



## ICNet Global: Infrastructure and Climate Networks of Networks

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Climate change is already impacting the performance and integrity of transportation infrastructure around the world and is anticipated to have serious ramifications for infrastructure safety, environmental sustainability, economic vitality, mobility and system reliability. These impacts will disproportionately affect vulnerable populations and urban locations as well as compromising the resilience of the larger interconnected physical, cyber, and social infrastructure networks. For this reason, increasing the resilience of transportation infrastructure to current and future weather and climate extremes is a global priority.

The complexity of this challenge requires a convergence approach to foster collaboration and innovation among technically and socially diverse researchers and practitioners. The multi-institutional **ICNet Global** Network of Networks unites domestic and international research and practice networks to facilitate integrated engineering, climate science, and policy research to advance the development of resilient transportation infrastructure and systems. ICNet Global collaborators represent networks based in Korea, Europe, United Kingdom, and the United States and link researchers at the forefront of scientific, engineering, and policy research frontiers, drawing expertise from many disciplines and nations to share and enhance best practices for transportation resilience.

**ICNet Global's** long-term mission is to prepare the world's existing and future transportation infrastructure for a changing climate. To that end, we are working to: (1) build a network of existing research networks who are tackling the challenges climate change poses to transportation infrastructure; (2) establish a common base-level knowledge, capacity, and vision to support the convergence of novel and diverse ideas, approaches, and technologies for creating climate resilient transportation infrastructure; and (3) grow the next generation of critical and diverse thinkers with the expertise to address and solve climate-related infrastructure challenges. Although just one year into our work, and despite challenges represented by COVID-19, we have surveyed over 100 potential members worldwide to learn about fields of interest and held five productive virtual workshops to discuss current research, how to incorporate climate change information into engineering education, and how practitioners are currently including climate information into planning and design. In this presentation we highlight our goals and recent accomplishments while laying out future plans and inviting interested researchers and practitioners to join us.