

Downtown Fort Lauderdale, Florida

A ULI Advisory Services Panel Report

October 13–18, 2019



ULI Urban Land
Institute
Advisory Services

Downtown Fort Lauderdale, Florida

Fully Activating Downtown Fort Lauderdale's Public Realm

A ULI Advisory Services Panel Report

October 13–18, 2019



Urban Land Institute
2001 L Street, NW
Suite 200
Washington, DC 20036-4948
uli.org

About the Urban Land Institute

THE URBAN LAND INSTITUTE is a global, member-driven organization comprising more than 45,000 real estate and urban development professionals dedicated to advancing the Institute's mission of providing leadership in the responsible use of land and in creating and sustaining thriving communities worldwide.

ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and the Asia Pacific region, with members in 81 countries.

ULI's extraordinary impact on land use decision-making is based on its members' sharing expertise on a variety of factors affecting the built environment, including urbanization, demographic and population changes, new economic drivers, technology advancements, and environmental concerns.

Peer-to-peer learning is achieved through the knowledge shared by members at thousands of convenings each year that reinforce ULI's position as a global authority on land use and real estate. In 2019 alone, more than 2,400 events were held in about 330 cities around the world. Drawing on the work of its members, the Institute recognizes and shares best practices in urban design and development for the benefit of communities around the globe.

More information is available at uli.org. Follow ULI on Twitter, Facebook, LinkedIn, and Instagram.

COVER PHOTO: Paul Angelone/ULI

© 2020 by the Urban Land Institute

2001 L Street, NW | Suite 200 | Washington, DC 20036-4948

All rights reserved. Reproduction or use of the whole or any part of the contents of this publication without written permission of the copyright holder is prohibited.

About ULI Advisory Services

THE GOAL OF THE ULI ADVISORY SERVICES is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. Since 1947, this program has assembled well over 700 ULI-member teams to help sponsors find creative, practical solutions for issues such as downtown redevelopment, land management strategies, evaluation of development potential, growth management, community revitalization, brownfield redevelopment, military base reuse, provision of low-cost and affordable housing, and asset management strategies, among other matters. A wide variety of public, private, and nonprofit organizations have contracted for ULI's advisory services.

Each panel team is composed of highly qualified professionals who volunteer their time to ULI. They are chosen for their knowledge of the panel topic and are screened to ensure their objectivity. ULI's interdisciplinary panel teams provide a holistic look at development problems. A respected ULI member who has previous panel experience chairs each panel.

The agenda for a five-day panel assignment is intensive. It includes an in-depth briefing day composed of a tour of the site and meetings with sponsor representatives, a day of hour-long interviews of typically 50 to 100 key community representatives, and two days of formulating recommendations. Long nights of discussion precede the panel's conclusions. On the final day on site, the panel makes an oral presentation of its findings and conclusions to the sponsor. A written report is prepared and published.

Because the sponsoring entities are responsible for significant preparation before the panel's visit, including sending extensive briefing materials to each member and arranging for the panel to meet with key local community members and stakeholders in the project under consideration, participants in ULI's five-day panel assignments are able to make accurate assessments of a sponsor's issues and to provide recommendations in a compressed amount of time.

A major strength of the program is ULI's unique ability to draw on the knowledge and expertise of its members, including land developers and owners, public officials, academics,

representatives of financial institutions, and others. In fulfillment of the mission of the Urban Land Institute, this Advisory Services panel report is intended to provide objective advice that will promote the responsible use of land to enhance the environment.

ULI Program Staff

Paul Bernard

Executive Vice President, Advisory Services

Thomas W. Eittler

Senior Vice President, Advisory Services

Deborah Kerson Bilek

Vice President, Advisory Services

Paul Angelone

Director, Advisory Services

Lauren McKim Callaghan

Director, Advisory Services

Jacqueline Canales

Director, Advisory Services

Georgia Gempler

Senior Associate, Advisory Services

James A. Mulligan

Senior Editor

Laura Glassman, Publications Professionals LLC

Manuscript Editor

Brandon Weil

Art Director

Deanna Pineda, Muse Advertising Design

Graphic Designer

Craig Chapman

Senior Director, Publishing Operations

Acknowledgments

On behalf of the Urban Land Institute, the panel would like to thank the Fort Lauderdale Downtown Development Authority (DDA) for sponsoring this panel. A tremendous amount of effort went into putting this visit together. This panel would not have been possible without the extensive work by Marti Brown, Jenni Morejon, Alex Saiz, and Elizabeth Van Zandt. They also answered many questions throughout the week's visit by the panel. We would also like to offer a special thank you for the DDA board members—Alan Hooper, Charlie Ladd, Greg Durden, Jim Ellis, John Ropes, Steve Hudson, and Tim Pertrillo—as well as board general counsel John Milledge.

Thank you to ULI Southeast Florida/Caribbean and leadership provided by Julie Medley and Mallory Barker. Finally, the panel would like to thank the more than 100 residents, business and community leaders, and representatives who shared their perspectives, experiences, and insights with the panel over the week.



LEAH SHEPPARD/ULI





LEAH SHEPPARD/ULI

Contents

2

About 10 Minute Walk

3

ULI Panel and
Project Staff

5

Background and
Panel Assignment

7

Opportunity and Key
Recommendations

9

Market Context and
Vulnerabilities

15

Market Opportunities
and Connections

22

Building Resilience and
Design Considerations

30

Governance and
Process

37

Conclusion

38

Appendix A: Urban Design
Principles and Goals

40

Appendix B: Recommendation
Matrix

42

About the Panel

About 10 Minute Walk

PARKS ARE ESSENTIAL to the physical, social, environmental, and economic health of people and communities. Parks help expand the economy by attracting homebuyers, tourists, and highly talented workers. They protect the environment, provide space for the enjoyment of arts and nature, and make people healthier, happier, and more connected.

Despite these known benefits, research shows that one in three Americans—more than 100 million people—do not have a park within a 10-minute walk of their home. 10 Minute Walk is a movement dedicated to improving access to safe, high-quality parks and green spaces in cities—large and small—throughout the United States. Led by The Trust for Public Land (TPL), in partnership with the National Recreation and Park Association (NRPA) and the Urban Land Institute and with support from The JPB Foundation, 10 Minute Walk is working to create a world in which, by 2050, all people in U.S. cities live within a 10-minute walk of a park or green space. This partnership drives commitments from city leaders working to achieve this vision and transform their communities.

Nearly 300 U.S. mayors have endorsed 10 Minute Walk so far. ULI, TPL, and NRPA are working with partners in select cities on measurable policies and strategies to advance the 10 Minute Walk vision. Success in this work will require the expertise, creativity, and close collaboration of public- and private-sector leaders. ULI has a powerful role to play in catalyzing its members, networks, and partners around a vision of a green, sustainable, connected, and resilient future for all people.

Learn more and connect with 10 Minute Walk at 10minutewalk.org and uli.org/parks.



ULI Panel and Project Staff

Panel Chair

Stephen Whitehouse

Principal
Starr Whitehouse
New York, New York

Panel Members

Garrett Avery

Senior Designer
AECOM
New York, New York

David Cheney

Principal and Director of Operations
CORE architecture + design
Washington, D.C.

Josh Murphy

Senior Spatial Analyst
NOAA
Washington, D.C.

Jeanne Myerson

Principal
The Belgrave Group
San Francisco, California

Nan Rohrer

President
Midtown Community Benefits
Baltimore, Maryland

Katie Troutman

Senior International Realty Specialist
U.S. Department of State
Washington, D.C.

Stacie West

Director of Parks Projects
NoMa Business Improvement District/
NoMa Parks Foundation
Washington, D.C.

ULI Project Staff

Paul Angelone

Director, Advisory Services

Leah Sheppard

Senior Associate, Urban Resilience

Michaela Kadonoff

Associate, Meetings and Events

Background and Panel Assignment

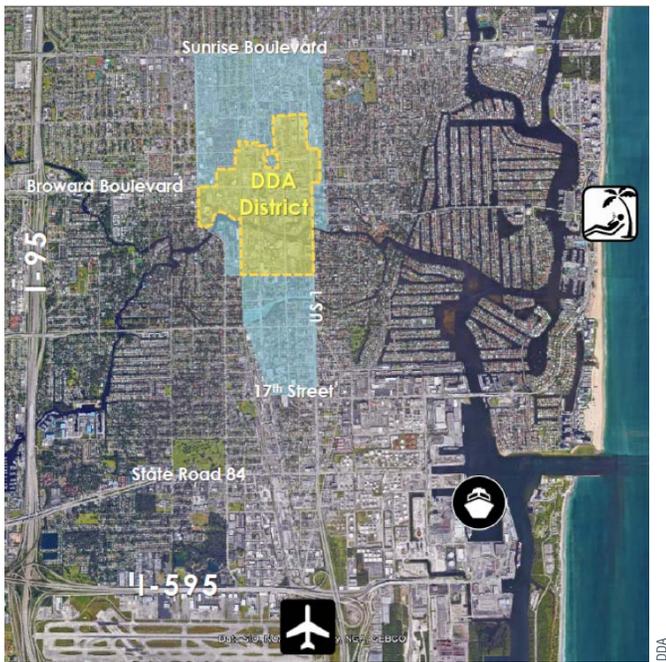
DOWNTOWN FORT LAUDERDALE is the burgeoning urban center in a city of 190,000. It serves as the county seat for 1.9 million people and is the geographic center of a southeast Florida region of 6 million, now linked by high-speed rail with plans to connect to Orlando. The area benefits from its proximity to world-class beaches, Everglades National Park, a scenic two-mile Riverwalk winding through downtown Fort Lauderdale, and other large state parks. City parks, largely designed for recreational activity or formal event programming, exist in the urban core but have not benefited from capital improvements for decades and do not fully complement the evolving metropolitan nature of downtown.

Moreover, the urban core lacks smaller, neighborhood parks, plazas, and open spaces that can provide a respite from the densification while supporting resilient design and infrastructure enhancements. Whereas public investment in downtown Fort Lauderdale parks has been limited, the opposite is true for private real estate development. Over the past 18 years, close to 6.8 million square feet of office, retail, multifamily residential, and hotel space has been built in downtown Fort Lauderdale. Today, another 6.2 million square feet is under construction, making downtown Fort Lauderdale the latest redevelopment hot spot in the nation.

This long-planned and much-anticipated development landed Fort Lauderdale at number 29 among 89 U.S. cities for

overall real estate prospects in ULI/PwC's *Emerging Trends in Real Estate® 2020* report, and population in downtown Fort Lauderdale has grown 30 percent over the past 10 years, with 13,000 residents and 60,000 daily employees. As of June 2019, more than 4,600 residential units were under construction, 5,000 more were approved to be built, and 2,000 were under review for approval.

In March 2019, Fort Lauderdale voters approved a \$200 million general obligation bond to support the acquisition of new park land and make improvements to existing parks citywide. The influx in private capital and the new funding source of a citywide parks bond present two complementary opportunities to set



The study area (blue) with the DDA taxing area (yellow).

the stage for renewed investment in downtown parks and open spaces.

