

Societal Impact Evaluation of Infrastructure Service Disruption due to Disaster

○ Yongsheng Yang

Abstract: Compared with the physical and economic impact assessment of disaster, people know little about the societal impact of disaster, especially for the impacts on normal life or well-being of individuals. Modern societies are comprised of interdependent critical infrastructure, which can provide essential resources and services to people to maintain their normal life. When natural and man-made hazards strike the society, infrastructure may suffer varying degree of damages and disruptions, which lead to difficulties for residents to access life-supporting resources (water, food, shelter, medical, and so on), and cause significant impacts on everyday life. In order to better understand and evaluate the societal impact of disrupted infrastructure, this study reviewed the research progress on societal impact assessment of disaster firstly, and then, highlight the importance of everyday life impact evaluation due to interrupted infrastructure. Furthermore, we present a theoretical framework to evaluate the water service impact considering availability and accessibility of water-related infrastructure.