

12-16 October 2020

Background and Objective:

Asia needs a large number of high-quality infrastructure development projects to catalyze its economy and improve the quality of life. Asian countries are seeking policy measures for attracting private sector investment in transport infrastructure. The COVID-19 pandemic's significant impact on cities and transportation networks has given rise to the urgent need for interdisciplinary research addressing human mobility, infrastructure, supply chains, logistics, and integrated mobility models.

The Asian Development Bank Institute (ADBI), in association with the Center for Sustainable Development and Global Smart City, and Chubu Institute for Advance Studies at Chubu University, Japan will host a virtual conference on Transport Infrastructure Development, Spillover Effects and Quality of Life on 12-16 October 2020. To address the emerging research topics, ADBI in association with WCTR Society formed in 2019 a Special Interest Group (SIG) on High-Speed Rail: Policy, Investments and, Impacts (WCTRS-SIG: A4). This conference will also provide a forum for members of this SIG A4.

The objective of this virtual conference is to enhance capacity and increase knowledge among senior officials and experts on critical issues related to the planning, implementation, and operation of transport infrastructure in Asia, with a special focus on high speed rail (HSR) development. The conference comprises ten sessions in which policy makers, practitioners, and academics can exchange views and share experiences on transport infrastructure projects and their spillover impacts on the economy, environment, society, and the quality of life.

In 2018-2019, ADBI hosted a conference on "Spill-over Effects of High-Speed Railway and Quality of Life" in November 2018 at Tokyo, Japan; and five special sessions on "Transport and Quality of Life" at the 15th World Conference on Transport Research (WCTR) during 26-31 May 2019, at the Indian Institute of Technology (IIT) Bombay, India. Together, the conference and special sessions highlighted critical issues and delivered key messages on the broad research on High-Speed Rail and Quality of Life. ADBI published selected papers in the "Handbook on High-Speed Rail and Quality of Life", released during the Virtual Conference on Transport Infrastructure Development, Spillover Effects, and Quality of Life in March 2020. In the context of Covid-19, ADBI also hosted three webinars on HSR in May-June 2020.

Organizers: ADBI, Chubu University, WCTRS SIG A4

Supporting organizations: MLIT, JICA, JARTS, JR East, NHSRCL

Conference Co-chairs: KE Seetha Ram and Y Hayashi;

Secretariat: Ayushman Bhatt, Noriko Nogami (ADBI); Dr Takeshita, Mayumi Takeuchi (Chubu)

ADBI Events Webpage: https://www.adb.org/news/events/transport-infrastructure-development-spillover-effects-quality-in-life

Participants/Registration:

https://us02web.zoom.us/webinar/register/WN_MKnexloxSnmA6RxFdbjS6g

Output: Edited Volume by ADBI Press



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Conference Schedule

Time – JST (hr:mm)	Day 1 12 October 2020 Monday	Day 2 13 October 2020 Tuesday	Day 3 14 October 2020 Wednesday	Day 4 15 October 2020 Thursday	Day 5 16 October 2020 Friday
09:30 to 10:30 (17:30 Vancouver Time(-1 day); 20:30 EST (-1 day) 09:30 Korean Time. 08:30 Chinese/Taipei Standard Time)				Session 4: Competition and Cooperation between Air, Rail	
10:30 to 11:30				and Roads for inter- city travel (90 min)	Session 7 Graduate Students Colloquium
11:30 to 12:30					(90 min)
13:30 to 15:30 (20:30 AKDT (-1 day); 10:00 IST; 11:30 Vietnam/Central Indonesian Time; 16:30 NZST)		Session 2: Capacity Building for Engineering, Research, Innovation, and Construction Technology Management in Sustainable Transport Infrastructure Development (90 min)	Club of Rome Symposium (14:00- 16:30 JST)	Session 5: Policy and Innovation for Transport 2.0 - Building a National Network of HSR in Asian Countries (120 min.)	Session 8: Quantifying and Simulating Quality of Life (90 min)
15:30-16:30					
16:30 to 18:30 (09:30 CET; 13:00 IST)	Opening Plenary/Special Session on High- Speed Rail and Quality of Life (90 min)	Session 3: Transport Infrastructure and its Wider Economic Impacts (90 min)		Session 6: Transport-Urban Interactions (90 min)	Closing Plenary & Emerging Research on High-Speed Rail (90 min)
22:00 to 00:00 (06:00 Vancouver Time; 09:00 EST; 15:00 CET; 18:30 IST)	Session 1: Impacts of COVID-19 on Transport (co-organized with WCTRS COVID-19 Task force) (90 min.)				

