### NIST funding opportunities under the American Recovery and Reinvestment Act of 2009

## Implementing the American Recovery and Reinvestment Act of 2009 at NIST

The American Recovery and Reinvestment Act of 2009 was signed into law by President Obama on February 17, 2009. This Act provides a total of \$610 million in funding to NIST. (http://www.nist.gov/recovery/)

# Potential Research Opportunities of Interest for the Construction, Building, and Fire Safety Industries

The NIST <u>Building and Fire Research Laboratory (BFRL)</u> is involved in a wide range of scientific, engineering, and investigative work for the building and fire safety communities. We address technical challenges in response to critical national needs, with a particular mission focus on measurement science. Our strategic priorities include energy, construction productivity, sustainable infrastructure materials, innovative fire protection, and disaster-resilient structures and communities, including earthquakes, hurricanes, and fires.

BFRL-related topics in the Measurement Science and Engineering Research Grants Program include the following:

#### Energy:

 Research in measurement science to enable net zero energy, highperformance buildings.

#### Physical Infrastructure:

- Research on measurement tools to improve construction productivity.
- Research on the development of multi-scale models that predict life-cycle performance of construction and building materials and the development of measurements of degradation and lifecycle performance of construction materials (including flammability and nanoparticle release rates), and research to produce sustainability metrics to quantify lifecycle performance by integrating technical, economic, and environmental performance (including energy consumption).
- Research on the tools, models, and methods necessary to reduce the risk of fire spread in buildings and in wildland-urban interface communities, ensure effective and safe use of emerging fire service technologies, and derive lessons from post-fire investigations.
- Research on the tools, models, and methods necessary to enhance the resilience of structures and communities to disasters (earthquakes, hurricanes, windstorms, and fires).

#### **More Information**

Additional specific details related to these topics, as well as information on proposal submission are available on the <a href="Measurement Science and Engineering Research Grants Program website">Measurement Science and Engineering Research Grants Program website</a>.

### NIST-wide Opportunities

For additional details related to these topics, as well as information on proposal submission, see the following:

**Construction Grant Program** 

Measurement Science and Engineering Fellowship Program

Measurement Science and Engineering Research Grants Program

www.bfrl.nist.gov 5/29/2009