Understanding Risk 2016

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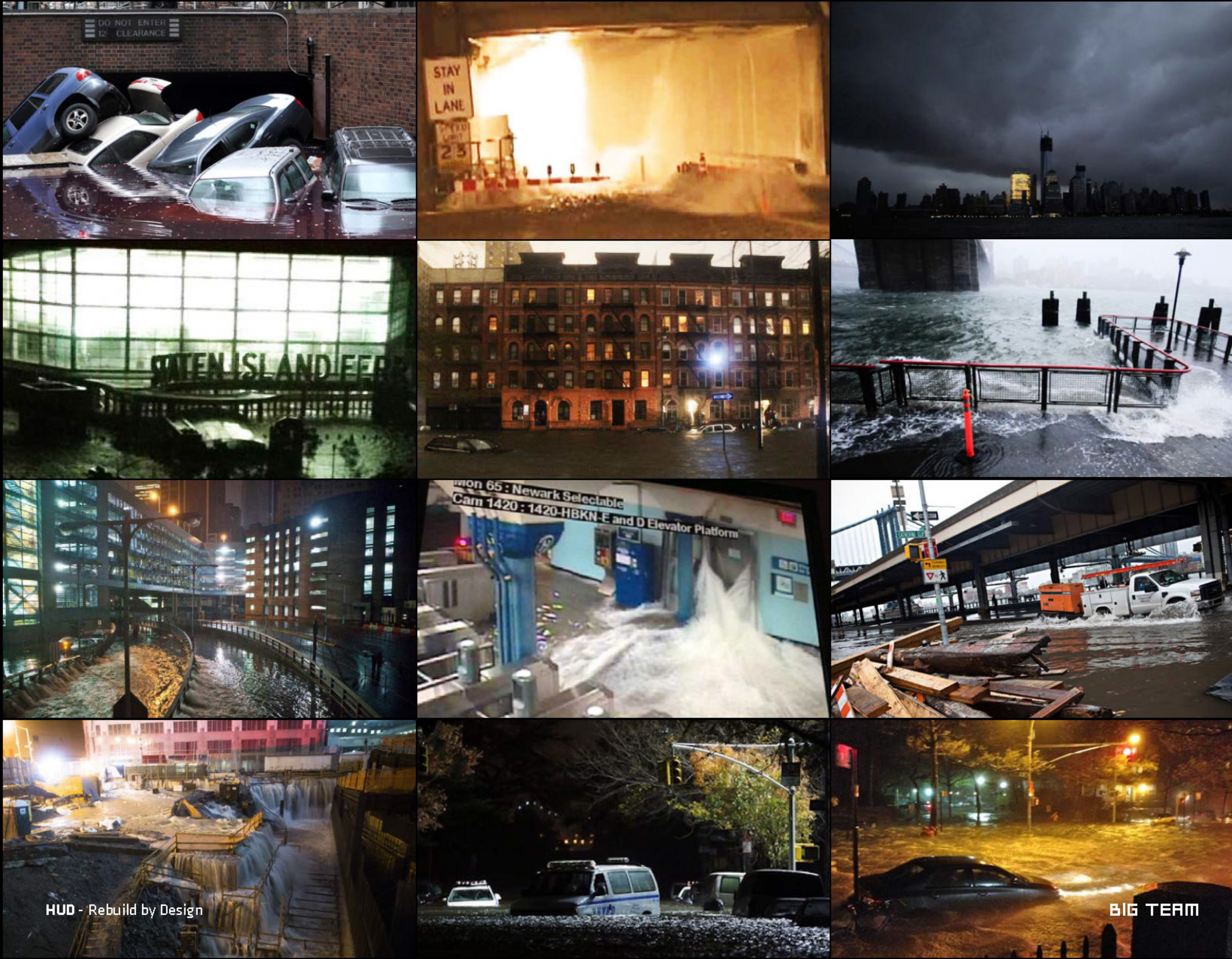
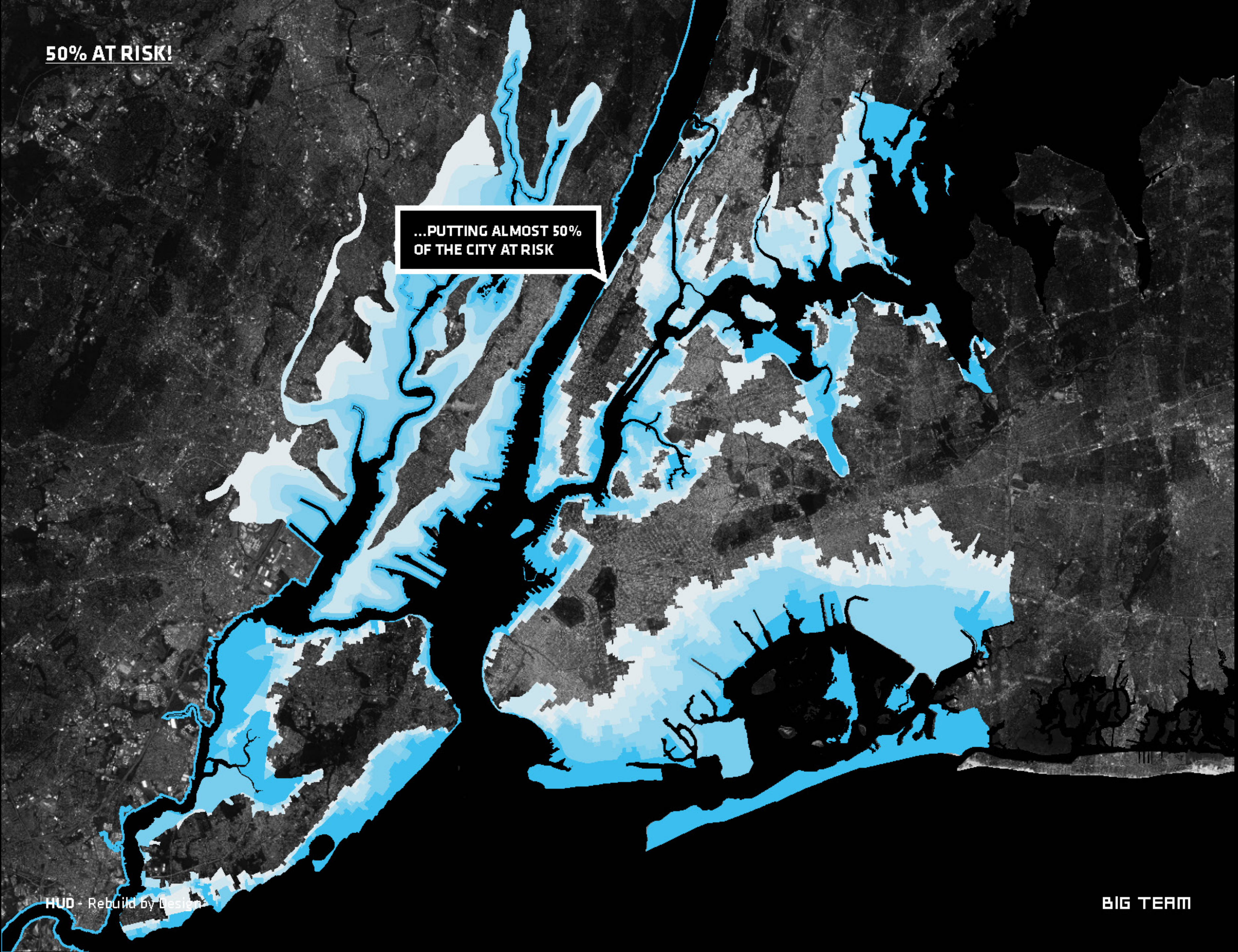
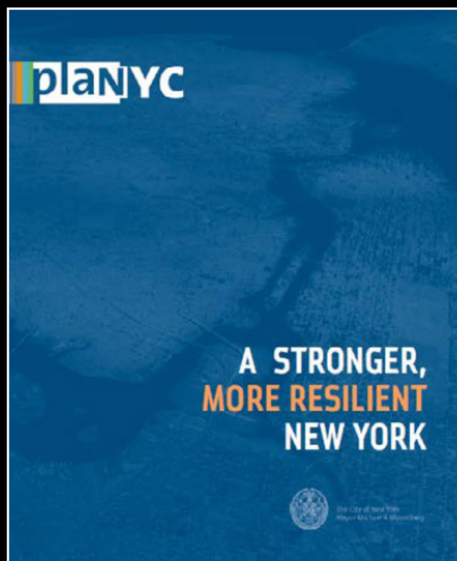

DO NOT ENTER
12 CLEARANCE
STAY IN LANE
Mon 65 : Newark Selectable
Cam 1420 : 1420-HBKN-E and D Elevator Platform

50% AT RISK!



