

PROJECT TEAM / LIVING CITY DESIGN LAB

Adapt to Thrive

Transforming West Palm Beach from
Shore to Core

MARCH 2017



VAN
ALEN
INSTITUTE

PERKINS+WILL

PROJECT TEAM / LIVING CITY DESIGN LAB

Adapt to Thrive

TABLE OF CONTENTS

01. GOALS

02. RESEARCH

03. SOLUTIONS

(A) INNOVATION FRAMEWORK

(B) DESIGN CONCEPTS

(C) IMPLEMENTATION STRATEGIES

Adapt to Thrive

01. GOALS

In the coming decades, cities will face many inevitable social, economic, and environmental changes. Populations will grow or shrink, communities will be pulled apart or pushed together, and economies will respond.

Coastal cities, like West Palm Beach, are especially vulnerable. The likely impacts of climate change —frequent powerful storms and sea level rise— will be felt by coastal cities first.

Change is a certainty of the future. How our cities navigate change, however, is not certain.

West Palm Beach will define what it means to be a model coastal city by embracing change with hope and ambition and making smart investments that enhance the quality of people's lives. The formula for progress is to:

- 1) Think differently about infrastructure
- 2) Respond incrementally with investment
- 3) Dream big about the city you want to live in

This proposal transforms West Palm Beach's waterfront into a dynamic social and environmental space, rethinks the city's streets and alleys as destinations in their own right —not just conduits for cars— and envisions mundane architecture, like parking structures, as opportunities to create community.

When West Palm Beach adapts, it thrives.

01. GOALS

HOW CAN WE FACILITATE SOCIAL INTERACTION AMONG DIVERSE GROUPS?

ENHANCE
THE PHYSICAL
ENVIRONMENT

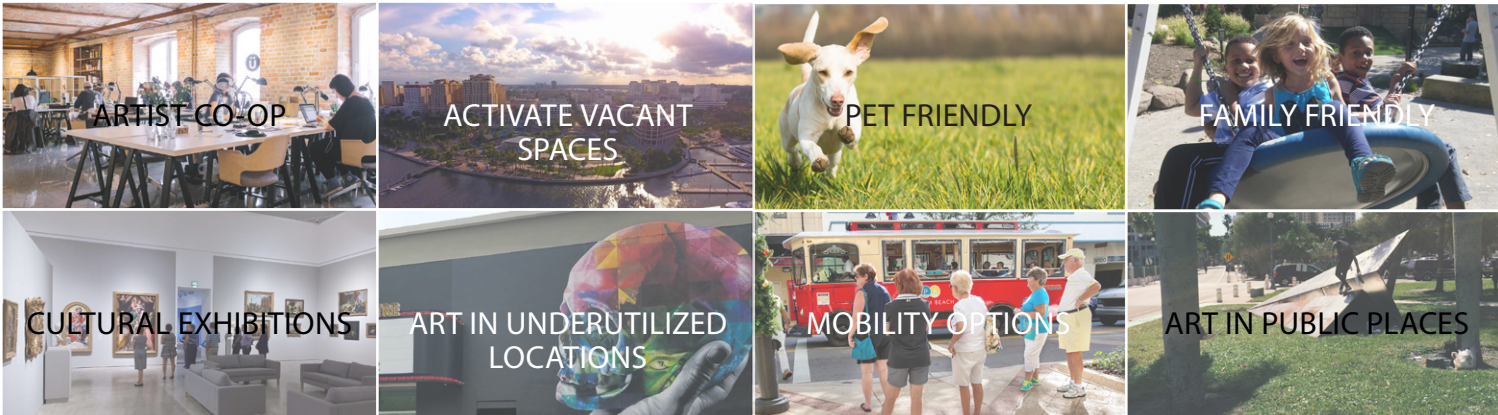


Objective: Maintain the atmosphere and amenities of the Downtown, which make it pedestrian-friendly and conducive to walking, shopping, entertaining, and socially interactions.

ENHANCE
THE BUSINESS
ENVIRONMENT



Objective: Ensure that Downtown West Palm Beach is economically vibrant by capitalizing on its resources and assets, enhancing its amenities and strengthening the business environment.



01. GOALS

HOW CAN WE REIMAGINE DOWNTOWN WEST PALM BEACH TO MAKE IT MORE ENGAGING AND VIBRANT?

MARKET THE
DOWNTOWN



Objective: Strengthen the brand and image for Downtown West Palm Beach by capitalizing on its amenities, history and location to communicate a positive identity for the area.

IMPROVE QUALITY
OF LIFE



Objective: Ensure that Downtown West Palm Beach is an engaging and thriving district for our residents.





02. RESEARCH

02. RESEARCH
EXISTING SURVEY INFORMATION

HOW DO RESIDENTS AND VISITORS DESCRIBE DOWNTOWN WPB?

Per the 2016 WPB DDA visitor survey, when asked to describe downtown West Palm Beach, visitors tend to be very positive using such words as:



When asked specifically to provide the area's strong points, the downtown visitors most frequently mention:





When asked what would be important additions to the downtown area, the most often mentioned elements were:



02. RESEARCH
EXISTING SURVEY INFORMATION

HOW CAN CITIES COLLECT INFORMATION THAT INFORMS FUTURE ADAPTATION AND GROWTH?

SURVEY
RESULTS



Strengths continue to be its [atmosphere, scenery, restaurants, and events](#)

Weakness continues to be [parking](#)

Top draws to downtown area continue to be [special events and dining](#)

Visitors want [more events, more free events, and more family events](#)

Opportunity exists to draw in more people by appealing to [families with children](#)

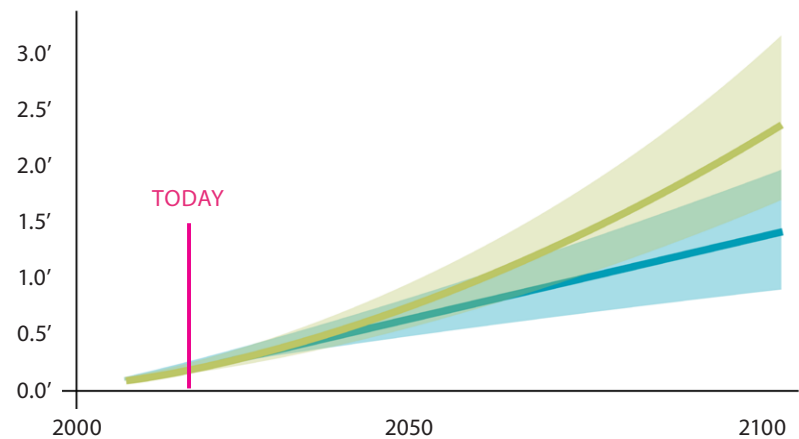
02. RESEARCH
DATA

WITH OUR UNCERTAIN FUTURE, WE NEED SMART STRATEGIES FOR CITY DEVELOPMENT

What will transform West Palm Beach in the coming century?

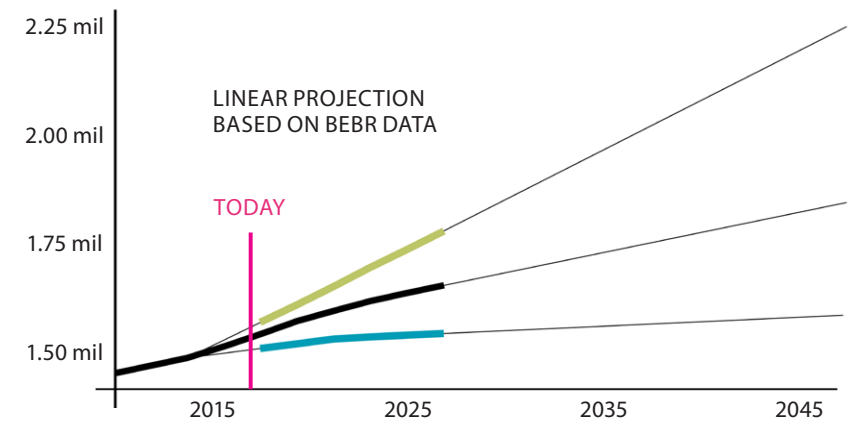
Sea level rise and demographic growth are two of the primary transformative pressures facing West Palm Beach. The two graphs below illustrate the alignment between projected sea level rise and projected population growth.

① Global Mean Sea Level Rise



Source: Climate Change 2014: Synthesis Report
The Intergovernmental Panel on Climate Change

② Palm Beach County Population Growth



Source: Projections of Florida Population by County, 2020–2045
BEBR / Bureau of Economic and Business Research (University of Florida)

02. RESEARCH
STRATEGIES

How can West Palm Beach respond?

West Palm Beach can begin planning now for its long-term future, harnessing environmental, social, and economic change to create value and community.

Fearful Responses To Change

Walls and engineered defenses are fearful responses to sea level rise that address one problem without creating environmental, social, and economic opportunities associated with connecting people to water.



Hopeful Responses To Change

Natural systems should be used to adapt to sea level rise, create wildlife habit, and connect West Palm Beach's two greatest assets: its people and its waterfront!



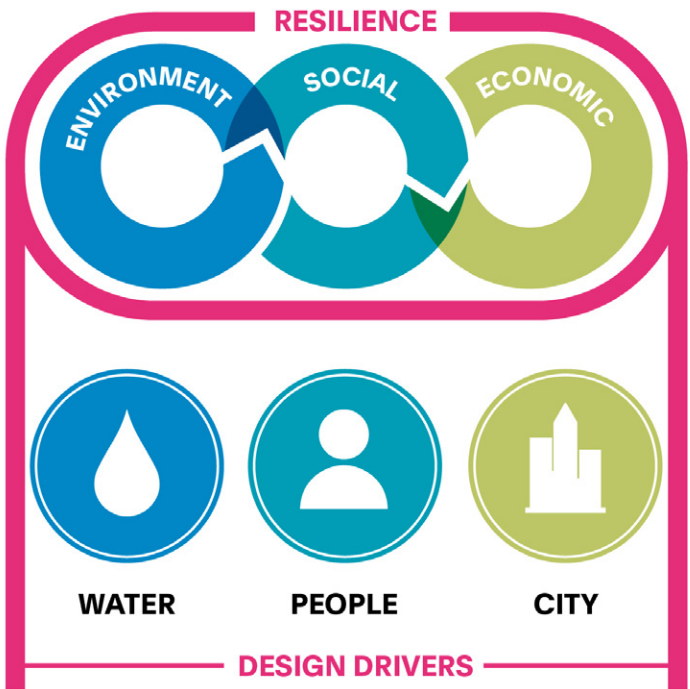
How can West Palm Beach monitor its progress?

