



ResilieNomics & Building Resilience Index

**Changing how we
Build, Finance & Insure**

May 2026

Topics

- 1. Intro**
- 2. ResilieNomics**
- 3. Building Resilience Index**
- 4. Opportunity**
- 5. Conclusion**



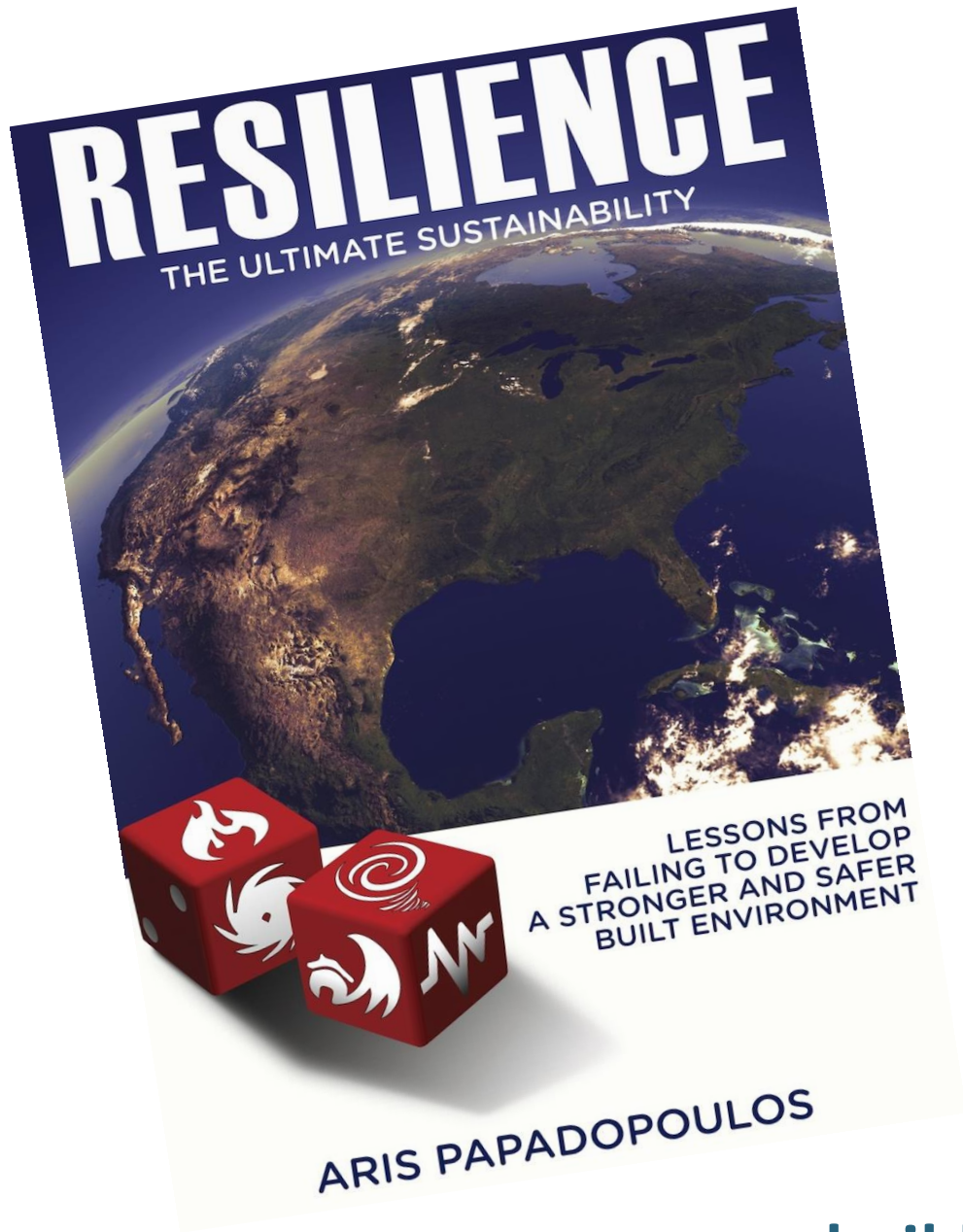
My Resilience Journey



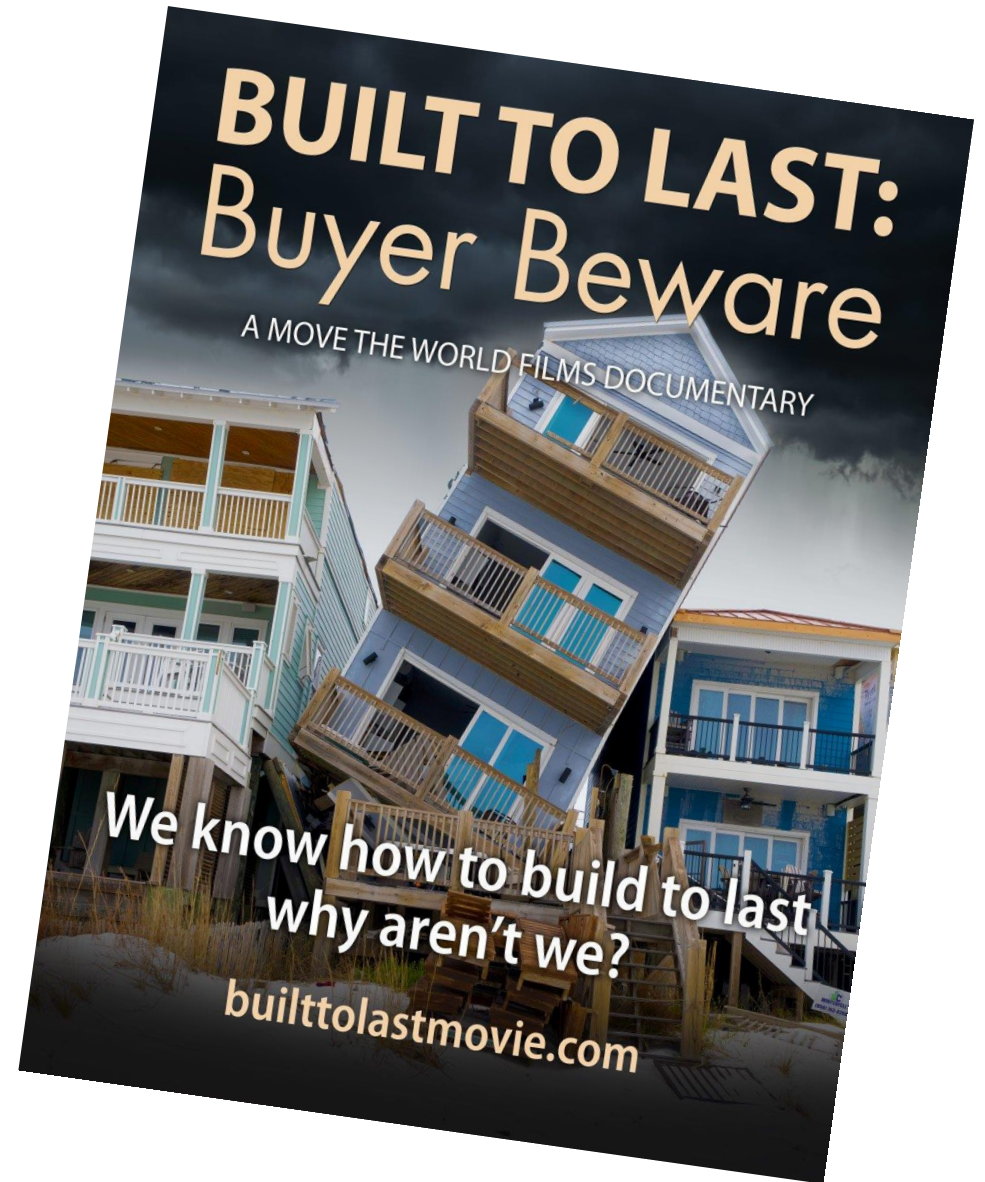
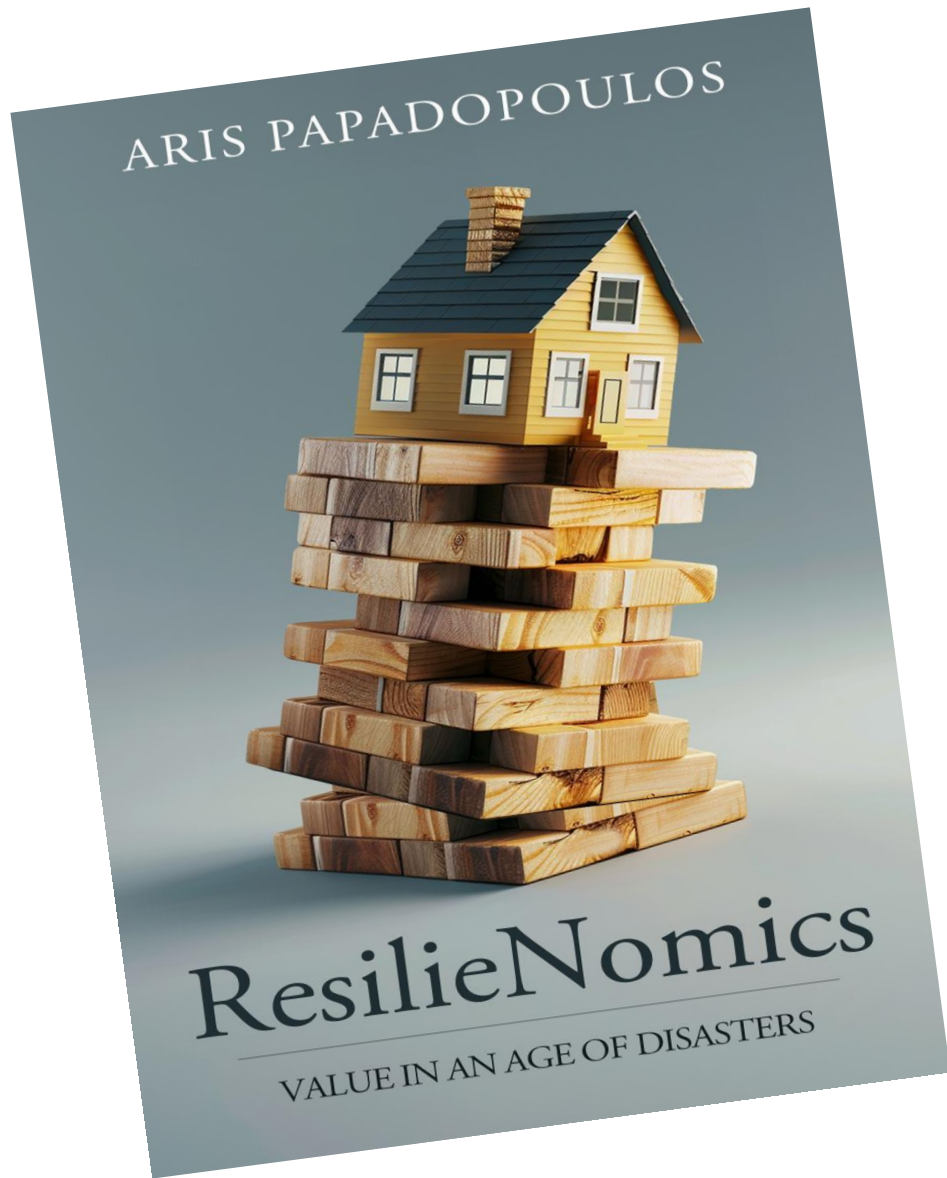
FIU
Extreme Events
Institute