FEMA FLOOD ZONE

2013 - PLANYC SPECIAL INITIATIVE FOR REBUILDING AND RESILIENCY




SIRR REPORT RECOMMENDS MANHATTAN, 8 CONTINUOUS MILES OF INTEGRATED COASTAL PROTECTION!
BULKHEAD
INTEGRATED FLOOD PROTECTION SYSTEM
INTEGRATED FLOOD PROTECTION SYSTEM
STONE RIVETMENT


CHELSEA PIERS
the sooner you park your car,
the sooner you can stop thinking

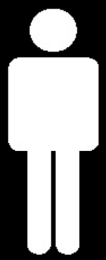
PROGRAM

+

INFRASTRUCTURE

RESILIENCY INFRASTRUCTURE

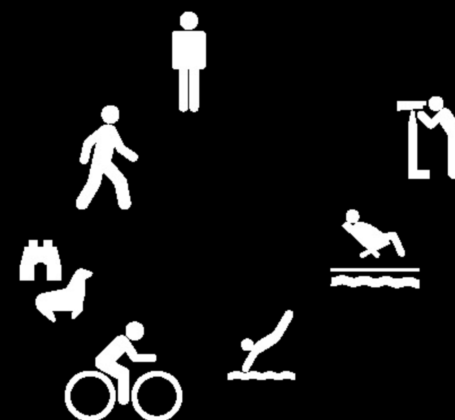
+



PEOPLE!

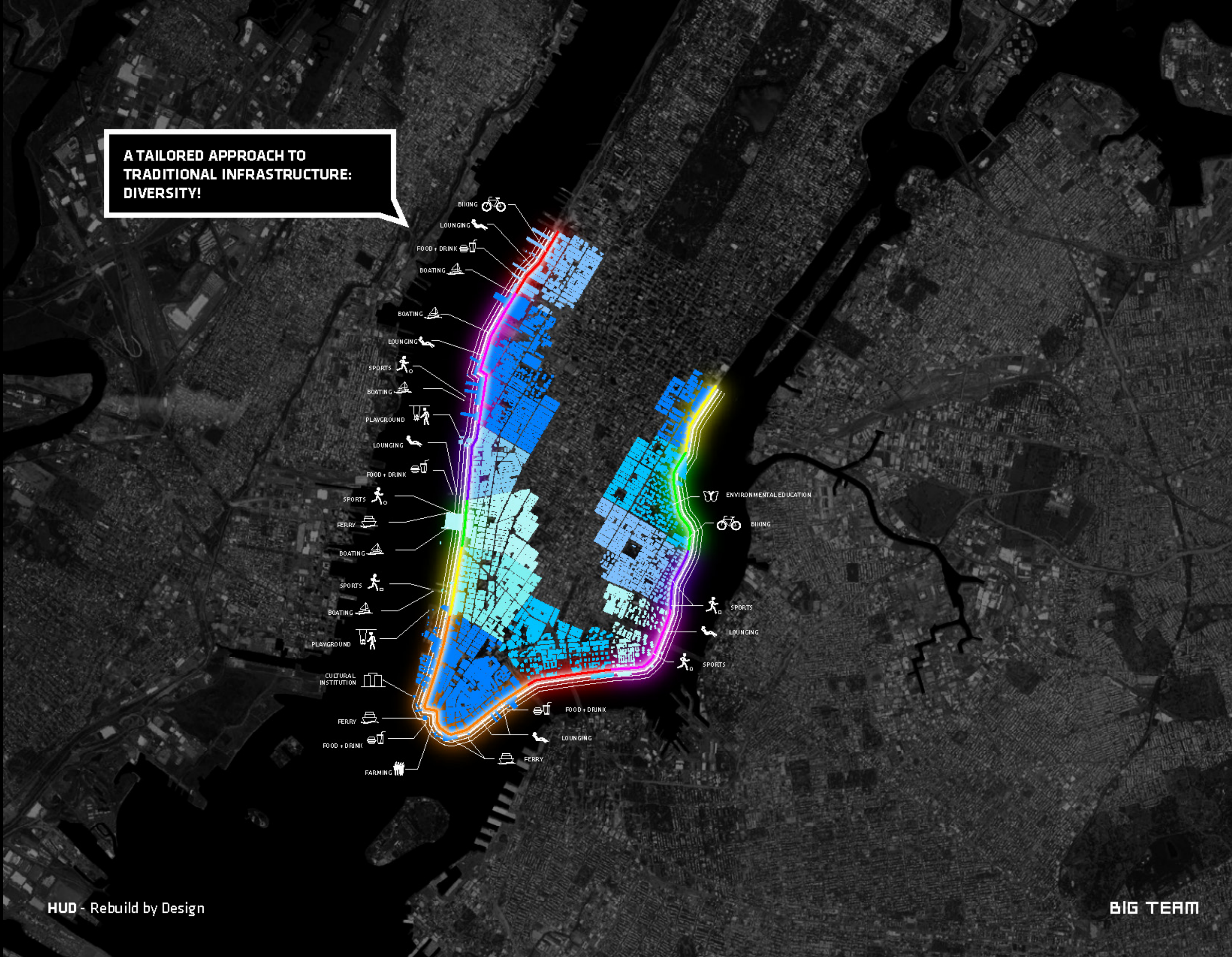
RESILIENCY INFRASTRUCTURE

+



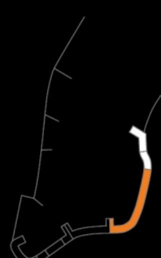
PROGRAM

A TAILORED APPROACH TO TRADITIONAL INFRASTRUCTURE: DIVERSITY!

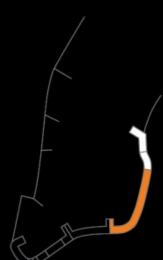


LONG-TERM PERSPECTIVE
EAST RIVER PARK. 2014

LONG-TERM PERSPECTIVE
THE BRIDGING BERM...



THE BRIDGING BERM
ADA ACCESSIBLE RAMPING CONNECTIONS

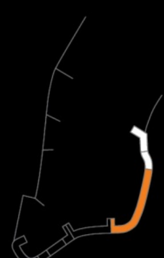


THE BRIDGING BERM

NEW TOPOGRAPHY AND VISTAS OVER PARK

TWO BRIDGES - UNDER FDR

EXISTING CONDITION

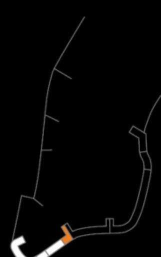


FLIP-DOWN DEPLOYABLE ART

A NEW BAND OF PUBLIC SPACE ALONG THE WATERFRONT!