A strong and vital city is resilient in the face of change.

For West Palm Beach, decision-making should be measured by the total amount of environmental, social and economic value generated by each investment. Infrastructure intended to respond to sea level rise and stormwater should also create value for people and the city at large.

Every dollar must serve three purposes!

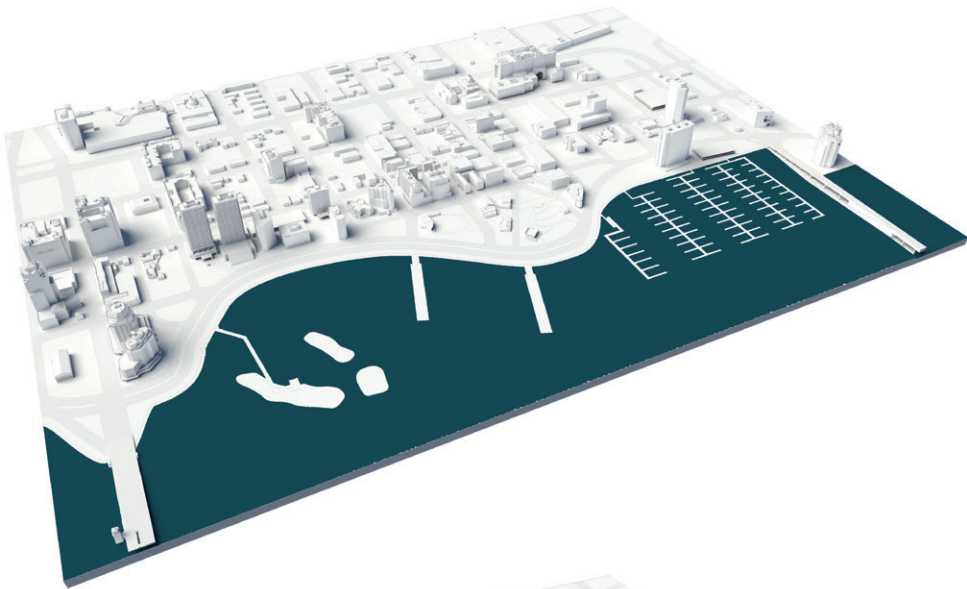
Design Methodology



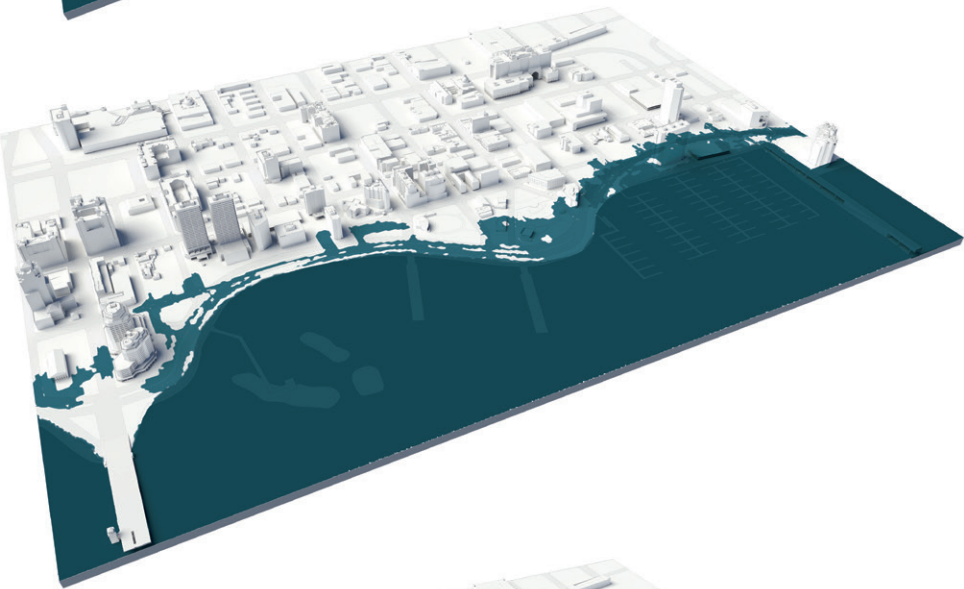
02. RESEARCH
SEA LEVEL RISE



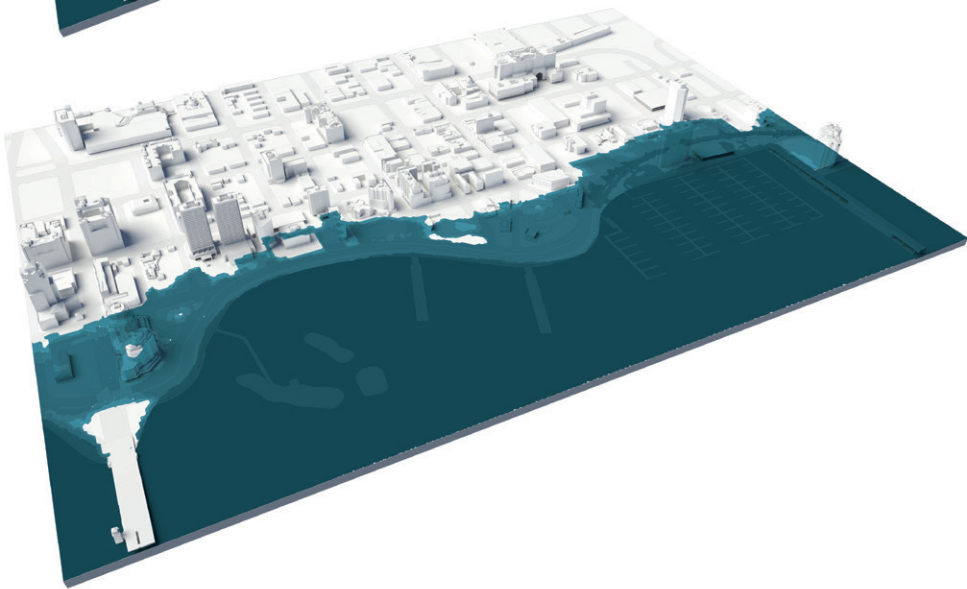
CURRENT (2017)



