



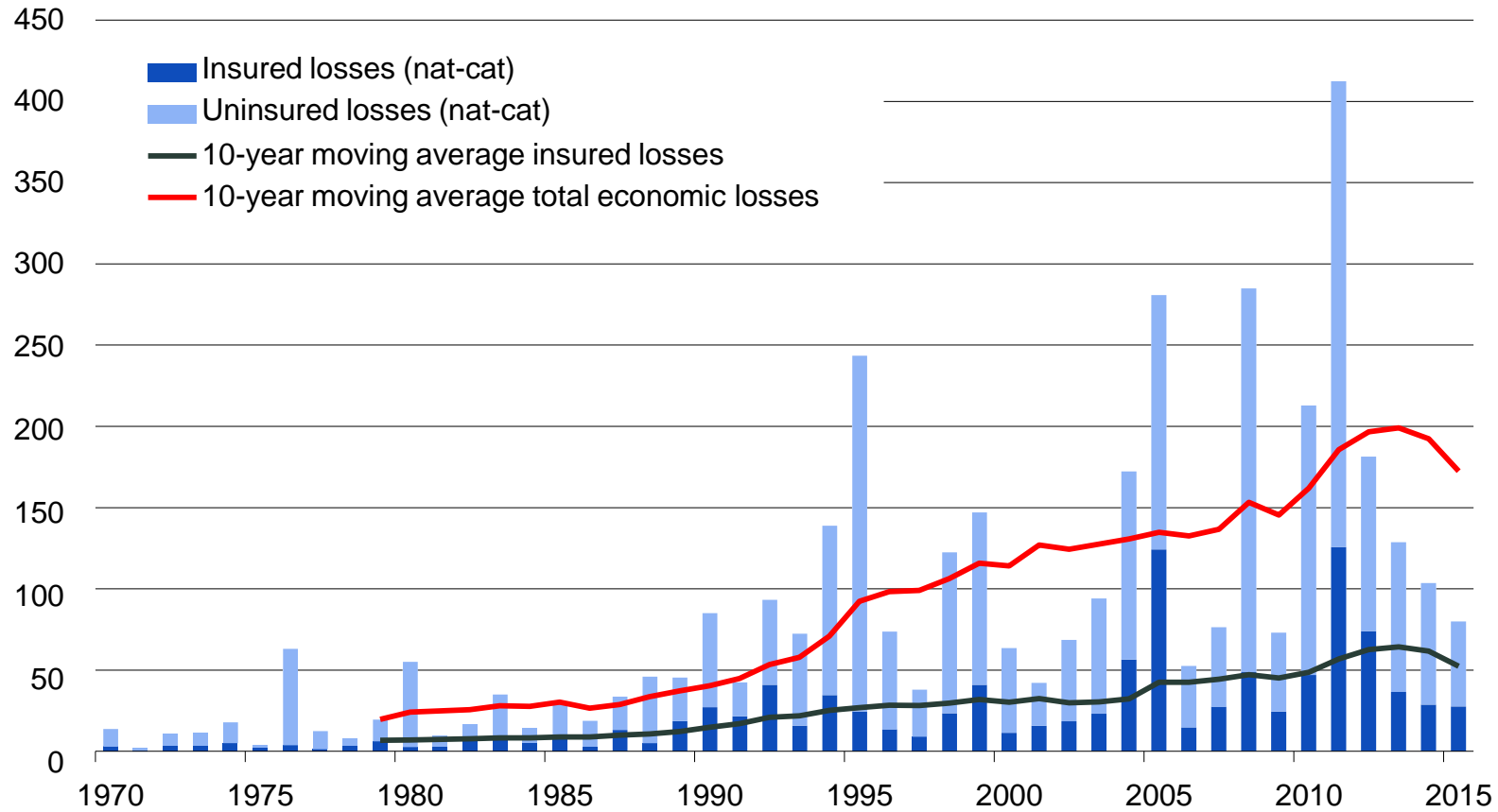
British
Consulate-General
Miami

Creating a resilient public infrastructure in coastal areas

David Prodger, British Consul General,
Miami

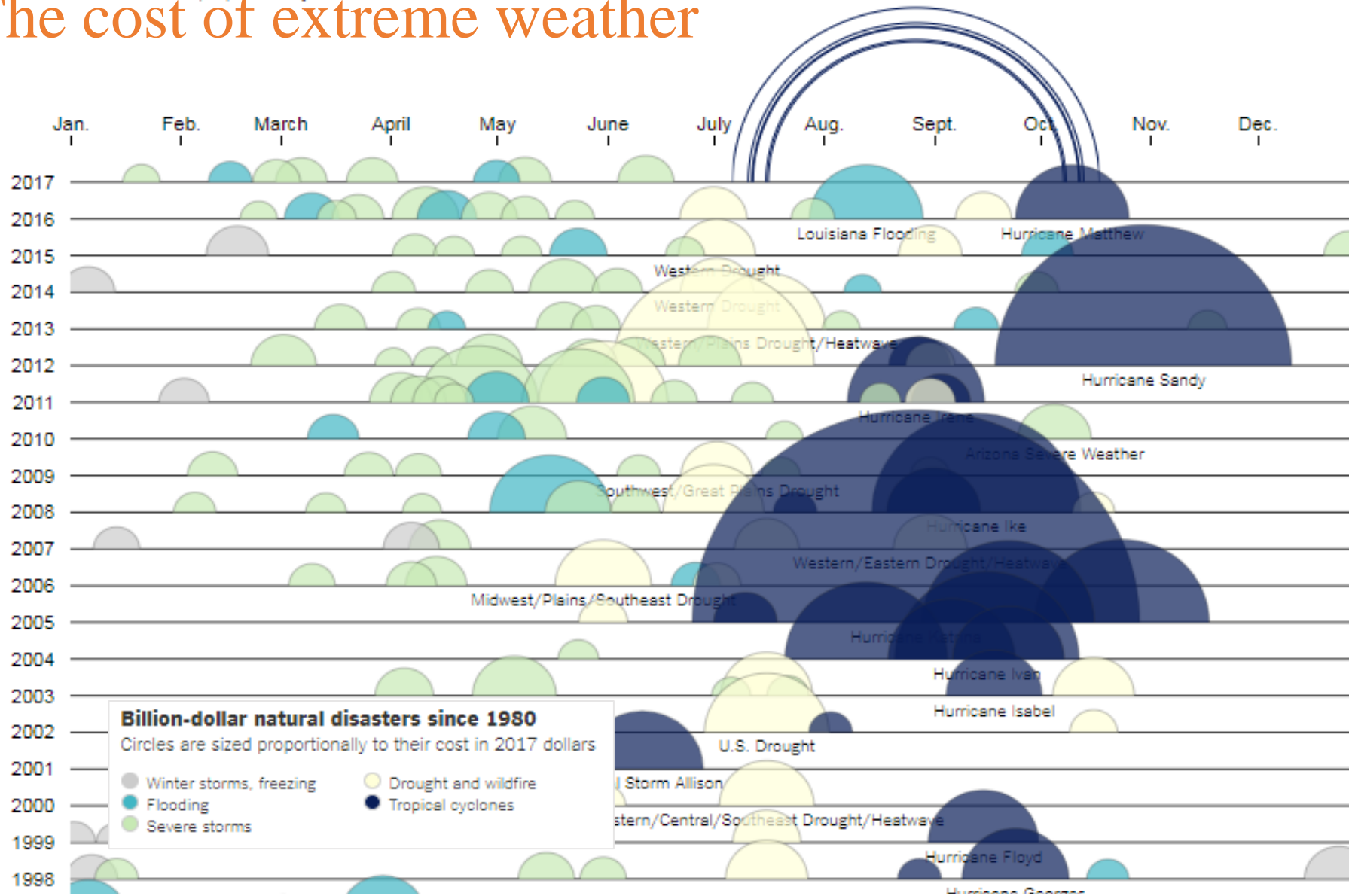
7th Annual State of the South Florida
Economy
11 My 2018

Natural Hazard, Community Resilience and Economic Risk



Source Swiss Re sigma report, 2016

The cost of extreme weather



<https://www.nytimes.com/interactive/2017/09/01/upshot/cost-of-hurricane-harvey-only-one-storm-comes-close.html>