Note: The effective duration of sessions are 90 minutes (except session 5), however including the pre- and post-event chat, a slot of around 120 minutes is secured.

olor Codes for Sessions and Session Items			
	Special Opening and Closing Plenary on HSR and QoL		
	Inter-related sessions for HSR, Spill over Effects and QoL		
	Inter-related sessions for COVID-19 impacts on transport and logistics		
	Inter-related sessions for Capacity building and Innovation for transport Infrastructure Development		
	Session Chairs		
	Key note Speakers and Panelist		
	Discussions		
	Paper Presentations		
	Short highlights/comments of Papers already presented in March Virtual Conference		



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Day 1: October 12, 2020 (16:30 to 18:30 JST)

[09:30 CET; 13:00 IST; 14:30 Vietnam time/Central Indonesian Time]

Opening Plenary /Special Session on High-Speed Rail and Quality of Life

S. No.	Time	Paper Title	Speaker/Author(s)
1	16:30 to 16:45 JST	Meeting room opens and pre- event chat	
		Part 1: Welcome Addre	sses (16:45 to 17:05 JST)
2	16:45 to 16:55 JST	Opening Remarks/ Overview of the Conference	Yoshitsugu Hayashi, Chubu University (Transport, QoL and Climate Change)
3	16:55 to 17:00 JST	Welcome by Dean, ADBI	Tetsushi Sonobe, Dean and CEO, ADBI, Tokyo, Japan
4	17:00 to 17:05 JST	Special Keynote presentation	Osamu Ishihara, President, Chubu University, Japan
		Part 2: Special Session on HSI	R and QoL (17:05 to 18:30 JST)
5	17:05 to 17:15 JST	Mechanisms to capture the spill- over effects of transport infrastructure: Land Trust and Spill-over Effects of Infrastructure Investment	Naoyuki Yoshino, Professor Emeritus, Keio University, Japan
6	17:15 to 18:00 JST	Panel Discussion on Transport Infrastructure for Economic and Sustainable Development (45 minutes) Moderator: Chul Ju Kim/ K E Seetha Ram, ADBI	Panelist 1: Achal Khare Managing Director, NHSRCL, India Panelist 2: Werner Rothengatter, KIT, Germany Panelist 3: Yoshitsugu Hayashi, Chubu University Panelist 4: K. N. Satyanarayana, IIT Tirupati, India Panelist 5: Kazuaki Hiraishi, Mitsubishi Research Institute, Japan
7	18:00 to 18:15 JST	Open Discussions/Q&A	
8	18:15 to 18:20 JST	Closing remarks	K E Seetha Ram, ADBI
9	18:20 to 18:30 JST	Post event chat	



12-16 October 2020

Day 1: October 12, 2020 (22:00 to 24:00 JST):

[06:00 Vancouver Time/Pacific Time; 09:00 EST; 15:00 CET; 18:30 IST; 23:00 ACT]

Session 1: Impacts of COVID-19 on Transport (co-organized with WCTRS COVID-19 Task Force)

