
	Ingrassia, Renato Angeloni, Lucrezia	based on the advanced analysis of surface	
	Gorgoglione, Paolo Clini and Francesco	texture	
	Canestrari		

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	n <b>5 – Hall 2</b> (14.00-16.00)	Chairperson
	nable Road Design, Construction	Giuseppe Cantisani
Practio	ces and Management (1)	
33	Giulia Del Serrone, Paolo Peluso,	Photovoltaic pavements in urban areas:
	Stefano Nichele and Laura Moretti	more benefits or drawbacks?
129	Giulia Del Serrone, Giuseppe Cantisani	"Smart Road" technologies and systems
	and Paolo Peluso	for improving road infrastructure
		performances
149	Miguel de Ortuzar de Garate and José	The underwater Lamiako tunnel project in
	María de Ortuzar de Garate	Bilbao estuary
166	<u>Vladan Ilić</u> , Dejan Gavran, Sanja Fric,	Addressing aquaplaning challenges on
	Filip Trpčevski, Stefan Vranjevac, Miloš	wide motorway pavements: A review of
	Lukić and <u>Nikola Milovanović</u>	pavement superelevation methods in
		poorly drained zones
231	Shuvrajit Biswas(R), Avesh Ali, Gd	The effect of basic oxygen furnace steel
	Ransinchung Rn and Sham S	slag and recycled concrete aggregate on
	Ravindranath	the mechanical properties of asphalt
		concrete
234	Galileo Tamasi, Graziano Tabelli,	A methodology for the analysis of Safety
	Stefano Zampino, Emanuele Renzi,	Management Systems for road
	Vincenzo Porretto and Nicola Sacco	infrastructures and related analysis
		following road accidents near road
		construction sites
238	Rosa Veropalumbo, <u>Cristina Oreto</u> ,	Effects of marine microplastics on the
	Nunzio Viscione, Francesca Russo and	mechanical, chemical and environmental
	Camilla Consalvo	performance of bituminous binder for road
		asphalt pavements

	n <b>6 – Hall 2</b> (16.30-18.30) n factors and Driving Simulation Studies	Chairperson Stefano Zampino
for Sa	fer Road Infrastructures	
65	Antonios Trakakis(R), Konstantinos Apostoleris, Basil Psarianos and Stergios Mavromatis	Speed on European Interchange Ramps: A Completed Correlation among Greek, Dutch & Russian Drivers
119	<u>Natalia Distefano</u> and Salvatore Leonardi	Sustainable Mobility: A Comparative Analysis of Vehicle Interactions Involving Cars, E-Scooters, and Bicycles at Urban Intersections
144	Stefano Zampino and Francesca Zampino	Use of mobile devices and hands-free technologies: state of the art and insights into drivers' behaviour
162	Alessandro Calvi, Fabrizio D'Amico and Andrea Vennarucci	A Novel Co-Simulation Platform for Driving Performance Evaluation of Various Road Users

172	Giovanni Bruno, Paolo Lorenzini, Elisa Gambaretto, <u>Alberto Portera(R),</u> Francesco Angioi and Andrea Spoto	Driving behaviors in immersive Virtual Environments: a study on the role of cognitive workload, sense of presence and simulation sickness in the CAVE laboratory.
210	<u>Xoliswa E. Feikie</u> and Jacob Adedayo Adedeji	The Significance of Informal Communication for Road User Safety from Pedestrians' Perspective

	on 7 – Hall 3 (11.00-13.00)	Chairperson
Strate	ate Change mitigation and adaptation egies	Angela Carboni
11	Cristina Bircu, <u>Francesco Bruzzone</u> , Federico Cavallaro, Alessandro Indelicato and Silvio Nocera	Reducing road congestion and air pollution with ICT-based platooning
28	<u>Luca D'Acierno(R)</u> , Luca De Matteis and Rosario Stefanelli	Adoption of hydrogen in railway traction: Opportunities and limits in the case of non- electrified railway lines
58	<u>Funda Ture Kibar,</u> Yakup Betus and Hediye Tuydes-Yaman	Defining Transportation Systems Resilience under Natural Disasters: a bibliometric analysis based on mode, metrics, and scope
155	Angela Carboni and Itir Coskun	Methods for assessing the role of traffic management in mitigating the environmental impacts of urban road transport: an overview
178	Mirjana Grdinić Rakonjac(R) and Marko Lučić	Electric vehicle selection with easy applicable MCDM methods
208	<u>Paolo Lazzeroni</u> and Angela Carboni	Investigating smart charging options for EVs in multi-family residential buildings
239	Cristina Oreto, Rosa Veropalumbo, Nunzio Viscione, Francesca Russo and <u>Giuseppe D'Addio</u>	Environmental sustainability of recycling alternative secondary aggregates for cold recycled binder layers of road asphalt pavements

