



ADB I—Purdue University—University of Tokyo: Virtual Workshop on Resilience of Cities to External Shocks: Analysis, Modeling and Economic Impacts

October 27 2020 (Tuesday) (Tokyo time; GMT+9)

Keynote Session	
Co-Chair: Dr. Peter Morgan, Vice Chair, ADBI Prof Satish V Ukkusuri, Purdue University	
9:00 - 9:15	<i>Welcome Remarks</i> Dr Tetsushi Sonobe, Dean and CEO, Asian Development Bank Institute (ADB I)
<i>Keynote Talk</i>	
9:15 - 9:45	Presenter: Alex Pompe, Facebook, Data for Good Team "3 Years of using Social Media Data for Crisis Response "
9:45 - 10:00	Q&A
<i>Paper 1: Regional Differences in Resilience of Social and Physical Systems: Case Study of Hurricane Maria</i>	
10:00 - 10:20	Presenter: Yabe, Takahiro; Rao, Suresh; Ukkusuri, Satish
10:20 - 10:30	Discussant: Laura Siebeneck, University of North Texas
10:30 - 10:35	Q&A

Session 1: Machine Learning and GIS	
Chair: Dr. KE Seetha Ram, ADB I; University of Tokyo	
<i>Paper 2: Developing System for Setting Priority of Road-Recovery Considering Human Mobility by Applying Deep Q-Learning</i>	
16:00 - 16:20	Presenters: Joo, Soo-hyun; Ogawa, Yoshiki; Yang, Shaofeng; Sekimoto, Yoshihide
16:20 - 16:30	Discussant: Satish V Ukkusuri, Purdue University (video recording)
16:30 - 16:35	Q&A
<i>Paper 3: Estimating Urban Environment Attributes Indicating Earthquake Damage Vulnerability of Cities using Sparse Modeling</i>	
16:35 - 16:55	Presenters: Ogawa, Yoshiki; Sekimoto, Yoshihide; Shibasaki, Ryosuke
16:55 - 17:05	Discussant: David Yu, Purdue University (video recording)
17:05 - 17:10	Q&A
<i>Paper 4: Road Network Vulnerability and City-level Characteristics: A Nationwide Comparative Analysis of Japanese Cities</i>	
17:10 - 17:30	Presenter: Chikaraishi, Makoto; Santos, Johan; Safitri, Nur Diana; Safira, Maya; Varghese, Varun
17:30 - 17:40	Discussant: Yoshihide Sekimoto, University of Tokyo
17:40 - 17:45	Q&A
30-minute break	



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Session 2: Behavioral Modeling	
Chair: Yoshihide Sekimoto, Associate Professor, University of Tokyo	
	<i>Paper 5: Planning for Tourist Urban Evacuation Routes: Collecting and Providing Information</i>
18:15 - 18:35	Presenters: Wachtel, Guy; Schmocker, Jan-Dirk; Hadas, Yuval; Yuhan, Gao; Nahum, Oren; Ben-Moshe, Boaz
18:35 - 18:45	Discussant: Arif Sadri, Florida International University
18:45 - 18:50	Q&A
	<i>Paper 6: Household context and operationalizing urban resiliency objectives: A case study of autonomous household response</i>
18:50 - 19:10	Presenter: Maquiling, Karl Sam
19:10 - 19:20	Discussant: Rita Padawangi, Singapore University of Social Sciences
19:20 - 19:25	Q&A

Session 3: Tsunami Risk and Sea Level Rise	
Chair: Satish V Ukkusuri, Purdue University	
[Use Purdue Zoom link]	
Meeting ID: 970 3071 6519	
Passcode: 343732	
	<i>Paper 7: Financing Resilience Efforts to Confront Future Urban and Sea-level Rise Flooding: Are Coastal Megacities in ASEAN Doing Enough?</i>
22:00 - 22:20	Presenters: Causevic, Amar; LoCastro, Matthew; David, Dharish; Selvakkumaran, Sujeetha; Gren, Åsa
22:20 - 22:30	Discussant: Piyush Tiwari, University of Melbourne
22:30 - 22:35	Q&A
	<i>Paper 8: A Spatio-Temporal Approach to Assess Changes in Flood Exposure of Shenzhen from Past to Future</i>
22:35 - 22:55	Presenter: Mestav Sarica, Gizem; Zhu, Tinger; Jian, Wei; Lo, Edmond Yat-Man; Pan, Tso-Chien
22:55 - 23:05	Discussant: Rita Padawangi, Singapore University of Social Sciences
23:05 - 23:10	Q&A
	<i>Paper 9: The Impact Assessment and Resilience toward Tsunami Risk</i>
23:10 - 23:30	Presenter: Huang, Michael; Tanaka, Hajime
23:30 - 23:40	Discussant: Seungyoon Lee, Purdue University @Korea
23:40 - 23:45	Q&A



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October 28 2020 (Wednesday) (Tokyo time; GMT+9)

Session 4: Simulation Studies	
Chair: P. S. C. Rao, Professor, Purdue University	
	<i>Paper 10: Policy dilemma between efficiency and fairness in urban flood evacuation: incorporating structural and nonstructural features in a conceptual agent-based model</i>
9:00 - 9:20	Presenter: Oh, Woi Sok; Yu, David; Muneeppeerakul, Rachata
9:20 - 9:30	Discussant: David Johnson, Purdue University
9:30 - 9:35	Q&A
	<i>Paper 11: Predictive Port Resiliency Tool to Assess Regional Impact of Hurricanes</i>
9:35 - 9:55	Presenters: Parr, Scott; Dhanak, Manhar; Kaiser, Evangelos; Goulianou, Panagiota; Russell, Hannah; Kristiansson, Fanny
9:55 - 10:05	Discussant: Elise Miller-Hooks, George Mason University
10:05 - 10:10	Q&A
	<i>Paper 12: Modeling Regional Impacts and Resilience to Water Service Disruptions in Urban Economies</i>
10:10 - 10:30	Presenters: Pagsuyoin, Sheree; Santos, Joost
10:30 - 10:40	Discussant: Elisabeth Krueger, Princeton University (video recording) KE Seetha Ram, ADBI (comment)
10:40 - 10:45	Q&A
15-minute break	

Closing Session	
Chair: Peter Morgan, Vice Chair, ADBI	
<i>Keynote Talk</i>	
11:00 - 11:30	Presenter: Yasuyuki Sawada (Asian Development Bank) "Hybrid methods of disaster resilience research"
11:30 - 11:45	Q&A
	<i>Paper 13: On Well-being of Households in Japan and What Needs to be Done Post-disasters to Reinstat Well-being</i>
11:45 - 12:05	Presenters: Shukla, Jyoti; Yukutake, Norifumi; Tiwari, Piyush; Namiwa, Shota
12:05 - 12:15	Discussant: Satish V Ukkusuri
12:15 - 12:20	Q&A
12:20 - 12:35	Remarks on the journal special issue Linda See, EPB (video recording)
12:35 - 12:50	Closing Remarks Satish V Ukkusuri, KE Seetha Ram