Cost to US GDP

\$3.9

trillion by 2025

Lost Business Sales

\$7

trillion by 2025

Lost Jobs

2.5

million jobs in 2025

Cost to Families

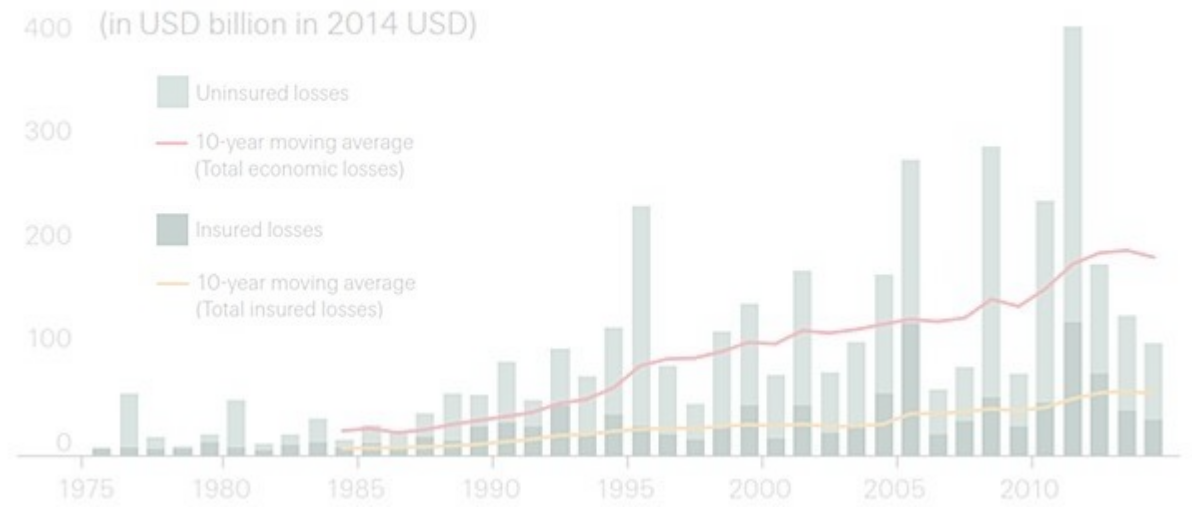
\$3,400

per year

<http://www.asce.org/failuretoact/>

TAXPAYERS PAYING

Natural catastrophe losses: Insured vs uninsured losses, 1975-2014



Only **30%** over last 10 years of cat losses insured

\$1.3 trillion in uninsured cat losses

Source Swiss Re sigma report, 2016

Governments...
uniquely exposed

- Shoulder cost of relief and recovery
- Pay for reconstruction of infrastructure
- Fund the underinsured