3 FEET (+/- 2100)



6 FEET

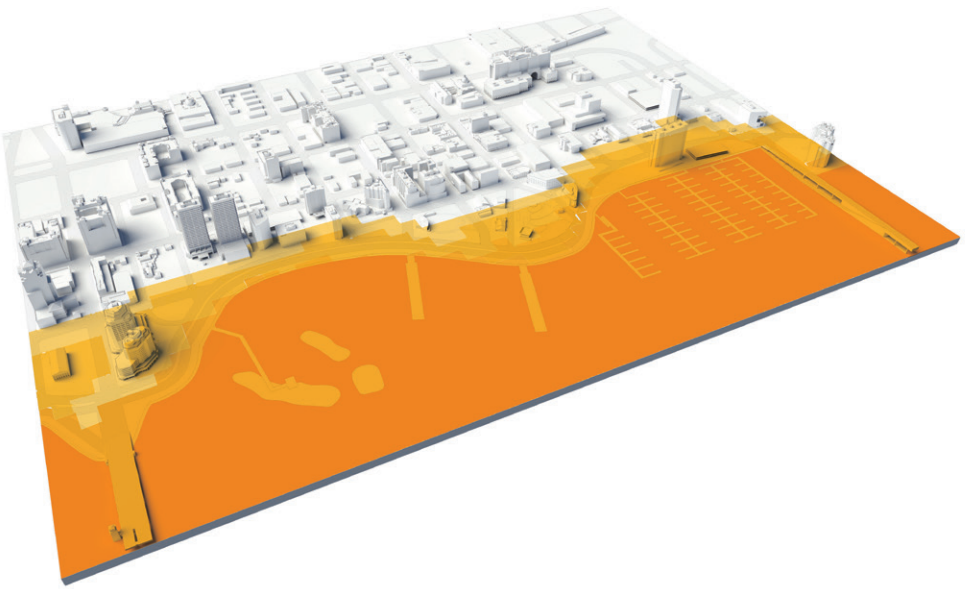


02. RESEARCH
STORM SURGE

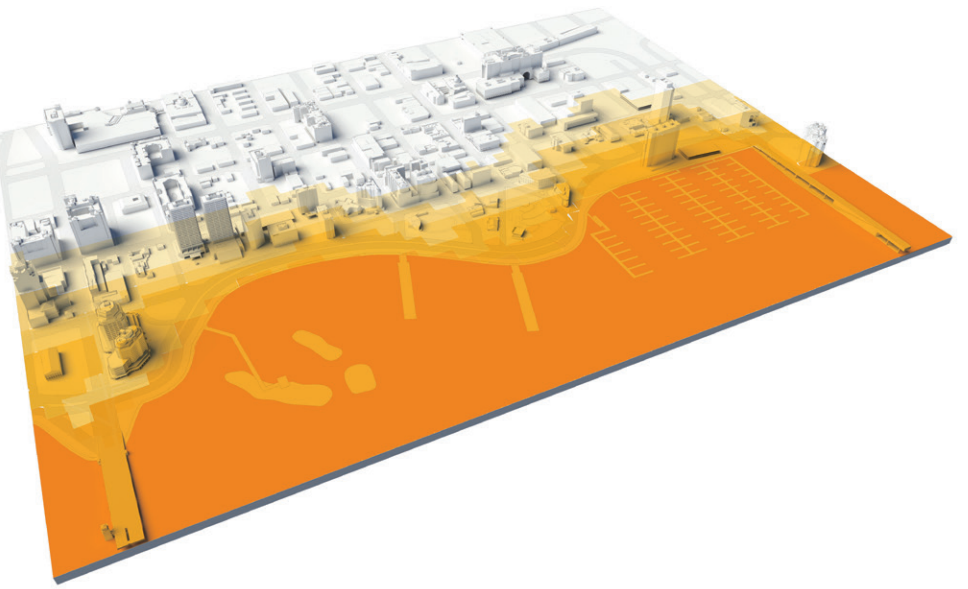


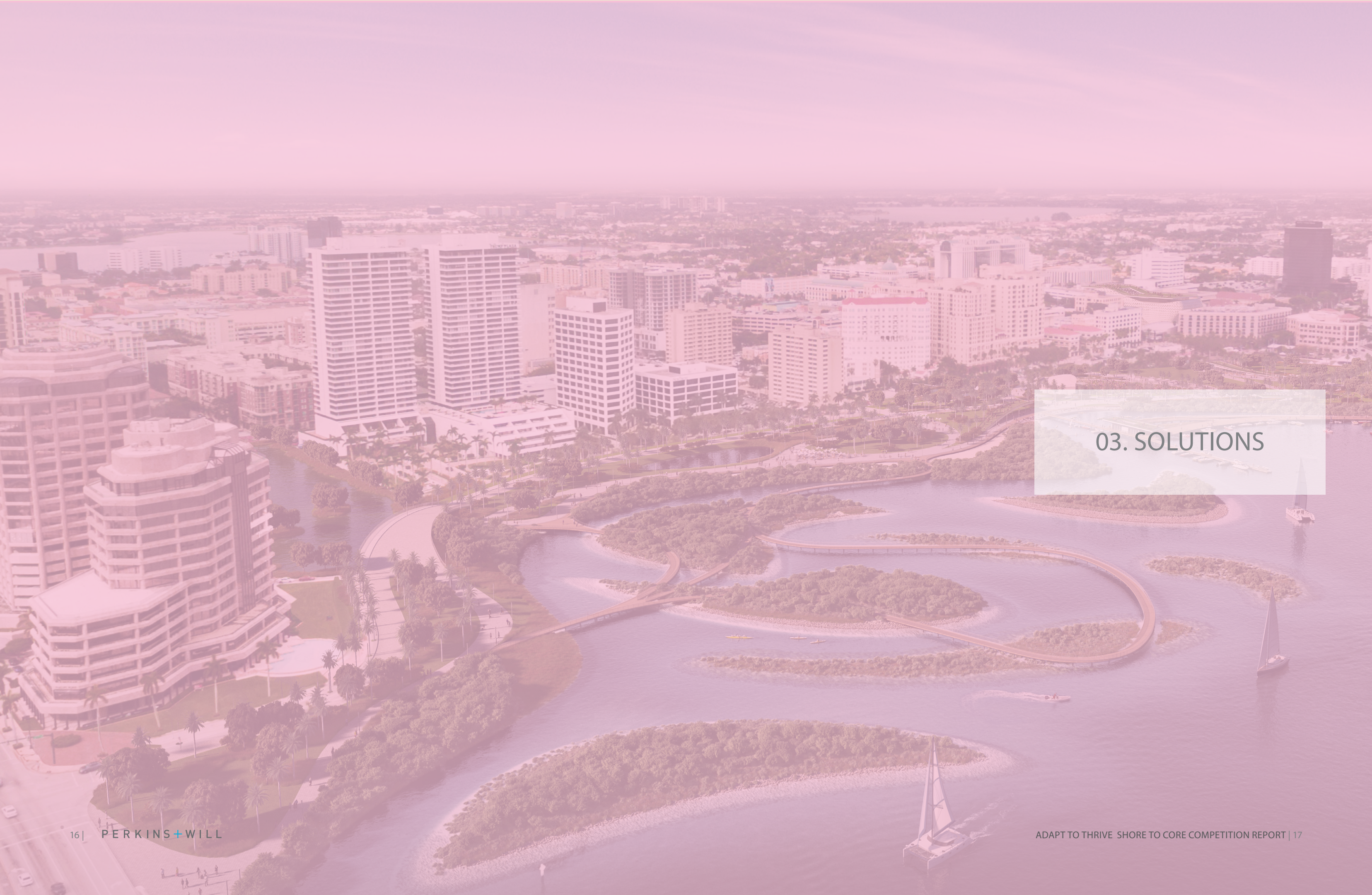
National Science Foundation scientists project future effects of sea level rise on storm surges will transform today's "once in a century" storm surges into "once in a decade" storms in the future.

CATEGORY 3



CATEGORY 5





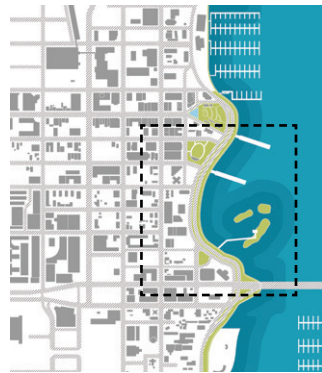
03. SOLUTIONS

03. SOLUTIONS
(A) INNOVATION FRAMEWORK

WATERFRONT CITIES ARE DEFINED BY THE RELATIONSHIPS BETWEEN PEOPLE AND WATER

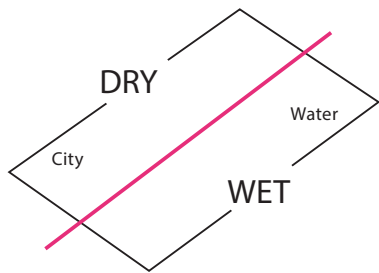
The design of the waterfront is grounded in two concepts, Adaptability, to provide new user experiences along with strategies for adjusting to future sea level rise and projections of increased storm surge; and Integration, to provide continuity along the waterfront and connectivity among the many waterfront elements and on into the city.

Together, integrating existing spaces to the redesigned and new urban places will create a dynamic urban waterfront, with increased cultural, social, and opportunities for new recreational activities.



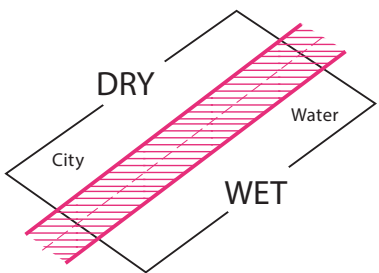
In understanding the relationships between water, people, and the city, we've located an opportunity to build resilience.

Today's Relationship



SEPARATION BETWEEN CITY AND WATER

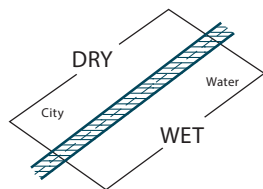
The Opportunity



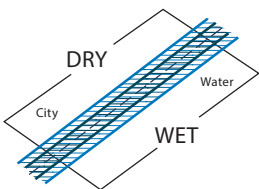
CREATE A ZONE OF TRANSITION TO EASE FROM WET TO DRY, TO EMBRACE WATER!

The opportunity zone should grow overtime to respond to increasing water levels.

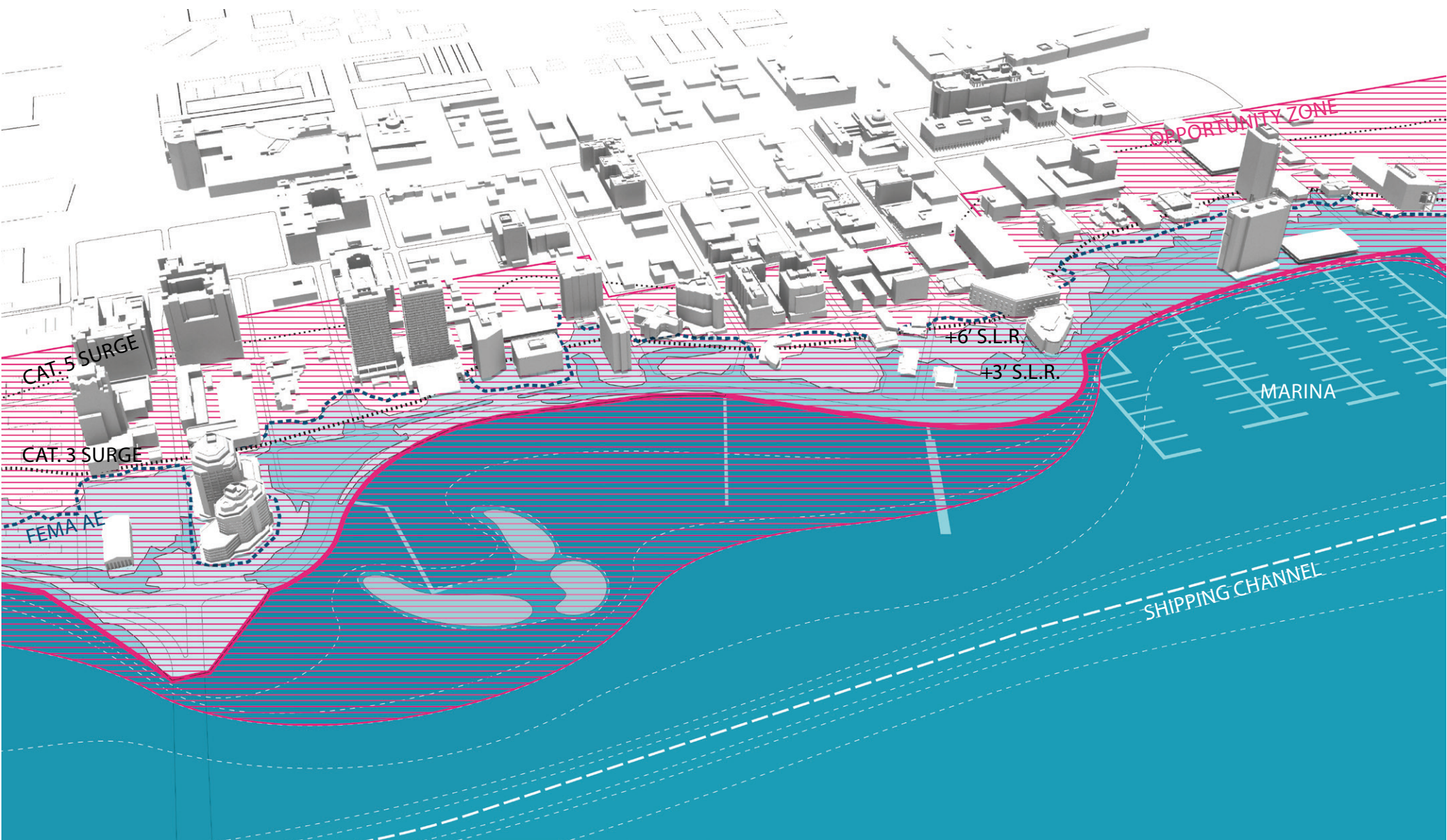
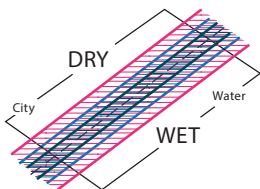
Phase 1
Completed by 2022



Future Phase
Completed by 20??