Resilience Action Fund
For a Stronger and Safer
Built Environment





www.buildingresilient.com



www.builttolastmovie.com





Build Resilience - Advance Professionally - Make an Impact

ResilieNomics-in-Action Fellowship (RNF)

JUNE 2026 - APRIL 2027
Remote - Part Time - Paid Stipend

ELIGIBILITY REQUIREMENTS

- US Citizen or Legal Resident
- 5-20 Years of Experience
- College or Vocational Degree
- Background in Building Design/ Construction/Operations/Sales/ Finance
- Part-Time (4hrs/week) - while employed
- **Disaster experience a plus!**

www.BuildingResilient.com

WHAT YOU'LL GAIN

- Paid Stipend
- Free Program Materials
- Mentorship & Training
- National Network
- Real World Impact



Apply by
April 30, 2026

Mark Samuelian Awards in Residential Resilience - 2025

CELEBRATING HIS LIFE, VALUES & LEGACY
IN BUILDING A MORE RESILIENT FUTURE



Commissioner
Mark Samuelian
1963 - 2022

Submit your application
July 15 - October 15, 2025
1st prize: \$5,000

Projects must demonstrate
resilience benefits to
residential buildings in Florida

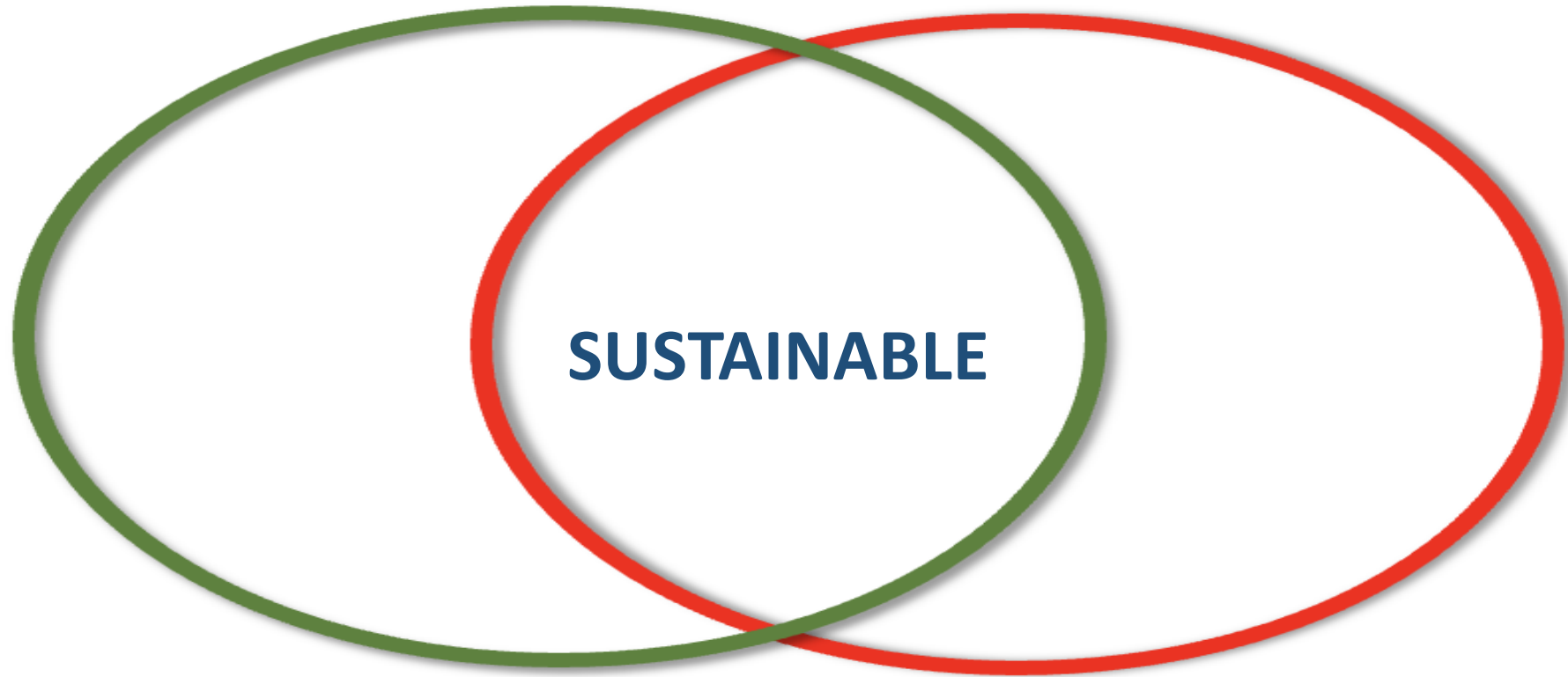
The third annual awards reception will be held at
Miami Botanical Garden on November 17, 2025

For more information, visit:

www.buildingresilient.com/mark-samuelian-award/



$$S = G + R$$



SUSTAINABLE

Green

Energy-efficient
Eco-friendly

Resilient

Hazard-resilient
Functional continuity



Natural ~~X~~ Disasters

Natural Hazards

+

Vulnerable Development

=

Development Disasters

ResilieNomics

*Enhancing Home & Community Resilience
by harnessing the Economic & Market Forces
that drive Consumer & Policy Choices
to grow & preserve
Household & Societal Wealth*