	sion 8 – Hall 3 (14.00-16.00)  I logistics and urban freight transport	Chairperson Rodrigo Tapia
14	Ish Kumar, <u>Lakshman R(R)</u> and Bhaskar Gowd Sudagani	Impact of Truck Access Restrictions on Freight Operations and Driver Quality of Life in Urban India
30	Bhavani Shankar Balla, Prasanta Sahu and Agnivesh Pani	A Model Typology Approach for Improving Spatial Transferability of Freight Demand Estimates: Case Study of Geographically Dissimilar Regions in India

78	Salar Salehi, Ken Koshy Varghese, Lory Michelle Bresciani Miristice and Guido Gentile	Path Choice Calibration Across Urban Road Networks using Routing Services
95	<u>Daniela Castaño Herrera</u> , Juan Gomez, Lucía Tapiador, Jose Manuel Vassallo and Laura Garrido	Connecting Purchases and Mobility: How does E-commerce impact people's mobility habits?
99	<u>Patricija Bajec</u> , Halyna Pivtorak and <u>Libor Svadlenka</u>	Research on Last-Mile Crowdshipping: Identification of Barriers and Enablers Impacting Wilingness-To-Work as a crowdshipper Across Diverse Groups and Countries
146	<u>Tiziana Campisi(R)</u> , Antonio Russo, Socrates Basbas, Efstathios Bouhouras and Giovanni Tesoriere	Walkability and pick-up points in the Catania Metropolitan Area, Italy: Lessons learned

Sessi	on <b>9 – Hall 3</b> (16.30-18.30)	Chairperson
Mobi	lity as a Service, AI and big data for	Fabio Borghetti
trans	port models and planning	
46	Camille Vedel, Stefano Fraire and	The impacts of MaaS bundles
	Marco De Divitis	over mobility habits and behavioral changes
76	Marco Petrelli, Gemma Andrea,	In depth analysis of the speed limits in the road
	Livia Mannini and Alessandra	network of Lazio region
	Renna	
118	Roberto Ventura(R), Giulio	Comparing Econometric and Machine Learning
	Maternini, Alessandro Olivo, David	Models for Predicting Fare Evasion Frequency: A
	Vetturi and Benedetto Barabino(R)	Case Study in Cagliari (Italy)
135	Vittorio Astarita, Sami Shaffiee	A Bibliometric-Based Literature Review on
	Haghshenas, Sina Shaffiee	Artificial Intelligence in Disaster Response
	Haghshenas, Giuseppe Guido and	
	Giulia Martino	
199	Hao Wang, Sai Sneha	Economics of smart parking: predictive analytics
	Channamallu, Sharareh	in optimizing urban parking revenue
	Kermanshachi, Jay Michael	
	Rosenberger, <u>Apurva</u>	
	Pamidimukkala(R), Chen Kan and	
	Greg Hladik	
218	Francesco Piras(R), Eleonora	Drivers and barriers of Mobility-as-a-Service:
	Sottile, Italo Meloni and Alice	insights from stakeholders of a middle-size
	Scalas	Italian city
229	Corrado Rindone and Antonino	Mobility as a Service towards sustainability:
	<u>Vitetta</u>	pilot experiments and user choice analysis