Future-Future Phase
Completed by 20??



03. SOLUTIONS
(A) INNOVATION FRAMEWORK

WITHIN THIS OPPORTUNITY ZONE,
FIVE ELEMENTS SHOULD BE DESIGNED FOR CHANGE

The “opportunity zone” is a transition area between two communities, the mostly public, waterfront corridor and the more private, urban community abutting it to the west; each community developed in a quasi-independent way over the years. The most prominent connection between these two communities is the existing network of streets and alleys. By integrating climate change adaptation strategies into them, they can become catalysts to improve the connections between the city and the water.

The primary component of the upland connectivity strategy is to create and integrate new water retention and detention corridors that are capable of storing the increased volume of water that is expected during peak storm and tidal events. These corridors will mitigate the effects of tidal events, while serving as community parks that can be used by residents and visitors throughout the year. This new infrastructure will create a new open space network connecting the urban core to the waterfront and its unique habitat.

Building

Today
Public Space Around Buildings



The Opportunity
Public Space Through Buildings

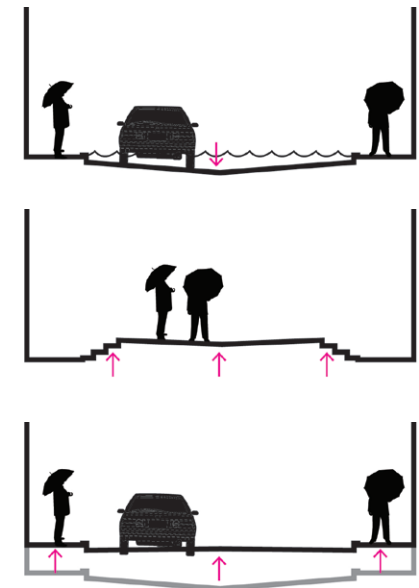


Streets + Alleys

Streets Today
Typical Section



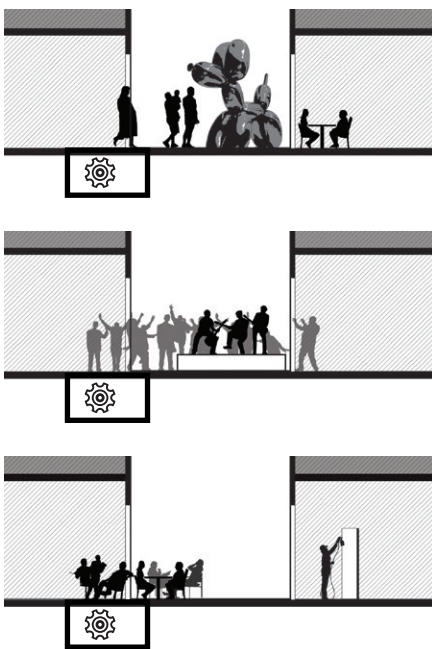
The Opportunity



Alleys Today
Service Spaces



The Opportunity
Art and Maker Spaces



Waterfront + Great Lawn + Amphitheater

Today
Existing Bulkhead



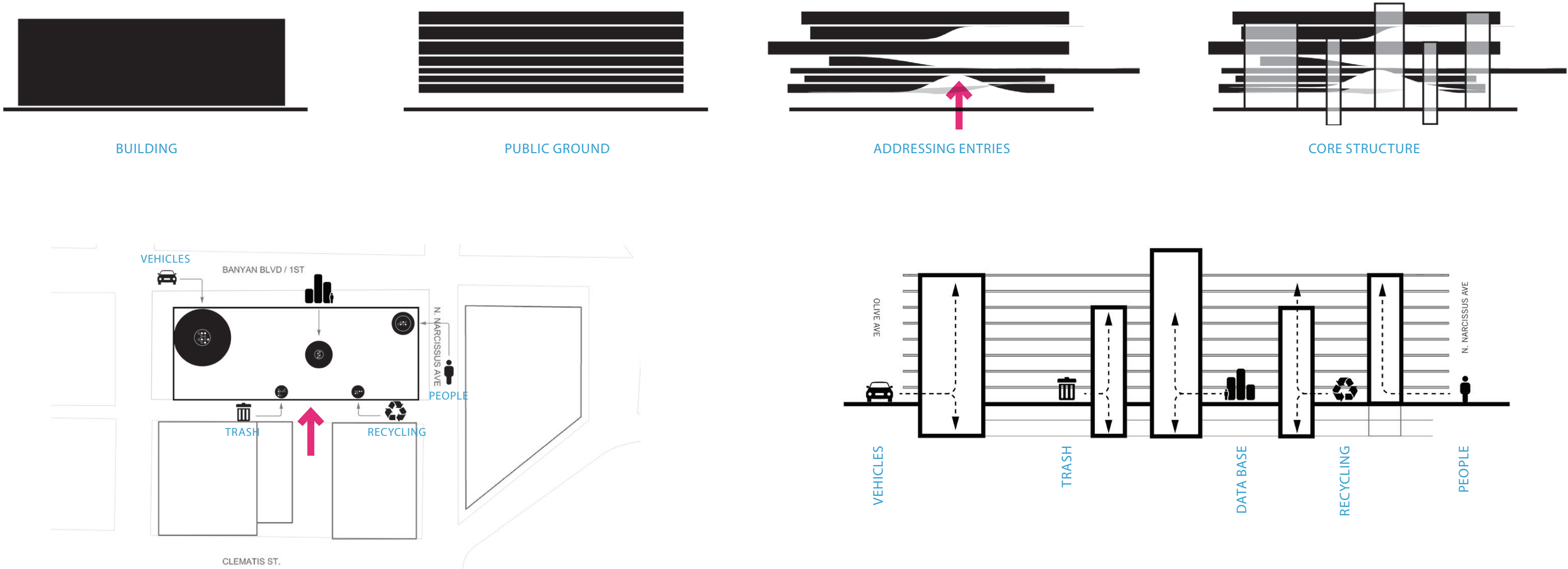
The Opportunity
Create a Gradient between Wet and Dry