***Making the Invisible Hand
of Adam Smith
more Resilient***



Markets work better with

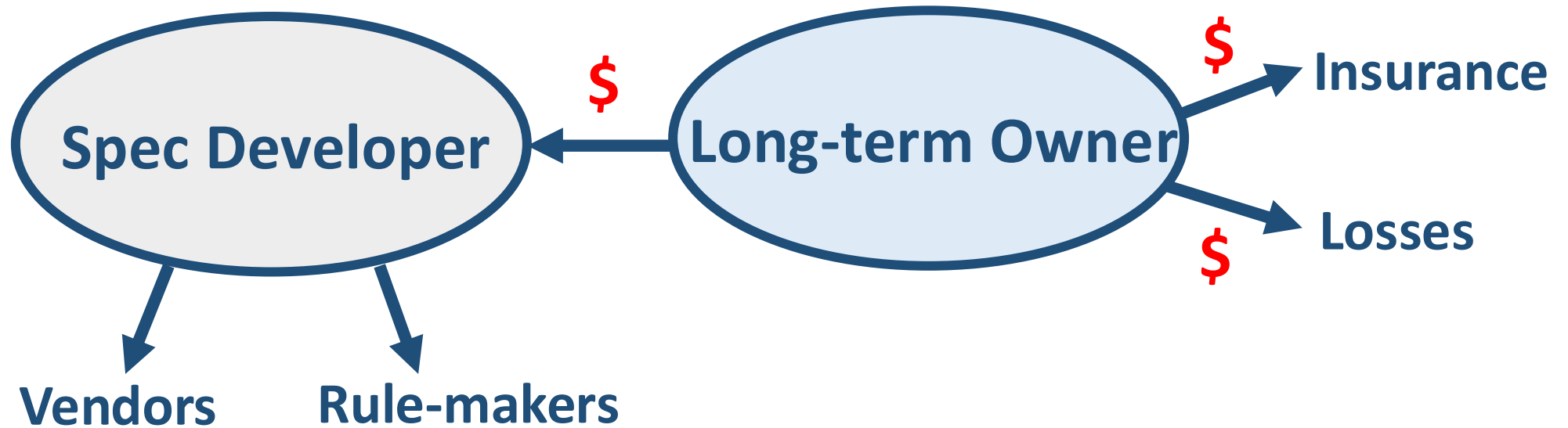
1. Knowledge

2. Transparency

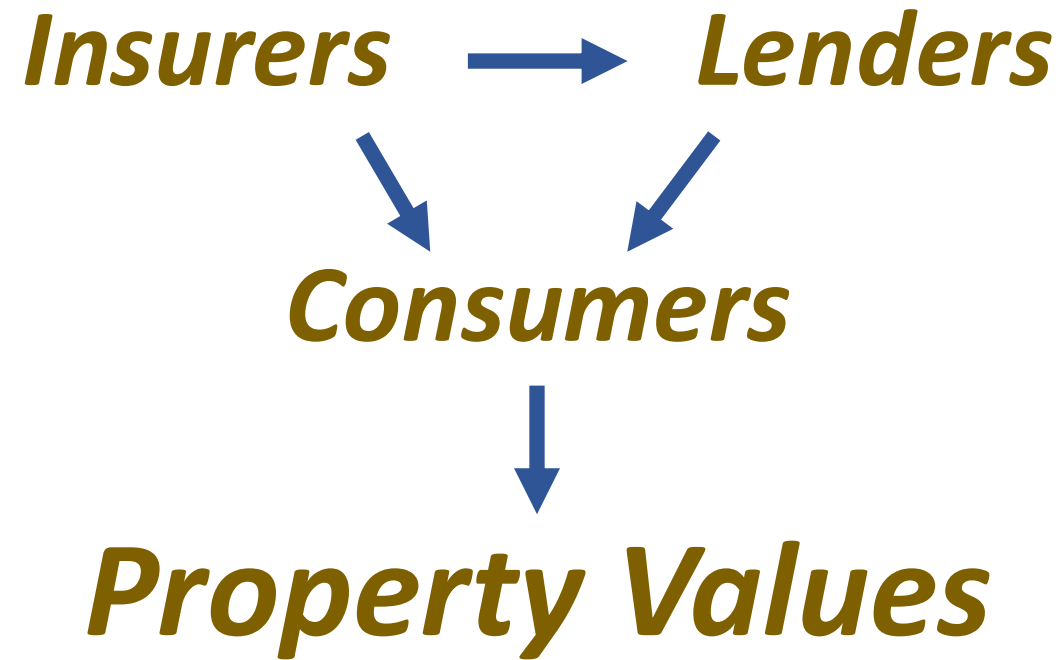
3. Risk Pricing



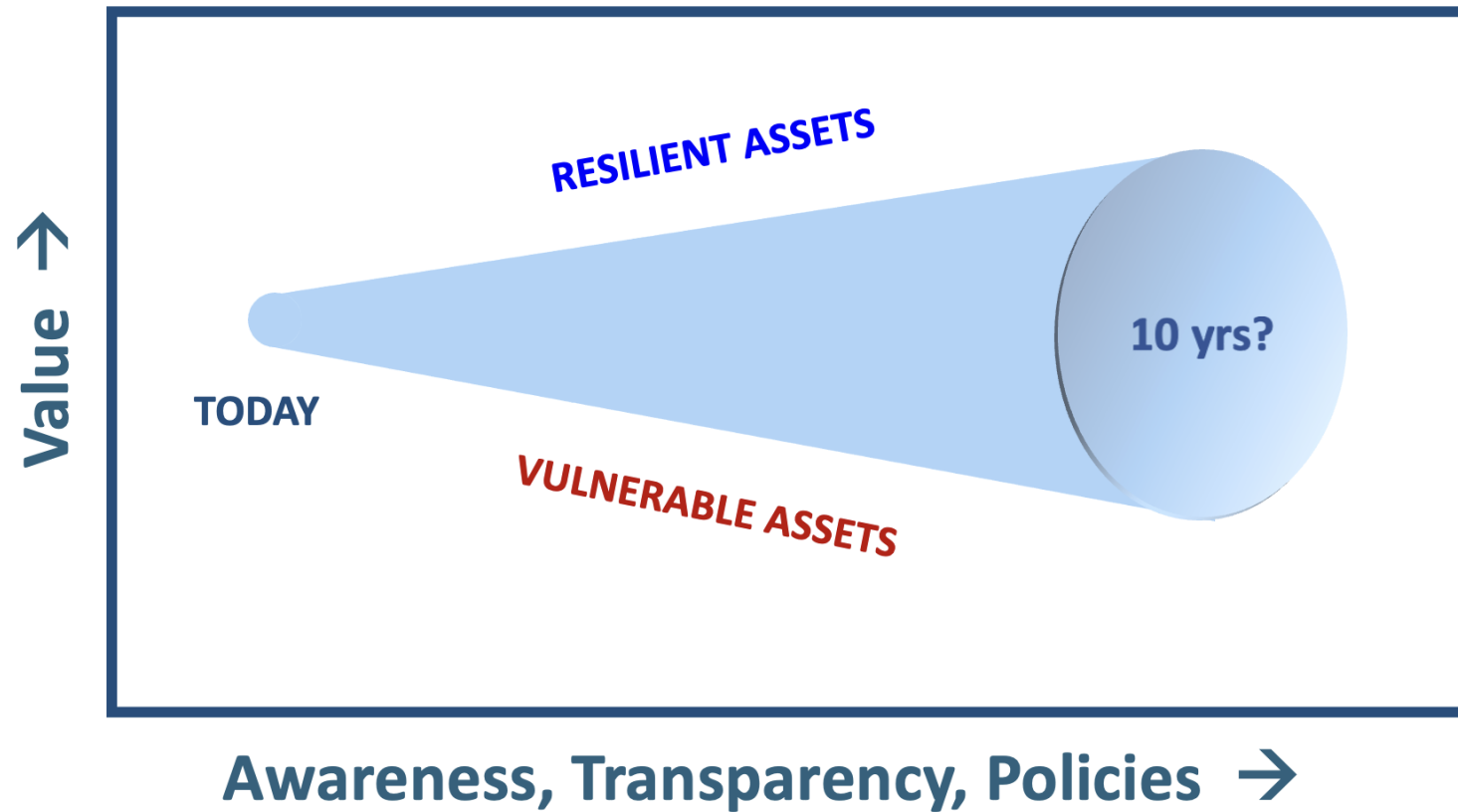
Vulnerable Development is Systemic



ResilieNomics Chain



The Resilience Correction



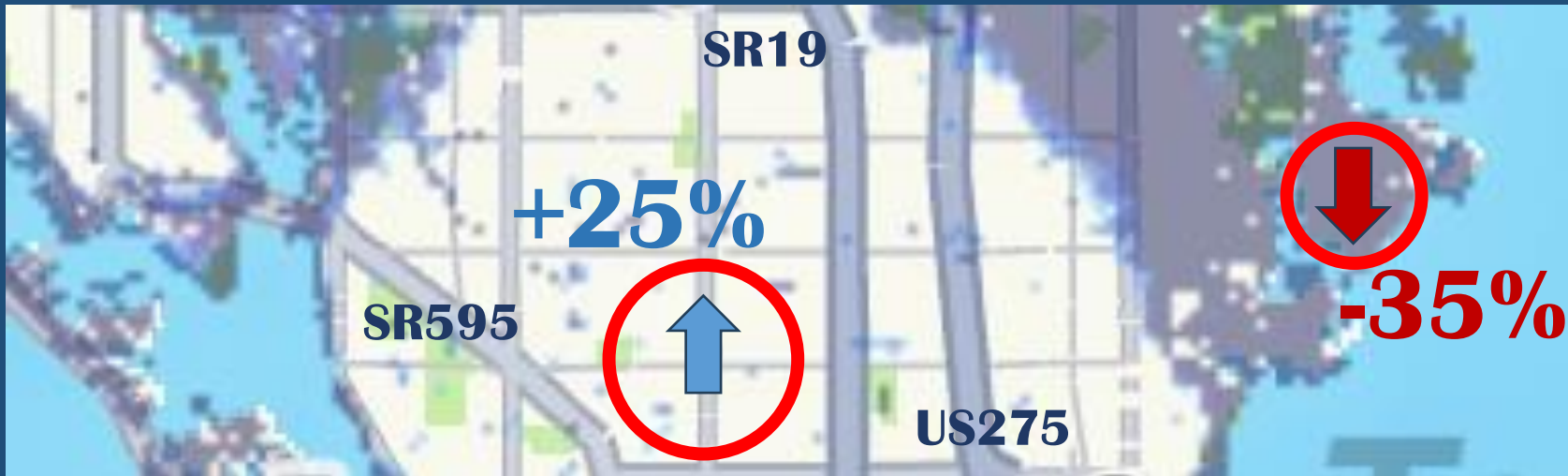
Tale of 2 Neighborhoods

Tampa Bay - 2024 Hurricanes



*Homes <\$400K purchased 5 years prior
& sold in 5 months after Milton*

60% Value Spread!



*How long before consumers
get the message?*

How does flooding affect home values? New report looks at Shore Acres

It found values in the St. Petersburg neighborhood decreased after Hurricane Milton. Values in a less flood-prone neighborhood went up.



What's Wrong with Disaster-prone US Property Markets? Case Study: St. Petersburg, Florida

History & Background

Nathaniel Upham (1865-1942) was a banker and developer from Minnesota who co-founded and was president of the National Association of Realtors. In the economic optimism after WWI and Florida's Roaring 20's land boom, Upham arrived looking for opportunities. He was a relative latecomer, as St Petersburg was already bursting with speculators and promoters.

Shore Acres was a wild marshland on the eastern edge of St Petersburg owned by the family of developer Hamilton Disston. Tampa's 1921 hurricane brought a 10ft storm surge, but that didn't dampen the land rush. Its population was 140,000 and few lived directly on the coastline. The clean-up was quick and officials were spinning positive news. However, Shore Acres had completely flooded and the Disstons decided to sell it and focus 5 miles inland on the higher ground they owned, which they named Disston Heights.

Upham jumped in to buy, figuring the location would draw traffic once the new Gandy bridge from Tampa opened. He dredged canals and the surrounding bay and pumped the mud to raise the land to 3ft. Competing developer Perry Snell was creating Snell Island directly south, except that he was raising the land to 5ft. The extra 2ft was better but cost more, though Upham rationalized that his canals would drain the water. To further trim costs, he shaped the land like a bowl with the center elevated only 1-2ft. These decisions would seal Shore Acres' fate for the next century.

After completing two bridges in 1923 connecting the former swampland to the rest of St Pete, Upham began marketing lots to northerners looking for seasonal homes. The Great Miami Hurricane of 1926 and a parallel recession slowed sales. The Great Depression and

[Full report on website](#)