THE STORM

PANELS DEPLOYED IN PLACE PRIOR TO EVENT



FULTON FISH MARKET

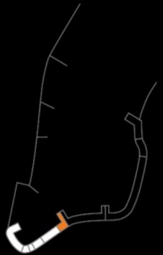
EXISTING CONDITIONS

SOUTH STREET PAVILIONS

FLEXIBLE PROGRAMMING ON FLOODSIDE!

STORM

GATES CLOSED, FURNITURE REMOVED

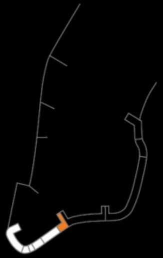


GATES

VIEWS MAINTAINED TO WATER

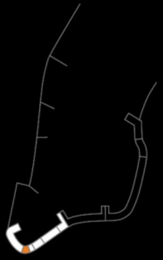
STORM APPROACHING...

PREPARATIONS MADE...



CLOSED POSITION
STORED-IN-PLACE DOORS RETRACT

FROM PAVILIONS



HARBOR BERM!

HARBOR MIDDLE SCHOOL AND REVERSE AQUARIUM

HUD - Rebuild by Design

BIG TEAM

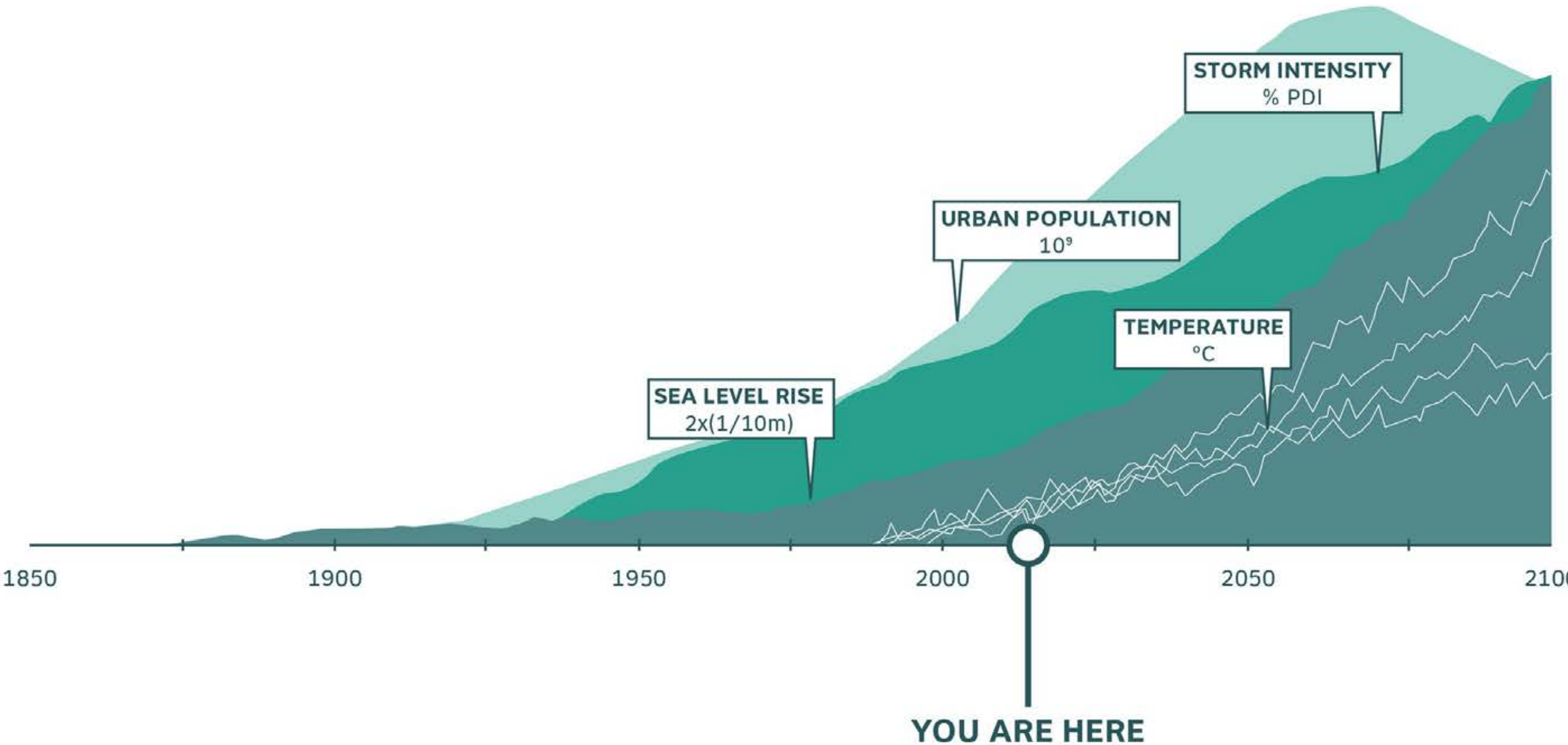
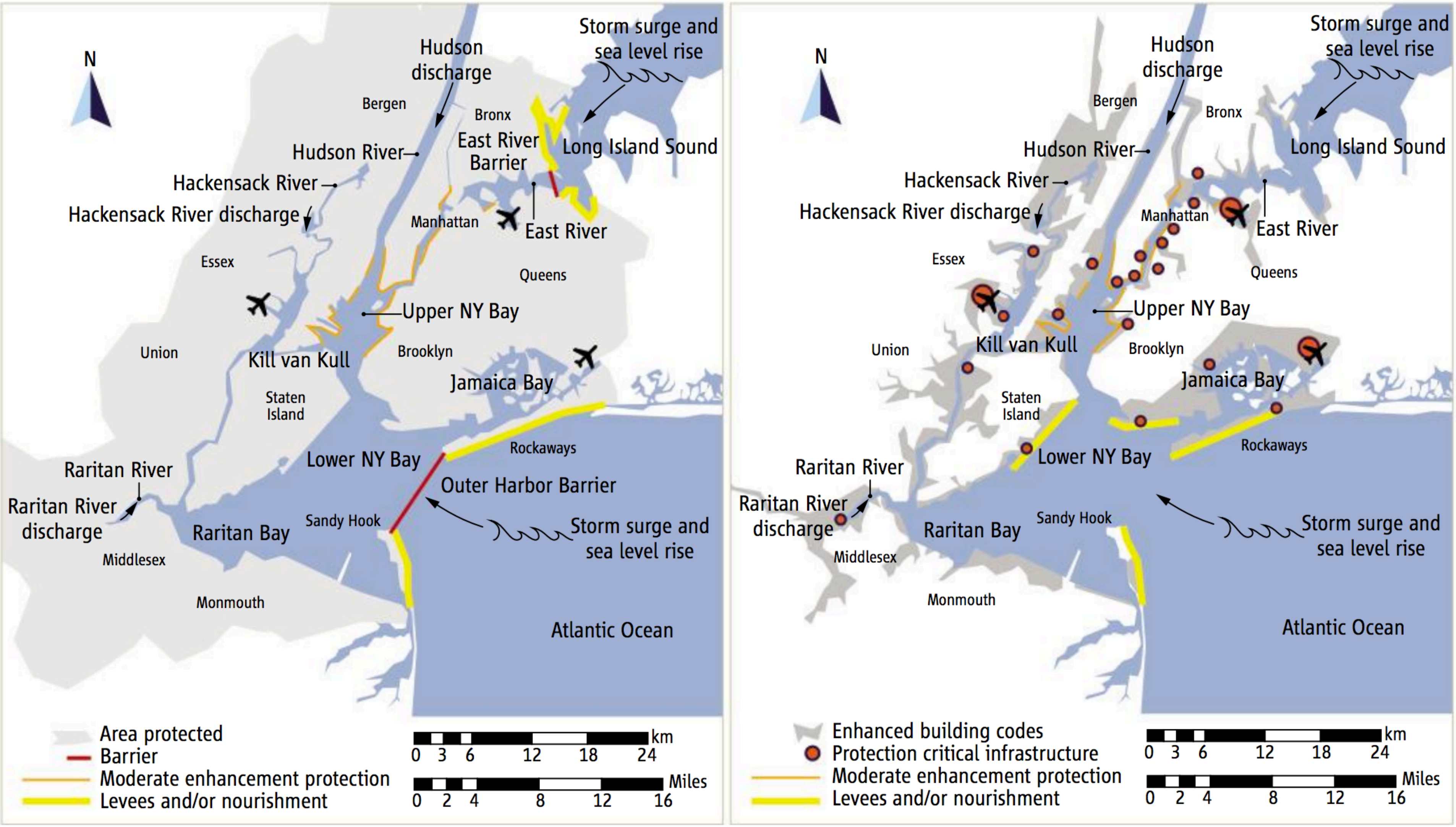
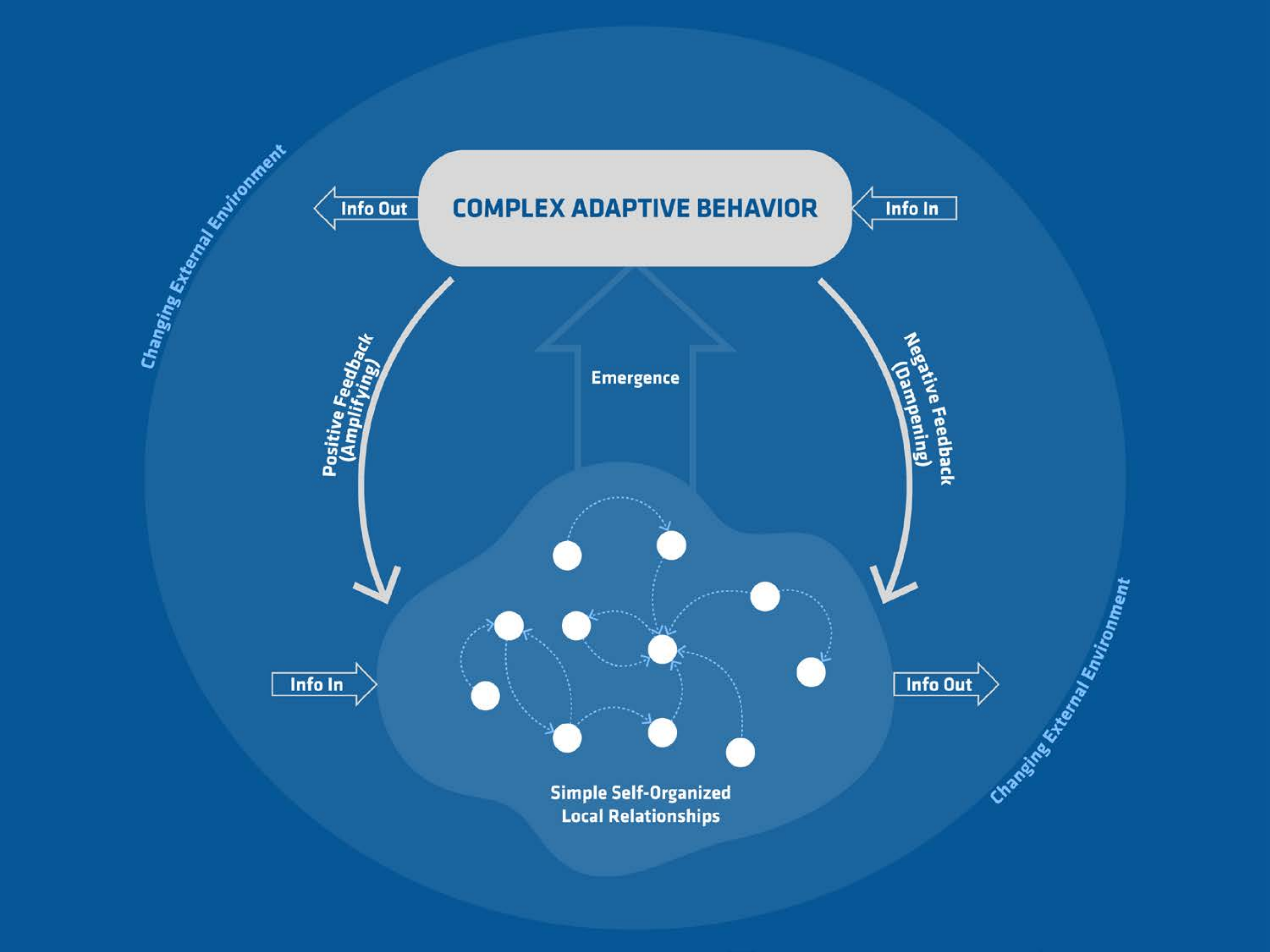
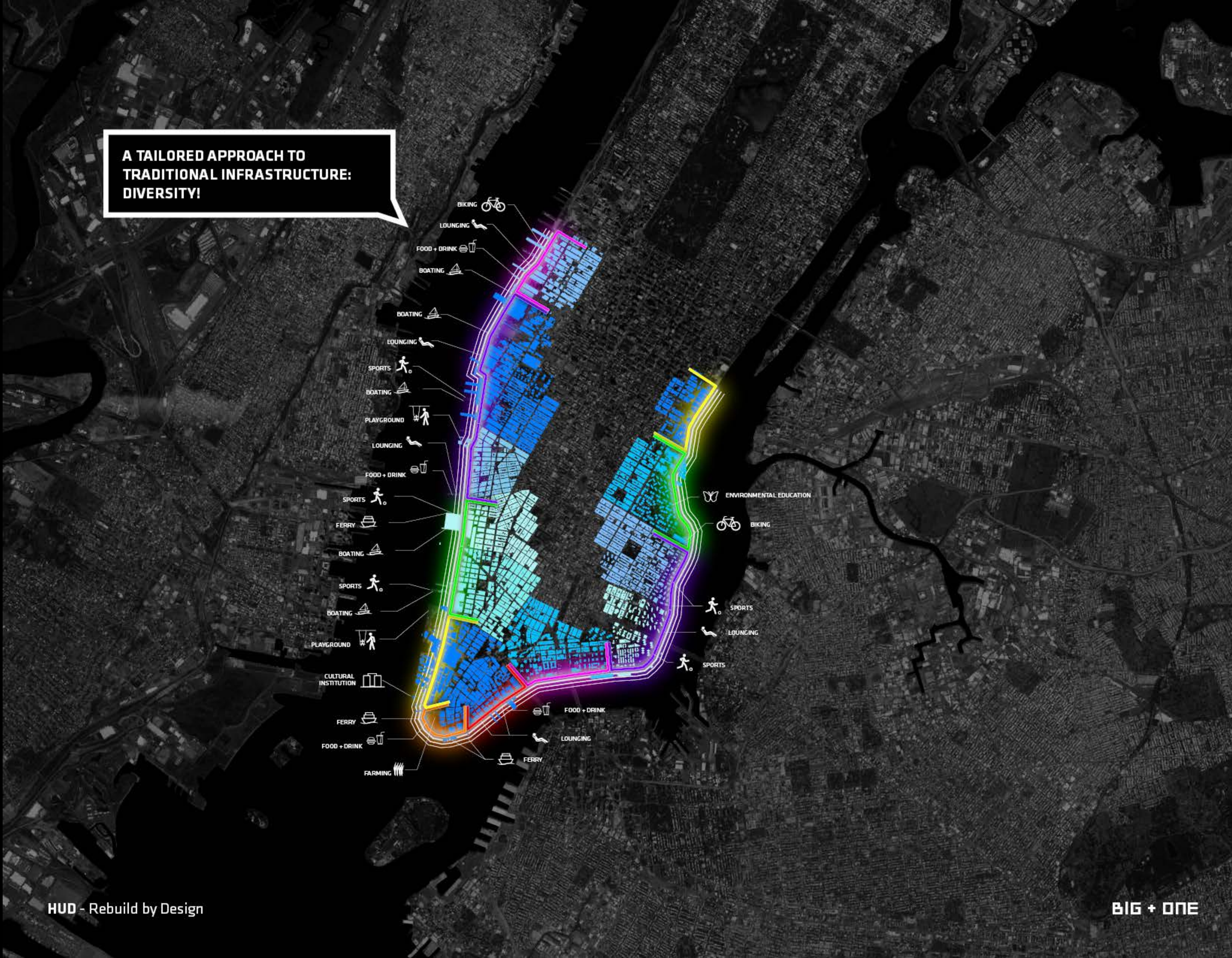


