Purpose: This workshop will bring together researchers, experts, practitioners, and noted leaders to explore the role of innovative technologies and smart infrastructure in building more resilient and sustainable communities; including:

- How can advanced technologies and structural performance data in structural engineering support the design of infrastructure and built systems that enhance resilience and promote faster recovery?
- What are today’s most promising innovations in technology and how are communities benefiting?
- What is the future role of advanced technologies and design practice—what does a resilient city’s built infrastructure look like in the future?
- What are the research gaps or opportunities in development and use of advance technologies and design for building resilient infrastructure?

8:30 – 8:40 am  Welcome and Introductions  
Dr. Lauren Alexander Augustine, Director, Program on Risk, Resilience, and Extreme Events, National Academy of Sciences, Engineering and Medicine

8:40 – 9:00 am  Setting the Stage: From Resilient Infrastructure to Resilient Communities: how can emerging technologies support community efforts to become more resilient?  
Mr. Chris Poland, Consulting Engineer

9:00-10:15 am  Enabling Community Resilience: Innovative Technologies in the Built Environment  
Moderator: Ms. Arrietta Chakos, Policy Advisor/Consultant, Urban Resilience Strategies

Panelist 1: Dr. Janice Barnes, Global Resilience Director, Perkins+Will

Panelist 2: Mr. Steve Moddemeyer, Principal, CollinsWoerman Architects

Panelist 3: Dr. Reginald DesRoches, Dean of Rice University’s George R. Brown School of Engineering
• What roles or functions do technologies and infrastructure play in a resilient community?
• How can infrastructure investments today ensure resilience in communities in the future and across the design life of the infrastructure?
• How can technologies and infrastructure be integrated into current systems and planning to build resilience?

10:15 – 10:45 am Break

10:45 – 12:30 pm Innovative Technologies: What are they now, what could they be in the future?
Moderator: Seymour Spence, Assistant Professor, Department of Civil and Environmental Engineering, University of Michigan

Speaker 1: Dr. Jerome Lynch, Professor, University of Michigan

Speaker 2: Mr. Daniel Hiller and Dr. Alex Stolz, Fraunhofer

Speaker 3: Dr. Maria Feng, Renwick Professor, Columbia University

Speaker 4: Dr. Robert D. Moser, Senior Research Civil Engineer, Engineering Systems and Materials Division – Research Group, Geotechnical and Structures Laboratory, U.S. Army Engineer Research and Development Center (ERDC)

Speaker 5: Dr. Oral Buyukozturk, Professor, MIT

• What is the vision for built infrastructure in resilient communities of the future? How can we better apply these technologies to benefit society?
• What is the “out of the box” thinking for the future? What does the next wave of research and design entail?

12:30 – 1:45 pm Lunch

1:45 -2:15 pm Featured Speaker – How are cities thinking about the role of technologies and structural engineering for the future?

Mr. Paul Brown, President, Paul Redvers Brown, Inc.

2:15 – 3:30 pm Visions of the Future: Enabling Design and Integration of Emerging Technologies
Moderator: Mr. Ron Eguchi, President & CEO, ImageCat Inc.

Panelist 1: Mr. Craig A. Davis, Water System Resilience Program Manager, Los Angeles Department of Water and Power

Panelist 2: Mr. David Mar, President, Mar Structural Design (confirmed)

Panelist 3: Mr. Peter Marx, Vice President of Advanced Concepts, GE Digital
• How could emerging technologies and innovations be integrated into the built environment? What are the potential challenges?
• How can decision makers build flexibility into their current decisions and initiatives to account for innovation and technological advances to come?
• How can decision makers, planners, and other stakeholders effectively use emerging technologies and innovations with current infrastructure projects and initiatives? And future ones?

3:30 – 4:00 pm  Break

4:00 – 4:30 pm  Where Are We & What’s Next
Dr. Farzad Naeim, President, Farzad Naeim, Inc.
Dr. Ting Lin, Assistant Professor, Marquette University

4:30 pm  Closing Remarks

5:00 – 6:30 pm  Evening Reception