Sessio	on 10 - Hall 4 (11.00-13.00)	Chairperson
Green	ports and port-city interaction	Elen Twrdy
12	Fabio Hector Echeverry Andrade,	The threat of illegal drug trafficking in
	Ruth Garcia-Llave and Ciro Jaramillo	European ports: meta-analysis of 22 case
	Molina	studies.
152	Guruviswas Jbv(R), Sujoy Sarkar,	Enhancing port performance assessment
	Naina Gupta, Pavan Kumar	through new performance indicators and
	Machavarapu and Sridharan N	MCDM techniques
158	Elena Cocuzza, Michela Le Pira,	Towards a sustainable governance of port
	Matteo Ignaccolo and Giuseppe	systems and port cities: a stakeholder
	Inturri	engagement approach
171	Antonio Polimeni and <u>Orlando Marco</u>	Methods for evaluation of factors affecting
	<u>Belcore</u>	time of ships in container ports: analysis of
		relevant attributes
189	Francesco Russo and Giuseppe	Methods for the evaluation of factors
	<u>Musolino</u>	affecting port generations
213	Claudia Caballini, Antonio Russo,	The evolution of maritime passenger
	Erika Olivari and <u>Tiziana Campisi(R)</u>	transport in the LigurianTyrrhenian basin of
		Italy: some considerations regarding their
		centrality
216	Elena Cocuzza, Elen Twrdy and	Analysis of the Eastern Sicilian Sea Port
	Matteo Ignaccolo	System

Sessio	on 11 - Hall 4 (14.00-16.00)	Chairperson
Sustai	inable Railway Design, Construction and	Ignacio Villalba Sanchis
Maint	enance	
2	Ignacio Villalba Sanchis, Adrián Márquez Castellano, Ricardo Insa Franco, Pablo Martínez Fernández and Pablo Salvador Zuriaga	DEM analysis of track ballast layer on turnouts: Insights into mechanical behavior and performance optimization
24	Siva Sai Hoshitha Tanimki, Stefano Ricci and Chandra Sekhar Rao Tanimki	Performance Evaluation of Geopolymer Concrete for Railway Superstructure Applications
163	<u>Corrado Rindone</u> and Antonio Russo	Intermediate results for railway capacity evaluation: a network analysis for HSR services in the south of Italy
167	Francesco Russo, <u>Domenico Sgro</u> and Giuseppe Musolino	Modelling dynamic structures of fares in high-speed rail market
186	Francesco Russo, Giuseppe Musolino and Marialuisa Moschella	High-Speed Rail travel demand analysis: pilot experimentation on generation model
227	Aldo La Placa, Francesco Benelli, Giovanni Bianchi, Francesco Freddi and Felice Giuliani	Behaviour of supported and unsupported insulated rail joint under different preload conditions

237	Marco Pasetto and <u>Giovanni</u>	Design Alternatives Assessment for the
	<u>Giacomello</u>	Ground Consolidation Under a Railway Line
		Embankment in Italy

Sessio	n <b>12 – Hall 4</b> (16.30-18.30)	Chairperson	
Air tra	nsport planning and management,	Alessandro Di Graziano	
Airpor	t Infrastructures and Pavement		
Mana	gement Systems		
17	Zvonimir Rezo, Sanja Steiner, Andrea	Aircraft Engine Emissions Reporting	
	Tikvica and Dario Fakleš	Information System Validation	
22	Olja Čokorilo, Srdjan Čokorilo and	A framework for aviation security	
	Lidija Tomić(R)		
104	Stefano Nichele, Laura Moretti and	Statistical analysis of lateral deviation of	
	Paola Di Mascio	aircraft landings on a non-instrumental	
		runway	
132	Alessandro Di Graziano, Eliana	BIM Integrated Airport Pavement	
	Ragusa, Giuseppina Pappalardo and	Management System	
	Emanuele Delfino		
168	Tiziana Campisi(R), Luigi Sanfilippo,	Monitoring and comparing traffic data for	
	Alberto Brignone, Giovanni Tesoriere	the improvement of airport landside	
	and Muhammad Ahmad Al-Rashid	accessibility: the Fontanarossa-Catania case	
		study	
190	Ruggero Pinto, Luca Bianchini	Digital management of airport pavement:	
	Ciampoli and Andrea Benedetto	preliminary achievements on apron areas	

# Friday, September 20, 2024

Sessi	on <b>13 – Hall 1</b> (9.30-11.30)	Chairperson
Trans	sport policy	Giovanni Calabrò
7	Fulvio Morgese, Nadia Giuffrida	Analysis of bike-friendly services for sustainable
	and Michele Ottomanelli	tourism: the case of Apulia region
47	Romain Noël and Alex Coiret	Application of the Lattice Boltzmann Method to
		estimate road capacity decrease depending on
		lane number and flow density
73	Andrea Rosa, Stefania Mauro and	Stakeholders mapping for promoting road-to-
	Serena Cecere	rail modal shift of freight transport
157	<u>Elisabetta Venezia</u>	The elderly mobility and sustainable
		development goals: composite indicators for
		European countries
200	Irina Di Ruocco(R) and Alessio	The HSR Naples-Bari as a driver for sustainable
	D'Auria	rural development of the internal areas between
		Campania and Puglia.
232	Apurva Pamidimukkala(R),	An Empirical Examination of Factors Affecting
	Sharareh Kermanshachi, Jay	Adoption of Alternative Fuel Vehicles
	Michael Rosenberger and Greg	
	Hladik	

