





TOWARDS MORE RESILIENT TRANSPORTATION SYSTEM

TO MULTIPLE HAZARDS

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Abstract

Transportation system is one type of critical infrastructure system in modern society and it includes bridges, roadways and traffic subjected to natural and societal environments. Safety and efficiency of such a system under various hazardous conditions are pivotal to reducing fatality and economic costs associated with infrastructure damage/failure and traffic accidents. During the past years, some interdisciplinary research efforts have been carried out at Colorado State University on promoting safer, more resilient and sustainable transportation system. These efforts include simulation-based and statistics-based transportation infrastructure performance prediction under multiple hazards and traffic safety risk assessment and prevention. Some recent advances are made in terms of modeling and understanding the associated risks and mitigation efforts of both transportation infrastructure (e.g. long-span bridges) and traffic accidents/injury subjected to hazardous and/or adverse conditions (e.g. strong winds, earthquakes, and cable loss events). These study efforts span several fields, such as traditional bridge engineering, traffic engineering, hazard mitigation and public health.

Biography

Dr. Suren Chen is an Associate Professor in the Department of Civil and Environmental Engineering at Colorado State University (CSU) and also the codirector of the Center for Sustainable & Intelligent Transportation System (CSITS) at CSU. His research has been primarily focused on transportation infrastructure (e.g. bridges) safety and resilience, highway traffic safety risk prediction and mitigation, transportation system planning, optimization and hazard mitigation. He has published about 100 technical papers and served as the PI of more than 20 research grants funded by various federal and state agencies. He was awarded 2009 ASCE Collingwood Prize and is currently an associate editor and editorial board member of several journals, such as ASCE Journal of Bridge Engineering and Advances in Structural Engineering. Dr. Chen is an active member of four technical committees within ASCE, and currently the chair of the ASCE Experimental Analysis and Instrumentation Committee. He serves as the Transportation Research Board (TRB) university representative for CSU. Dr. Chen has been a licensed professional civil engineer since 2004 and he worked as a Civil Engineer at a national consulting firm for two years before joining CSU in 2006 and was the Certified Floodplain Manager (CFM) between 2006 and 2012.



Online registration <u>http://goo.gl/HGKwPH</u> or scan the QR code This seminar is free of charge. The attendance certificate will be provided upon request. For more information, please contact Dr. Songye Zhu: 3400 3964, Email: <u>ceszhu@polyu.edu.hk</u>.



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