03. SOLUTIONS
(B) DESIGN CONCEPTS
THE BANYAN GARAGE

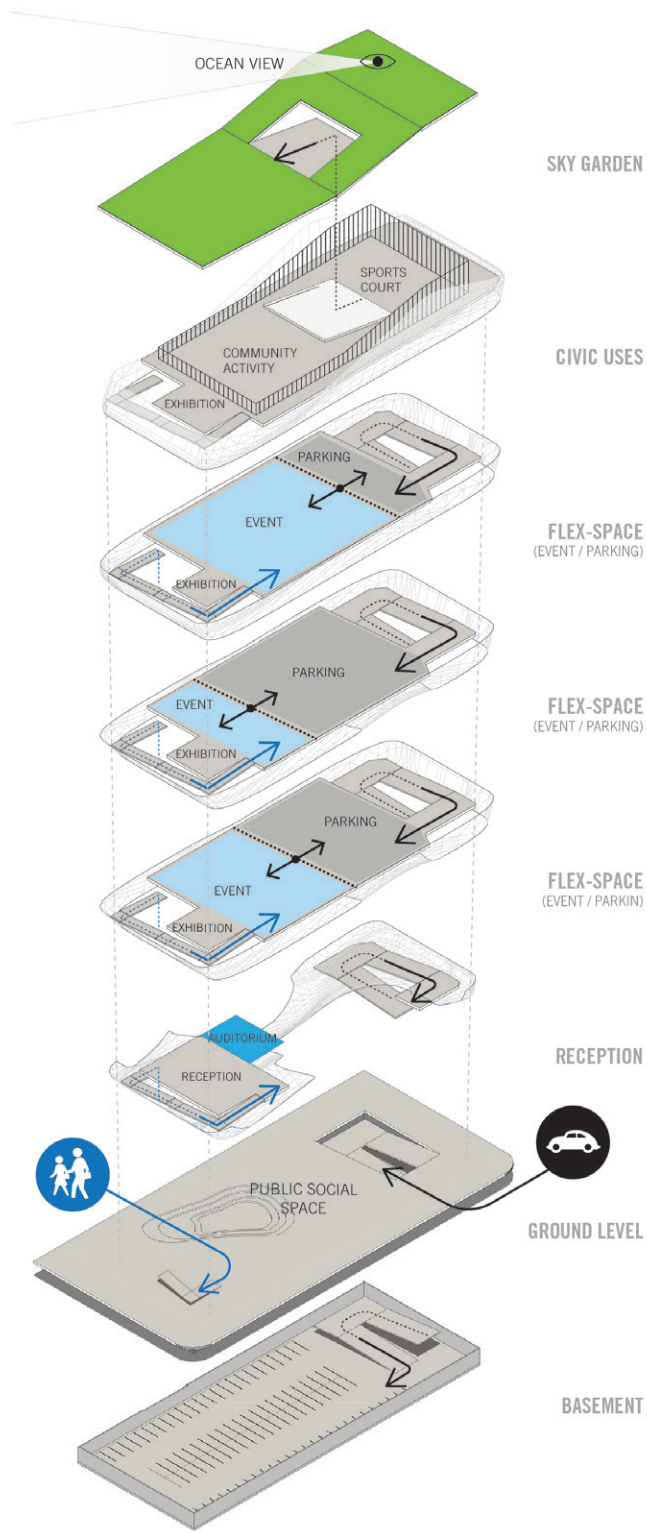
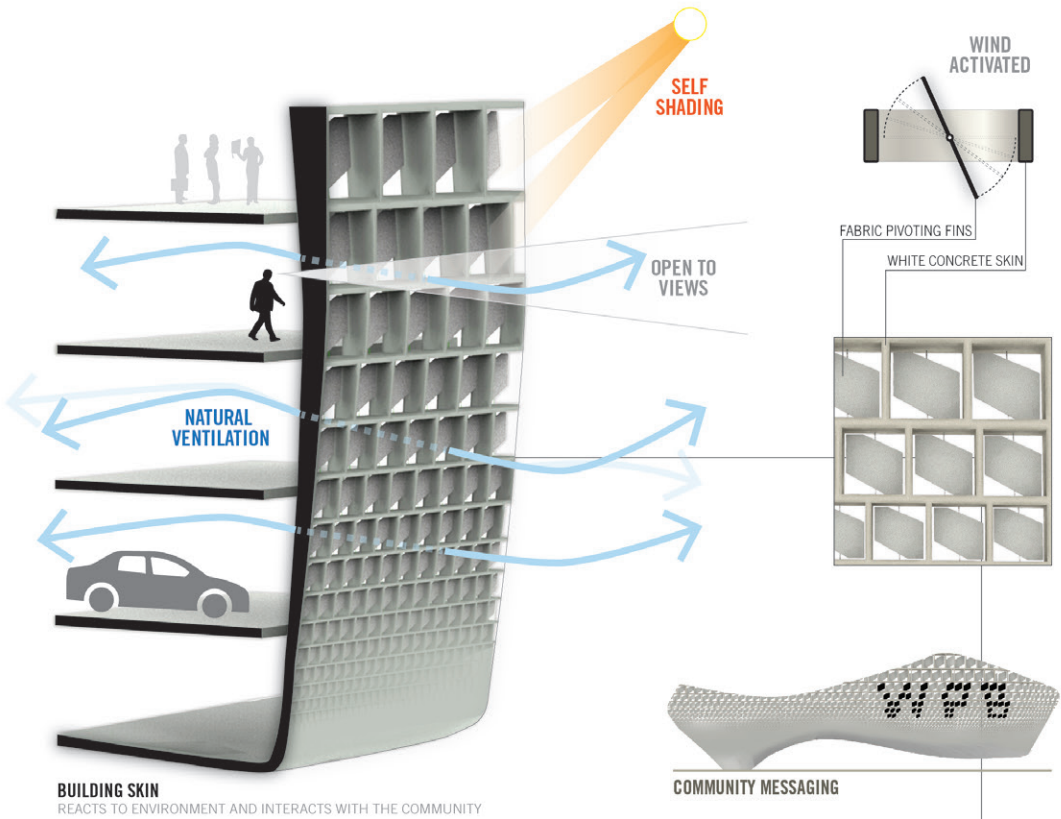
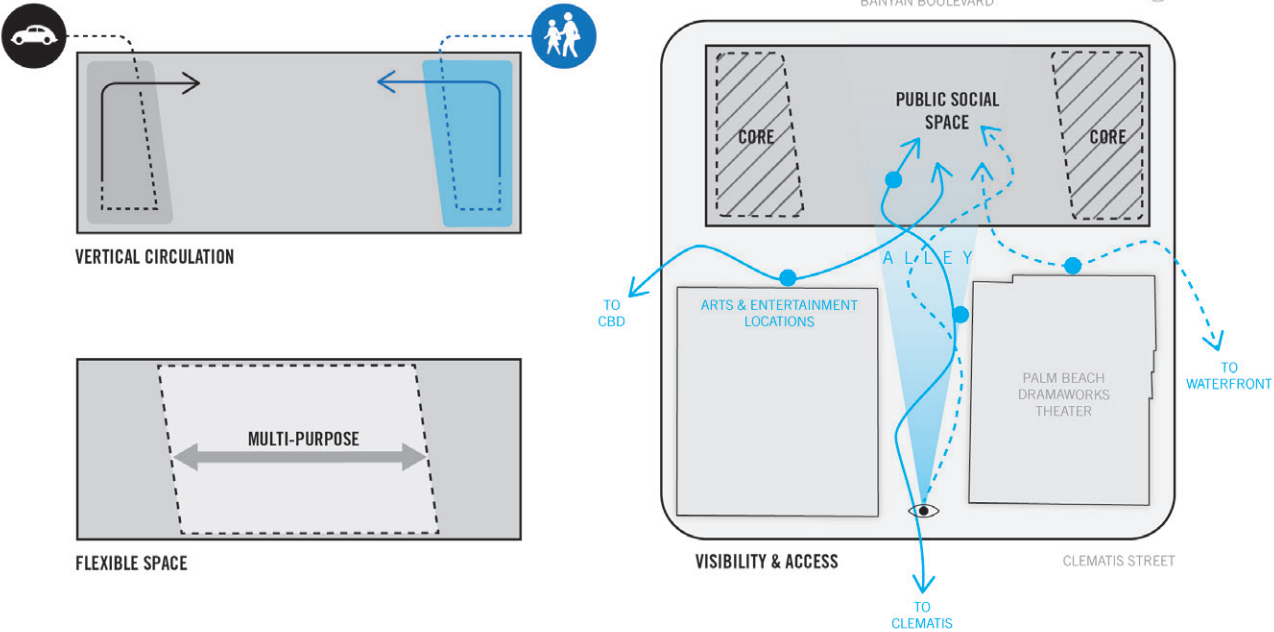
The underutilized Banyan Garage will be transformed into a new civic icon for the city. The building and its site continue and incorporate the overall project theme of Adaptability by providing new and unique spaces that are flexible enough to fit the social, economic and environmental needs of the community.

This civic building will become a magnet for social interaction by creating a ground level “public social space”, “flex-space” floor plates (providing +/- 300 parking spaces or +/- 100,000 gsf of event space) and a rooftop public “sky garden” - each creating a wealth of new opportunities for residents and visitors to experience downtown and the waterfront.



03. SOLUTIONS
(B) DESIGN CONCEPTS

THE BANYAN GARAGE



The New Banyan Street Garage + Civic Building with the New Banyan Alley

B. DESIGN CONCEPTS



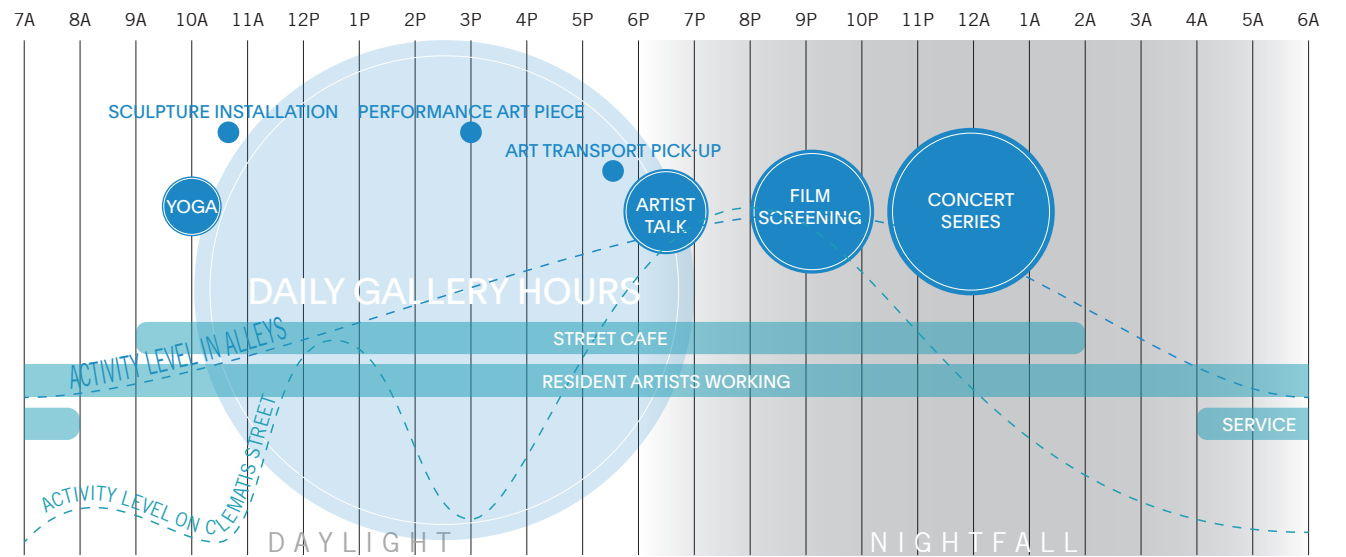
Current Condition



03. SOLUTIONS
(B) DESIGN CONCEPTS

THE ALLEY

Eroding the vertical and horizontal boundaries of the alley and incorporating available adjacent vacant spaces allow for “pockets” of open spaces and create conditions for increased interaction opportunities.



Today
There is a need for affordable space in downtown to help support the arts and smaller-scale entrepreneurial commercial opportunities.

The Opportunity
Consolidate and restructure alley service functions and provide new access into smaller, more densely programmed spaces to incentivize business and breath new life into downtown.



03. SOLUTIONS

(B) DESIGN CONCEPTS

THE WATERFRONT

Downtown West Palm Beach's waterfront extends approximately one mile along the Intracoastal Waterway from the Royal Park Bridge to the Flagler Memorial Bridge. This stretch of urban public waterfront is both unique to WPB yet also shares many issues common to other southeastern Florida coastal cities. Our proposal reimagines the city's downtown waterfront and reconnects it into downtown while maintaining and respecting its existing character and local history.