Tampa got a wake-up call



More coming



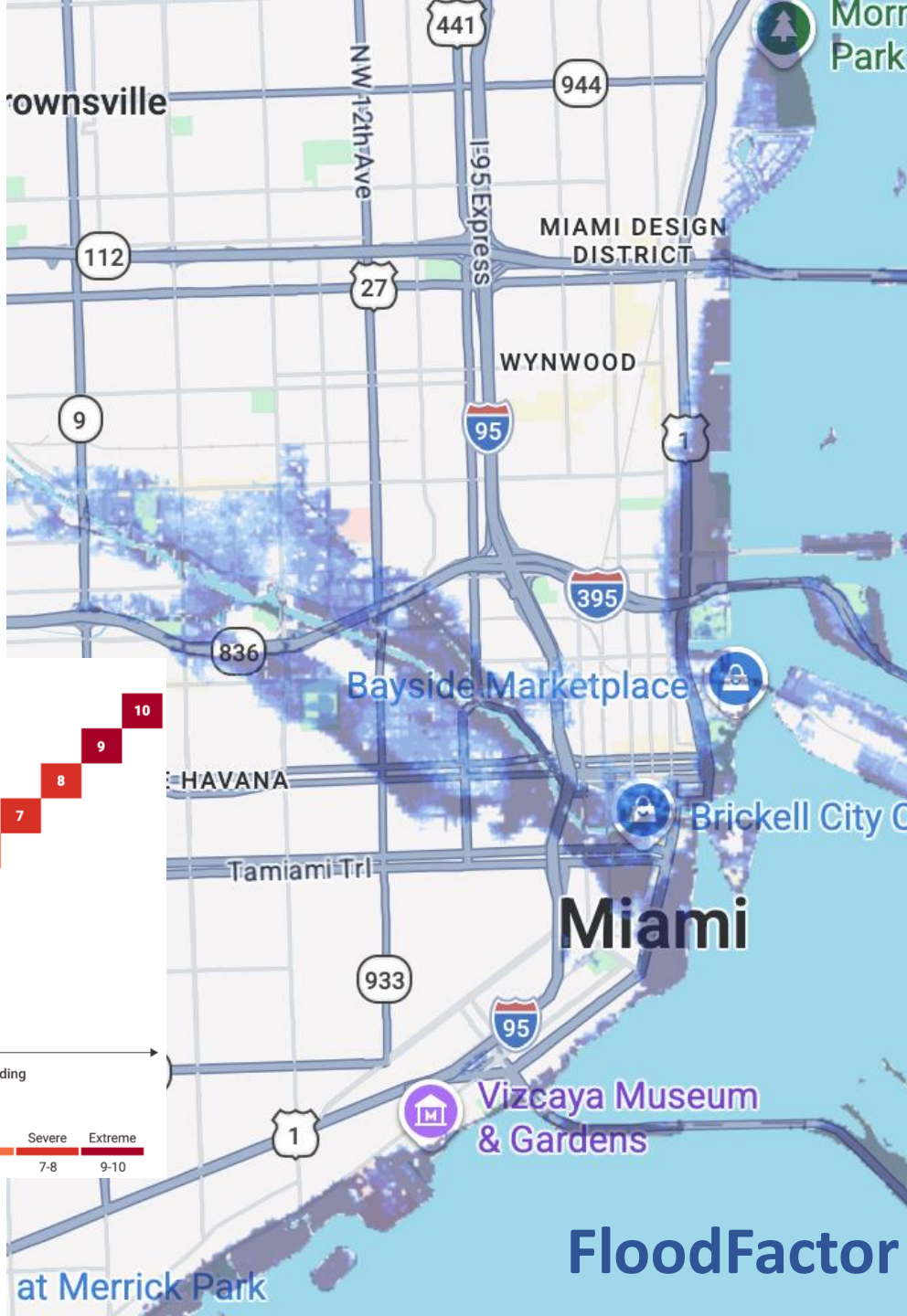
What will drive Market Adaptation

1. Metrics

2. Disclosures

3. Pricing

4. Incentives



Available on



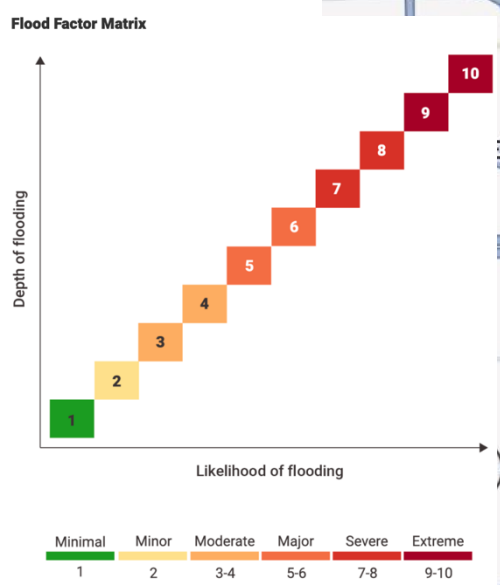
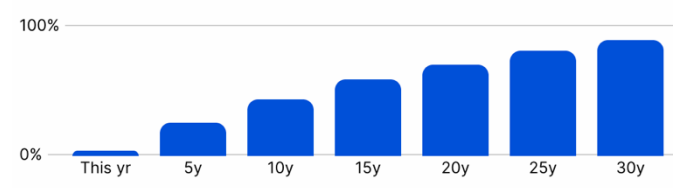
Climate risks

Flood Fire Heat Wind Air

Flood Factor ⓘ



Likelihood of flooding over time:



FloodFactor by First Street Foundation

Insurance Markets

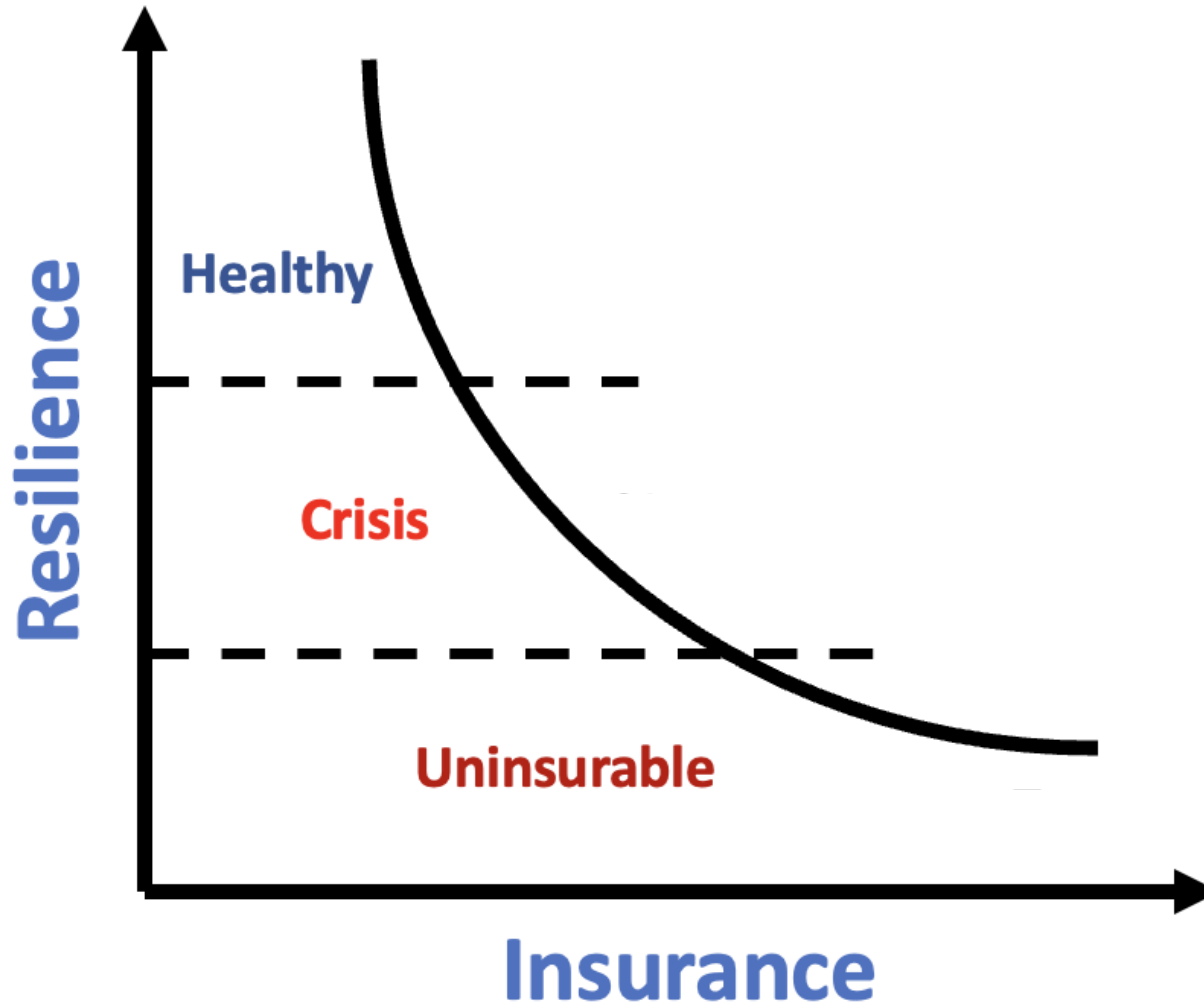
are pricing

Resilience

(or walking away)



The Insurance-Resilience Curve



**If Insurance is rattling
wait what's coming
from Lenders**



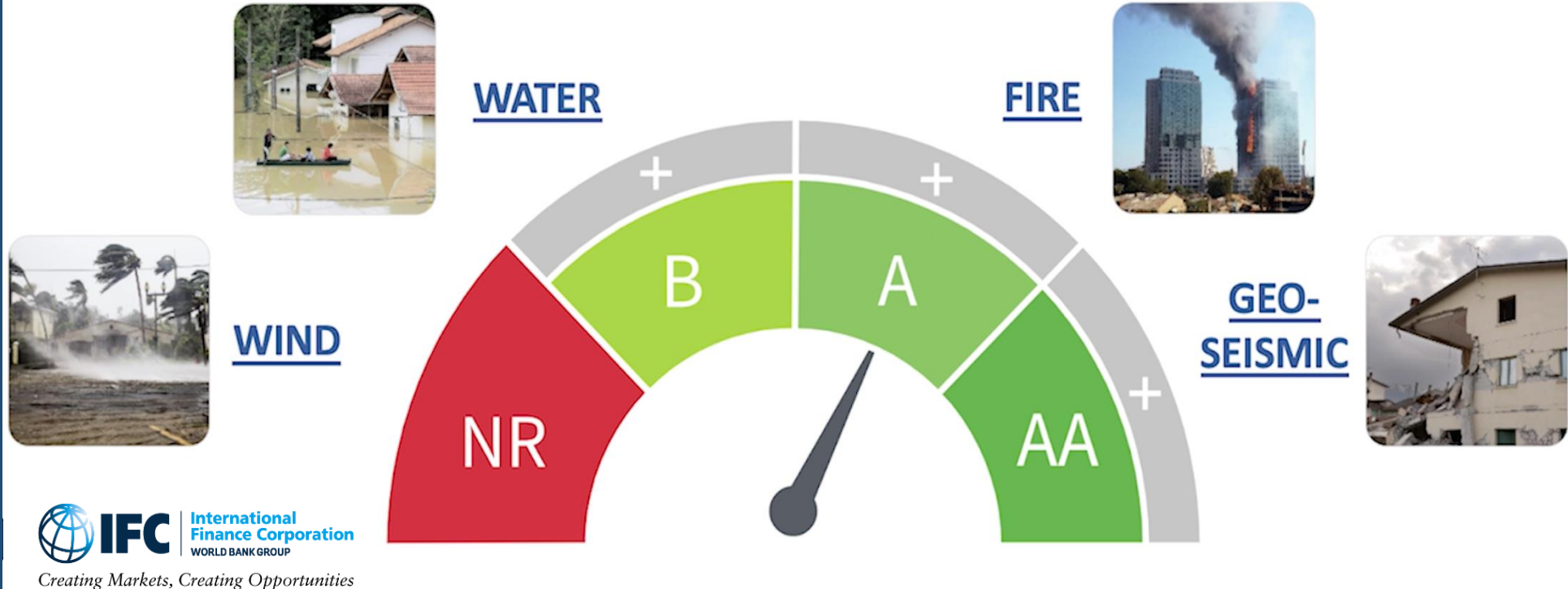
Lender Adaptation

- 1. Insurance contracts last a year**
- 2. Loan contracts last decades**
- 3. Basel III capital rules**
- 4. Need to know resilience of collateral**





Building Resilience Index



An 'S&P Rating' for Building Resilience

What is BRI?