Sessi	on <b>14 – Hall 1</b> (12.00-14.00)	Chairperson
City I	ogistics and urban freight transport	Patricija Bajec
(2)		
59	Ish Kumar(R) and Chidambara	A Comparative Evaluation of Freight Strategies
	Chidambara	for Online Business Models in Delhi: A Fuzzy AHP
		and TOPSIS Approach
96	Daniel Mark Vitiello, Patrizia Serra	Assessing greenhouse gas emissions arising
	and Gianfranco Fancello	from intermodal freight transport chains using
		the ISO14083 standard
126	Michela Le Pira(R), Nadia	Exploring the feasibility of Mobility as a Service
	Giuffrida, Rodrigo Tapia, Lóránt	(MaaS) for integrated passenger and freight
	Tavasszy, Gonçalo Correia,	transport through a Delphi survey
	Francesco Pilla, Matteo Ignaccolo	
	and Giuseppe Inturri	
193	Daniel Quiter <u>, Maximilian</u>	Best practices for implementing sustainable
	Engelhardt, Birte Malzahn and	urban logistics – the case of freight
	Stephan Seeck	consolidation for a Berlin industrial area
209	Rodrigo Tapia, Lori Tavasszy,	Designing an Urban Logistics Living Lab.
	Valerio Gatta, Edoardo Marcucci	Experiences from The Hague and Rome
	and Mateo Snoeijenbos	

242	Snežana Tadić, <u>Ljubica</u>	Evaluating barriers to drone application in rural
	Radovanović(R), Mladen Krstić,	areas
	Olja Čokorilo and Miloš Veljović(R)	

	47 11 11 4 4 7 2 2 4 7 2 2 1	
	n <b>15 – Hall 1</b> (15.00-17.00)	Chairperson
Active	mobility and micromobility	Anna Contenti
5	Letizia Appolloni, Maria Vittoria	Improving Walkability for Sustainable
	Corazza and Daniela D'Alessandro(R)	Mobility and Urban Regeneration in Rome
21	Rosita De Vincentis, Stefano Carrese,	Analysis of e-scooters' trajectories in real
	Livia Mannini, Marialisa Nigro, Simone	driving environments
	Sportiello, Roberto Capua and Marco	
	Giangolini	
42	Sevket Oguz Kagan Capkin, <u>Tejas Singri</u>	Impacts of COVID-19 on urban mobility
	Krishnamurthy, Luca Persia, Davide	towards exploring micro-mobility trends in
	Shingo Usami and Brayan Gonzalez-	Rome
	Hernandez	
75	Anna Psarra, Aristomenis Kopsacheilis	A dynamic pedestrian to infrastructure
	and Ioannis Politis	scheme around metro areas. A traffic
		microsimulation study in Thessaloniki,
		Greece.
191	Antonella Nardin, Stefano Carrese,	And then there were three: GIS-based
	Marialisa Nigro and <u>Fabio</u>	analysis of the new three-operator-only e-
	<u>D'Andreagiovanni</u>	schooter sharing system of Rome, Italy
219	Michela Le Pira(R), Matteo	Innovative solutions to promote
	Ignaccolo(R), Giuseppe Inturri and	sustainable micromobility: insights from a
	Elena Cocuzza	literature review within the IN-MOB
		project
225	Ana Trpković(R), Predrag Živanović,	Active Mobility Potentials for Tackling
	Sreten Jevremović, Eleni Anoyrkati and	Youth Post-Pandemic Inactivity
	Vladislav Maraš	