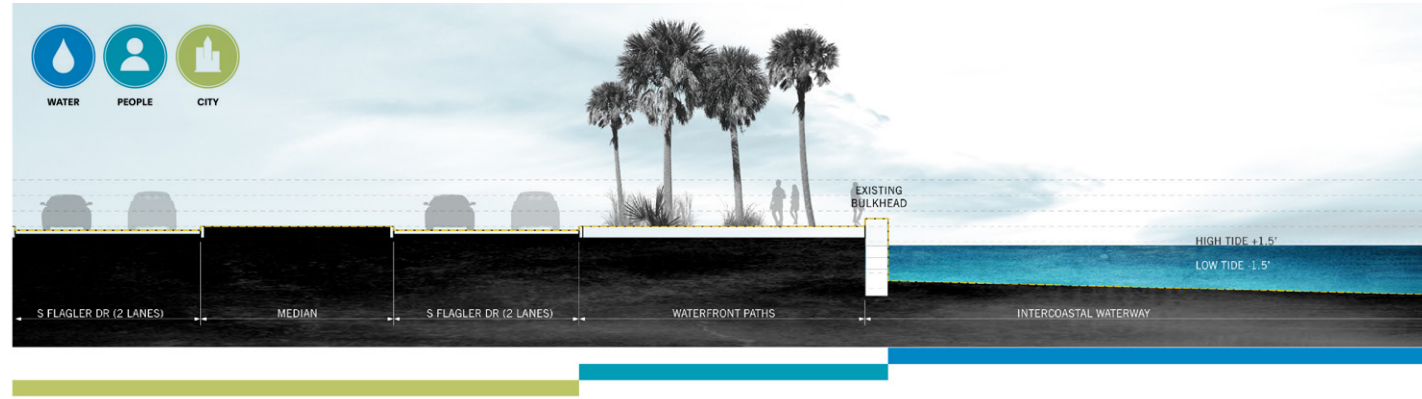
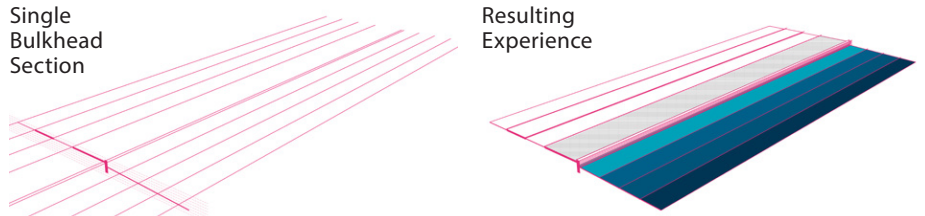


03. SOLUTIONS
(B) DESIGN CONCEPTS

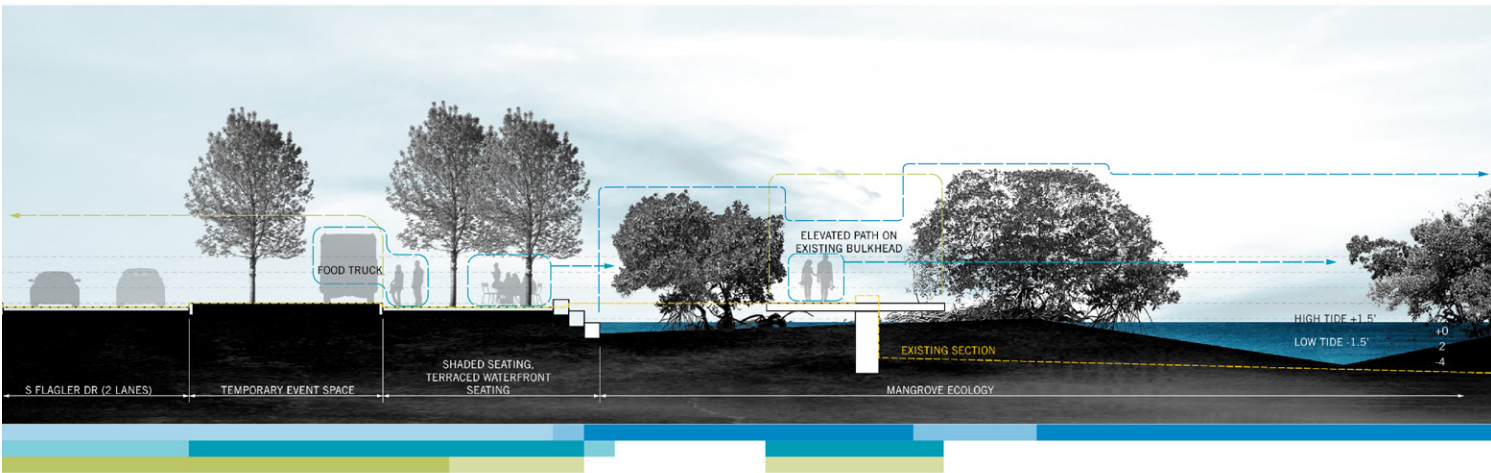
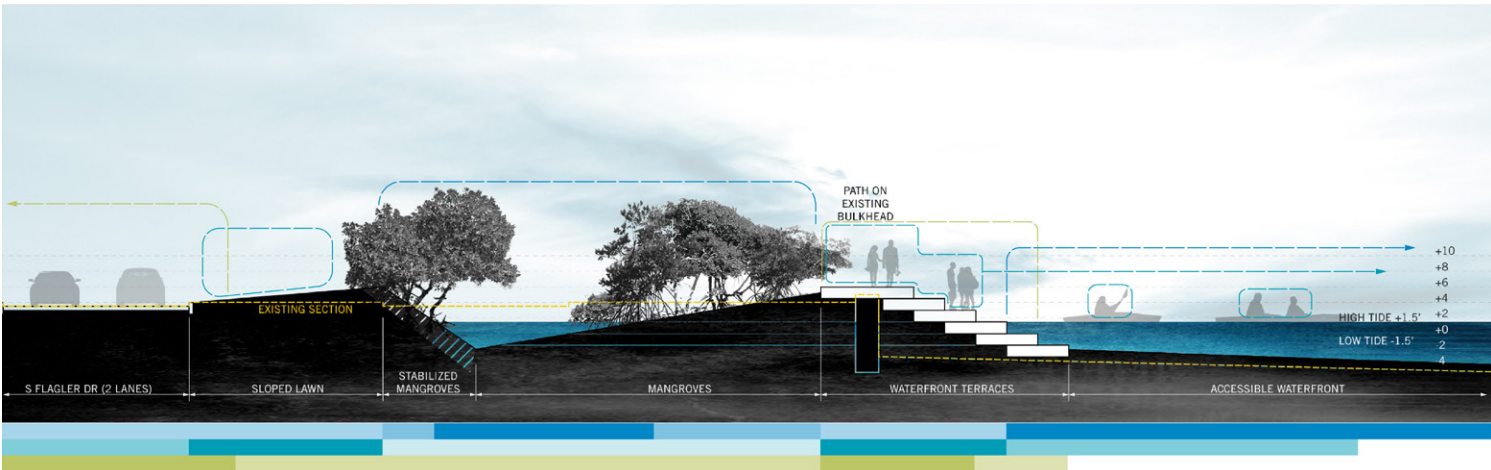
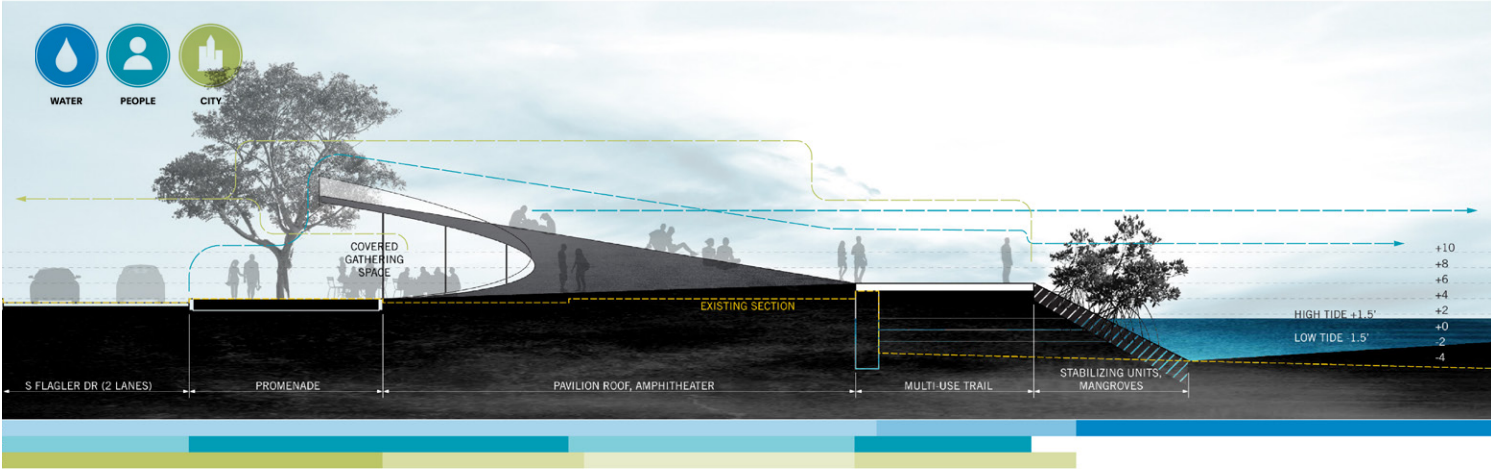
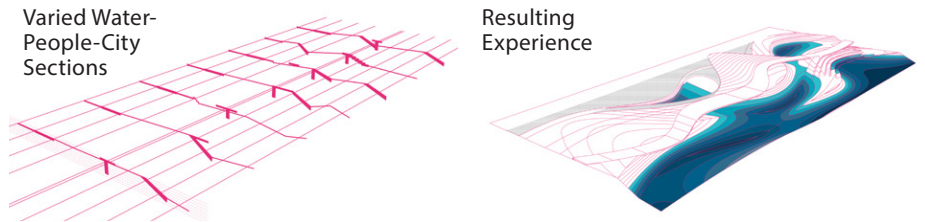
THE WATERFRONT

The character of the current water’s edge is dominated by a linear, concrete bulkhead interrupted only occasionally with access to piers and boat docking slips. This bulkhead solution replaced the original, more natural riparian ecosystem that defined the water’s edge and has created a barrier between people and their ability to interact directly with the water. The reintroduction of habitat islands, mangrove plantings, and low marsh areas provide opportunities for environmental education and play an important role in connecting the upland area with the aquatic habitat. The introduction of a beach, water terraces, and berm structures help to restore habitat by simulating the functions of the original ecosystem while providing greater opportunities for people to engage with the water.