The Study Area

The geographic scope of the panel is generally bounded by Sunrise Boulevard to the north, SE 17th Street to the south, NE/SE 15th Avenue to the east, and SW Fourth Avenue/NW Seventh Avenue (Avenue of the Arts) to the west (three square miles). The study area map (above) includes most of this area and highlights the taxing district of the Fort Lauderdale Downtown Development Authority (DDA) in yellow.

The Panel's Assignment

The DDA asked the ULI Advisory Services panel how to best address downtown park needs and opportunities, as outlined in the following objectives:

1. Envision downtown Fort Lauderdale as a vibrant, livable, urban center connected by a network of publicly accessible parks and open spaces that complement existing and planned development and celebrate the charm and uniqueness of a coastal metropolitan city.
2. Develop a new vision for downtown's most central park, Huizenga Plaza, located on the iconic Riverwalk and Las Olas Boulevard. Recommend new uses,

programming, and high-quality, flexible, and resilient design characteristics that will meet the needs of the growing urban core population. Identify potential public and private funding mechanisms, appropriate commercial enterprises, preferred operational and management models, and a recommended implementation strategy to support this vision.

3. Fort Lauderdale voters recently approved a \$200 million parks general obligation bond, which includes funding park improvements and the acquisition of new park land. Recommend criteria and a strategic decision-making process for land acquisition and the design and development of new parks and open space, prioritizing downtown. Address factors such as demographic shifts, social cohesion, health equity, recreation trends, development and market trends, connectivity to surrounding land uses, integration into an overall parks network, resiliency planning, public infrastructure investments, and anticipated mobility improvements.
4. Identify ways in which the private sector and philanthropic community can participate in and benefit from the addition of new or improved downtown parks and open spaces. Evaluate ways to capture a portion of the economic value of development adjacent to high-quality public spaces.
5. Outline incentives that would be needed for private property owners and developers to participate in a public space program. Suggest strategies for the public sector to streamline processes and expedite outcomes.
6. Prioritize design and programming characteristics that contribute to safe, comfortable, and interesting public space.
7. Present recommendations for the financing, management, and operations of public and private open spaces in downtown. Identify successful models and recommended roles and responsibilities of partner agencies, including public, private, philanthropic, and not-for-profit organizations.
8. Identify community engagement strategies to build support for changes to existing park space and to influence the design and development of new parks and open space.



Opportunity and Key Recommendations

AS SOUTH FLORIDA CONTINUES TO GROW, Fort Lauderdale is geographically bounded from seagrass to sawgrass—meaning the city has little room to grow physically. Instead, the tremendous amount of growth that is occurring within South Florida needs to be denser, requiring redevelopment, infill, and adaptive use of existing buildings. This growth needs to be accommodated while ensuring the lifestyle enjoyed by residents of Fort Lauderdale continues despite the development influx.

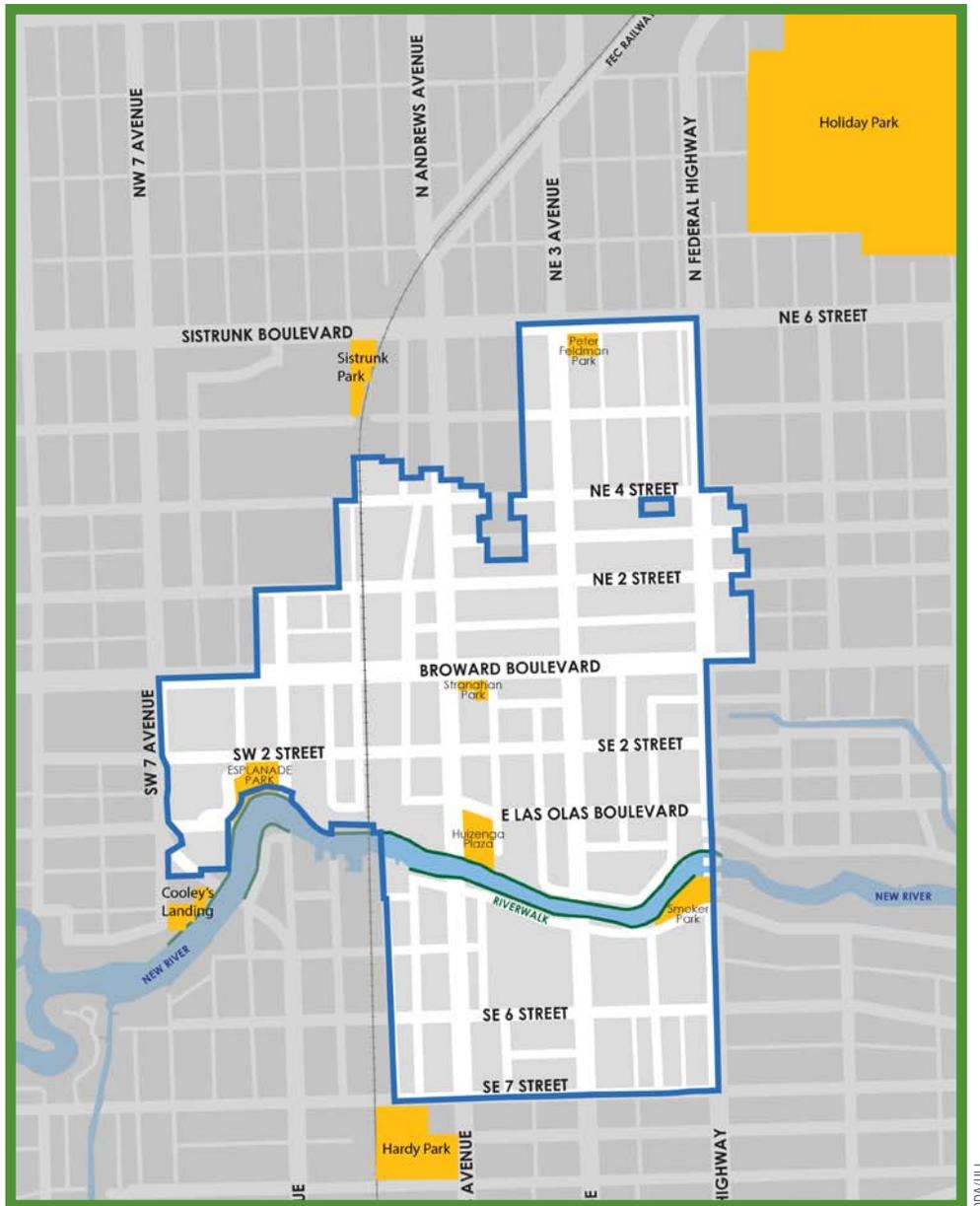
Opportunity for Redefinition

In this journey to density, longer-term residents and new transplants alike are growing concerned about the direction of the community's character and amenities. This panel's charge is to provide recommendations on how parks and open spaces can better make density livable and desirable while addressing the aspirations, needs, and opportunities of the community. The panel believes that parks and open space should be defined broadly—from the existing parks to sidewalks and streetscapes, to potential new open spaces like larger regional spaces, and to smaller pocket parks.

The DDA was established at a time when urban renewal was the major focus of redevelopment. Today, needs have changed

and past roles have evolved. The DDA, working closely with the city and other partners, has an opportunity to define a new framework for growth downtown and the how to implement it. This charge needs to include parks and open spaces as well as building resilience and adapting to a new climate. It means creating an engaging place full of entertainment, cultural, employment, community, recreational, and residential uses. It also means identifying funding and management opportunities to ensure the implementation continues despite changing political administrations.

The panel believes now is the time to leverage the opportunity presented by the passage of the \$200 million parks bond and sustained private investment and begin to create a downtown



The map shows DDA's boundary in blue and the downtown parks within the panel study area in yellow.

DDA/ULI

Fort Lauderdale that is a welcoming place for all of South Florida and the millions of visitors to the region each year.

Key Recommendations

The panel took part in briefings and tours, was provided with background information, and most important, interviewed more than 100 community members. As a result of these interactions, the panel makes the following key recommendations for the city, DDA, and other private and nonprofit entities:

- Acquire or dedicate new public land to augment downtown Fort Lauderdale's public realm.
- Showcase new and remodeled parks with climate-adaptive components along the Riverwalk and at Huizenga Plaza and Esplanade Park.
- Begin a more robust pedestrian and bike network.
- Hire a new chief public realm officer to coordinate public space and lead the engagement process for allocating park bond funds.
- Identify resources and partnerships to supplement the bond act for open space approved in 2019.
- Implement a public/private partnership to manage and fully activate a unified vision for downtown Fort Lauderdale's public realm.



PAUL ANGELO/ULI

Market Context and Vulnerabilities

FOLLOWING IS AN OVERVIEW OF EXISTING market conditions, economic indicators, and climate vulnerabilities that informed the panel’s recommendations. Understanding the market context was critical for the panel to evaluate both market opportunities and options to help grow and connect downtown Fort Lauderdale.

On the basis of market research and stakeholder interviews, the panel has found a growing sense that the housing and office markets have peaked but are not showing signs of slowing down in a strong market cycle following the Great Recession. Investor interest continues to be strong because of a growing population, low unemployment rate, and low cost of land relative to Miami-Dade County.

As South Florida growth continues, limited space availability is causing longer-term problems since most sites that allow for the greatest density in downtown Fort Lauderdale have already been built, entitled, or purchased. Planning for where growth will be located is critical now. Finally, climate change will affect

the downtown market by contributing to more extreme heat, more sunny-day flooding, and greater risk from sea-level rise.

The Regional and Local Economies

The key to the Broward County economy is its central position in the South Florida tri-county area, composed of Broward, Palm Beach, and Miami-Dade counties. Broward County is roughly equidistant between Miami and West Palm Beach. South Florida is by far the most economically and culturally vibrant region in the state of Florida, accounting for more than 6 million residents and its largest office market, with an aggregate of 227 million square feet. Broward County’s central location within this dynamic growth corridor makes it easily accessible

Population Growth



Employment Growth



The population of Fort Lauderdale will grow by more than 267,000 residents, and more than 145,000 new jobs will be created by 2024, according to current estimates.

by road, rail, air, and sea and positions it for trade with domestic and international markets. Fort Lauderdale is the county seat and largest city, with about 190,000 residents.

Along with its strategic location, Broward County's economy is supported by its transportation infrastructure and quality of life. Broward County is a global trading nexus that links North America, South America, Europe, and the Caribbean and now supports a diverse range of industries including manufacturing, finance, insurance, real estate, high technology, avionics/ aerospace, marine industries, and a burgeoning film production business. Broward County's labor force is just under 1 million and is diversified over a broad spectrum of industries, including technology, construction and real estate, marine, and tourism. The county unemployment rate has consistently declined in recent years and has outperformed that of neighboring counties for the past five years.

Temperatures in Fort Lauderdale average 77 °F year-round, and 3,000 hours of sunshine are recorded each year. Fort Lauderdale is a major yachting center with 42,000 resident yachts and 100 marinas and boatyards. Home to the largest boat show in the world (generating half a billion in economic activity or \$100 million/day in transactions during the five-day event), the local boating industry is roughly valued at \$9 billion. It is also a major port of call for many cruise lines.