IMAGE: SCAPE/LANDSCAPE ARCHITECTURE

Arcadis, proposal for NY Flood protection

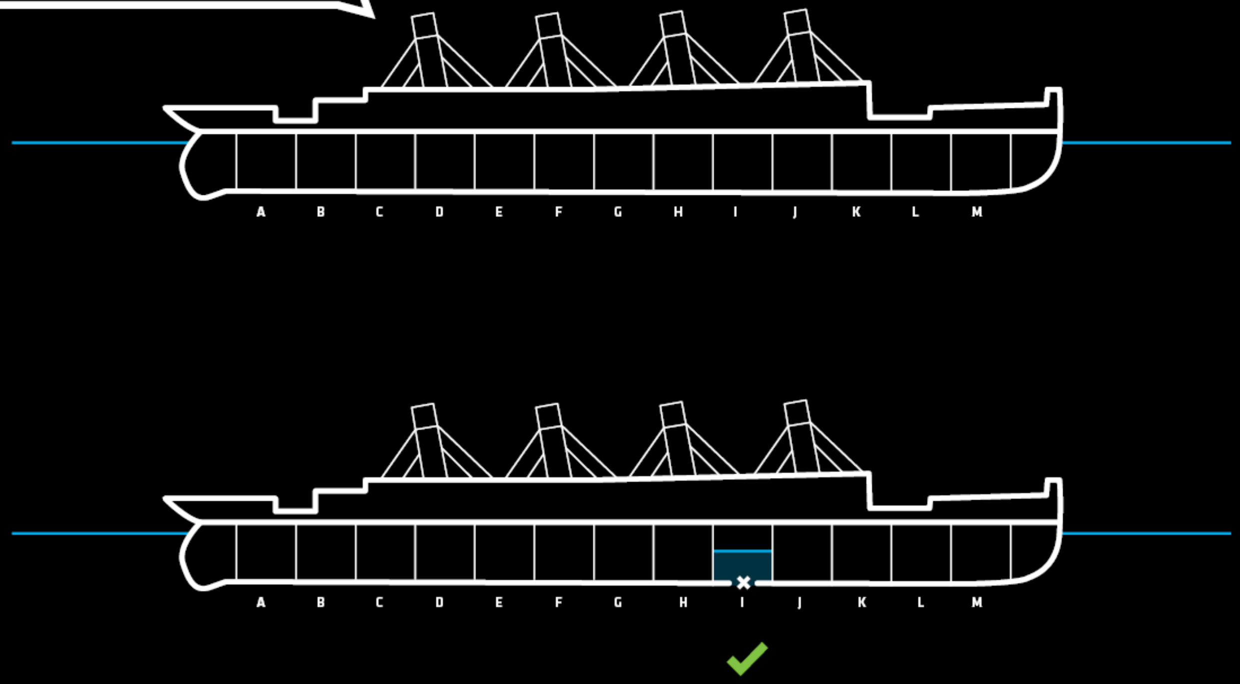

N
Hudson discharge
Storm surge and sea level rise
Bergen
Bronx
East River Barrier
Long Island Sound
Hudson River
Hackensack River
Hackensack River discharge
Manhattan
East River
Essex
Queens
Upper NY Bay
Union
Kill van Kull
Brooklyn
Jamaica Bay
Staten Island
Rockaways
Lower NY Bay
Raritan River
Outer Harbor Barrier
Raritan River discharge
Raritan Bay
Sandy Hook
Storm surge and sea level rise
Middlesex
Monmouth
Atlantic Ocean
Area protected
Barrier
Moderate enhancement protection
Levees and/or nourishment
km
0 3 6 12 18 24
Miles
0 2 4 8 12 16
N
Hudson discharge
Storm surge and sea level rise
Bergen
Bronx
Hudson River
Long Island Sound
Hackensack River
Hackensack River discharge
Manhattan
East River
Essex
Queens
Upper NY Bay
Union
Kill van Kull
Brooklyn
Jamaica Bay
Staten Island
Rockaways
Raritan River
Lower NY Bay
Raritan River discharge
Raritan Bay
Sandy Hook
Storm surge and sea level rise
Middlesex
Monmouth
Atlantic Ocean
Enhanced building codes
Protection critical infrastructure
Moderate enhancement protection
Levees and/or nourishment
km
0 3 6 12 18 24
Miles
0 2 4 8 12 16


COMPLEX ADAPTIVE BEHAVIOR
Info Out
Info In
Changing External Environment
Positive Feedback (Amplifying)
Negative Feedback (Dampening)
Emergence
Info In
Info Out
Simple Self-Organized Local Relationships
Changing External Environment



A TAILORED APPROACH TO
TRADITIONAL INFRASTRUCTURE:
DIVERSITY!
BIKING
LOUNGING
FOOD + DRINK
BOATING
BOATING
LOUNGING
SPORTS
BOATING
PLAYGROUND
LOUNGING
FOOD + DRINK
SPORTS
FERRY
BOATING
SPORTS
BOATING
PLAYGROUND
CULTURAL INSTITUTION
FERRY
FOOD + DRINK
FARMING
ENVIRONMENTAL EDUCATION
BIKING
SPORTS
LOUNGING
SPORTS
FOOD + DRINK
LOUNGING
FERRY

WHAT IF, LIKE A SHIP'S HULL, THE CITY'S PROTECTION COULD ACTUALLY BE COMPARTMENTALIZED...