	12 11 112 (2.22 11.22)	
	on <b>16 – Hall 2</b> (9.30-11.30)	Chairperson
Road	Asset Management and Road Safety	Patrizia Serra
Man	agement (2)	
136	Stefano Zampino, Luca Conticini, Alfonso	A Procedure for Network Wide Road
	Montella and Maurizio Mancinetti	Safety Assessment in Italy
139	Steffel Ludivin Tezong Feudjio, Stephen	Traffic Conflict Approach in Road Safety:
	Kome Fondzenyuy, Elvis Chia Ngwah, Jean	A Review of Data Collection Methods
	François Wounba, Davide Shingo Usami	
	and Luca Persia	
161	Michele Pinna, Gianfranco Fancello and	An integrated Road safety analysis for
	Patrizia Serra	urban and suburban black spots
		localization
180	Tevoh Lordswill Ndingwan, Jean François	Assessment and countermeasures
	Wounba, Stephen Kome Fondzenyuy,	selection for safer roads to schools in the
	Steffel Ludivin Feudjio Tezong, Rita	city of Yaoundé: progressive evaluation
	Awasiri Ndonue, Davide Shingo Usami and	using surveys and iRAP methodology
	Luca Persia	
195	Erika Garilli, Federico Autelitano and	The Parma University Campus as major
	Felice Giuliani	trip attractor. Traffic microsimulation for
		modelling vehicle access scenarios.
240	Stefano Raccagni, Roberto Ventura, Giulio	Effects of road characteristics on
	Maternini and Benedetto Barabino	operating speed along the urban road
		network of Brescia (Italy)
236	Galileo Tamasi, Graziano Tabelli, Stefano	Inspection of existing tunnels:
	Zampino, Emanuele Renzi, Erika Garusi,	development of an innovative
	Giuseppe Orsini, Stefano Grimaz(R), Petra	methodology and use of special
	Malisan, Fabio Zorzini and Enrico Del Pin	equipment for technical triage.

Sessi	on <b>17 – Hall 2</b> (12.00-14.00)	Chairperson
Susta	inable Road Design, Construction Practices	Luigi Di Matteo
and I	Management (2)	
48	Marinella Giunta and Giovanni Leonardi	Data-driven track geometry defects
		localization and strategies for preventive
		maintenance: a case study
53	Daniele Soraggi and Gabriele Ivano	Meet me halfway. Genoese
	<u>D'Amato</u>	infrastructure agenda: between
		construction and renovation.
62	Salvatore Antonio Biancardo, <u>Mattia</u>	Rainwater drainage systems solutions
	Intignano, Francesco Abbondati,	for safer transport infrastructures
	Francesca Di Fonzo, Carlo Gualtieri and	
	Gianluca Dell'Acqua	
77	Mohammad Abbasi, Alice Consilvio, Israel	On supporting traffic management
	Alejandro Hernández-González, Paula	decisions according to bridges structural
	Lopez Arevalo and Hamidreza Alavi	health monitoring within a digital twin-
		oriented platform

94	Salvatore Bruno(R), Antonello De Amicis,	Advancing Road Infrastructure: Cross-
	Giuseppe Loprencipe, Simone Orlandini,	Slope Analysis of Road Sections Using a
	Gianmarco Rotondi and Lorenzo Vita	Mobile Mapping System (MMS)
110	Alessandro Corradini, Gianluca Cerni and	Study on skid resistance of road
	Pier Riccardo Porceddu	pavements contaminated by soil fine
		particles
175	Alessandro Marradi, Chiara Mignini,	Damage evolution assessment of
	Alessandro Friani, Arianna Stimilli and	innovative sustainable semi-flexible
	Tullio Caraffa	pavements through Accelerated
		Pavement Testing

Sessi	on <b>18 – Hall 2</b> (15.00-17.00)	Chairperson
Safet	y Strategies for Vulnerable Road Users	Victoria Gitelman
8	Nicholas Fiorentini and Massimo Losa	Evaluating Risk Factors of Severe
		Crashes on Italian Urban Roads through
		novel Safety Performance Function and
		Crash Modification Factors
68	<u>Victoria Gitelman</u>	Evaluating the safety effects of
		infrastructure measures on non-urban
		roads, in Israel
86	Vittorio Ranieri, Nicola Berloco, Stefano	Exploring relationships between crash
	Coropulis, <u>Paolo Intini</u> , Margherita Pazzini,	patterns and vehicle fleet age: are there
	Claudia Brasile, Valeria Vignali and Andrea	empirical evidences in favour of partial
	Simone	driving automation?
106	Davide Shingo Usami, Brayan Gonzalez	Road safety capacity building in
	Hernandez, <u>Manuel Merolla</u> , Steffel	Cameroon: train-the-trainers approach
	Ludivin Feudjio Tezong and Luca Persia	
123	Irena Ištoka Otković, Aleksandra Deluka-	Analysis of influencing parameters on
	Tibljaš, Sanja Šurdonja and Tiziana Campisi	children's crossing speeds at non-
		signalized crosswalks using neural
		network models
128	Julia Maria Slowy, Edoardo Mazzia,	A human rights-based approach for
	Raffaele Alfonsi and Trigaluh Prastyana	promotion of inclusive and safe urban
	Tika	transport – Case study of Integrated
		Corridor Management (ICM) Dhaka
		North Project in Bangladesh