Today
The current bulkhead resists water, while the public spaces of the waterfront function as single objects.



The Opportunity
A new gradient from wet to dry provides space for social, economic and environmental program, creating a more resilient waterfront that systematically stretches from the Intercoastal into the urban fabric of West Palm Beach.



03. SOLUTIONS

(B) DESIGN CONCEPTS

THE WATERFRONT: THE GREAT LAWN + THE AMPHITHEATER

At the scale of the downtown core, our proposal envisions a continuous public waterfront, connecting the many and varied downtown elements —the water’s edge, Flagler Street, the Meyer Amphitheater, the Great Lawn, Clematis Street and its shops and restaurants— to each other and from the water to the urban edge.

The proposed continuous waterfront is reimagined with a two-lane, shared-use Flagler Street expanded and redesigned as a pedestrian promenade interwoven into a series of existing and new civic spaces that range in scale from small and intimate islands to large and open great lawns.

In addition to the multitudes of visitors that descend upon downtown for its many, much-loved events and activities, these new and revitalized places are designed to draw residents and visitors to the waterfront throughout the year – days, evenings, and weekends.



03. SOLUTIONS

(B) DESIGN CONCEPTS

THE AMPHITHEATER

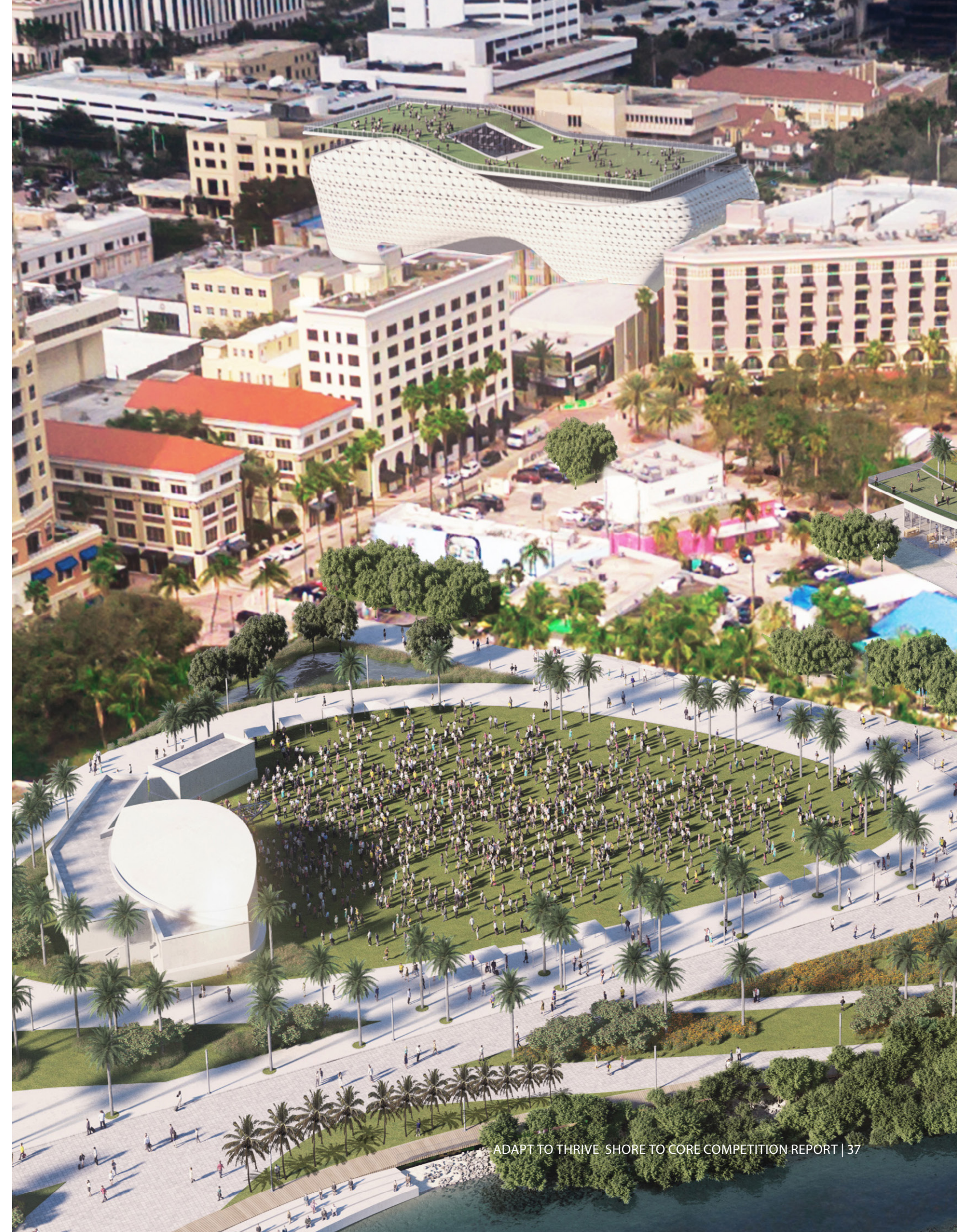
The Meyer Amphitheatre (with its +/-10,000 sf band shell and +/- 1 acre sloped lawn) is host to a handful of special events throughout the year. Although the band shell's size is not readily suitable for either large or small events, its prominent location and open lawn space provides downtown residents with a place to sit, picnic, and enjoy a more passive downtown park that complements the more active, event friendly great lawn a block away.

New views into the amphitheater and out to the waterfront are created by removing the existing berm along Flagler Street and extending the range of the amphitheater out toward the waterfront promenade.

Regrading the amphitheater grounds to more seamlessly integrate into the redesigned waterfront experience – sloped along Datura Street and open to Flagler Street and the waterfront.



Open lawn used as multi-purpose communal gathering space
(images Brooklyn Bridge Park)



03. SOLUTIONS

(B) DESIGN CONCEPTS

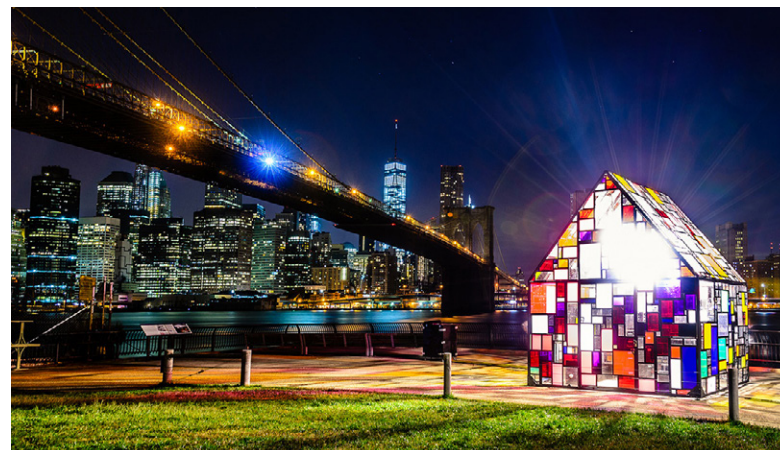
THE GREAT LAWN

The Great Lawn, West Palm Beach’s most prominent public space, is shaped by its surrounding buildings and is utilized for a wide range of activities and events on daily basis and throughout the year. By reenvisioning Flagler Street, the great lawn can be “extended” toward the water’s edge, where a series of innovative and sustainable design elements may be implemented. In order for downtown to grow and thrive, the Great Lawn must grow, connect to the waterfront and become a conduit for people between the core and the water.

Relocation of the existing Visitor Center and removal of a portion of N. Clematis Street, the Great Lawn extends to the north all the way up to the “Florida Crystals” arcade, where newly-activated ground floor spaces will then front the park and provide much needed amenities including a new Visitor Center.

The Great Lawn is extended to the east (across a pedestrian-friendly and easily-closeable two-lane Flagler Street) to the waterfront promenade and its many proposed amenities: an over-the-water boardwalk, a community pool, waterside restaurants, and seating and gathering areas that engage the water in a variety of ways.

A new park pavilion along the south end of the park directs and connects Clematis Street visitors to the Great Lawn and to the waterfront.



Great lawn serves ceremonial, civic and cultural uses
(images Brooklyn Bridge Park)



03. SOLUTIONS

(B) DESIGN CONCEPTS

THE WATER'S EDGE

The waterfront is WPB's connection between land and sea. Today's waterfront users include boaters, residents and tourists that come into to the city from the waterside - its docks and piers - as well as, local residents and thousands of visitors who descend on the waterfront for its signature events, SunFest and Palm Beach International Boat Show. The goal of our proposal is to make the waterfront an even more attractive place to stroll, jog, cycle, boat, and enjoy.

New floating waterfront amenities include over-the-water boardwalks, restaurants, and additional day-docking that is integrated into and between the existing floating piers. A redesigned waterfront with a new waterfront pavilion located on land acquired from the redesigned Flagler Street unites the formerly separate downtown spaces: waterfront promenade, amphitheater, and Great Lawn.

Waterfront dining options are provided at a myriad of levels: On the pier, on a rooftop garden, and on the mangrove island.

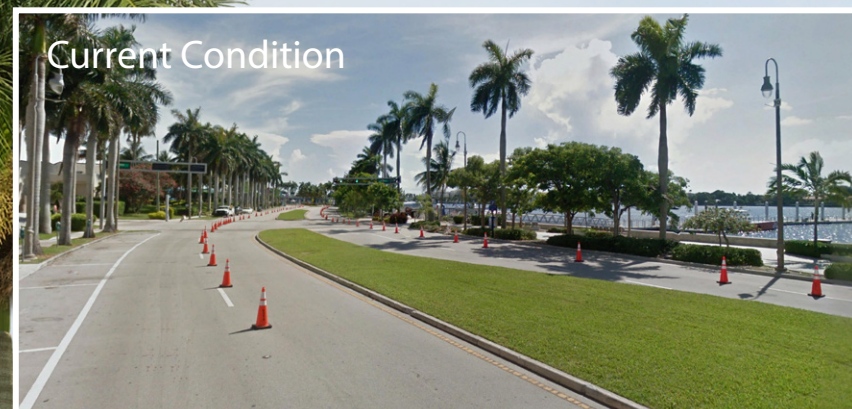
A new waterfront community pool allows access into the water as part of the waterfront experience.