THE BIG U - RESILIENT NEIGHBORHOODS

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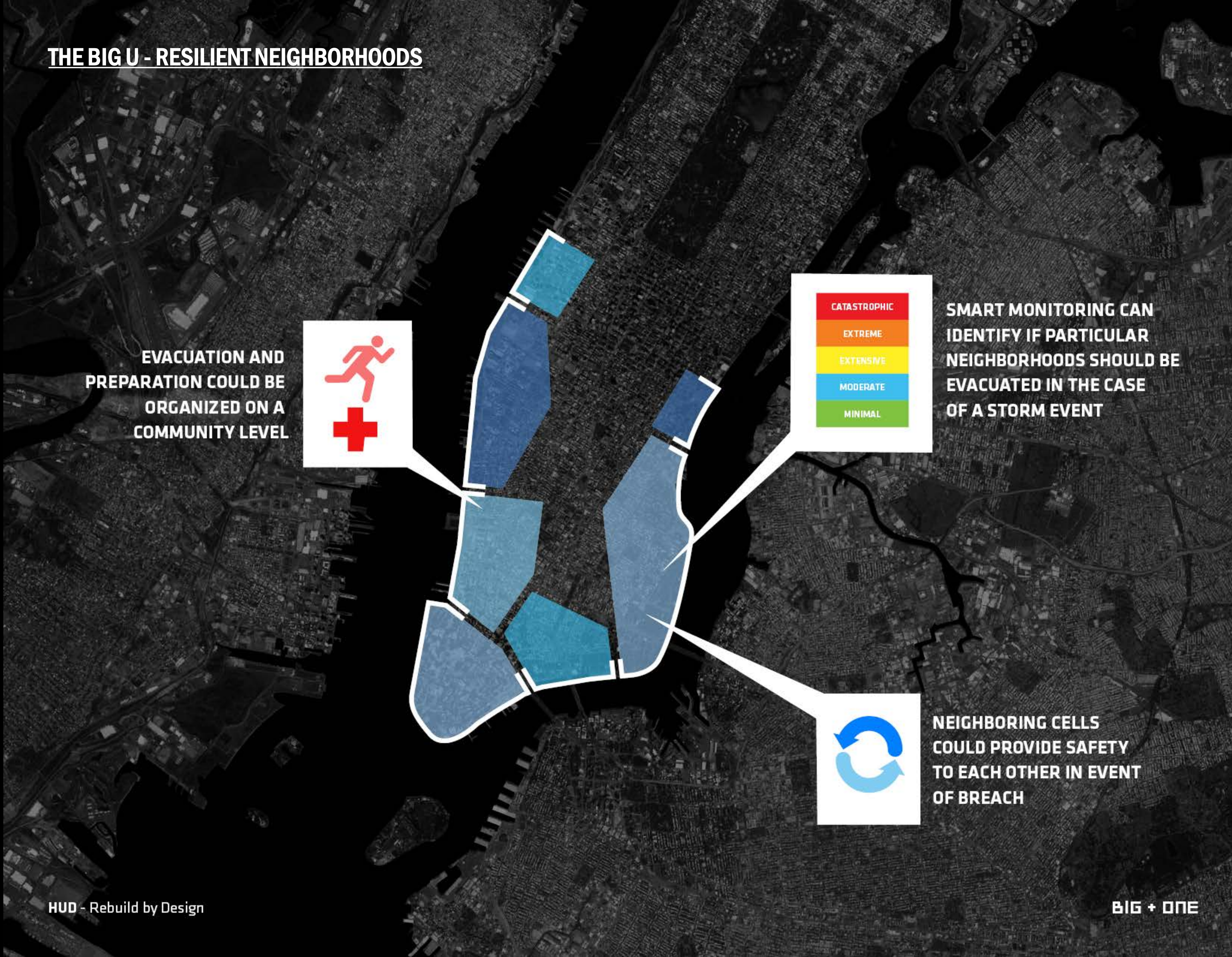
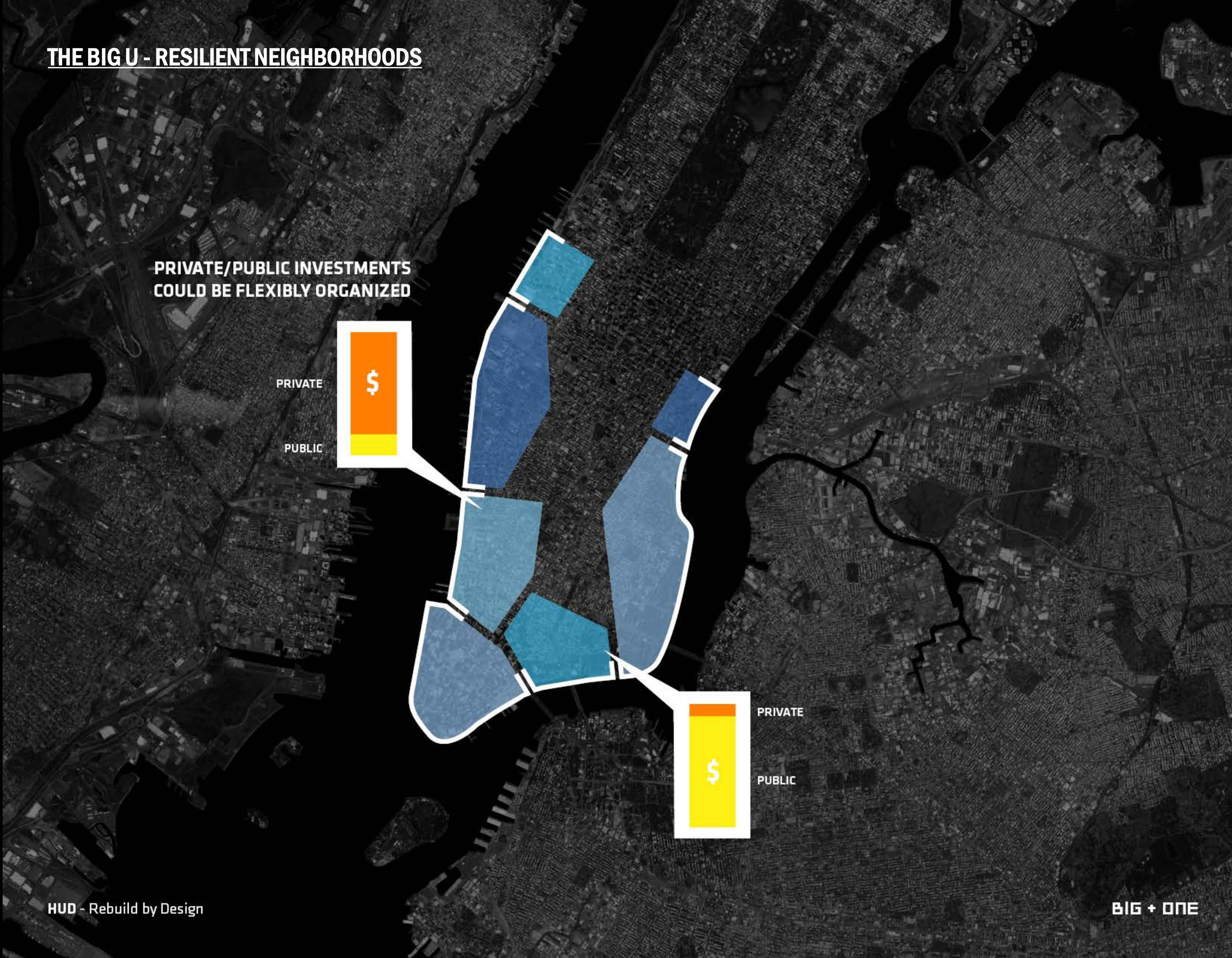
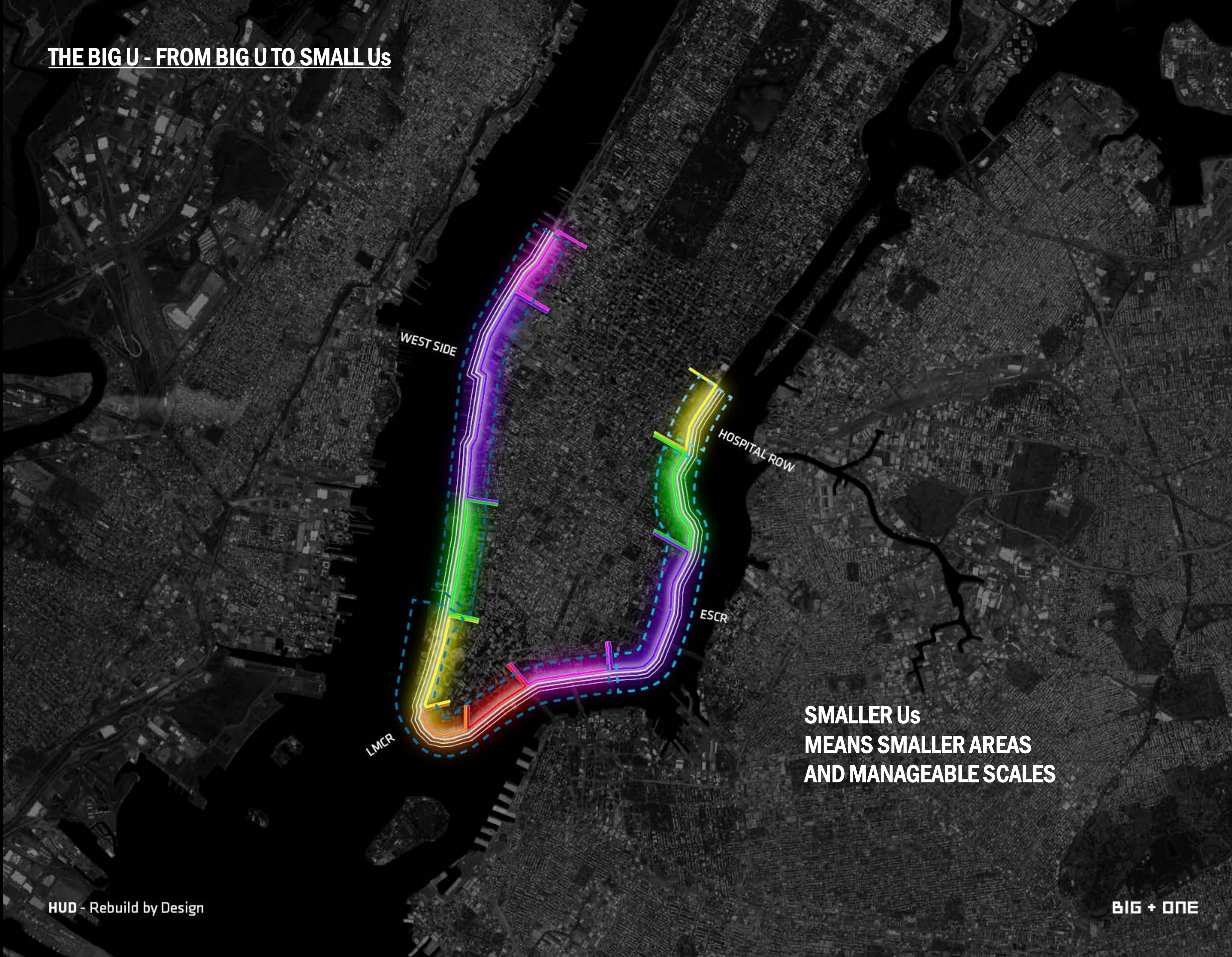