Yet, most seek funds...
only after cat event

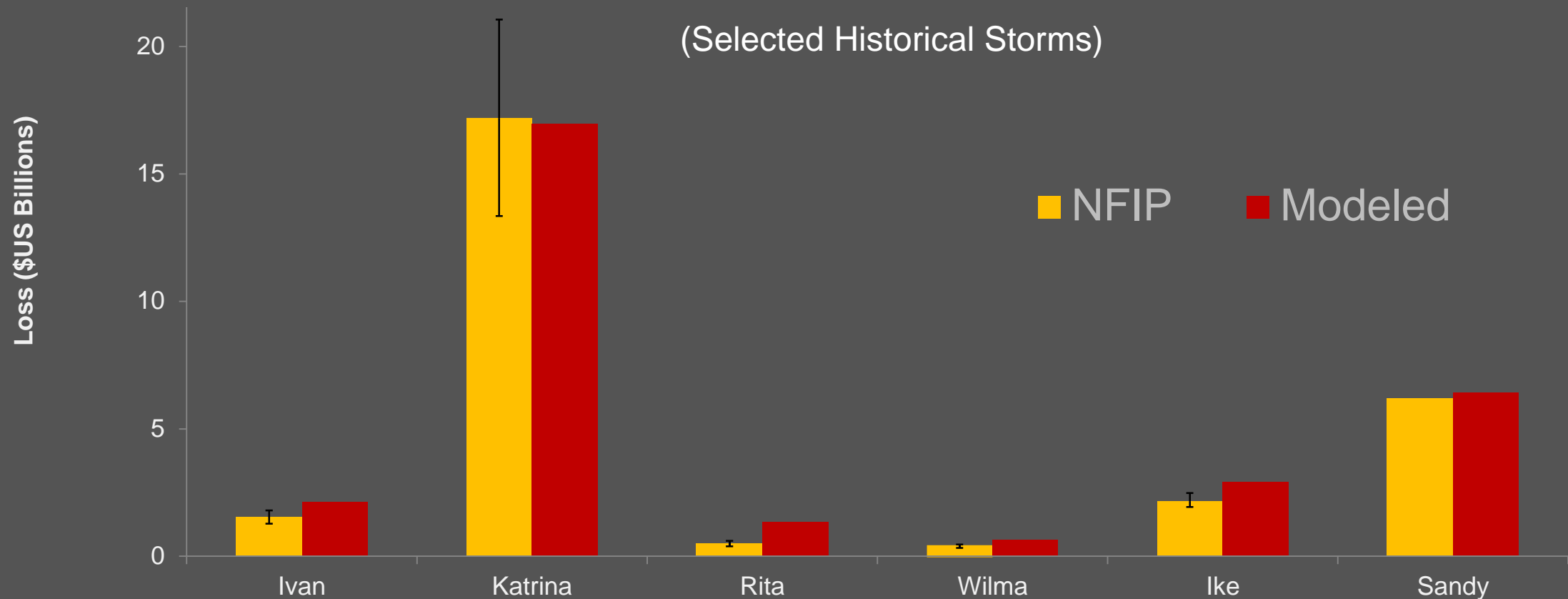
- Increasing taxes
- Borrowing
- Soliciting aid

you
you
you
+
measure it
manage it,
finance it
(whatever, wherever)