Session 19 – Hall 3 (9.30-11.30)		Chairperson
Publi	c transport	Silvio Nocera
37	Gino D'Ovidio, Maximilian Di Pasquale and <u>Lorenzo Mario D'Angelo</u>	A novel approach operative-TCO based to assess the LPT company costs of hydrogen-fueled buses use
50	Maria Vittoria Corazza and Matthew Robinson	Best practice for water management and saving for bus operators
83	Alessandro Nalin, Andrea Simone, Luca Bellinato, Valeria Vignali and Claudio Lantieri	GIS-based analysis to locate electric vehicle charging stations in an urban environment: a case study in Bologna, Italy
116	Fabio Borghetti, Beatrice Bianchini(R), Andrea Strada and Michela Le Pira	Can tramways be used for freight transport in urban areas? A case study in the city of Milan in Italy
159	Nimish Laddha(R), Dr.Prasanth Vardhan and Dr. Pavan Kumar Machavarapu	Innovative Urban Planning: A Heuristic Approach Using the Simulated Annealing Algorithm to Optimize the Land Use Allocation for Enhancing Public Transportation Ridership
169	<u>Isabel Santoro</u> , Fabio Borghetti, Elena Ratto and Stefano Rossi	How to measure the impact of electronic ticketing systems in local public transport?  An Italian case study
182	Michelangelo Fusi and Michela Tiboni	The new tram renaissance in Italy: an evaluation from an urbanistic perspective

	on <b>20 – Hall 3</b> (12.00-14.00)	Chairperson
Multi	imodal and integrated transport	Elena Cocuzza
syste	ms	
18	Giuseppe Salvo, <u>Alessandro Emilio</u>	Multimodality between micromobility and
	Capodici(R) and Luigi Sanfilippo	public transport services: different policies
		and practices in European cities
36	Valentina Costa and Ilaria Delponte	From stand-alone local accessibility
		enablers to integrated first-mile solutions:
		the role of DRT services within Beigua-SOL
		and Arroscia Valley Ligurian Internal Areas.
55	Eleni Kougia, Christos Karolemeas,	Modeling the spatial variability of the
	Panagiotis Tzouras, Lambros	willingness to use carsharing services in
	Mitropoulos(R) and Konstantinos	urban areas
	Kepaptsoglou	
67	Valentina Costa, Federico Campanini	Shared practices and experiences of
	and Ilaria Delponte	University Mobility Management. Exploring
		scalability at the municipal level
87	Annalisa Zoli, Margherita Pazzini,	Users' preferences on bike-train
	Valeria Vignali, Andrea Simone,	intermodality: what can induce travelers to
	Massimo Gaspardo Moro, Katia	use this type of intermodal transport?
	Raffaelli and Claudio Lantieri	

130	Pietro Manenti, <u>Fabio Borghetti</u> , Laura Ferretto and Benedetto Barabino	How to promote and implement Mobility as a Service? An Italian survey to learn about the propensity of users
228	Giuseppe Musolino and <u>Francesco</u> <u>Russo</u>	Mobility as a Service towards sustainability: pilot experiments and evaluation methods