THE BIG U - RESILIENT NEIGHBORHOODS



THE BIG U - FROM BIG U TO SMALL Us

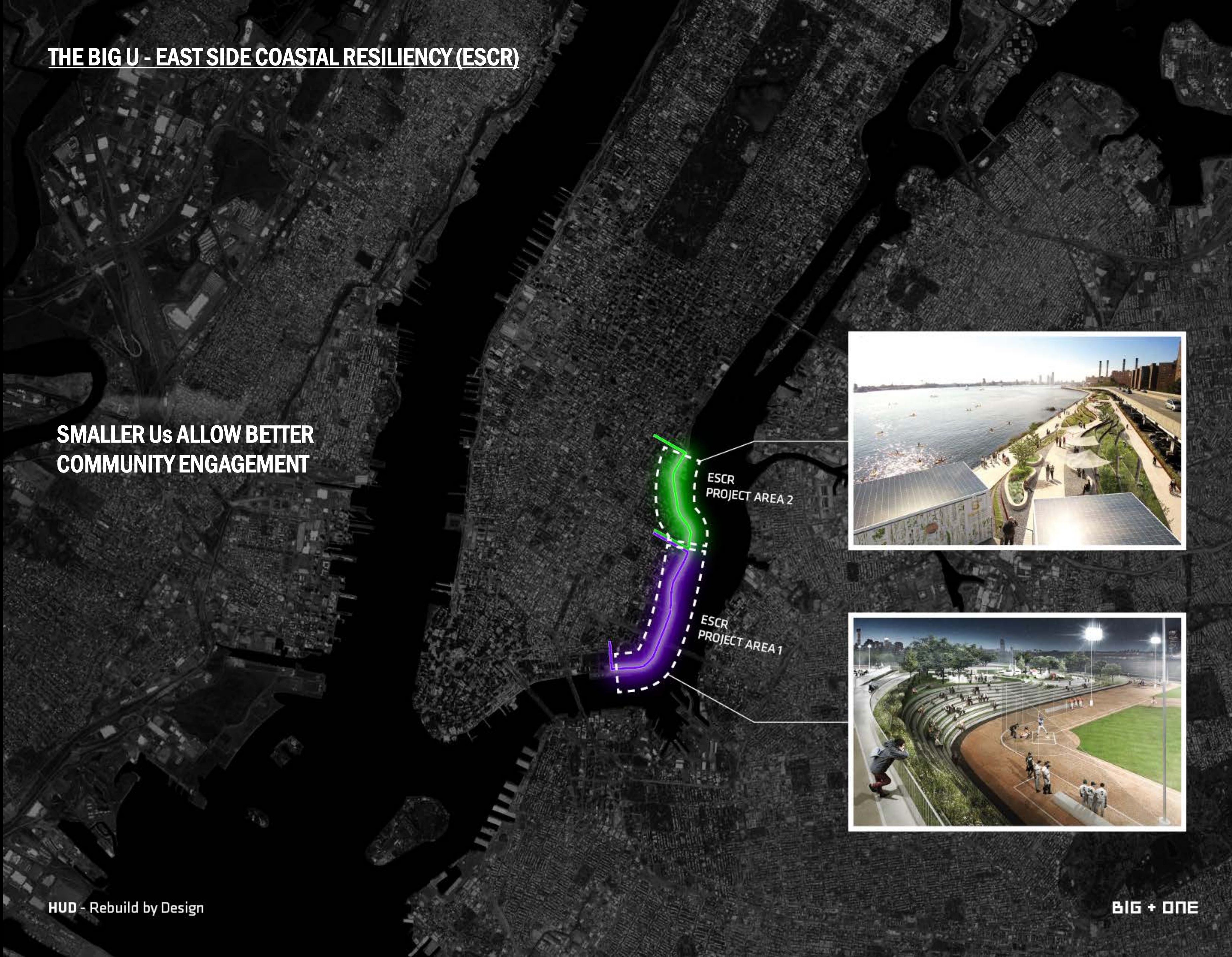


SMALLER Us
MEANS SMALLER AREAS
AND MANAGEABLE SCALES

THE BIG U - EAST SIDE COASTAL RESILIENCY (ESCR)

THE BIG U - EAST SIDE COASTAL RESILIENCY (ESCR)

SMALLER Us ALLOW BETTER COMMUNITY ENGAGEMENT



THE BIG U - EAST SIDE COASTAL RESILIENCY (ESCR)

THE BIG U - EAST SIDE COASTAL RESILIENCY (ESCR)

SMALL Us BLEND IN
BETTER WITH
ONGOING EFFORTS

THE BIG U – BUILDING UP FROM SMALL Us

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« Report: Residents Trapped Again in Elevator That Took Young Man's Life

Juror in Sheldon Silver Trial: Defense "Ins Intell

Federal Government Awards $176 Million For Flood Protection Below Montgomery Street

Rendering: Lower Manhattan flood protection

THE BIG U - LOWER MANHATTAN COASTAL RESILIENCY (LMCR)

HUD - Rebuild by Design

BIG + ONE

THE BIG U - LOWER MANHATTAN COASTAL RESILIENCY (LMCR)

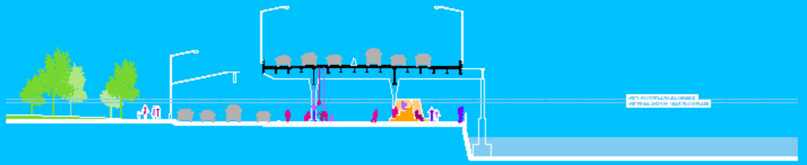
THE BIG U - ACHIEVING GRAND VISION

INCREMENTAL PLANNING AND LONG TERM OPPORTUNITIES

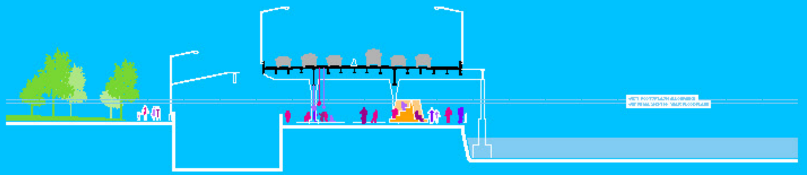
With the momentum and urgency post-Sandy, this easily implementable flood- and stormwater protection is designed as a first step in the longer-term transformation of the (Lower East Side) waterfront.