Employment

A growing number of major corporations are calling Fort Lauderdale home. AutoNation, Citrix Systems, DHL Express, and Spirit Airlines are all headquartered in the city, while ANC, Bank of America, and others are major employers. AutoNation is by far the largest corporation within Fort Lauderdale, with listed revenue of more than \$21.5 billion in 2017. In addition, Fort Lauderdale's downtown is home to campuses for Florida Atlantic University, Florida International University, and Broward Community College, as well as federal, county, and city government offices.

Top 10 Major Employers

Employer	Sector	Employees
Broward County School Board	Education	31,797
Memorial Healthcare System	Health care	12,200
Broward County government	Government	11,654
Broward Health	Health care	8,219
Nova Southeastern University	Education	7,462
AutoNation	Automotive	4,000
American Express	Finance	3,500
City of Fort Lauderdale	Government	2,568
Spirit Airlines	Airlines	1,800
Citrix	Technology	1,700

Sources: Greater Fort Lauderdale Alliance; ULI.



Looking north across West Broward Boulevard toward the Brightline–Virgin Trains station.

Downtown

Fort Lauderdale's commercial districts offer a mix of top-quality stores and restaurants and cultural events. Downtown is a vibrant urban core of about two square miles. The Las Olas Boulevard and Riverfront areas host many commercial attractions, and local retail developers remain bullish according to panel interviews.

Las Olas Boulevard is generally a pedestrian-friendly street lined with shops, restaurants, and galleries. The boulevard is a major connection to Las Olas Beach. The Riverwalk, a brick-lined linear park following the New River through downtown Fort Lauderdale, attracts over 1 million visitors per year. The Broward Center for the Performing Arts is the nation's eighth-most-successful theater, hosting Broadway shows, the Florida Philharmonic, performances by touring companies, and many other events for more than 700,000 people each year. The Museum of Discovery and Science, drawing about 450,000 visitors, and the NSU Art Museum round out major cultural destinations drawing a tri-county audience.

Fort Lauderdale is committed to its long-term growth, which has been deliberately planned over several decades through land use policy and master planning, and because of a strong postrecession market is now being realized. Since 2000, close to 6.8 million square feet of office, retail, multifamily residential, and hotel space has been built in downtown Fort Lauderdale. Today, another 6.2 million square feet is under construction.

This includes about 4,600 new residential units with another 5,200 approved to be built. Residential is the primary driver of new construction. The current residential population is about 17,650 people and is projected to grow 37 percent by 2024. The median age is about 37.5 years, and the per capita income is expected to grow from about \$63,258 today to nearly \$75,478 by 2024. Rents are increasing and housing affordability is decreasing. Currently, residential growth is shifting west of the train tracks into Progresso Village and Sistrunk Corridor—raising displacement concerns of a predominantly African American community.

Downtown is home to some 5,136 businesses with more than 64,000 daytime employees. There is about 7.2 million square feet of office space with another 360,000 square feet under construction. Existing hotel rooms total 800 with another 600 under construction. Land costs downtown are \$240 to \$290 per square foot.

Transportation

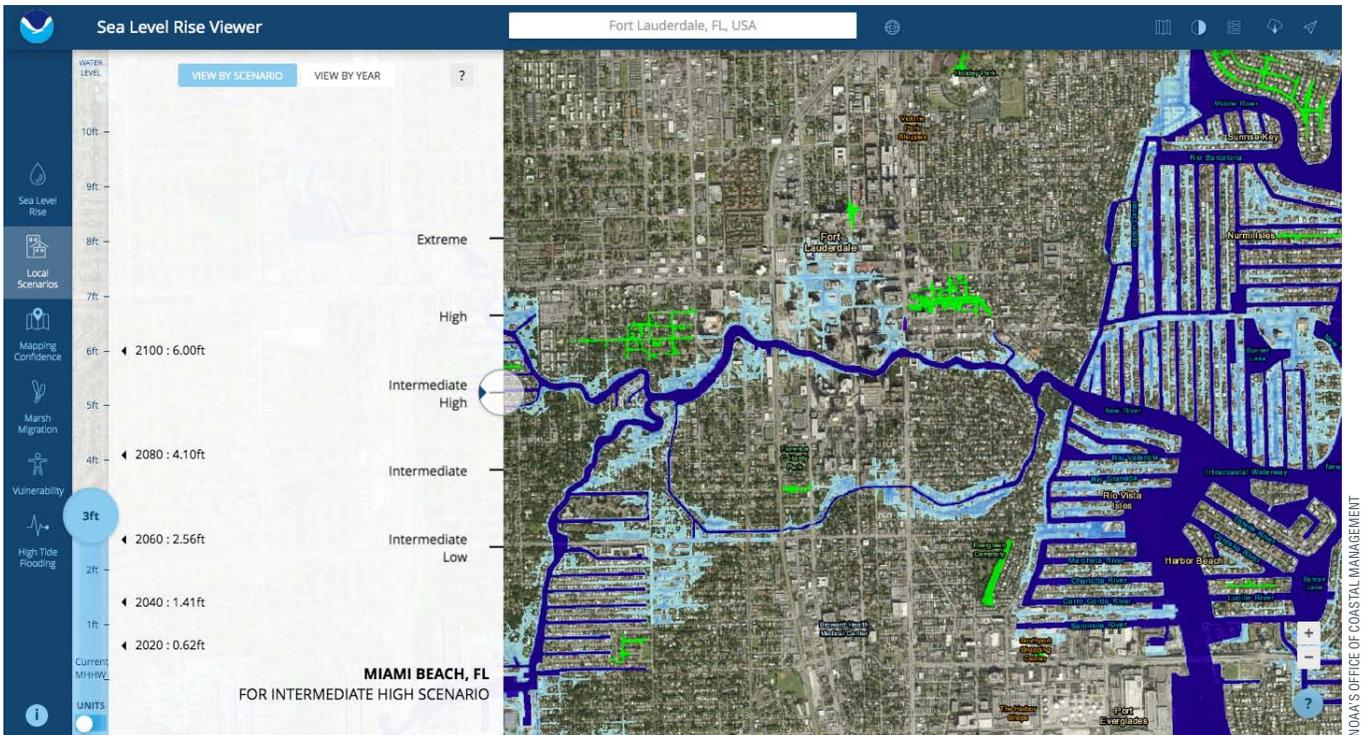
Commuter times average about 25 minutes, and with the opening of the Fort Lauderdale Station, an intercity rail station served by Brightline–Virgin Trains USA, travelers can access downtown Miami and West Palm Beach in about 30 minutes. To alleviate chronic issues, Broward County, after voter approval, recently enacted a transportation penny tax to fund a 30-year, \$15 billion infrastructure investment plan. This surtax will fund hundreds of road traffic and safety improvements, reconfigure intersections, and ensure that some 700 municipal-requested updates from throughout Broward County are finally met. Additional public mass transit is anticipated to be added to the region as part of this investment.

Major Climate Risks and Vulnerabilities

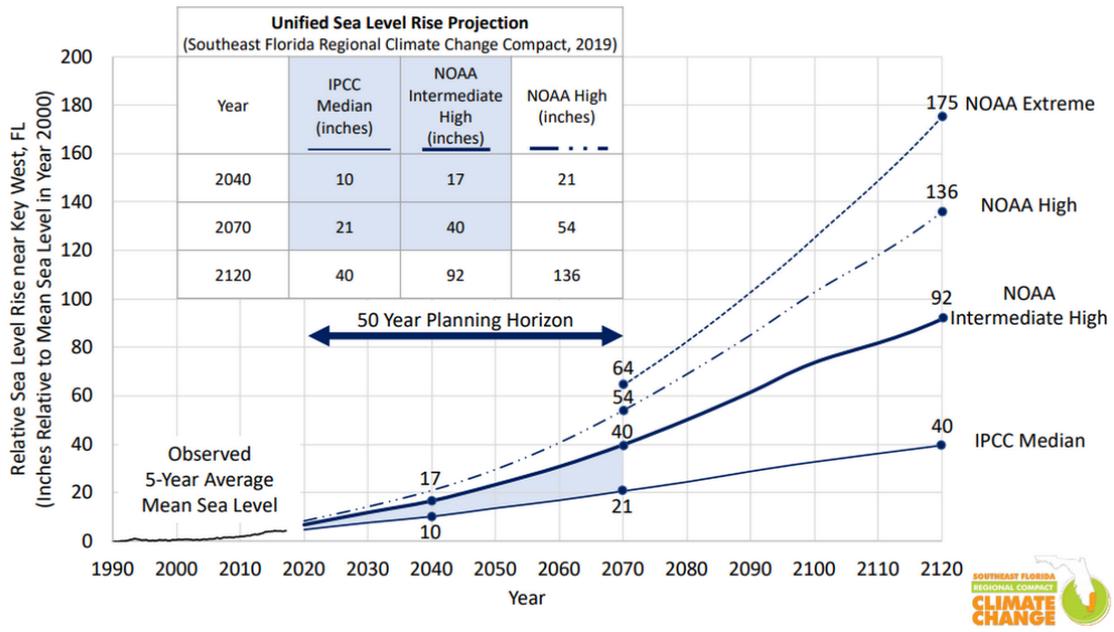
South Florida and Fort Lauderdale specifically are vulnerable to a changing climate. Vulnerabilities such as sea-level rise, increased high-tide flooding, more-extreme precipitation, and extreme heat threaten the marketplace and livability. Many of the impacts will be within the lifetimes of the existing downtown residents as well as within the timeline of a typical 30-year mortgage.

Sea-Level Rise

Using the high sea-level-rise (SLR) scenario developed by the National Oceanic and Atmospheric Administration (NOAA) and adopted by the Southeast Florida Climate Change Compact, downtown Fort Lauderdale would expect to see 1.42-foot SLR above the current mean higher high water (MHHW; the average



A visualization of the impact of three feet of sea-level rise above the current MHHW level in downtown Fort Lauderdale and surrounding areas.