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S. No.	Time	Paper Title	Speaker/Author(s)
1	22:00 to 22:05 JST	Meeting room opens and pre-event chat	
2	22:05 to 22:15 JST	Opening Remarks/Keynote presentation by Session Chair	Yoshitsugu Hayashi, Professor, Chubu University, Japan ; Co- Chair of WCTRS Covid-19 Task force
3	22:15 to 22:25 JST	A new policymaking framework for addressing the impacts of COVID-19 and future pandemics: PASS approach and its applications	Junyi Zhang, Professor, Hiroshima University, Japan; Co-Chair of WCTRS Covid-19 Task force
4	Roun	dtable Discussion chaired by Junyi Zhang (Profes 22:25 to 23:55 JST	ssor, Hiroshima University)
4.1	22:25 to 22:35 JST	Policy measures for addressing the impacts of COVID-19 in mainland China	Yacan Wang, Huiyu Zhou Beijing Jiaotong University, China
4.2	22:35 to 22:45 JST	Policy measures for addressing the impacts of COVID-19 in Taiwan	Cheng-Min Feng, , National Chiao Tung University, Taiwan
4.3	22:45 to 22:55 JST	Policy measures for addressing the impacts of COVID-19 in India	Senathipathi Velmurugan, CSIR - Central Road Research Institute, India
4.4	22:55 to 23:05 JST	Policy measures for addressing the impacts of COVID-19 in Australia	Hitomi Nakanishi University of Canberra, Australia
4.5	23:05 to 23:15 JST	Policy measures for addressing the impacts of COVID-19 in United States	Giovanni Circella, UC Davis, USA
4.6	23:15 to 23:25 JST	Guidance Note on COVID-19 and Transport in Asia and the Pacific	James Leather, Asian Development Bank
4.7	23:25 to 23:35 JST	Policy measures for addressing the impacts of COVID-19 in Low Income Countries	Holger Dalkmann, CEO Sustain 2030 & Senior Adviser High Volume Transport Program (HVT)
5	23:35 to 23:55 JST	Open Discussion	All Speakers
6	23:55 to 24:00 JST	Closing remarks	



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Day 2: October 13, 2020 (13:30 to 15:30 JST):

[20:30 AKDT (-1 day); 10:00 IST; 11:30 Vietnam/Central Indonesian Time; 12:30 Chinese Standard Timel]

<u>Session 2: Capacity Building for Engineering, Research, Innovation, and Construction Technology</u> Management in Sustainable Transport Infrastructure Development

S. No.	Time	Paper/Presentation Title	Speaker/Author(s)
1	13:30 to 13:45 JST	Meeting room opens and pre-event chat	
2	13:45 to 13:57 JST	Opening Remarks and Session Overview by Session Chair	Sudhir Misra, Professor, IIT Kanpur, India
3	13:57 to 14:09 JST	The Concept of Experimental Platform on Next- Generation Shinkansen Development: Type E956 Shinkansen Test Train named ALFA-X	Koji Asano Director, Advanced Railway System Development Center, JR East, Japan
4	14:09 to 14:21 JST	5G Key Technologies for Intelligent High-Speed Railway	Bo Ai Beijing Jiaotong University, China
5	14:21to 14:33 JST	Artificial Intelligence based Spatial Exploration for Computer-Aided High-speed Railway Alignment Development	Sandeepan Roy, Avijit Maji IIT Bombay, Mumbai, India
		Discussions	
		Title TBC	Invited Discussant: Ashwin Mahalingam Professor, IIT Madras
6	14:33 to 15:15 JST	Estimating Direct, Indirect, and Induced Employment from Highway Construction in India	Vinod Vasudevan, Sudhir Misra, Tanika Chakrobarty, Prasanna Behera, Ayushman Bhatt IIT Kanpur/University of Anchorage, Alaska, USA
7	15:15 to 15:20 JST	Closing remarks	
8	15:20 to 15:30 JST	Post event chat	



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Day 2: October 13, 2020, (16:30 to 18:30 JST)

[09:30 CET; 13:00 IST; 14:30 Vietnam time/Central Indonesian Time]