Design elements anticipate and allow for the accommodation of future needs and opportunities: more extreme weather patterns and continued sea level rise, developments in mobility, changes in environmental law, community- and affordable housing needs.

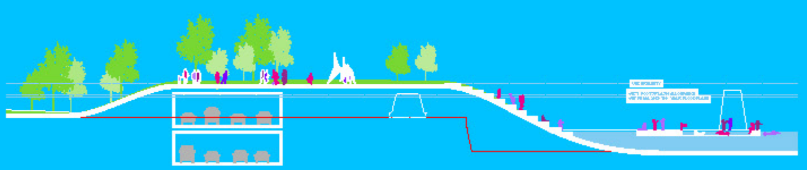
NEAR-TERM PHASE



INTERIM

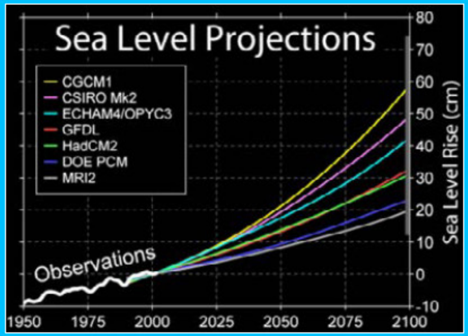


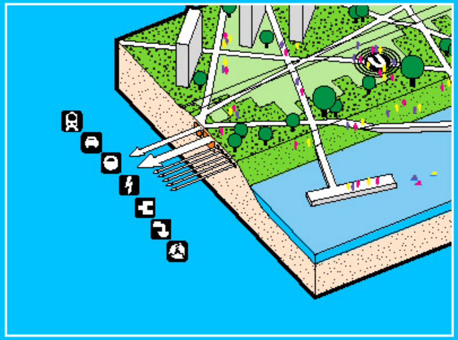
LONG-TERM PHASE



Many issues are complex and unpredictable, and it is important to have a first project in place soon. The Big-U concept proposes a robust first step and a continued exploration of these long-term needs and opportunities.

IN-WATER





ECOLOGY

Improving the waterside ecology and expanding the waterfront park structure by building into the water.

SEA-LEVEL RISE

Anticipating increased design heights of the levee/berm system

INTEGRATION

Integrating future infrastructural needs on the waterside.

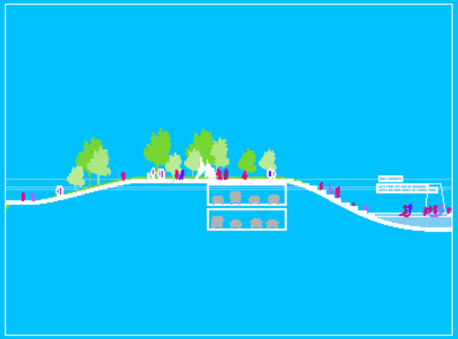
MOBILITY

SUSTAINABILITY

Re-thinking parking, bike, and passive energy infrastructure.

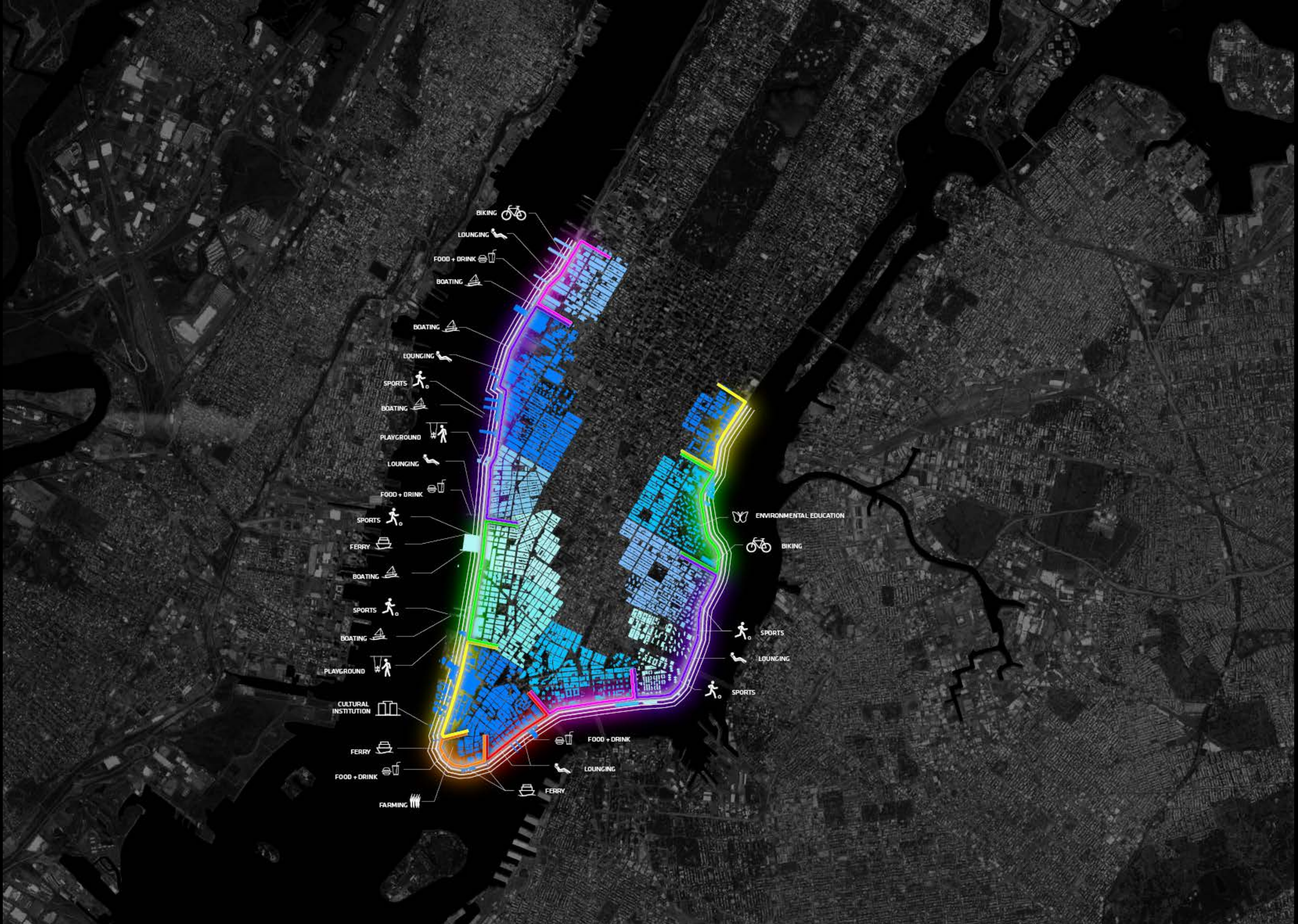
TRANSIT

Enhancing transit such as light-rail or BRT systems.



FDR

Integrating a buried F.D.R. into a berm and increasing waterfront parkspace.


BIKING
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