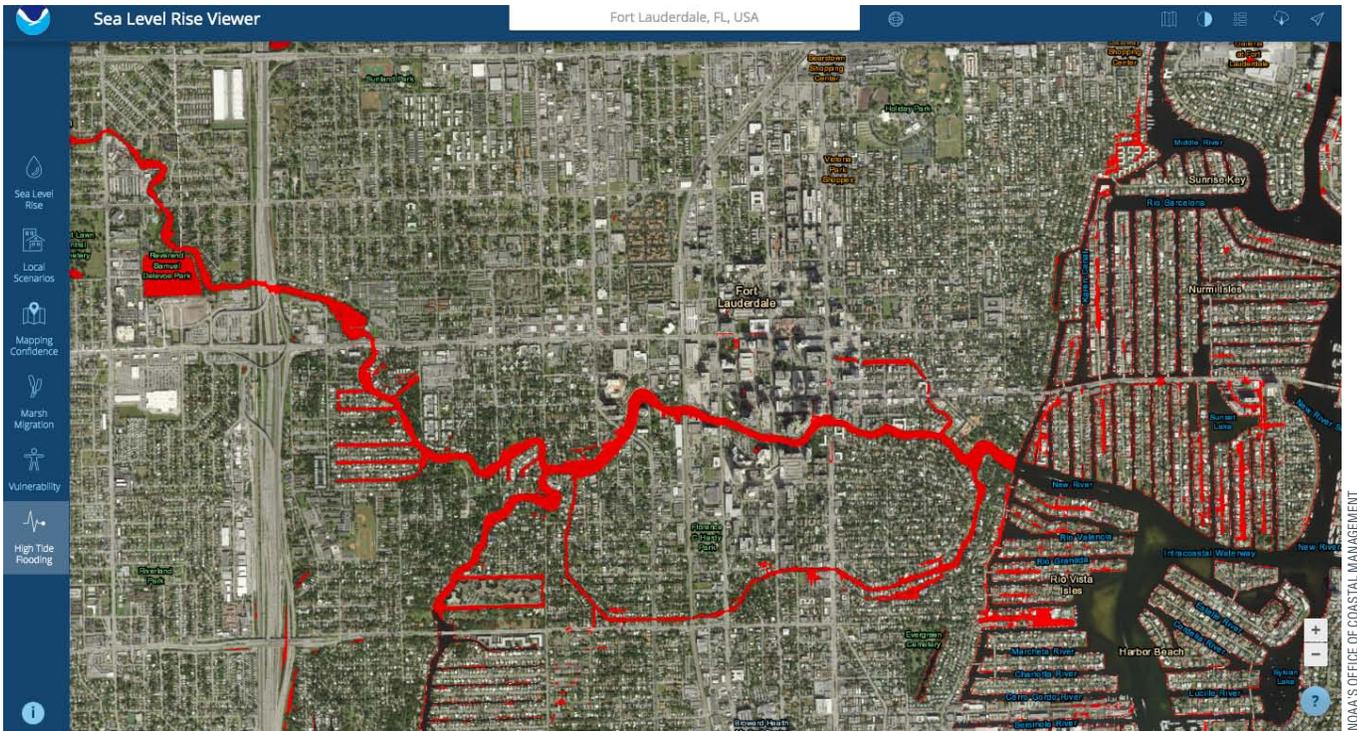


The unified SLR projection adopted by the Southeast Regional Climate Change Compact in 2019. The panel uses NOAA's intermediate high SLR scenario.

height of the highest tide recorded at a tide station each day during the recording period) by 2040 and 2.56 feet by 2060. This represents the future base water level at high tide. Normal seasonal variations in water levels and storm surges would result in even higher water levels.

High-Tide Flooding

As sea levels rise, high-tide flooding and the current effects associated with it will occur more frequently. Currently in Miami Beach (the closest tide gauge), the high-tide flooding threshold is 1.74 feet above MHHW, which occurs six days each year.



Map of tidal flooding.



LEAN SHEPPARD/DULI

The panel observed sunny-day flooding, which is occurring more often as a result of sea-level change.

Under the high SLR scenario adopted by the Southeast Florida Climate Change Compact, high-tide flooding will occur 24 or more days a year, essentially twice a month, by 2026.

Changing Precipitation Regimes

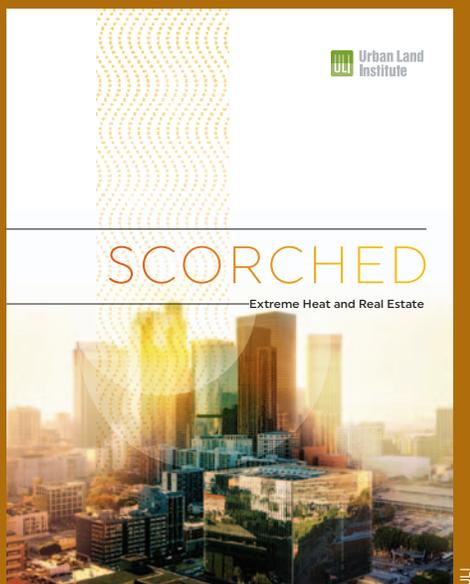
According to the Fourth National Climate Assessment, the Southeast has experienced an increase in the number of extreme precipitation events over the past century, and this upward trend is expected to continue into the future. When rainwater exceeds the capacity of the Fort Lauderdale/Broward County stormwater system’s ability to capture, convey, and discharge into downstream drainage systems, flooding may occur in areas that historically have avoided problems.

When these events are combined with rising sea level, tidal conditions, or both, the system’s ability to pump stormwater, which relies upon the difference between water elevation in the river and water elevation in the system, becomes significantly reduced. Higher sea levels may increase water elevation in the river, causing tide gates to close outfalls for a longer period of time, thereby reducing or even reversing the flow of stormwater discharge back into surrounding neighborhoods. In effect, sea-level rise may compromise the storm sewer system’s ability to discharge when it is over capacity in the event of extreme

SCORCHED: EXTREME HEAT AND REAL ESTATE

Extreme heat is a complex problem that has significant effects on human health, especially in urban areas. However, new research shows that the built environment offers numerous opportunities to mitigate such impacts. A new ULI report, *Scorched: Extreme Heat and Real Estate*, provides an overview of extreme heat's connections to the built environment and an in-depth discussion of heat mitigation and adaptation strategies related to building design, building materials, green infrastructure, and public space design. Fort Lauderdale has an opportunity to encourage the implementation of such strategies downtown and make spaces more adaptable to environmental conditions and more comfortable for occupants.

The full report is available at https://americas.uli.org/wp-content/uploads/sites/2/ULI-Documents/Scorched_Final-PDF.pdf.



precipitation. This reduced capacity could result in increased street flooding, as well as sewer backups into surrounding buildings, subsurface infrastructure vaults, and vehicular tunnels.

Extreme Heat

The Southeast Florida Regional Climate Change Compact projects that Florida's average temperature will increase between 4 and 10 degrees Fahrenheit over the next 100 years. Extreme heat has a profound effect on quality of life and human health, causing dehydration, heat exhaustion, heat stroke, and mortality. More frequent and longer heat waves have the potential to aggravate these health impacts. Health risks are disproportionately borne by residents from high-poverty neighborhoods, of older age, with poor health, and without access to air conditioning. Like other cities, Fort Lauderdale is more vulnerable to extreme heat and rising temperatures because of the urban heat island (UHI) effect, which contributes to cities being up to 16 °F hotter than rural and suburban areas. The texture of Fort Lauderdale's downtown (size and shape of area and how streets and buildings are arranged) determines intensity of UHI effect.



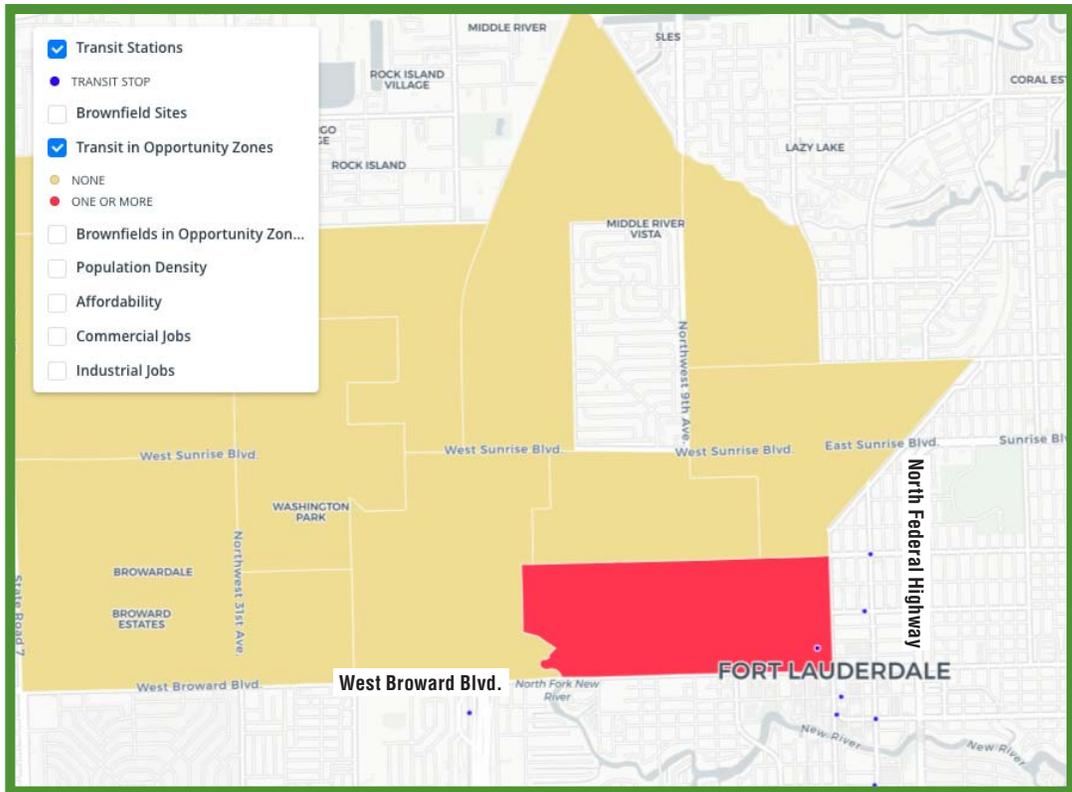
Market Opportunities and Connections

THE MARKET PICTURE—along with a changing climate—presents some significant opportunities and challenges within the near and longer terms. These include both public and private opportunities. During the week of the panel's visit, the joint city-county campus project, a new downtown home being planned for Broward County and Fort Lauderdale city government operations, was approved to move forward by the Joint Development Procurement Authority. Near this new public site is the Brightline–Virgin Trains station and several Opportunity Zones. The Kushner Companies is assembling properties near this area for future development. In addition, a variety of developers are assembling several entitled and unentitled parcels south of the New River.

Despite these expansions of downtown, to maintain Fort Lauderdale as a viable location longer term, where employers will remain, grow, and relocate (jobs, taxes, retail spending power of employees), South Florida must have appropriate space and workforce to support such growth. This includes identifying new opportunities to expand the footprint of downtown to ensure that compact, urban development continues in Fort Lauderdale. This creates the opportunity to develop a new framework/strategy for downtown growth and expansion that connects this new growth with high-quality parks and open space.