Session 3: Transport Infrastructure and its Wider Economic Impacts

S. No.	Time	Paper Title	Speaker/Author(s)
1	16:30 to 16:45 JST	Meeting room opens and pre- event chat	
2	16:45 to 17:00 JST	Opening Remarks and Session Overview by Session Chair	Werner Rothengatter, Professor Emeritus, Karlsruhe Institute of Technology (KIT), Germany
3	17:00 to 17:15 JST	Wider Impacts and Spill-over Effects of High-Speed Rail Infrastructure Investments in Europe: The Case of Spain	Angel Aparicio , Professor, Universidad Politécnica de Madrid, Spain
4	17:15 to 17:30 JST	Estimating the Environmental Benefits from Development of High-Speed Rail in Vietnam	An Minh Ngoc, Le Thu Huyen Lecturer, University of Transport and Communication, Vietnam
		Discus	ssions
		Title TBC	Invited Discussant: Michael Wegener, Spiekermann & Wegener Urban and Regional Research, Germany
5	17:30 to 18:15 JST	Assessing the wider economic impacts of transport infrastructure investment with an illustrative application to the North-South High-Speed Railway project in Vietnam	Thi My Thanh Truong, Sybil Derrible, University of Transport Technology Vietnam,
		High Speed Rails and Knowledge Production- A Global Perspective	Ayushman Bhatt, Hironori Kato The University of Tokyo, Japan
6	18:15 to 18: 20 JST	Closing remarks	
7	18:20 to 18:30 JST	Post event chat	



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Day 4: October 15, 2020 (09:30 to 11:30 JST):

[17:30 Vancouver Time (-1 day); 20:30 EST (-1 day); 09:30 Korean Time. 08:30 Chinese Standard Time Standard Time]

Session 4: Competition and Cooperation between Air, Rail and Roads for inter-city travel

S. No.	Time	Paper Title	Speaker/Author(s)
1	09:30 to 09:45 JST	Meeting room opens and pre-event chat	
2	09:45 to 10:00 JST	Opening Remarks & Keynote presentation by Session Chair on: "Air-HSR Competition and Cooperation: with added comments on effects of Covid-19"	Tae Hoon Oum, Professor Emeritus at Saunder School of Business, UBC Canada & President, WCTR Society
3	10:00 to 10:15 JST	Efforts for Optimal Inter-City Modal Split	Sungwon Lee, The Korea Transport Institute, Republic of Korea
4	10:15 to 10:30 JST	What's the impact of Chinese High-Speed Rail on Airline Carbon Emissions?	Jack Strauss, Hongchang Li University of Denver, USA
		Discussions	
		Competition between high-speed rail and air transport in Japan	Shinya Hanaoka Tokyo Institute of Technology, Japan
5	10:30 to 11:10 JST	Sine Qua Non: High-Speed Rail Forms and Functionalities in Intercity and Urban Areas	Eugene Chao University of Pennsylvania, USA
		Does High-Speed Rail has a Spillover Effect on the Mode Shift for Intercity Travel	Zhenhua Chen, Xiaohong Ren, <i>Ting</i> Dan, Wei Wang, The Ohio State University, USA
6	11:10 to 11:15 JST	Closing remarks	
7	11:15 to 11:30 JST	Post event chat	



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Day 4: October 15, 2020 (13:30 to 15:30 JST):

[00:30 EST; 06:30 CET; 10:00 IST; 11:30 Vietnam/Central Indonesian Time; 12:30 Chinese Standard Time; 16:30 NZST]

<u>Session 5: Policy and Innovation for Transport 2.0 - Building a national network of the High</u> <u>Speed Rail in Asian Countries</u>