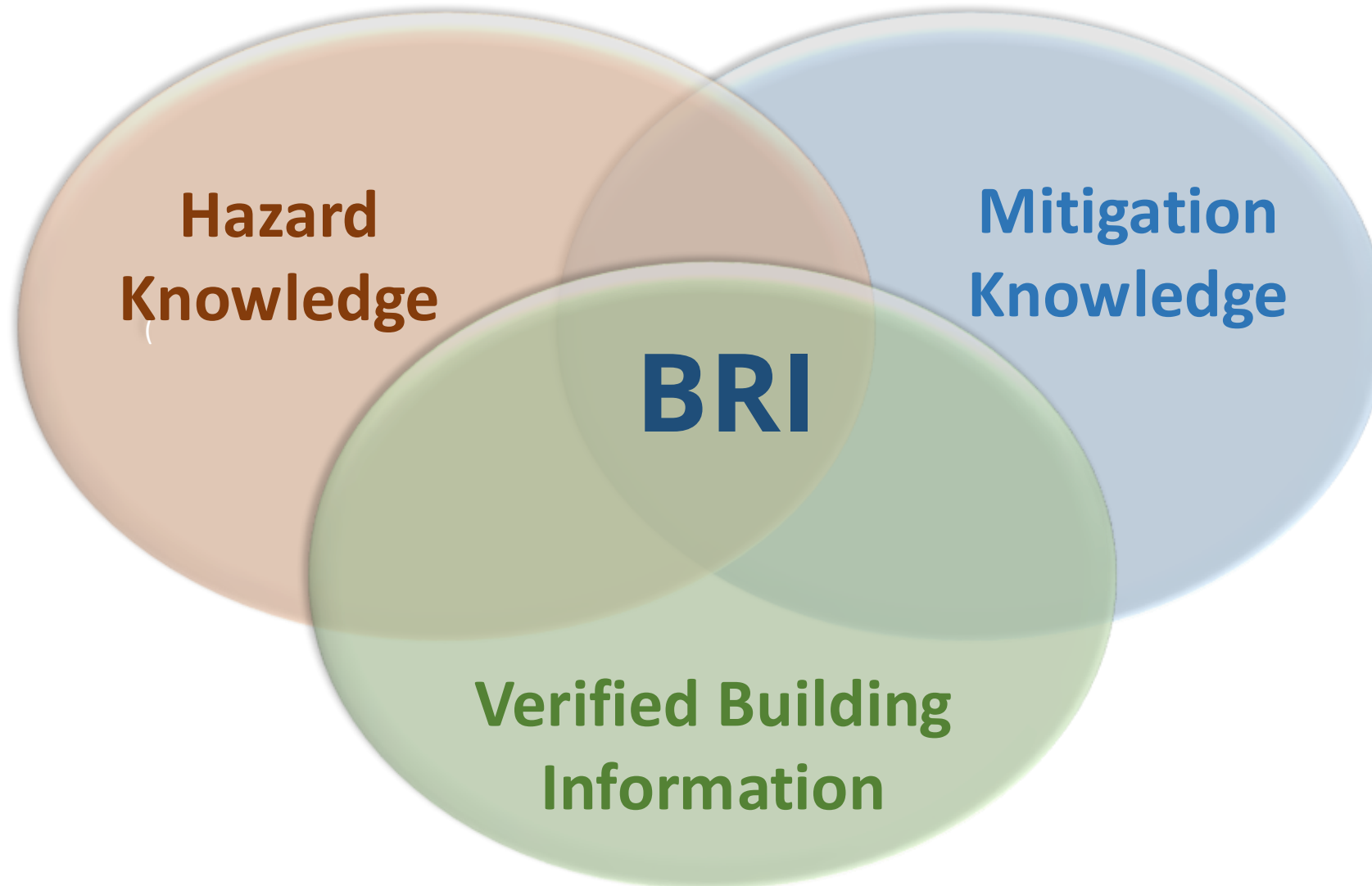
Verified assessment
that rates any building's
hazard mitigation measures



BRI is robust
easy-to-apply
& standardized



Free Open-Source Tool



BRI supplements Local Codes

- **Code compliance is a prerequisite**
- **Set above code for building survival**
- **BRI is conservative**



What makes a building resilient?

- **Physical Integrity: Hazard Resistance**
- **Operational Continuity: Ability to Function**



BRI Rating Levels

AA Global Best Practices

A Strong Resilience

B Basic Resilience

NR Weak or Unpermitted

Plus (+) added for Ops Continuity Measures



Why a Rating?

- BRI rating is relative: AA > A > B > NR
- Responsibility/liability remain with building owner & professional team



Who is the customer?