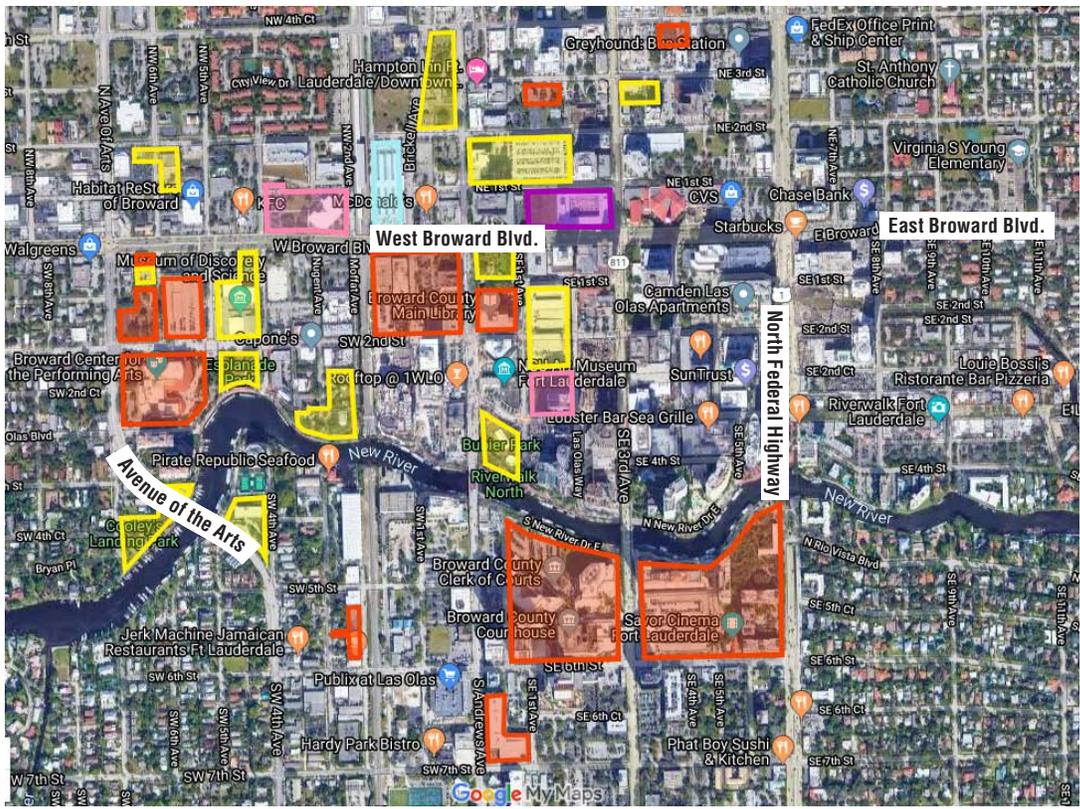
Strategic Growth

A more strategic approach toward downtown growth can also be more thoughtful about where growth should occur since privately controlled parcels are becoming fewer and fewer. The framework should support downtown with new growth corridors that take into consideration the effect of growth on residential neighborhoods—especially those that risk displacement—impacts of climate change, the quality and network of parks and open space, and the overall management of these spaces. This framework should clarify city codes and the process of design approvals for developers and make them more transparent for community members, thereby resulting in a better public realm.



SMART GROWTH AMERICA LOCUS OPPORTUNITY ZONE NAVIGATOR

The map shows Fort Lauderdale's Opportunity Zones, highlighted. The zone in red is the location of the Fort Lauderdale Station, serving Brightline–Virgin Trains.



DDA

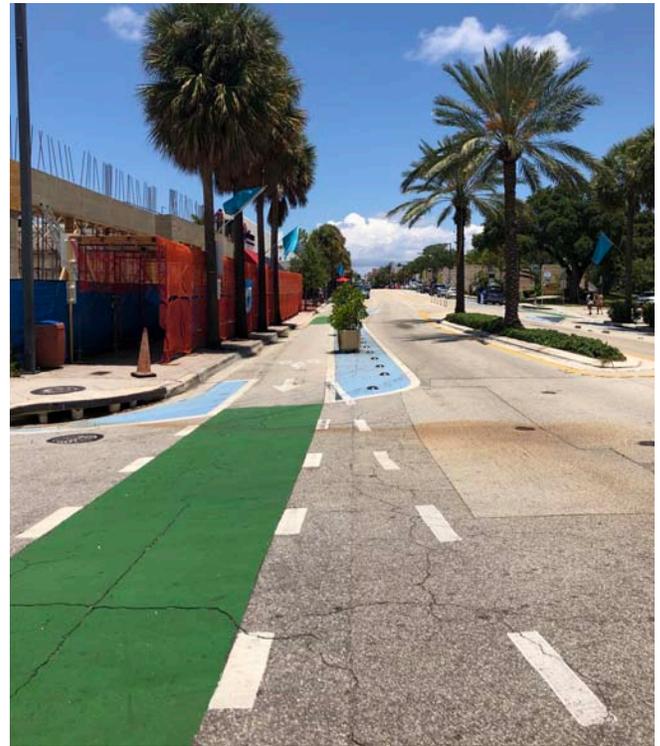
Publicly owned land within downtown Fort Lauderdale. The colors represent the following: light blue is the proposed joint city-county center; orange is owned by Broward County; yellow is owned by the city of Fort Lauderdale; pink is owned by the state of Florida; and purple is the Federal Courthouse.

THE ECONOMIC CASE FOR OPEN SPACE

A survey of successful project examples from across the United States indicates that investing in high-quality vibrant open spaces can pay dividends. Such places—include a range of small to moderately scaled spaces—from pocket parks to trails and downtown parks—where people can gather, play, exercise, and relax with friends, family, and neighbors. Opportunities to leverage demand for such spaces are significant: 85 percent of U.S. residents identify proximity to parks, playgrounds, open space, or recreation centers as an important factor in their decision about where to live. Yet public investment in park development and maintenance has remained stagnant or declined in recent years across the United States. In fact, many large U.S. cities have a substantial backlog in deferred maintenance for parks.

The DDA can play a critical role in helping create coherent open space and public realm connections by using already existing public assets or purchasing land for parks and open space and then transferring these spaces to a new or existing nonprofit that manages and activates the downtown parks and open spaces. Impact fees from developers could offset some costs that could be donated to a specific friends group, conservancy, or foundation instead of just a city-supported fund. These new connections can also help ensure that downtown expansion supports and leverages the economic success of the surrounding communities by encouraging inclusive economic opportunity and workforce development. Finally, this plan should seek opportunities to better leverage developments such as the new Florida Panthers hockey facility and the Parker Playhouse renovation at Holiday Park; likely more can be done to integrate the new facility into the regionally significant park and the adjacent Flagler Village and Victoria Park neighborhoods.

Ideally, new construction, especially office and taller residential buildings, should be close to the Brightline–Virgin Trains station and contiguous with downtown. This will enable a new central activity center for downtown centered on this station and build on existing activity centers such as Huizenga Plaza that anchors East Las Olas Boulevard, which connects directly to the beach. Future growth south of river toward the airport should also be examined as well as along major transportation corridors



Micromobility lanes along Las Olas Boulevard.

like Broward Boulevard and Las Olas Boulevard. In particular, Broward Boulevard should be upgraded to accommodate higher density and be designed to move people not just cars.

Land Use and Design Opportunities

Establishing a framework for strategic growth will allow the opportunity to improve land use patterns, invigorate surrounding areas with more varied uses such as office, mixed-use buildings, and denser neighborhoods outside of downtown, and improve the scale of the community by improving the interface between the buildings and the street. An opportunity exists to experiment with public realm upgrades that are relatively easy and inexpensive to enable innovations and leverage private-sector funding. Some items to consider could be improved street trees that provide shade, moveable tables and chairs, murals, arcades, and pedestrianized zones at non-peak commute times. Then what works can be codified into new building and street guidelines by the city.

This strategy will help ensure opportunities for improvement are not lost as frequently. Some recent examples include the mothballing of the proposed Las Olas Boulevard Business Improvement District (BID), the Wave Streetcar, and the decision to reexamine the entirety of the Las Olas Boulevard



PAUL ANGELONE/ULI

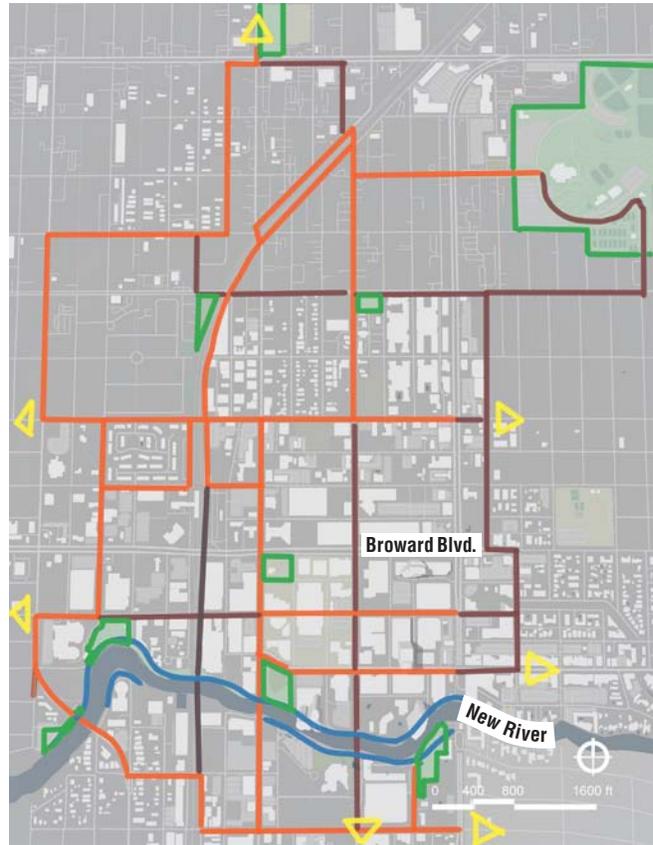
The panel heard through interviews that many parks are designed as lawns. An opportunity exists to better activate these spaces and create better gathering places, not just nice places to view while driving by them.

stretch from Andrews Avenue east to the beach. A new framework will also help better integrate various planning efforts, such as the Mockingbird Trail that has energy and community support compared with the largely abandoned Flagler Trail planning efforts.

Connectivity and Circulation

To make these connections and strategically grow, a stronger network of existing parks and open space is needed, including connecting this network to the planned Mockingbird Trail as well as the existing Riverwalk. This network will help create better circulation and then enhanced downtown circulation. Additional places that should be connected include Huizenga Plaza, the Brightline–Virgin Trains station, the newly developed joint city-county government campus on top of the bus terminal, One Stop Shop park, FATVillage, and Holiday Park, among other connections. Then, this network could be extended beyond downtown, creating better connections to places like the Sistrunk Corridor and SE 17th Street to the beach.

Multimodal capabilities should be improved with the redevelopment of the bus station. Connections to the train and buses could be strengthened, including enhanced last-mile service. Sidewalks should be enhanced, and protected micromobility lanes for bicycles, scooters (with improved management and designated parking areas), and electric mopeds developed. Ride sharing should be better managed with designated dropoff and pickup locations, and smarter shared parking should be implemented to reduce the need for additional parking.



STEPHEN WHITEHOUSE/ULI

The panel's proposed physical connections that build on existing parks and open space, the proposed Mockingbird Trail, and the Riverwalk would enhance circulation and better connect neighborhoods beyond downtown.



PHILLIP PESSARI/FLOKRI

The current site of the Broward Central Terminal transfer station is the proposed location for the joint city-county building.

Joint City-County Center

The joint city-county government campus should serve as a key connector between downtown, Huizenga Plaza, the Riverwalk, and surrounding neighborhoods. The panel believes that this is a positive opportunity and creates synergies between the city and the county at the new center while freeing up three major sites for redevelopment. This project also creates the opportunity to reserve a majority of the One Stop Shop parcel as public open space with concessions or food trucks activating the edges.