	wit	h the support of MLIT, JICA, NHSRCL JREast, JAR1	S, RTRI	
S. No.	Time	Title	Speaker/Author(s)	
1	13:15 to 13:30 JST	Meeting room opens and pre-event chat		
		Part 1: Welcome addresses and Keynotes (13:30 -14:00 JST)	
2	13:30 to 13:40 JST	Opening Keynote presentation	Vinod Kumar Yadav (Invited) Chairman & Chief Executive Officer of Railway Board, Ministry of Railways, India	
3	13:40 to 13:45 JST	Policies and Programs to transfer knowledge and experience from Japan to support other countries build HSR	Yasaburo Hikasa Assistant Vice-Minister for International Affairs, Ministry of Land, Infrastructure, Transport and Tourism (MLIT)	
4	13:45-13:55 JST	Programs to assist and develop capacity in Asian countries to build HSR	Kenichi Yamamoto Director General, JICA	
F		cussion: Policy and Innovation for Transport 2.0 (14:00 -14:50 Jes each panelist in 2 rounds like a conversation/dialogue- withou		
	(o minut		Haruhiko Kono	
5	14:00 - 14:40 JST	How to build local capacity to successfully operate and maintain HSR?	President, Japan Railway Technical Service (JARTS)	
6		Education & Training of SHIN, KANSEN specialists – Establishment of SHINKANSEN General Management Department	Masatoshi Kawai Senior Executive officer, JR East	
7		Technology and innovation for HSR	Tetsuo Uzuka General Director, RTRI, Japan	
8		Indigenous Solutions and opportunities for HSR in India	Achal Khare Managing Director, NHSRCL, India	
9		Policies and priorities for developing domestic capacity for building high quality infrastructure	K. N. Satyanarayana, Director IIT Tirupati, India	
10	14:40 to 14:50 JST	Panelist respond to questions from	participants	
	Part 3: Open discussion with panelists and participants on Issues, Innovation, and Investments to develop national networks of HSR in Asian Countries (14:50 – 15:40 JST)			
11	14:50 to 15:00 JST	cilitated by KE Seetha Ram - With the use polls and interactive re. Development of high-speed rail will be a "game changer" for Asian countries	Masafumi Shukuri Chairman, International High-Speed Rail Association	
	Discussants representing Asian and European countries: Sungwon Lee (KOTI, Korea); Ko Sakamoto (ADB Manila); Surya Raj Acharya (Nepal), Angel Aparicio (Spain); Aseem Kinra (Germany); Haixiao Pan (PRC); Hiroyuki Takeshita (Japan)			
12	15:40 to 15:45 JST	Closing Remark by Prof. Hayashi and Post event chat		
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Day 4: October 15, 2020 (16:30 to 18:30 JST):

[09:30 CET; 13:00 IST; 14:30 Vietnam time/Central Indonesian Time]

Session 6: Transport-Urban Development Interactions

	<u>session of transport orban bevelopment interactions</u>			
S. No.	Time	Paper Title	Speaker/Author(s)	
1	16:30 to 16:45 JST	Meeting room opens and pre-event chat		
2	16:45 to 17:00 JST	Opening Remarks/Keynote presentation by Session Chair: Factors Influencing the Ridership of a Proposed Metro Rail System	K.V.K Rao, Professor, IIT Bombay, India	
3	17:00 to 17:12 JST	Land Use and Urban Development Effects of HSR	Kenichi Kudo Director for Urban Transport Planning Office, City Bureau, MLIT Japan	
4	17:12 to 17:24 JST	Development around the newly built station	Hiroyuki Takeshima, Life-style Business Development HQ, General Manager, JR East, Japan	
5	17:24 to 17:36 JST	Land Value Capture (LVC) for Transit-Oriented Development (TOD) in the Philippines	Akihiro Sato Oriental Consultants Global, Japan	
6	17:36 to 17:48 JST	High Speed Rail Station Location Serviceability Quantification: Socio-Economic, Environmental, and Accessibility Implication	Sandeepan Roy, Avijit Maji, Prasanta Sahu IIT Bombay, Mumbai	
		Discussions		
		Promoting Logistics by Bullet Train in the Corona Pandemic Era	Yoshitaka Ishii , Former President and Chairman, JR Kyushu	
7	17:48 to 18:25 JST	Exploring a dynamic relationship between transportation strategies and community liveability: a case of Kolkata Urban Agglomerations (KUA)	Arpan Paul, Joy Sen IIT Kharagpur	
		TRANSPORT INVESTMENT AND QUALITY OF LIFE: EVIDENCE FROM ASIAN COUNTRIES	Md Aslam Mia Universiti Sains Malaysia, Penang, Malaysia	
8	18:25 to 18:30 JST	Closing remarks		
9	18:30 to 18:40 JST	Post event chat		



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Day 5: October 16, 2020 (10:30 to 12:30 JST): Session 7: Graduate Students Colloquium

