



American Society of Civil Engineers

ASCE COMMITTEE ON CRITICAL INFRASTRUCTURE (CCI)

Established in January, 2005 by the ASCE Board of Direction, the Committee on Critical Infrastructure provides vision, guidance, and direction on activities related to homeland security, multihazard protection, and resilience of critical infrastructure, including planning, design, preparedness, procurement, construction, operation and maintenance, and event response, mitigation, and recovery. In addition to ensuring that the Society maintains its proactive leadership role in these key national issues, CCI provides guidance to build coalitions that undertake activities in critical infrastructure, and assists in identifying sources of necessary resources related to critical infrastructure.

CCI VISION

ASCE is a recognized leader in incorporating resilience into multihazard preparedness, (planning, design, procurement, construction, operations and maintenance) mitigation, response, and recovery of critical infrastructure.

CCI MISSION

CCI provides insight and guidance to ASCE on its internal and external activities related to critical infrastructure resilience. CCI identifies, influences, and facilitates ASCE critical infrastructure activities.

WORKING DEFINITIONS

CCI has developed working definitions* related to critical infrastructure as follows:

Critical infrastructure includes systems, facilities, and assets so vital that if destroyed or incapacitated would disrupt the security, economy, health, safety, or welfare of the public. Critical infrastructure may cross political boundaries and may be built (such as structures, energy, water, transportation, and communication systems), natural (such as surface or ground water resources), or virtual (such as cyber, electronic data, and information systems).

Safety denotes a status, which is extensively free of adverse effects or is regarded as non-dangerous.

Security provides protection against attacks, sabotage, acts of violence, or disruption. Security concepts are constructed and used to reach the status of safety. Measures of security are effective when they prevent or mitigate expected and unexpected consequences.

Sensible security is the level of protection provided through design, construction, and operation that mitigates adverse impacts to systems, facilities, and assets, in proportion to their value to society and their likelihood of being affected by natural and/or man-made events.

Multihazards include significant events such as infrastructure deterioration, natural disasters, accidents, and malevolent acts.

Resilience refers to the capability to prevent or protect against significant multihazard threats and incidents and to expeditiously recover and reconstitute critical services with minimum damage to public safety and health, the economy, and national security.

*See ASCE Policy Statement 518, Unified Definitions for Critical Infrastructure and Sensible Security

GOALS AND ACTIVITIES

1. Promote awareness in ASCE and the general public regarding sensible security and critical infrastructure resilience via planning; design; preparedness; procurement; construction; operation and maintenance; and response, mitigation, and recovery from multihazard conditions
 - Develop ASCE training and outreach tools promoting critical infrastructure maintenance, public awareness, and mitigation and response planning resources
 - Implement sensible security and resilience concepts into the ASCE Code of Ethics
 - Maintain vibrant critical infrastructure section of the ASCE website with regularly updated content
 - Host a WebBlog to share and archive information and opinions related to critical infrastructure
 - Publish monthly electronic publication, The CRIB Sheet, featuring updates on critical infrastructure news and related resources
 - Promote and energize ASCE Infrastructure Champions to facilitate communication between ASCE National and local geographic units on critical infrastructure related issues
 - Evaluate civil engineering curricula and make recommendations to better prepare future civil engineers
2. Provide structure, policies, and procedures for ASCE responses to events of national and/or international significance
 - Serve in an advisory role to the ASCE Board to determine appropriate response to significant events
 - Develop strategy to address liability and legal issues and operational context issues regarding participation in disaster response and recovery operations
 - Develop and promote mechanisms and training programs for ASCE members to participate in disaster response, recovery, and mitigation efforts
 - Develop a directory of ASCE members, with expressed interest and availability to assist in disaster response and recovery initiatives
3. Ensure that ASCE maintains its proactive leadership role in key national critical infrastructure issues, via internal and external coalitions, as appropriate
 - Advocate ASCE support of The Infrastructure Security Partnership (TISP)
 - Provide annual report to the Board of Direction on the efficacy of ASCE-wide critical infrastructure activities with specific recommendations for action
4. Facilitate the development of standards, guidelines, and standards of practice to develop critical infrastructure resiliency to multihazard conditions
 - Identify and document current and planned activities in critical infrastructure within ASCE
5. Evaluate the need for specialty certification for engineers involved with disaster management
 - Establish Disaster Response and Recovery Advisory Committee (DRAC)

ROSTER

Name	Employer	Sector
Marla Dalton, P.E.	ASCE/TISP	Critical Infrastructure/TISP Executive Director
David Dee, Jr., P.E.	PB Americas, Inc.	Water Resources/Region Governor
Mathew Francis, P.E.	URS Corporation	Geotechnical
Wilbur Hitchcock, Ph.D., P.E.	University of Alabama Birmingham	Energy / Academia
Eva Lerner-Lam, F.ITE	The Palisades Group, Inc.	Transportation
Daniel Martin, CEM, CFM	Integrated Solutions Consulting	Disaster & Emergency Management
Enrique Matheu, Ph.D.	US Department of Homeland Security	Federal Government/Dams
Cindy L. Menches, P.E.	The University of Texas at Austin	Construction / Academia
Paul Mlakar, Ph.D., P.E., Chair	US Army Corps of Engineers	Blast Protection
Karen Moran, P.E., Vice Chair	Whitman, Requardt & Associates, LLP	Water/Wastewater
Scott Nacheman	Thornton Tomasetti	Disaster Response/Structures
Lawrence Roth, P.E.	ASCE	Geotechnical
Doug Sethness, P.E.	CH2M HILL	Ports and Waterways
Robert Turner, P.E.	City of Spokane	City Government/Region Governor