New waterfront steps allow access into and observation of the daily high and low tides, the monthly effect of the moon on the tides, and the slowly rising seas.



A New Integrated Waterfront: Connecting the Amphitheater and Great Lawn to the Intracoastal

B. DESIGN CONCEPTS



A New Adaptive Waterfront: Engaging the Water in New Ways

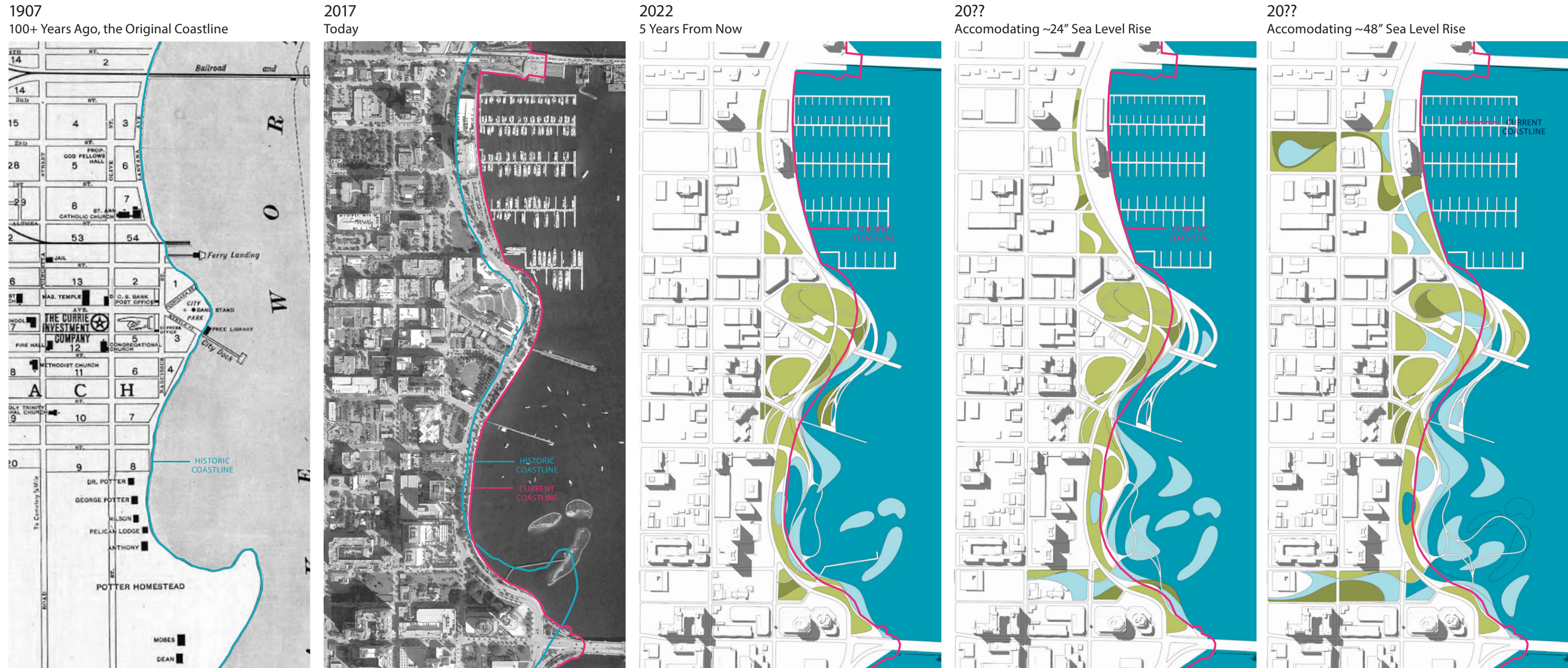
B. DESIGN CONCEPTS



03. SOLUTIONS
(C) IMPLEMENTATION STRATEGIES

SEA LEVEL RISE MUST DETERMINE IMPLEMENTATION

The shape of the waterfront has changed only slightly over the past 100 years. Some new areas to the south were created to provide additional public waterfront, while new areas for development were created to the north. Some areas were removed entirely: The 1907 map shows the city's land mass extending into the Intracoastal, where the South Cove Islands are today.



03. SOLUTIONS
(C) IMPLEMENTATION STRATEGIES

SEA LEVEL RISE MUST DETERMINE IMPLEMENTATION.

The waterfront should, through its design, construction, and operation, reflect West Palm Beach’s commitment to innovation, sustainability, and response to climate change. The waterfront should be seen and used as the city’s “front yard” and through a network of new “green” infrastructure and reenvisioned public spaces, physically connect the water to downtown destinations and the greater city beyond.

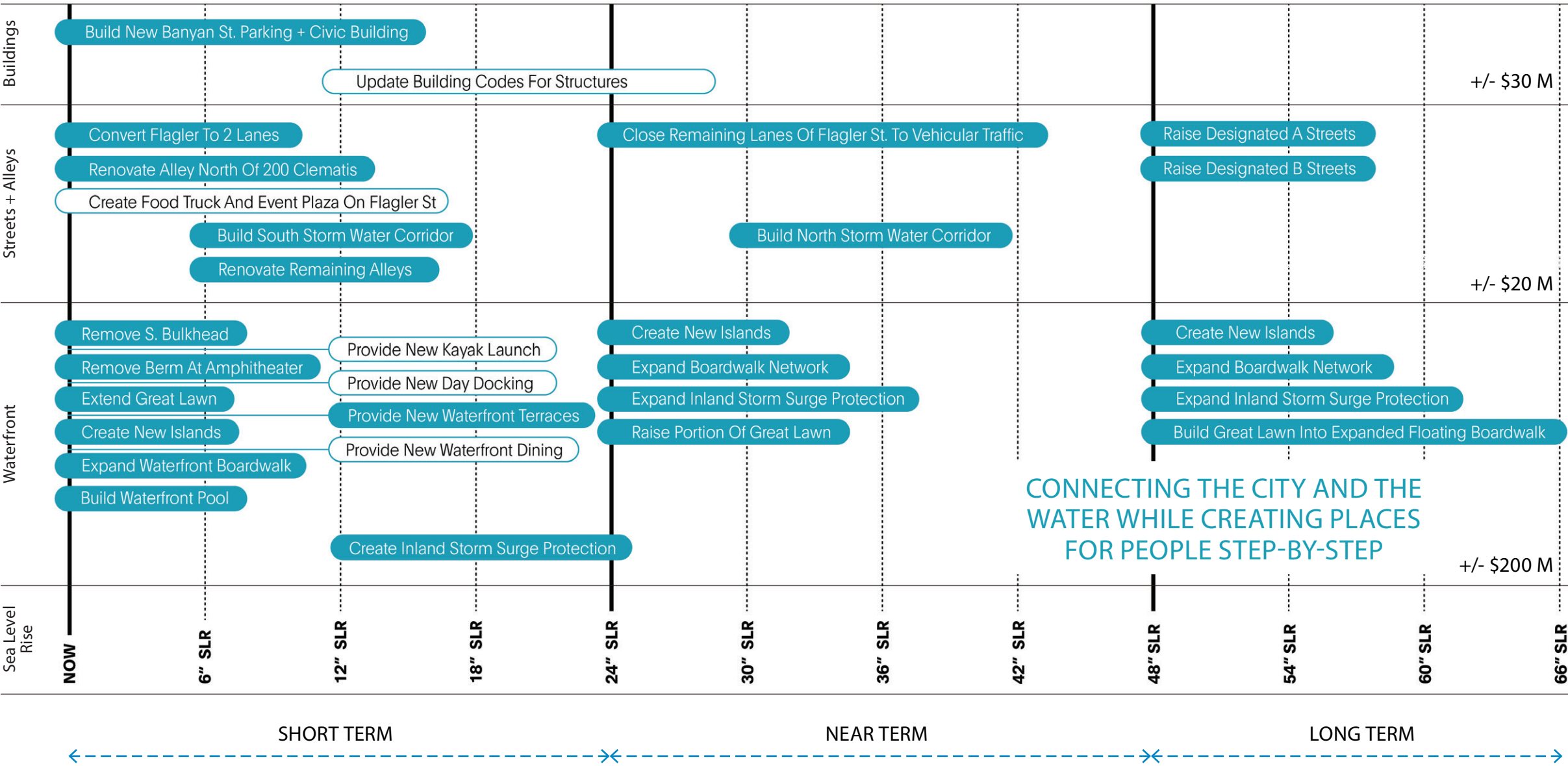
Our bold vision for the waterfront is based on our belief that the city should be ready and able to adapt to social, economic and environmental changes over time. This vision, like all other grand scale projects, will be realized over many years, and include many multifaceted infrastructure projects that must be constructed in conjunction with the creation of each new public space.

For West Palm Beach, interventions have been identified for the short term and long term.

Buildings
Build New Banyan St Parking + Civic Building
Update Building Codes for Structures

Streets + Alleys
Convert Flagler Street to 2 Lanes
Renovate Alley N. of 200 Clematis St.
Build South Storm Water Corridor
Build North Storm Water Corridor
Create Food Truck Plaza
Raise Designated A Streets
Lower Designated B Streets
Renovate Remaining Alleys
Close Flagler St. to All Vehicular Traffic

Waterfront
Remove Southern Bulkhead
Remove Berm at Amphitheater
Create New Islands
Build Waterfront Pavillion
Expand Island Boardwalk
Extend Great Lawn
Build Waterfront Boardwalk Network
Build Waterfront Pool
Provide New Day Docking
Provide Waterfront Dining
Provide Waterfront Terraces
Provide New Kayak Launch
Create Inland Storm Surge Protection



CONNECTING THE CITY AND THE WATER WHILE CREATING PLACES FOR PEOPLE STEP-BY-STEP