The Riverwalk and County Jail

The Riverwalk has been an excellent addition to downtown, but an opportunity exists to further improve it to activate the waterfront while better serving downtown and the city of Fort Lauderdale as a whole. This effort has created an amenity that mixes active marine uses with restaurants, bars, parks, and large multifamily buildings and offices. Central to the circulation of the Riverwalk is Huizenga Plaza and the connection to the surrounding street network such as Las Olas Boulevard.

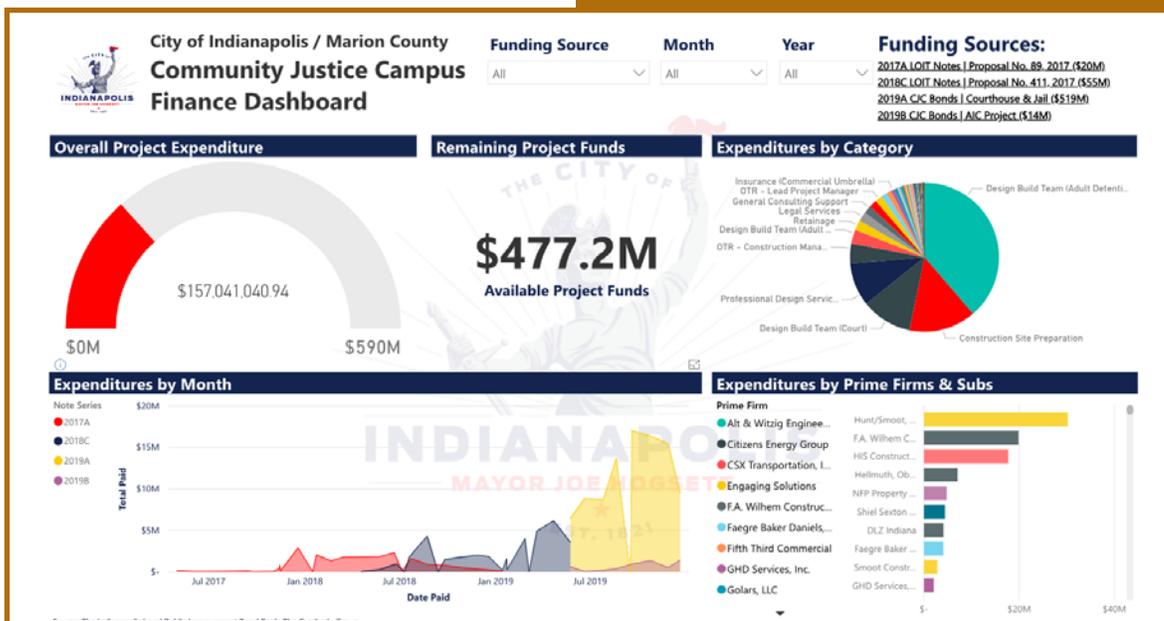
The panel believes that the full potential of the Riverwalk is not being achieved and recommends that the county jail be relocated and redeveloped as prime riverfront land. Having the jail in the middle of a growing entertainment and office and residential district is poor land planning and not a compatible use longer term. When the jail is relocated, the development site should include park and planned open space with

RELOCATING THE INDIANAPOLIS–MARION COUNTY JAIL

The city of Indianapolis, Indiana, is relocating its downtown jail and courts to a new \$590 million complex in the southeastern Twin Aire neighborhood. Currently, about 2,500 inmates are in the Marion County jail downtown spread over multiple buildings that present limited abilities to address mental health concerns.

The new Community Justice Center will provide an Assessment and Intervention Center to begin to address mental health concerns since about 40 percent of the jail inmates are classified as mentally ill and 85 percent of the inmates have substance abuse problems. In addition, the campus will include the use of technology such as e-filing and courtroom video conferencing, spaces for counsel/client conferences, and medical, mental health, and social services. This effort is intended to reduce recidivism and save the city about \$15 million annually, aiding it to cover the bond payments.

The new site is a former 140-acre Citizens Energy coke plant that has sat empty for many years and is being remediated as part of the new project. The city also anticipates receiving rent from businesses such as legal services, bail bonds, and retail operators. As part of a major upgrade of the city’s public transit system—IndyGo—additional routes and connectivity will be added to this location. It will be integrated into the city’s new bus-rapid-transit network. Downtown, the existing facilities will be able to be redeveloped as office and residential development moves east.



The finance dashboard for the Community Justice Center is publicly available and regularly updated.



LEAH SHEPPARD/ULI

The Riverwalk.

complementary active uses, and further reinforce and enhance walkability and extend downtown farther south of the river.

New pedestrian bridges or other improved pedestrian connections should be extended across the New River to form a complete Riverwalk loop while not negatively affecting marine traffic. To finance some of these improvements, the slip and moorage fees could be renegotiated to increase income, dedicating some to the Riverwalk and adjacent parks. An example of this was done by a public/private partnership to enhance the Chicago Riverwalk.



JEANNE MYERSON/ULI

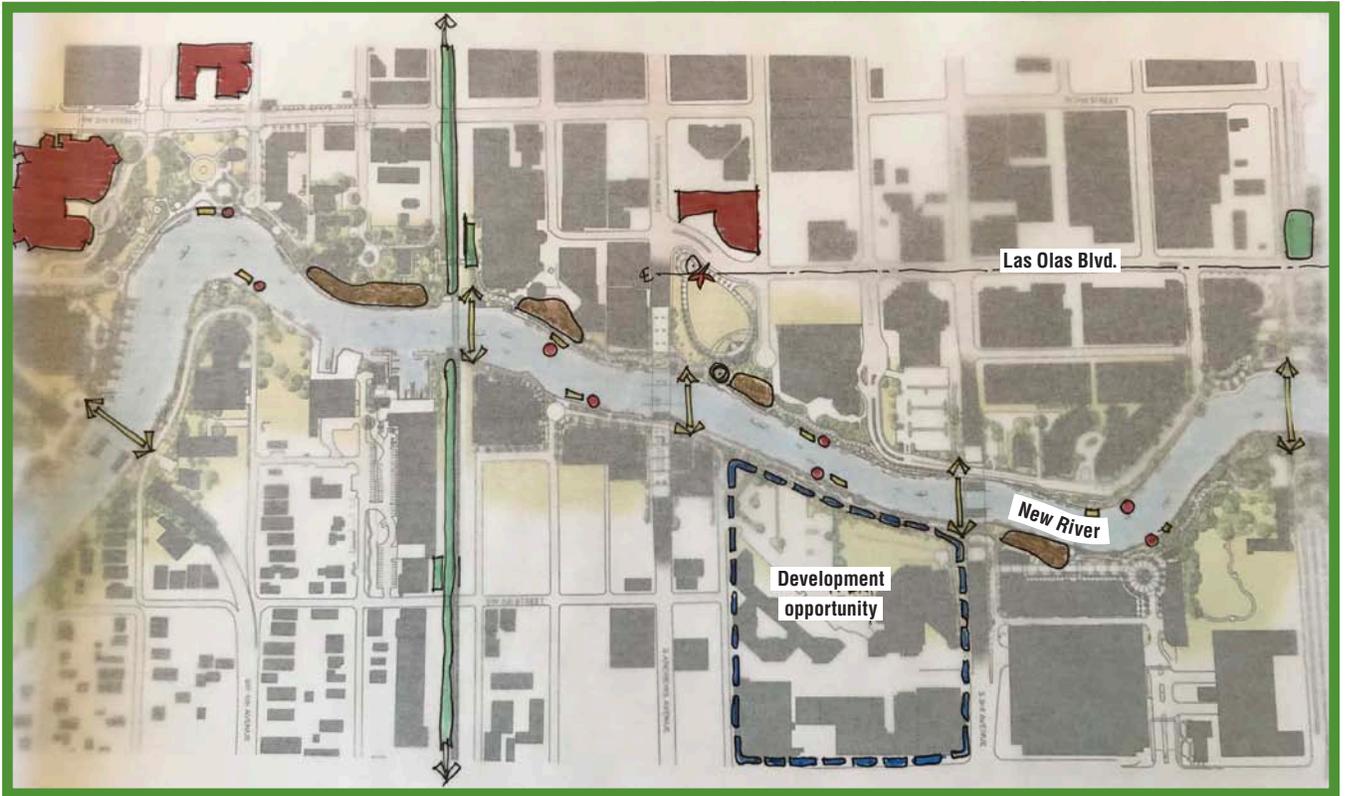
A view of the Broward County Jail that the panel proposes relocating to make better use of the land.

10 PRINCIPLES OF SUCCESSFUL PUBLIC/PRIVATE PARTNERSHIPS

Public/private partnerships are a way to most effectively combine the strengths and resources of both the public and private sectors. These partnerships are used in economic development, infrastructure development, social services delivery, and other applications. In 2005, the Urban Land Institute published *Ten Principles for Successful Public/Private Partnerships*. In 2014, these principles were updated to better reflect how such partnerships can help weather severe economic recessions in a publication titled *Successful Public/Private Partnerships: From Principles to Practices*.

10 Principles for Successful Public/Private Partnerships

1. Prepare properly for public/private partnerships
2. Create a shared vision
3. Understand your partners and key players
4. Be clear on the risks and rewards for all parties
5. Establish a clear and rational decision-making process
6. Make sure all parties do their homework
7. Secure consistent and coordinated leadership
8. Communicate early and often
9. Negotiate a fair deal structure
10. Build trust as a core value



The panel's proposed improvements to the Riverwalk as well as identification of a development opportunity if the Broward County Jail were relocated.



PAUL ANGELONE/ULI

Building Resilience and Design Considerations

AN UNDERSTANDING OF THE VULNERABILITIES presented by climate change and how that will redefine how and where to build is critical. As mentioned in the “Market Context and Vulnerabilities” section, resilience in downtown Fort Lauderdale will need to be built to address sea-level rise, tidal inundation, extreme precipitation, and extreme heat. This section gives examples of design considerations and how these could specifically be applied within the study area.

A resilient community is one that understands its current and future risks and vulnerabilities and has identified strategies to mitigate these risks. These strategies should maximize community investments through the realization of co-benefits that promote vibrant and healthy populations and economies. This is especially true because significant spending is needed downtown on public utilities and other assets.

Parks and open space can play a role in enhancing the resilience of the surrounding community through co-benefits of items such as recreation and public safety; creating social cohesiveness and enhancing public health; and decreasing costs, because green infrastructure is generally less expensive to build than fully built out gray infrastructure. However, gray

DEFINING RESILIENCE

The Urban Land Institute, in partnership with numerous other organizations active in the built environment, such as the American Planning Association, the U.S. Green Building Council, and the American Institute of Architects, defines resilience as “**the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events,**” which have become more frequent and intense due to climate change. Similarly, Presidential Policy Directive-8 defines resilience as “the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies.” This definition is used by federal agencies and is critical to understand when applying for nonlocal funds.

infrastructure is sometimes necessary to manage extreme weather events.

