June 6, 2016

The Honorable Barbara Comstock  
Chairwoman  
Subcommittee on Research and Technology  
Committee on Science, Space, and Technology  
United States House of Representatives  
Washington, DC  20515

Dear Madam Chairwoman:

I am pleased to submit the 2016 Annual Report of the National Construction Safety Team (NCST) Advisory Committee (Committee) of the National Institute of Standards and Technology (NIST). The Committee serves as NIST’s advisor on implementation of the NCST Act (P.L. 107-231; the ‘Act’) and the opinions and recommendations expressed in this letter reflect our views as an independent, private sector body. The Committee met at the Engineering Laboratory, NIST on May 3 in Gaithersburg, MD at which time we were briefed on activities under the Act.

The Committee notes that NIST has conducted three investigations under the Act—World Trade Center collapse, Station Night Club fire and Joplin tornado. NIST staff have also participated in reconnaissance teams organized by other agencies to investigate damage from such events as the attack on the Pentagon, Hurricane Sandy, and Amarillo, TX and Waldo Canyon, CO wildland-urban interface fires. The Committee believes that NIST has a special role in collecting and translating data into building code provisions, and that despite investigations by NIST under the Act and by other agencies, important opportunities to improve building safety may be being missed. The special expertise possessed by NIST staff and their building safety orientation strongly suggest that their ability to investigate tornado events other than Joplin and wildland-urban interface fires would be highly beneficial. The Committee supports the concept of Reconnaissance Decision Criteria used by NIST to guide decisions on whether to deploy a team. However, even high scores do not always trigger deployment. Examples include South Carolina rain-induced flooding (1000-year flood connected to Hurricane Joaquin, October 2015, score 3.9/5) and earthquakes in Taiwan (3.8/5) and Japan (4.3/5). Constraints on deployment appear to include funding limitations. Possibly this has led to developing deployment criteria so stringent as to rule out all but the most catastrophic events. The Committee urges NIST to review the criteria in the context of apparent climate change; and to consider ways of stretching its resources, perhaps by reducing the length and complexity of reporting in order to conduct more investigations.

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National Construction Safety Team Advisory Committee
National Institute of Standards and Technology

a damaged site, possibly six months to a year after an event, permits exploring what changes in building safety have been implemented and whether damage models are reliable for resilience planning.

The Committee continues to find the NCST program highly valuable and relevant to the security of the nation’s building stock.

Yours,

Jeremy Isenberg, PE, PhD, NAE, Hon. Memb. ASCE
Chair, National Construction Safety Advisory Committee
The Honorable Ted Cruz  
Chairman  
Subcommittee on Space, Science,  
and Competitiveness  
Committee on Commerce, Science,  
and Transportation  
United States Senate  
Washington, DC 20510

Dear Mr. Chairman:

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Yours,

Jeremy Isenberg, PE, PhD, NAE, Hon. Memb. ASCE
Chair, National Construction Safety Advisory Committee
June 6, 2016

The Honorable Eddie Bernice Johnson
Ranking Minority Member
Committee on Science, Space, and Technology
United States House of Representatives
Washington, DC  20515

Dear Representative Johnson:

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Yours,

Jeremy Isenberg, PE, PhD, NAE, Hon. Memb. ASCE
Chair, National Construction Safety Advisory Committee
June 6, 2016

The Honorable Dan Lipinski  
Ranking Minority Member  
Subcommittee on Research and Technology  
Committee on Science, Space, and Technology  
United States House of Representatives  
Washington, DC  20515

Dear Representative Lipinski:

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Yours,

Jeremy Isenberg, PE, PhD, NAE, Hon. Memb. ASCE
Chair, National Construction Safety Advisory Committee
June 6, 2016

The Honorable Bill Nelson  
Ranking Minority Member  
Committee on Commerce, Science, and Transportation  
United States Senate  
Washington, DC  20510

Dear Senator Nelson:

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Jeremy Isenberg, PE, PhD, NAE, Hon. Memb. ASCE
Chair, National Construction Safety Advisory Committee
Dear Senator Peters:

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Chair, National Construction Safety Advisory Committee
June 6, 2016

The Honorable Lamar Smith
Chairman
Committee on Science, Space, and Technology
United States House of Representatives
Washington, DC  20515

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