S. No.	Time	Paper Title	Speaker/Author(s)
1	10:30 to 10:45 JST	Meeting room opens and pre-event chat	
2	10:45 to 10:55 JST	Opening Remarks by session co-chairs	Daniel del Barrio Alvarez, University of Tokyo, Japan and Nikhil Bugalia IIT Madras, India
3			
4	A select no. of presen	tations (in <u>3min presentation format</u>) will be	TBD
5		featured	
6			
7	11:30 to 12:10 JST	Open Discussions	
8	12:10 to 12:15 JST Closing remarks		Alok Tripathi GM Innovation, NHSRCL, India
9	12:15 to 12:30 JST	Post event chat	

Note: Students working/interested in any field relevant to the conference theme are eligible to make submissions. Interested students can fill the following google form: https://forms.gle/tMCASXwrwHFLi4AKA, and email their presentations to abhatt@adbi.org by October 4, 2020.



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Day 5: October 16, 2020: (13:30 to 15:30 JST):

[00:30 EST; 06:30 CET; 10:00 IST; 11:30 Vietnam/Central Indonesian Time; 12:30 Chinese Standard Time;]

Session 8: Simulating HSR networks and their impacts on Quality of Life

S. No.	Time	Paper Title	Speaker/Author(s)
1	13:30 to 13:45 JST	Meeting room opens and pre-event chat	
2	13:45 to 14:00 JST	Opening Remarks and Keynote presentation by Session Chair on QoL Research	Yoshitsugu Hayashi, Professor, Chubu University, Japan
3	14:00 to 14:12 JST	Empirical Analysis on Industrial Sectors for QOL Improvement along High-Speed Rail Corridors	Shuji Sugimori, Yoshitsugu Hayashi, Hiroyuki Takeshita, Akash Yewale, Chubu University & IIT Bombay
		Discussions	
4	14:00 to 15:10 JST	Transportation mode choice in Vietnam intercity trips	An Minh Ngoc, Le Thu Huyen and Ahmet Basit Dogru Lecturer, University of Transport and Communication, Vietnam
		Urban transportation systems in selected small developing island states: A comparative Analysis	Khan Urwah, Juan Gonzalez Nagoya University, Japan
5	15:10 to 15:15 JST	Closing remarks	
6	15:15 to 15:30 JST	Post event chat	



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Day 5: October 16, 2020 (16:30 to 18:30 JST):

[09:30 CET; 13:00 IST; 14:30 Vietnam time/Central Indonesian Time]

Closing Plenary on Emerging Research Topics

S. No.	Time	Paper Title	Speaker/Author(s)
1	16:30 to 16:45 JST	Meeting room opens and pre-event chat	
2	16:45 to 16:55 JST	Opening Remarks and Session Overview by Session Chair	KE Seetha Ram, ADBI
3	16:55 to 17:10 JST	Capacity Building for HSR Development	Hironori Kato, Department of Civil Engineering, The University of Tokyo, Japan
4	17:10 to 17: 25 JST	Emerging Research Topics relating to (I) Artificial intelligence and transport; (ii) Transport and logistics – improving efficiency; (iii) Rural connectivity; and (iv) Road safety	B. N. Puri Director (Research), Asian Institute of Transport Development, New Delhi
5	17:25 to 17: 40 JST	Deriving Policies from Land Use- Transport Interactions for Sustainable High-Speed Rail Development in Asia	Francesca Pagliara, University of Naples Federico II
6	17:40 to 18: 10 JST	Round Table Discussions moderated by Prof Hayashi	Invited panelists: KVK Rao, IIT Bombay, India Tetsuo Kidokoro, University of Tokyo (TBC) Werner Rottengather, KIT, Germany Sudhir Misra, IIT Kanpur, India Junyi Zhang, Hiroshima University, Japan (TBC) Aseem Kinra, University of Bremen, Germany
7	18: 10 to 18:15 JST	Summary of Conference and Closing remarks	Yoshitsugu Hayashi, Chubu University, Japan
8	18:15 to 18:30 JST	Post event chat	