On the Issue of Resiliency:
A Report from the Frontlines of the Disaster Safety Movement

(Statement delivered at the United Nations on Friday, October 4, 2013 during high level, structured discussion, “Resilient Design—To Build or Not to Build?” hosted by the UN’s Economic and Social Council in conjunction with UN-Habitat)

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Introduction

Good morning and thank you Your Excellency Ambassador Momen, Dean Gauchat and my distinguished fellow panelists.

My perspective on the topic today comes from 27 years on the frontlines of what we and our partnership of more than 120 public, private and nonprofit organizations call the “disaster safety movement”. My first 12 years of perspective followed my time in the insurance industry where I joined and led various teams as we responded to natural disasters, and crafted and delivered regulatory and policy solutions to help manage financial exposure to catastrophic risk.

Since then, I have spent 15 years as leader of the nonprofit Federal Alliance for Safe Homes (FLASH), an organization whose mission is “strengthening homes and safeguarding families from disasters of all kinds”. At FLASH we are specifically focused on better building codes, design standards and products with the built environment in mind.

It only takes one event like Hurricane Andrew, Hurricane Katrina or a Superstorm Sandy to convince thinking people in that community that something has to change. FLASH started out 20 years ago in the post-Hurricane Andrew just that way. We began as a diverse, volunteer committee looking to “Break the Cycle” of “Build/Destroy/Rebuild” and find a path to disaster-resistant construction for homes and communities.

As I prepared for this event today, it was very gratifying to read these words in the UN Habitat strategic plan (Humanitarian Affairs and the Role of UN-Habitat: Strategic Policy on Human Settlements in Crisis and Sustainable Relief and Reconstruction Framework).

“Building a ‘culture of prevention’ at all levels in society is a challenge often not met until after the devastation wrought by disaster...

However…together in partnership [we] can and should...create a culture of prevention, and ensure those most vulnerable need not remain that way indefinitely.”

We couldn’t agree more.

Building codes and standards, enforcement, a marketplace that values and will pay for resilient structures and continuous learning to drive innovation and address costs are just some of the elements of a culture of prevention.

But even as these elements come together, it is extraordinarily difficult to bring about change to the way we build, where we build and how we finance what we build. This is especially true where no prior disaster experience exists, or when disaster memories have faded over time.
Our panel question today is “To Build or Not to Build?” I say we will build, but with one caveat. When we do, we have to design and build in a manner that anticipates and mitigates the weather risk in that location.

Lives, communities and economies are at stake.

Take South Florida for example where we’ve seen explosive growth in the 20 years since Hurricane Andrew. It is staggering and insurance exposure tops $176 billion in each of the three main counties.

Our concern is whether or not those new structures will survive and bounce back quickly. Did we put the right practices in place 20 years ago to resist the high wind, wind-driven rain and rising water we expect with the next storm?

The next hurricane will answer that question, but in the meantime, our experience highlights three areas that we are convinced will help drive the right behavior and foster a culture of prevention. They are:

I. Policy Leadership
   II. Creating Public Value
   III. Open Source Framework

I. Fostering Policy Leadership

We have opportunities to advance resilience at every level of government. In fact, you may know about the “Safe Building Codes Incentive Act” in the United States Congress that proposes to reward communities that enact strong building codes by increasing payout of disaster relief funds. This is a macro approach to advancing resiliency.

A new, micro approach is proposed legislation to create tax-free, disaster savings accounts.

Sponsored by Congressman Dennis Ross, the Disaster Savings Account Act of 2013 creates a new section of the Internal Revenue Code that permits eligible individuals to deduct amounts up to $5,000 that have been set aside in a tax-preferred account for use toward disaster mitigation expenses. So, if you are saving up for hurricane shutters, seismic cripple walls, flood vents, or roofing that will resist the flying wildfire embers, you will be eligible for tax breaks.

Tax or financial incentives like this proposed savings account, tax holidays and tax exemptions can all drive resilience.

But another important policy is to remove tax disincentives. For example, appraisers in California and South Florida are careful to not add property taxes to homes that have
been hardened against seismic events or hurricanes because we don’t want to penalize good behavior by the homeowner and remove motivation to mitigate damage in advance.

So we are gaining ground on policy innovation at the federal level, but here in the U.S., we often simultaneously lose ground at the local level when model building codes and standards are not adopted, are weakened or are inadequately enforced.

Our current involvement in Memphis, Tennessee on the matter of seismic building codes is an interesting case. Here are some of the facts.