Sessi	on <b>21 – Hall 3</b> (15.00-17.00)	Chairperson
Digite	alization in transport, Intelligent	Michela Bonera
Trans	sport Systems	
38	Carla Giaume, Sofia Pechin, Tito	Urban Vehicle Access Regulation As A Mean
	Stefanelli and Cosimo Chiffi	To Improved Accessibility And Quality Of Life
52	Zahra Lahijanian, Natalia Isaenko,	Empirical Analysis of Traffic Patterns:
	Gaetano Fusco and Chiara	Leveraging Machine Learning Techniques for
	Colombaroni	In-Depth Insights
151	Francesco Deflorio, Angela Carboni,	Observing user perception and usage of
	Federica Cossu and Francesco Ciro	ADAS from a survey in Italy
	Scotto	
179	Sai Sneha Channamallu(R), Sharareh	Cluster-based analysis of parking
	Kermanshachi, Jay Michael	satisfaction and strategies
	Rosenberger, Apurva Pamidimukkala	
	and Greg Hladik	
202	Deema Nabeel Almaskati(R), Apurva	A review of first responders and
	Pamidimukkala, Sharareh	autonomous vehicles
	Kermanshachi, Jay Michael	
	Rosenberger and Ann Foss	
204	Vincenza Torrisi, Giovanni Calabrò,	Exploring the reliability of Floating Car Data
	Giuseppe Inturri, Salvatore Cavalieri	(FCD) for traffic prediction applications
	and Matteo Ignaccolo	

Sessio	<b>n 22 - Hall 4</b> (9.30-11.30)	Chairperson
Trans	port infrastructure and systems analysis	Enrico Pagliari
235	Galileo Tamasi, Graziano Tabelli,	VISIVIA research project: set-up of the VISIT
	Stefano Zampino, Emanuele Renzi,	(Visual Inspection for Safety-deficit
	Giuseppe Palermo, Luca Conticini,	Identification and Triage) methodology and
	Stefano Grimaz, Petra Malisan(R),	use of equipped vehicles for inspection of
	Fabio Zorzini and Enrico Del Pin	existing roads
71	Masoud Saljoqi, Riccardo Ceccato,	Network-level analysis of the effects of
	Gregorio Gecchele, Riccardo Rossi	drivers' preferences toward driving behavior
	and Massimiliano Gastaldi	of Automated Vehicles: a microsimulation
		study on a highway segment
214	Nadia Giuffrida, Salvatore Viscio and	State of the art on mapping tools in the
	Mario Binetti	context of CCAM and Smart Infrastructure

223	Enrico Pagliari, Stefania Balestrieri, Eugenia Ancidoni and Mariano Iervolino	A new methodology based on Artificial Intelligence for road infrastructure monitoring, with a special focus on pedestrian crossings
233	Sai Sneha Channamallu(R), Deema Almaskati, Sharareh Kermanshachi and Apurva Pamidimukkala	Machine Learning Insights into AV Crash Dynamics: Predicting Injury Outcomes
241	Giovanni Mantovani	The Tram Renaissance in Rome, 1983 - 2024

Caar's	Continue 22 Hall 4 (42 00 44 00)		
Session 23 - Hall 4 (12.00-14.00)		Chairperson	
Sustainable Infrastructure Design and Life		Luca Tefa	
Cycle	Assessment		
13	Beatrice De Pascale, Piergiorgio	A Comparative life cycle-based decision-	
	Tataranni, Alessandra Bonoli and	making framework for road pavement	
	Claudio Lantieri	structures incorporating recycled and	
		artificial aggregates.	
34	Giulia Del Serrone, Gennaro Riccio	Life cycle assessment of prestressed	
	and Laura Moretti	concrete railway sleepers	
74	Salvatore Bruno, Cristiano Fustaino,	Comprehensive Analysis of Adherence in	
	Giuseppe Loprencipe and Lorenzo	Stone Pavements	
	<u>Vita</u>		
81	Maria Luisa Tumminello, Nazanin	Towards smart and sustainable road	
	Zare, Elżbieta Macioszek, Anna Granà	intersection design embedding connected,	
	and Tullio Giuffrè	cooperative and automated vehicles	
226	Griselda López Maldonado, <u>David</u>	Analysis of the relationship between road	
	<u>Llopis-Castelló(R)</u> , Sara Moll	geometric design and disengagements in	
	Montaner and Víctor Manuel Ramos	SAE2 level vehicles	
	Meléndez	SALZ IEVEL VEHICLES	

## **Closing Ceremony – Hall 1** (17.00-18.00)

Chairperson: Angela Carboni, Organizing Committee member

## **Awards ceremony**

Michela Le Pira, Conference Chair, Scientific Committee Coordinator

Closing remarks from authorities and TIS ROMA 2024 organizing committee Enrico Pagliari, Conference Chair, Organizing Committee Coordinator

## **Gala Dinner**

# Thursday, September 19, 2024

# at "Palazzo Montemartini"



Largo Giovanni Montemartini 20 - 00185 Rome - Italy



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