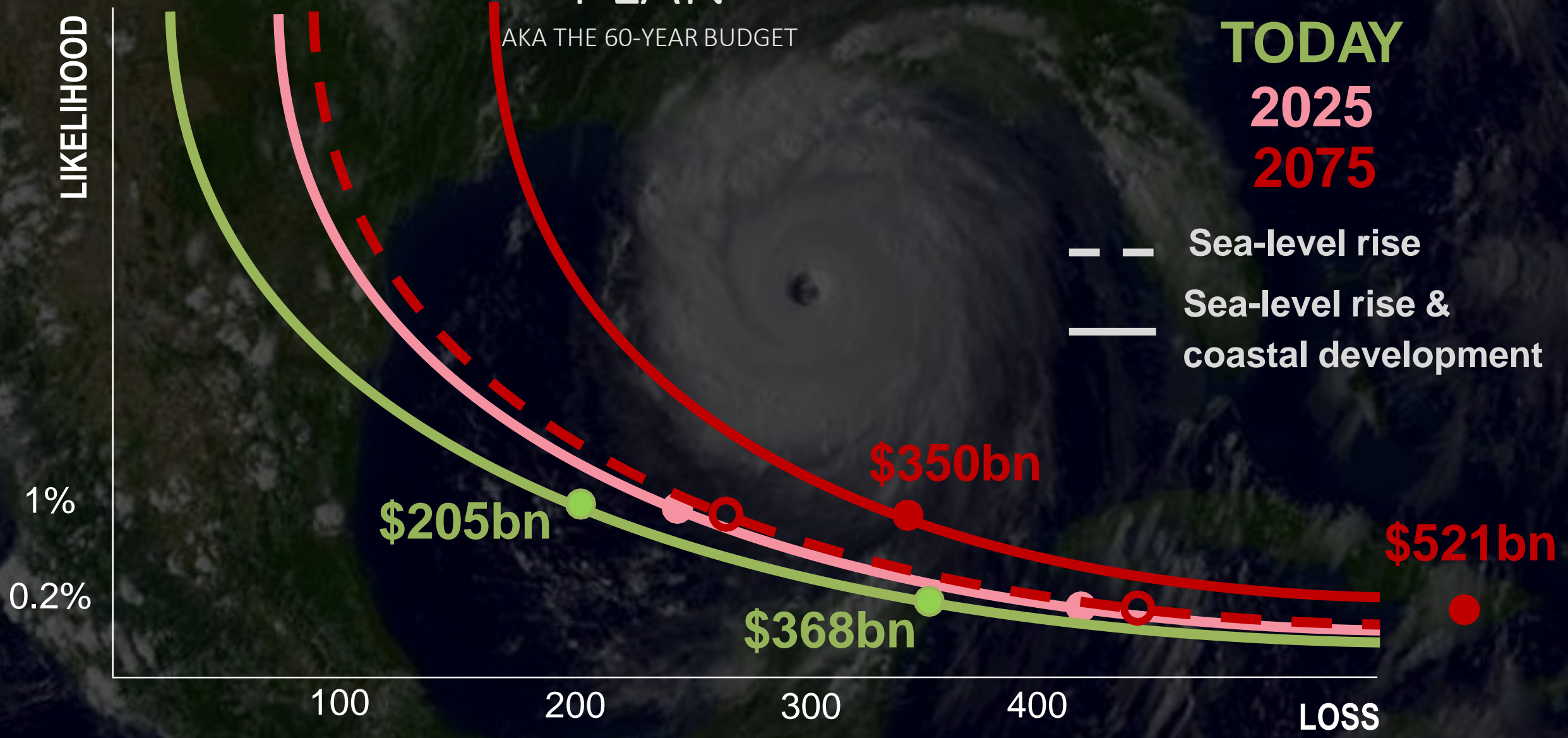


Calibrated to historical loss experience...
...and validated against each new event

Actual vs. RMS Modeled (Selected Historical Storms)