Design Considerations

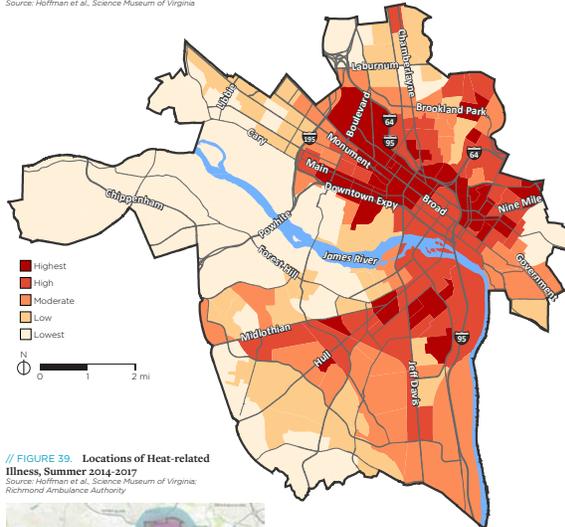
Many design considerations should be taken into account through a downtown-scale planning exercise to build resilience and enhance the public realm. These considerations for parks within the study area should enable actions to be implemented that support community health and well-being.

QUICK WIN: MAP STUDY AREA'S UHI EFFECT

The city of Fort Lauderdale or DDA could commission a local university or other group to conduct a heat study to pinpoint current areas that require intervention. This can be extremely simple and inexpensive. In 2017, Richmond, Virginia, gathered 15 volunteers to bike around the area equipped with handmade devices to measure air temperature and mark locations as they moved along. The collected data fed into open-source software that resulted in a map that showed a picture of Richmond's UHI effect. More information can be found here: <https://toolkit.climate.gov/case-studies/where-do-we-need-shade-mapping-urban-heat-islands-richmond-virginia>.

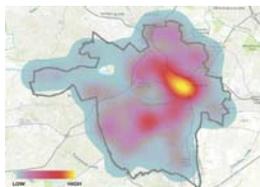
// FIGURE 38. Urban Heat Vulnerability, 2017

Urban heat vulnerability is a term used to describe an area's conditions that make it heat sensitive using a combination of % tree canopy, % impervious surfaces, % families in poverty, and the amount of afternoon warming during a heat event.
Source: Hoffman et al., Science Museum of Virginia



// FIGURE 39. Locations of Heat-related Illness, Summer 2014-2017

Source: Hoffman et al., Science Museum of Virginia; Richmond Ambulance Authority



Consider this:

- How can we prepare for the effects of climate change?
- How do we ensure the most vulnerable populations are included in creating solutions to mitigate the effects of climate change?

RICHMOND
300

UHI map of Richmond, Virginia.

JEREMY HOFFMAN

Parks should take the following steps:

- Facilitate cooling (e.g., install shade trees, splash pads, and other water features).
- Encourage activity (e.g., build walking paths, recreational fields, and skate parks).
- Encourage community gathering (e.g., community programming that brings neighborhoods together and builds social cohesion).

Wherever possible, resilience should be integrated into park design. The panel suggests promoting these features with public art that provides education and information on the resilience strategies. This could be done through a partnership with the local art and science museums. Finally, system redundancy should be created. This should include microgrids and distributed solar.

Coastal Flooding

Communities have a range of measures to help them protect properties from coastal flooding and damage caused by flood-related wave action, erosion, sedimentation, or saltwater exposure. These measures range from large-scale civil engineering works designed to protect entire communities or large parcels, to small-scale, site-specific features intended to protect specific assets or functions.

The following are examples of coastal flooding design considerations.

- *Tidal or surge barriers:* These are physical floodgates constructed in the water at inlets, rivers, or other narrow breaks in the coastline that, when closed, can prevent high tides or storm surges from traveling inland.
- *Sand dunes, wetlands, and other natural or nature-based infrastructure:* These are physical barriers that can protect



Empire Stores overlooks Brooklyn Bridge Park, which uses riprap edges to reduce the force of wave action.

SS ARCHITECTURE

communities or specific properties from floodwaters or attenuate high-velocity flow and wave action.

- *Levees, seawalls, revetments, and other floodwalls:* These are designed to block floodwaters from inundating communities, individual properties, or specific buildings or machinery, such as pump stations.
- *Dry floodproofing:* This can prevent water from entering specific nonresidential buildings or specific machinery through the use of sealed exterior walls, watertight doors, and water-resistant materials. The risks of coastal floods that exceed the design flood elevation must be considered carefully along with the need for evacuation of personnel.
- *Wet floodproofing:* A flood mitigation technique designed to permit parts of the structure to intentionally flood, by equalizing hydrostatic pressures and by relying on the use of flood-damage-resistant materials. With this technique, the parts of the building that are designed to

flood are only to be used for parking, storage, building access, or crawl space.

- *Backflow prevention devices:* These, such as tide gates and check valves, can prevent saltwater intrusion and tidal backflow from penetrating stormwater pumps and pipes.

Stormwater Management

More frequent high-intensity rain events can overwhelm traditional measures to effectively manage stormwater. Techniques that leverage natural and nature-based features can be used to capture and manage stormwater at the site level, thereby reducing the burden on the system. The following are examples of stormwater management design considerations.

- *Bioswales:* Vegetative areas that capture stormwater runoff from large impervious areas through infiltration, storage, or both;
- *Blue roofs:* Roof infrastructure that is designed to store rainwater with a detention system;
- *Cisterns and stormwater vaults:* Large storage facilities that store stormwater, commonly below or at ground level;
- *Permeable surfaces:* Ground cover that allows water to percolate into the soil; and
- *Rain gardens:* Small plots of vegetation used to capture stormwater runoff through infiltration, storage, or both.



© REGENCY CENTERS

An above-ground cistern that benefits the development both as a marketing tool (symbol of Whole Foods' commitment to sustainability) and as a stormwater-harvesting vessel.

Extreme Heat

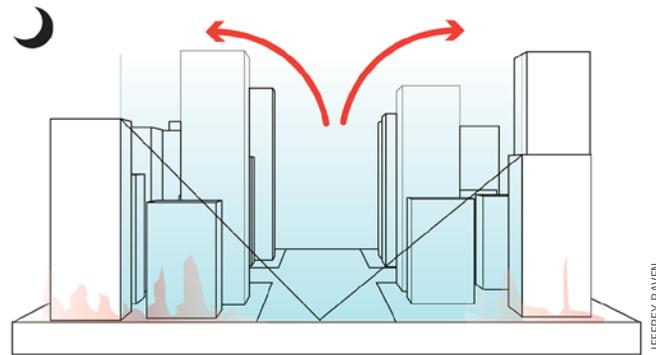
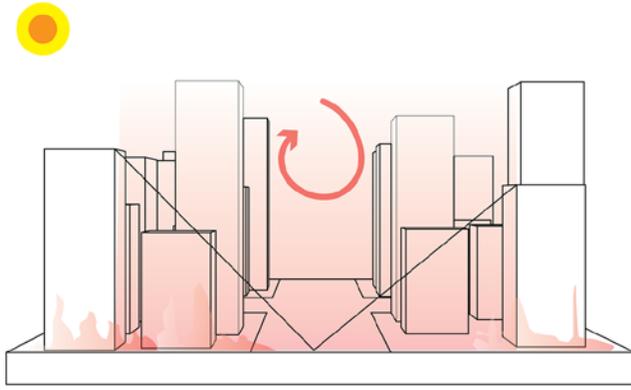
As mentioned earlier in this report, extreme heat will become more of a concern in the near future. This builds on an already warm, sunny climate in South Florida. The following are examples of design considerations to mitigate against extreme heat.

- *Shade structures installed on buildings:* Permanent or temporary structures that can be installed as part of landscape design in open areas and architectural design of buildings.
- *Waste heat management at the building scale:* By reducing building cooling load and creating alternative outlets for rejecting heat rather than venting directly to the street.
- *Cool roof:* Roofing material made of reflective paints, sheet coverings, or reflective shingles/tiles that reflect sunlight instead of absorbing heat. Cool roofs are 50 to 60 °F cooler than standard roofs and produce 20 percent average energy savings for property owners.



CCDC

Broad Street in Boise, Idaho's Central Addition LIV District incorporates stormwater infrastructure (such as permeable pavers, rain gardens, and swales) in the public right-of-way to help the surrounding properties meet their stormwater management requirements.



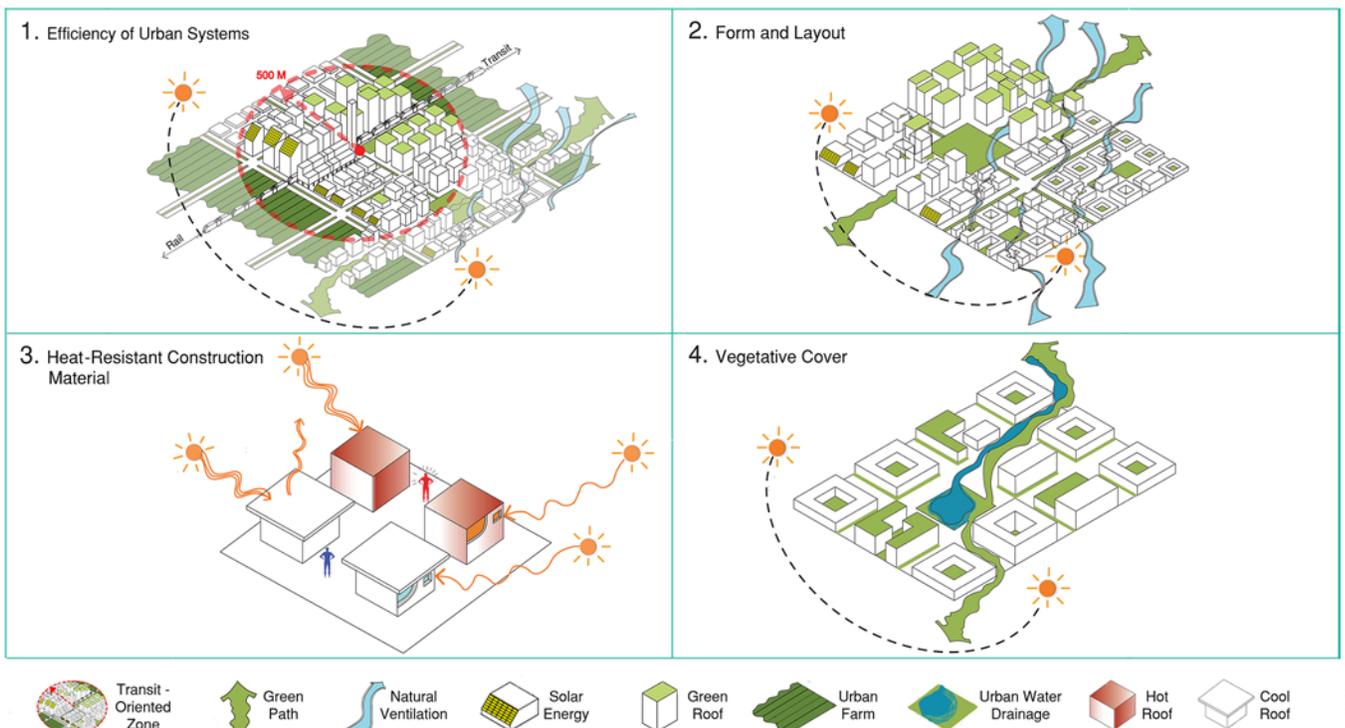
Having varied building heights and open spaces enables heat to escape at night.