Two Identical Buildings



A



NR



Identical Buildings - Different Locations



Downbursts
Urban Flooding



Hurricanes
Flash Flooding



Hazards are site-specific

WIND



WATER



FIRE



GEO-SEISMIC



Downburst

Tornado

Hurricane

Urban Flooding

Coastal Flooding

River/Lake Flooding

Flash Flooding

Storm Surge

Tsunami

Local Fire

Wildfire

Subsidence

Volcano

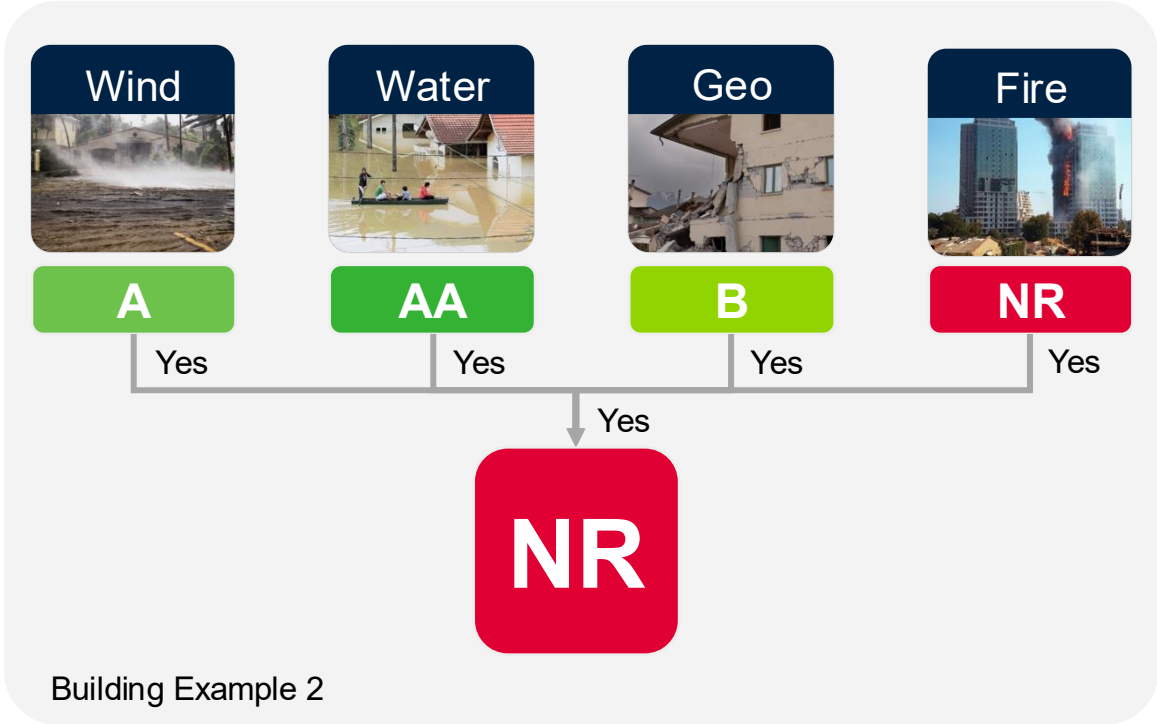
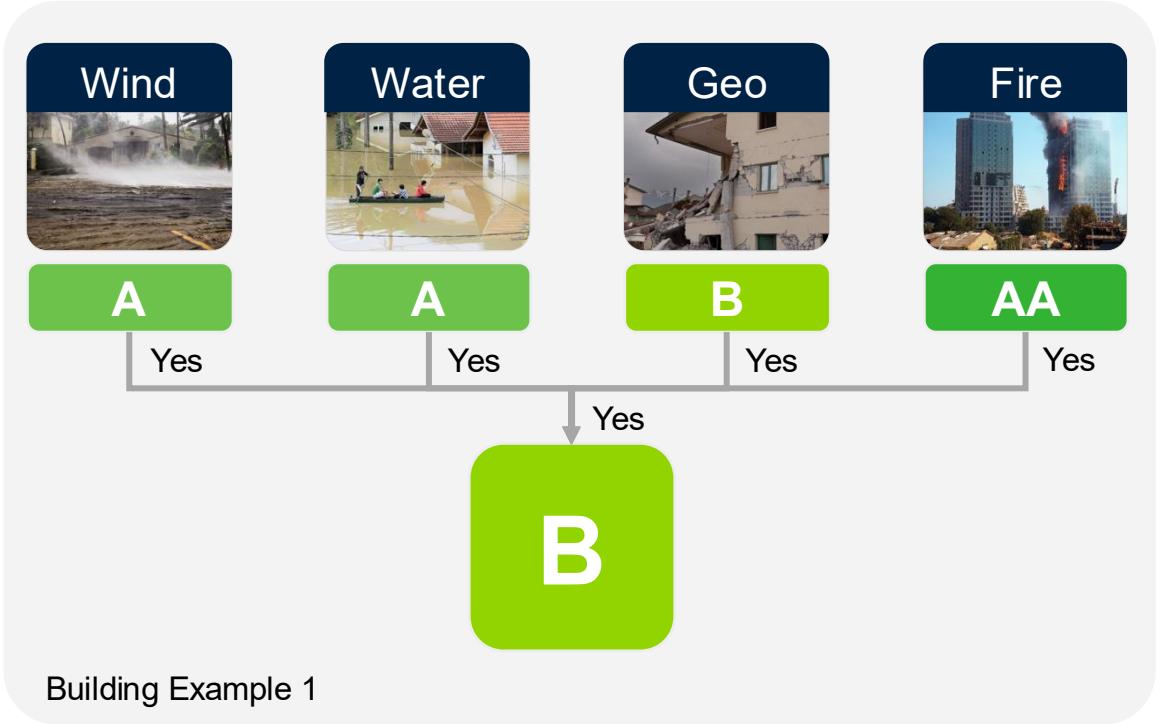
Landslide

Earthquake

Default
Hazards



BRI applies the 'Weakest Link' Principle



BRI Mitigation Measures

WIND



WATER



FIRE



GEO-SEISMIC



Location-related

0

3

2

5

Structural

7

16

18

10

Inspection

2

2

2

3



Select Mitigation Measure Criteria

Wind speed
(hurricane)



1st floor elevation
(flash flood/storm surge)



Fire rating
(key elements)



Earthquake



AA

>180 mph &
concrete

>20ft
+ not wetland

>3 hrs

Seismic base
isolation

A

>155 mph

>16ft

>1 hr

Braced
structure

B

>125 mph

>10ft

>0.5 hr

Sheer walls

NR

<125 mph

<10ft

<0.5 hr

Lacking above



BRI Terms

1. Free & open-source
2. Valid for 10 years, or major event
3. Rating, not certification
4. Verified onsite by 2 registered building professionals
5. IFC can audit

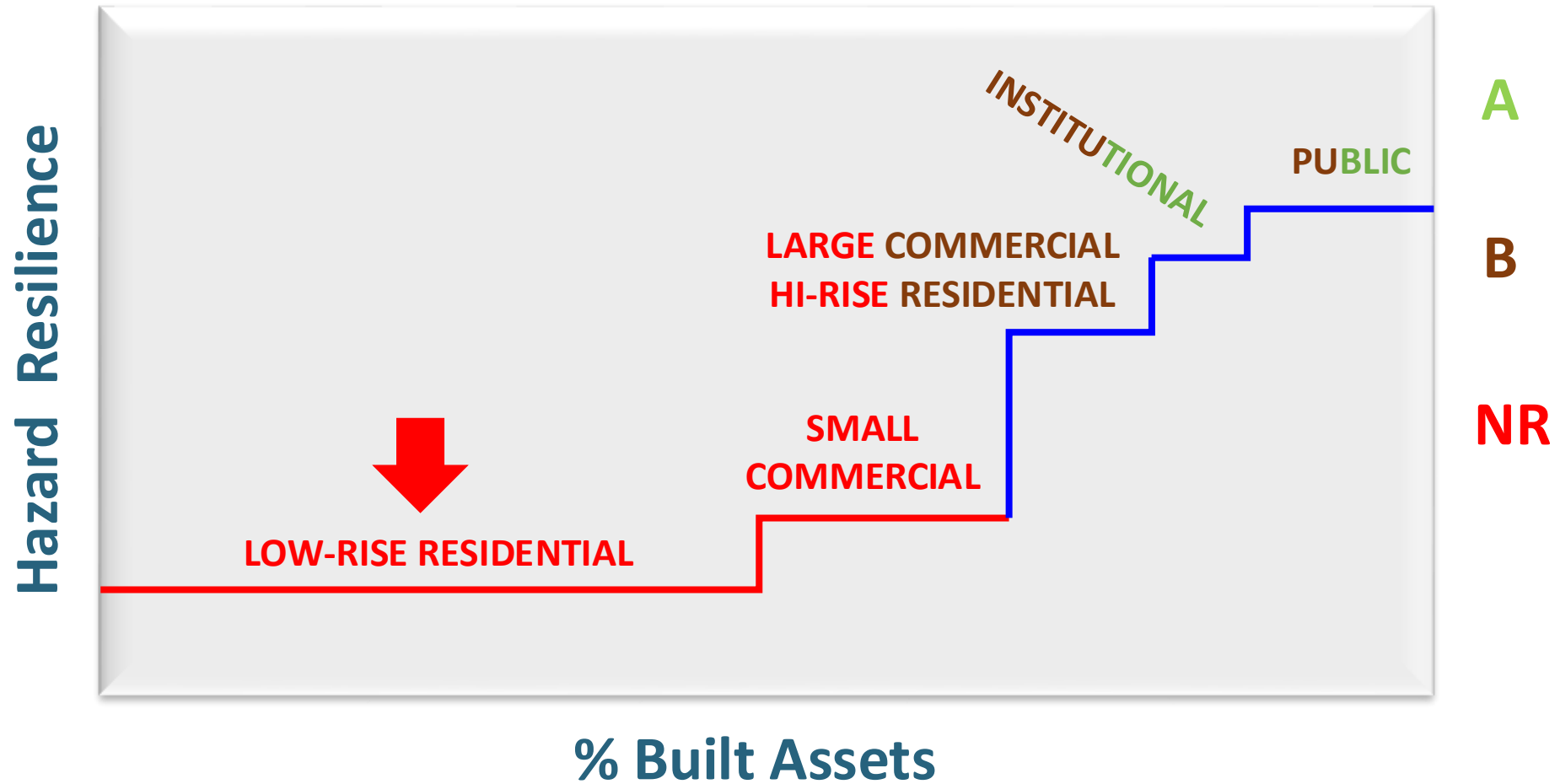


BRI Launch



www.ResilienceIndex.org

Building Stock is mostly **B** & **NR**



Future Implications



Insurance

Lending

Tax/Fees

Value

AA/A

Discount

Favorable

Credit

Premium

B

Standard

Standard

Normal

Base

NR

Uninsurable

Unbankable

Surcharge

Discounted

Opportunity

Become a Certified Assessor and/or Verifier



Certification Requirements

ASSESSOR

VERIFIER

Bld Professional



Training



Licensed



10+ yrs Experience



Pass Exam



Coaching



Conclusion

Markets

rather than

Government Policies

will lead

ResilieNomics

Consumers

acting from self-interest

and armed with

knowledge & transparency

will propel change

Governments can
facilitate transparency,
reward resilience &
allow markets to perform