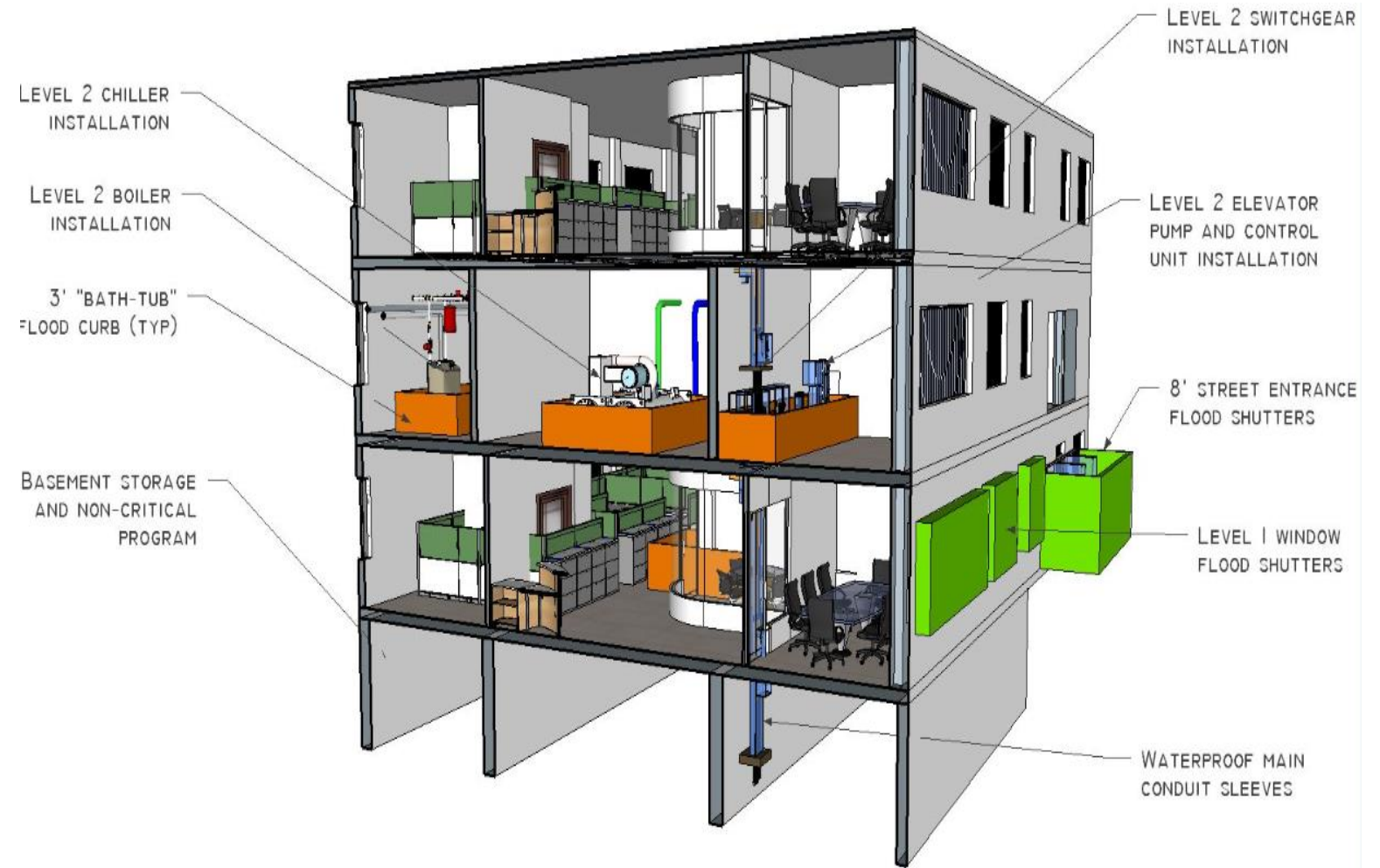


LONG-RANGE RESILIENCE FINANCING PLAN

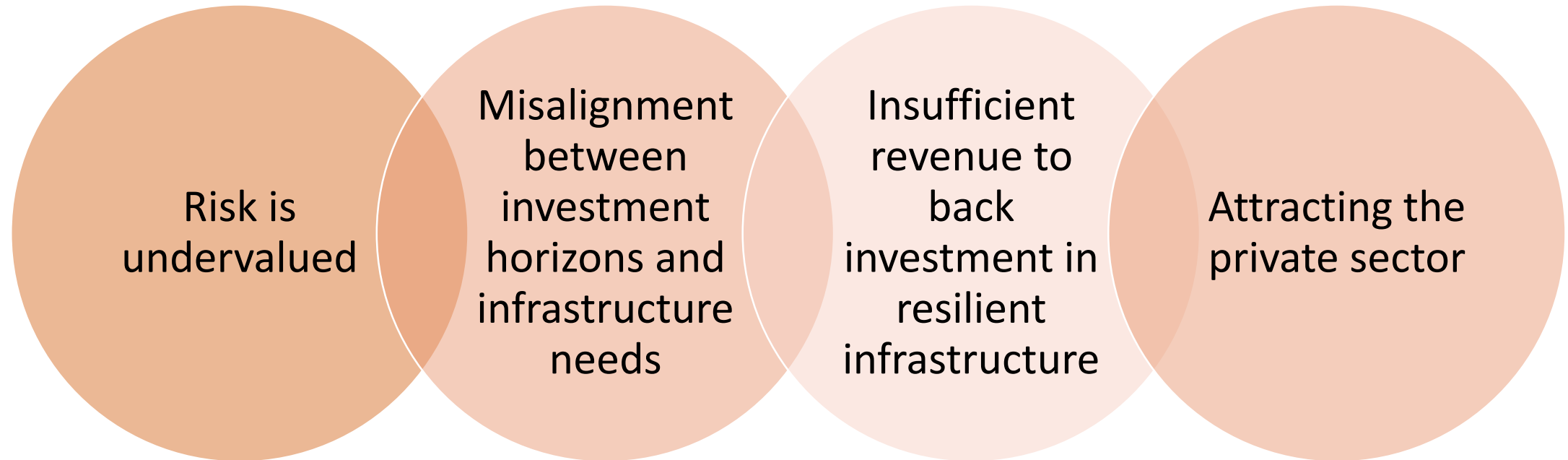


What is the ROI of preparing for extreme weather?

