Is resilience resilient?

Justin Schultz, Director | HR&A Advisors
Around the world, disasters are becoming more frequent and severe as recovery costs are growing.
Financial losses from adverse events have grown exponentially over the past 36 years, rising from $50 billion per year to $200 billion.
In the US, federal recovery funding is unable to cover these increasing costs.
Cities, and the infrastructure that support them, are more vulnerable than ever to climate change-related risks, and conventional solutions are ill-suited to address the increased risks urban density.
At HR&A, we empower communities to address pressing resilience challenges by leveraging assets to create value.
PATHWAYS FOR RESILIENCE

CAPACITY BUILDING

STRATEGIC PLANNING AND POLICY

IMPLEMENTATION
CAPACITY BUILDING

Design, facilitate, and implement programs that build organization capacity and prepare communities to think strategically about resilience and sustainability.
STRATEGIC PLANNING & POLICY

Evaluation of systems’ vulnerability and climate mitigation and adaptation to identify opportunities for implementation in strategic resilience and sustainability plans.
IMPLEMENTATION

Economic feasibility and creative funding strategies for resilience and sustainability of infrastructure and the built environment through adaptation to risks of extreme climate conditions and energy efficiency interventions.
THE RESILIENCE LOOP

STRATEGY PLANNING AND POLICY

Deep City Engagement

Diagnostic Analysis

CAPACITY BUILDING

FUNDING, DESIGN AND IMPLEMENTATION

Thought Leadership and Research
THE RESILIENCE PRINCIPLES

SUPPORT MULTIPLE BENEFITS WITH EACH ACTIVITY

MAKE IMPROVEMENTS AS PART OF NATURAL BUILDING CYCLES, AND ADDRESS MARKET FAILURES

INCORPORATE LOCAL INVOLVEMENT IN DESIGN AND DECISION-MAKING

WORK IN LAYERS FOR INDEPENDENTLY EFFECTIVE SOLUTIONS

DEVELOP ADAPTIVE AND FLEXIBLE STRATEGIES
CAPACITY BUILDING

NATIONAL DISASTER RESILIENCE COMPETITION
Led 67 disaster-impacted communities through resilience strategy development.

Produced eight academies attended by over 500 jurisdiction representatives and partners, including 250 subject matter experts.

Facilitated access to technical assistance from climate scientists, engineers, designers, and policy advocates.

Managed federal efforts to inform local resilience insights.
OUTCOMES

NEW ORLEANS
$141M
Gentilly Resilience District

VIRGINIA
$121M
Green Infrastructure & Economic Development Center

NEW YORK CITY
$176M
Lower Manhattan Coastal protection system

OTHER WINNING JURISDICTIONS

The State of California will receive $70M
The State of Connecticut will receive $54M
The State of Iowa will receive almost $97M
The State of Louisiana will receive almost $93M

The City of Minot, ND will receive $74M
The State of New Jersey will receive $15M
The State of New York will receive $36M
Shelby County, TN will receive $60M

Springfield, MA will receive $17M
The State of Tennessee will receive almost $45M
POLICY & STRATEGIC PLANNING
Supported **evaluation** of city performance and perceptions.

**Strategic action plan** support. Created briefing books, facilitated working groups, conducted research, & prioritized actions.

Developed city’s **strategy framework**, which included goals and implementation actions.
IMPLEMENTATION
STRATEGIES

With multiple benefits, the potential to unlock new sources of funding is expanded.

Flood Protection
Reducing the risk of physical damage and business interruption.

Economic Development
Maintaining the neighborhood’s and the city’s competitiveness.

Livability
Expanding opportunities for new open space, housing, schools, and cultural amenities.

Mobility
Improving circulation across all modes.
STRATEGIES
Ability to leverage other public and private investments to reduce certain project costs.

INTEGRATE PARKS & INFRASTRUCTURE
DEVELOPER IN-KIND CONTRIBUTIONS

ALTERNATIVE FUNDING SOURCES
LOCAL FEDERAL
PROJECT COST

FUNDING SOURCES
STRATEGIES
By expanding project scope, additional funding sources can be utilized.

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<th>Local</th>
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<th>Federal</th>
<th>Private/Utility</th>
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<td>FTA, FHWA</td>
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LESSONS

Recognize and quantify a broad array of public and private benefits.

Attract federal funds by matching the project benefits case to evolving federal cost-benefit frameworks.

Apply value capture mechanisms to monetize the benefits of resilience projects accruing to a diverse mix of parties.

Align resiliency investment plans with other municipal levers to reduce total project costs.