What ResilieNomics will mean for Consumers

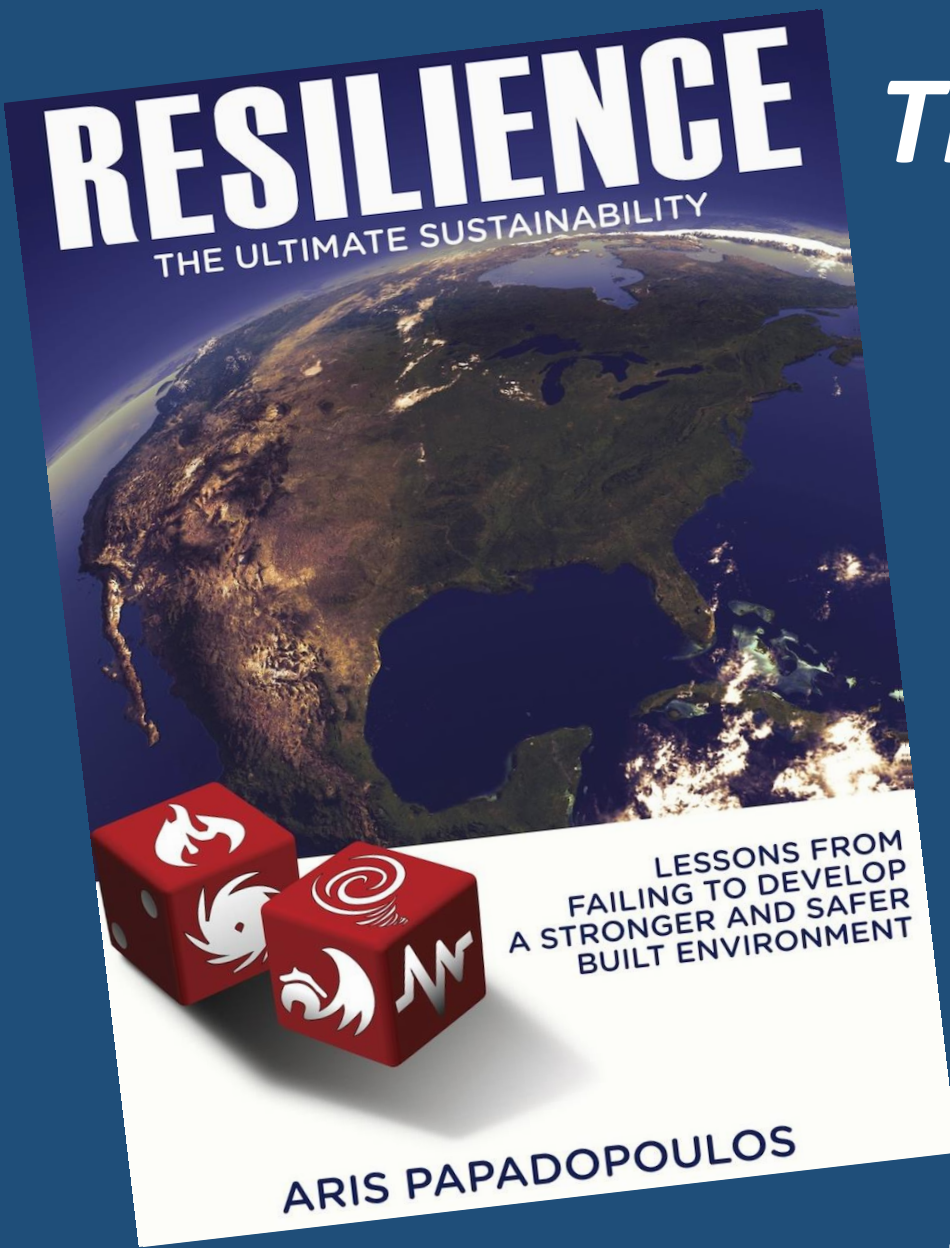
- 1. Awareness & Transparency**
- 2. Resilience Shift**
- 3. Value Differentiation**

What ResilieNomics will mean for Business

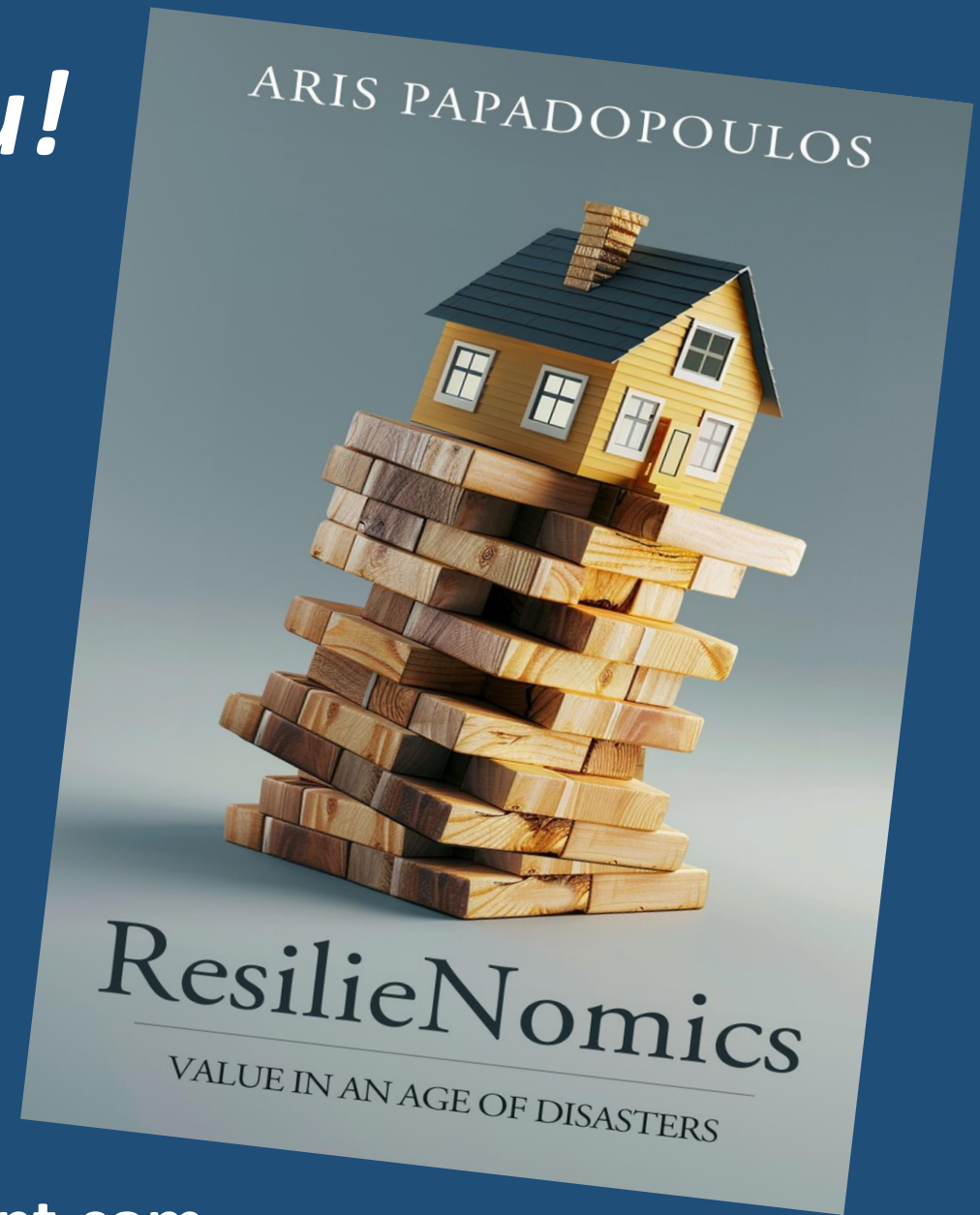
- 1. Demand Shift**
- 2. Profitability Spread**
- 3. Resilience-linked Finance**

Are you preparing?

1. Learn more
2. Strengthen your position
3. Plan for change



Thank you!



www.BuildingResilient.com