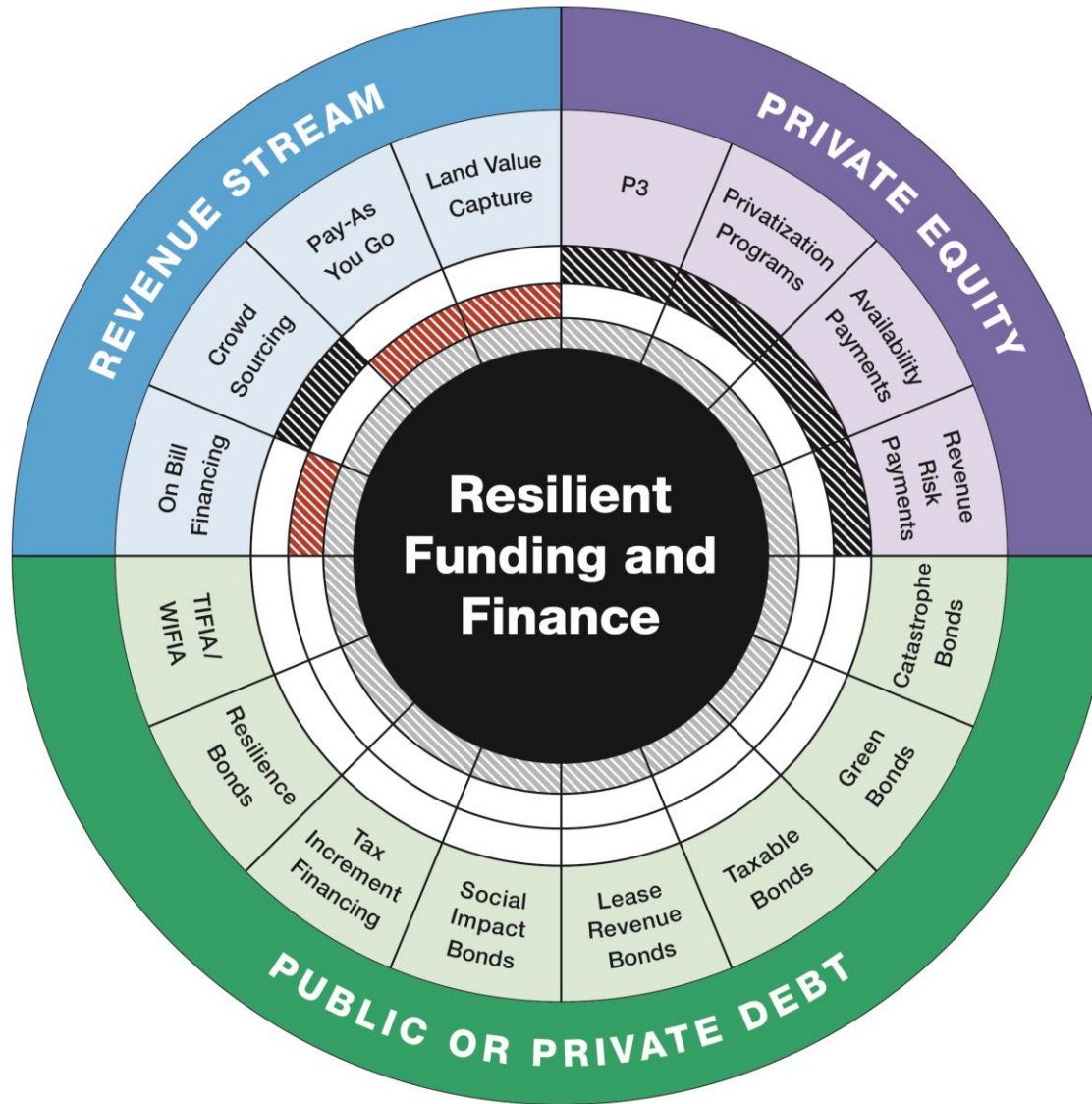
- \$1 invested in building resilience and reducing exposure saves \$4 in disaster response and recovery
- \$1 invested in resilience saves \$4-7 in response and \$5-10 in avoided economic losses
- \$1 on disaster risk reduction saves \$7 in response activities
- \$1 on disaster preparedness saves \$7-10 on response
- \$1 in preparedness is worth \$15 in disaster relief efforts



Barriers to financing resilient infrastructure



Portfolio of funding and financing strategies



TYPE OF FUNDING

- Private Equity
- Public or Private Debt
- Revenue Stream

UNDERLYING RISK ALLOCATIONS

- Risk transferred to Private Sector
- Risk retained by the Public Sector
- Risk shared between Private and Public Sector – applicable to all depending on how structured



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