Disaster Recovery Certification Development Forum

For Construction Personnel in the US and Canada Development & Research Planning Session

> November 4-6, 2015 AIA National Headquarters Washington, DC

Catastrophic events such as intense storms, floods, droughts, fires, power outages, temperature shifts, and economic dislocation present tremendous challenges. Over the past three decades, extreme weather events have combined with the demographic trend of more tightly clustered communities to spur a steady rise in the number and total cost of disasters costing a billion dollars or more. Since 1983, the U.S. federal government has spent over one trillion dollars in disaster recovery and rebuilding efforts. As a result, the Federal Emergency Management Agency in its Mitigation Framework urges "mitigation during the recovery phase [to help] strengthen and build a more resilient community to withstand future disasters".

Construction personnel perform a critical role in the wake of these disasters. Their knowledge, skills, and abilities are essential to community reconstruction. Moreover, their work can utilize green construction best practices, means, methods, and materials to ensure the durability, risk mitigation, and resilience of the recovery effort.

Preparing construction workers to implement these state-of-the-art approaches and technologies requires high quality educational efforts. Toward that end, <u>Green Advantage</u>, <u>Antioch University</u>, and the <u>International Code Council</u> are convening a Development and Research Planning Forum at the <u>American Institute of Architects Headquarters</u> in Washington, DC on November 4-6, 2015. We envision the outcome of this process will ultimately lead to a Disaster Recovery Specialist Certification for construction industry personnel in the US and Canada, based upon a recognized body of knowledge and an examination protocol that is accredited under ANSI/ISO/IEC 17024.

We request your assistance in identifying reference materials, experts, and participants in <u>one or more</u> of the upcoming daylong sessions listed below.

Each day of the 3-day Disaster Recovery Certification Development Forum, a select, diverse group of stakeholders from the building design, specification, construction, disaster preparedness and recovery, health and safety, security, military, gaming, insurance, education, and research fields will convene. The goal is to create "proofs of concept" that can be used to demonstrate the viability of three related objectives:

1) Day One - Creating a Disaster Recovery Specialist Certification for Construction Personnel. $^{\rm 5}$

In response to disasters such as Hurricane Katrina and Superstorm Sandy, construction workers quickly assembled to restore infrastructure, make repairs and provide shelter. Many of these workers had little, if any, preparation to implement disaster recovery best

practices, particularly as they relate to green construction. In addition, these workers were generally not prepared to function effectively within the social milieu of loss and trauma. In the interest of enhanced resiliency and preparedness for future extreme events, Green Advantage wishes to develop an ANSI/ISO/IEC 17024 accredited Disaster Recovery Specialist Certification for construction personnel in the US and Canada. The focus of this part of the Forum will be to outline the scope, parameters and requisites of this certification.

2) Day Two - Using Virtual Technologies and Gaming Principles to Produce Certification Exams and Training.

For many construction personnel and those aspiring to join their ranks, conventional didactic learning and objective testing have distinct limitations. Virtual technologies (multi-sensory, interactive technologies) combined with gaming techniques, represent an exciting potential for enhancing training and certification outcomes. Because of its enhanced transfer of learning attributes, this medium will be beneficial to the roll-out of the disaster recovery training and certification as well as other training and certifications for construction personnel. The focus of this part of the Forum will be to determine the framework for this platform and chart the course for its development and widespread use.

3) Day Three - Developing a "Real-time" Research Methodology that Measures and Improves Certified Construction Personnel Performance.

The disadvantage of retrospective research to measure the effectiveness of Green Advantage Certified personnel on construction projects is the long lag period for monitoring and evaluation. An immediate, empirical method is needed to provide useful feedback. For example, a gaming reporting system could be fashioned through creation of an app that incentivizes participants through a scoring system based on various construction performance parameters that are verified through photography. Rewards could accompany achievement of measurable targets. The focus of this part of the Forum will be to create the architecture for this research tool in a manner that ensures its utility to researchers and to construction workers.

Our Request

Please supply the following by August 31, 2015

1. Nominations and contact information for public and private sector leaders who might wish to attend Day 1, 2, or 3.

Note that seating is limited, so all nominees might not be selected to attend. Meals and snacks will be supplied without charge to meeting attendees. <u>CLICK HERE to Nominate</u>

2. Relevant sources of information related to one or more of the three objectives of the Forum.

CLICK HERE to Provide Information

3. Names and contact information for additional experts who might provide inputs.

CLICK HERE to Recommend

We trust you share our excitement about these significant opportunities for better enabling construction personnel to meet the unique challenges of the twenty-first century. Your leadership and guidance in this undertaking are needed and appreciated.

Thank you in advance for your willingness to assist. Feel free to contact Green Advantage at <u>D3Forum@greenadvantage.org</u>, if you have any questions.