- Even though Memphis sits in the heart of the New Madrid Seismic Zone with self-described aging infrastructure and out-of date building codes, local leaders have been slow and in some cases, unwilling to embrace current, model codes.
- Approximately 30 percent of all U.S. goods are processed through Memphis each year.
- A modeled 7.7M earthquake striking Memphis is expected to disrupt 38 percent of the region’s GDP.

So what can we do to help a local official in Memphis appreciate the impact of decision-making that may seem hyper-local but in fact has potential international implications?

Should we define “responsible resilience leadership” to connect the dots for those who have this enormous responsibility?

It seems so because countless lives and billions of dollars in property are on the line.

II. Public Value

So what do we mean when we say that we need to create a public value for resilience or a value that leads to a culture of prevention? To us, it means that we create a belief system where people will only live, work or play in buildings that are safe, strong and sustainable. As we look to the recommendations by the UN-Habitat, we wholeheartedly agree that mitigation requires the involvement of all parts of society, and public awareness is crucial to create behavior change—especially with children, our “future decision-makers”.

When we raise a generation of children who value resilience, we are more likely to encounter leaders in the future who accept the benefit of building codes, the benefit of building innovation and the return on investment of buying safer, stronger homes.

We have partnered with the world’s leading story tellers at Walt Disney World to advance this premise. There, we have created an award-winning, “edu-tainment” experience called, StormStruck: A Tale of Two Homes®. StormStruck is a 2,700 square-foot weather mitigation exhibit that we designed in collaboration with Walt Disney
Imagineers and developed with our sponsors from RenaissanceRe Holdings Ltd., Simpson Strong-Tie, State Farm and WeatherPredict Consulting Inc.

It provides fun and play while helping families learn how to prepare homes for every kind of weather from flood and hail to high wind and even snow, but the underlying message is clear—you can ensure our own resilience if you ask the right questions, make the right choices and take the right actions.

At StormStruck, we use guest surveys to measure whether guests understand our message. We ask them what they knew about resilience before they visited, what they learned while in the experience, and whether they intend to change future behavior when it comes to building, rebuilding or buying a home. The research results reveal that guests are surprised to learn that not all buildings are built to withstand disasters but are very happy to learn that they can be.

This year, we are partnering with two of the nation’s leading social psychologists to conduct more research. Dr. Roxane Cohen Silver of University of California Irvine and Dr. Baruch Fischhoff of Carnegie Mellon University are helping us look deeper at decision-making around resilience. Beyond providing further validation of our approach, our hope is that the findings will provide us with insights that are useful in future public awareness initiatives.

III. Open Source Framework

The third and final area where we believe we could better drive resiliency is through establishment of an “Open Source Framework.”

We use the definition that goes beyond the traditional software application to a broader application where open sourcing means, “expressing willingness to share and collaborating with others in ways that are transparent.”

One of the most recent, successful open source movements is in education where Rice University Professor Richard Baraniuk is successfully “open sourcing” textbook access to approximately two million people per month. And the result has been phenomenal. For example, now young students in Pakistan have access to self-paced trigonometry courses.

It’s likely that all of our work can benefit from better information sharing, and this is especially true on the frontlines of disaster safety. So where do communities go to get and share best practices about mitigation?

We have started a new website, just out of BETA last month called www.mitigationmovement.org to test and demonstrate the idea of open sourcing resilience strategy, information and programs.
MitigationMovement.org is an open community created to help members of the disaster safety movement come together and collaborate.

When you visit MitigationMovement.org, you can access free academic research papers, consumer education campaigns, long-term recovery opportunities and technical resources.

One example of what you will find are research papers by Dr. Forrest Masters of the University of Florida, Civil Engineering that address residential building performance of roofs, roof coverings, windows and other critical components. Dr. Masters tests disaster-resilient building practices and products to help improve building codes and standards, and you will learn a lot there, but you can share insights with him and other researchers as well.

We invite everyone here to join us on this website both as users and contributors.

Open sourcing projects like MitigationMovement.org cut across multiple industries to ensure that everyone can play a role in improving resilience. It is much more efficient because everyone has access to the same information, the same scientific research and everyone can participate in the policy conversation.

Conclusion

So I hope you now see why we believe policy leadership, creating a public value for a culture of prevention and maintaining an open source framework are so critical to our efforts to advance the cause of disaster resilience. And, we are so honored that our vision honed over three decades is perfectly aligned with that of UN-Habitat.

Like you, we know that disaster safety, resilience, survival and endurance (by whatever label) is what we need. And it can only be achieved when the goal of preserving lives AND property is aligned.

We are standing by to support your efforts whether it is through sharing of awareness initiatives, methodologies, model curriculum, technical programs or template policies. I thank you for your time today and commend you for your efforts.