- *Cool pavements*: Light-colored, reflective, or porous pavements that do not absorb heat.
- *Green roof*: Roofing that includes vegetation planted over a waterproof membrane. Generally, this is a high-impact temperature reduction strategy (and often paired with local government incentives).
- *Green wall (vertical landscaping)*: Vegetation planted in a vertical system along interior or exterior walls. It is an attractive amenity that reduces not only building energy use and envelope surface temperatures, but also the surrounding microclimate temperatures.

Districtwide

Some design elements could serve broader outcomes than the previous more targeted or issue-specific threat mitigation strategies. The following are examples of design considerations that could be implemented at the districtwide level.

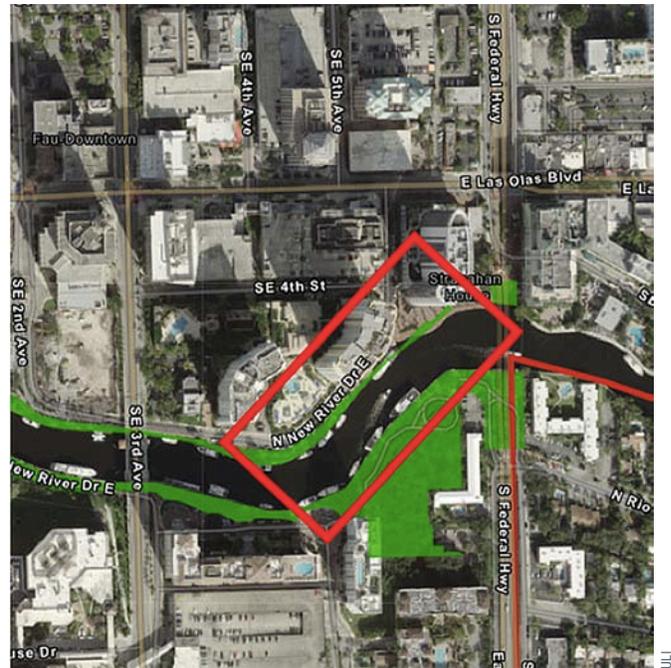
- *Urban geometry and density*: If building with resilient design best practices, increased density can support a sustainable energy efficiency lifestyle that encourages nonautomotive modes of transit as well as quality-of-life benefits.
- *Waste heat reduction strategies*: Strategies that support energy efficiency across industries and lead to fewer



Example of how a district-scale heat mitigation program could be implemented.

vehicle miles traveled will contribute to reducing waste heat (particularly away from public and residential spaces) and can be concentrated and used for district heating or electrical generation.

- *Ventilation corridors:* Using the movement of air through downtown can dissipate heat and increase human comfort.
- *Parks and open spaces:* Parks and open spaces can create “cool park islands” that can provide a comfortable place of refuge in downtown.
- *Urban canopy:* Trees and adjustable structures can offer cooler temperatures to pedestrians by providing shade. The panel heard from stakeholders that many of the current parks and outdoor spaces are exposed to high temperatures and uncomfortable to use. The panel recommends using trees and structures in parks and trails to block the sun and offer refuge to park goers and trail users.
- *Water features:* Fort Lauderdale prides itself for being a community by the water (boat show, river, etc).
- *Human protection and sheltering from extreme natural and man-made events:* Identify and implement strategies that promote “safe spaces”—structures that provide accessible shelter from extreme wind and water events while also providing opportunities for convenings and activities that promote social cohesion in all other times.



Site 1 demonstrates the fortification resilience strategy.

projects to explain each principle and its protective function. The sites can be compared or contrasted with one another.

A fourth principle, managed retreat—the coordinated relocation away from risk—may be necessary in some areas along the New River. The panel did not identify specific parcels that may need to be strategically acquired to accommodate water management through natural techniques. This should be conducted as part of a citywide strategy to expand downtown both south of the river and toward the Brightline–Virgin Trains station that is aligned with the 2060 floodplain projections, as discussed in the “Market Opportunities and Connections” section. This is also an opportunity to preserve and expand existing open-space buffers.

Applying Design Recommendations

The panel identified several sites along the current Riverwalk and adjacent park parcels to create site-specific recommendations. These design recommendations broadly demonstrate key resilience principles of fortification, accommodation, and water management. Three site-specific designs are presented on the map below following these principles. Interpretive elements should be included as part of

Site 1: Riverwalk East

The Riverwalk East site demonstrates the fortification resilience strategy. The panel identified this site for this demonstration because of the findings from examining the Riverwalk and



Three example sites used by the panel to explore resilience strategies.



PAUL ANGELO/ULI

Additional fortification is required within Riverwalk East.

adjacent park parcels between North New River Drive east from around Stranahan House to approximately a line drawn due south from SE Fourth Avenue.

On the south side of the New River, the path should be elevated by a natural berm. Slip access could be maintained through a floating dock. On the north side of the river, an engineered flood protection structure (bulkhead) should be installed that would extend the current pedestrian structure westward along North New River Drive.

Site 2: Huizenga Plaza

The Huizenga Plaza site demonstrates the water management resilience strategy. It also presents an opportunity to



Site 2 demonstrates water management resilience strategy.

demonstrate strategies that mitigate against extreme heat and provides an opportunity for more social cohesion. Huizenga Plaza is unique because it is owned and managed by DDA, thus allowing quicker action to begin demonstration of these principles and act as a flexible, central gathering place showing that Fort Lauderdale is prepared to live with water.

The plaza should be better integrated with both the Riverwalk and the Museum of Art campus across Las Olas Boulevard and the newly constructed hotel to the east. Elements that could improve connectivity might include consistent design elements,



DAVID CHENEY/ULI

The panel proposes minor modifications to Huizenga Plaza to improve the park for its users and better manage water.



MORRIS MALAKOFF

A water feature at Levy Park in Houston.

accessways, and open lines of site connecting all edges of the park. The panel's design slightly reduces the overall capacity of the park from about 2,000 people to about 1,800 but would allow more flexible space that could accommodate concerts as well as café space, restrooms that could also serve as a storm shelter, a splash pad/fountain, and space under the bridge that could be used for a dog park or skate park. Finally, a signature art piece should be commissioned since Huizenga Plaza forms the edge of a beloved avenue that accesses a very successful retail street as well as the beach.

Space should be provided for a stormwater pump station expansion while integrating an educational element and being less camouflaged. The northwest corner of the plaza should be elevated to include below-grade stormwater storage as well as rain gardens, and permeable pavement should be incorporated throughout the site. Finally, an effort should be made to save and preserve some of the historic oak trees near the river.

Site 3: The Esplanade

The Esplanade site demonstrates the accommodation resilience strategy. This is something that is already occurring at this



STEPHEN WHITEHOUSE, GARRETT AVERY, ULI

Stormwater management can be located under the main open space of Huizenga Plaza. Some of the elements could remain exposed to help educate the public about what is beneath their feet.

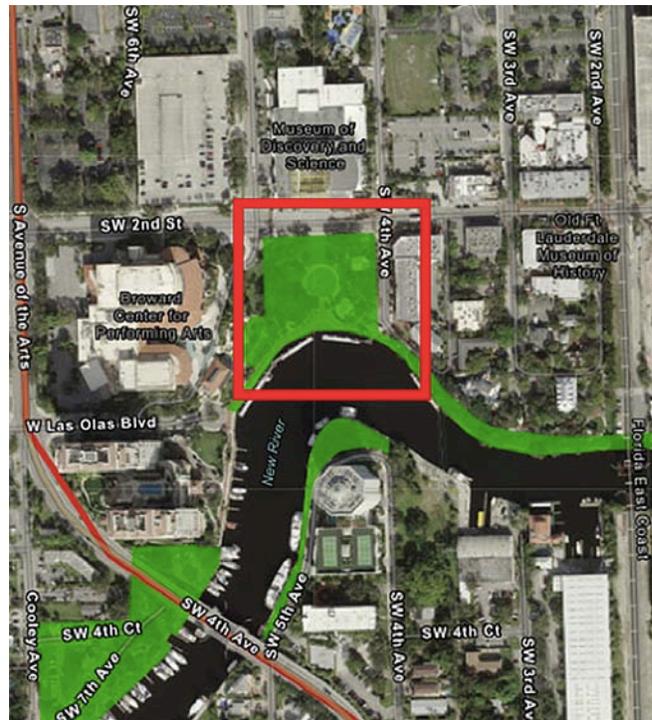
SUNDANCE SQUARE PLAZA

Sundance Square Plaza in Fort Worth, Texas, was redeveloped to include artistic mechanically operable shade umbrellas that provide almost 5,800 square feet of shaded space. Umbrellas are fitted with LED lamps and can be closed on cooler days when unneeded. The plaza also has two water features that allow residents to engage with water and cool off—a large at-grade interactive fountain and a water wall. These resilient improvements increased the number of people attending events by an average of more than 10-fold, and surrounding retail sales increased over 20 percent. The redeveloped plaza also turned into a destination for downtown and a common meeting place.



MICHAEL VERGASON LANDSCAPE ARCHITECTS

Sundance Square Plaza in Fort Worth.



ULI

Site 3 demonstrates the accommodation resilience strategy.



The site already has sunny-day flooding.



The natural ecosystem helps protect the city of Charleston from adverse effects. This provides an opportunity to show how Fort Lauderdale can live with water.

location and was witnessed by the panel along the steps of the Riverwalk.

This site presents an opportunity to form a partnership with the Museum of Discovery and Science and the Broward Center for the Performing Arts to be used as a wet floodproofing concept. For example, in New York City, the choreographer Madeline Hollander created *Ouroboros Gs*, which is a performance that brings attention to the Whitney Museum's being in a location vulnerable to sea-level rise and increasing frequency of 500-year flood events. A video of the performance can be found at <https://whitney.org/watchandlisten/44000>. Additional performance art pieces by Madeline Hollander highlighting the risk of sea-level change to New York City can be found on YouTube.

The accommodation strategy should be incorporated into the current efforts on redesigning this area already underway.

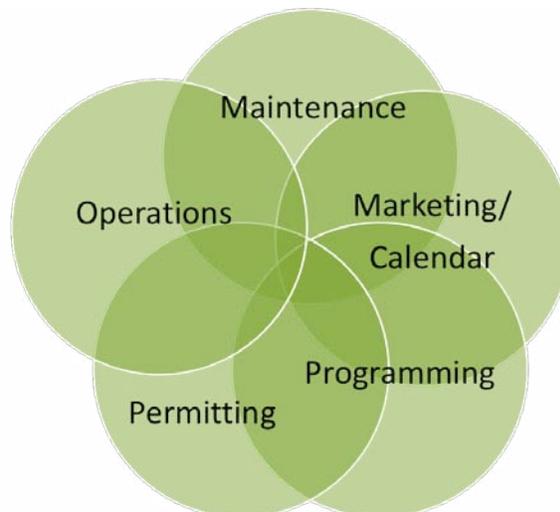


LEAH SHEPARD/ULI

Governance and Process

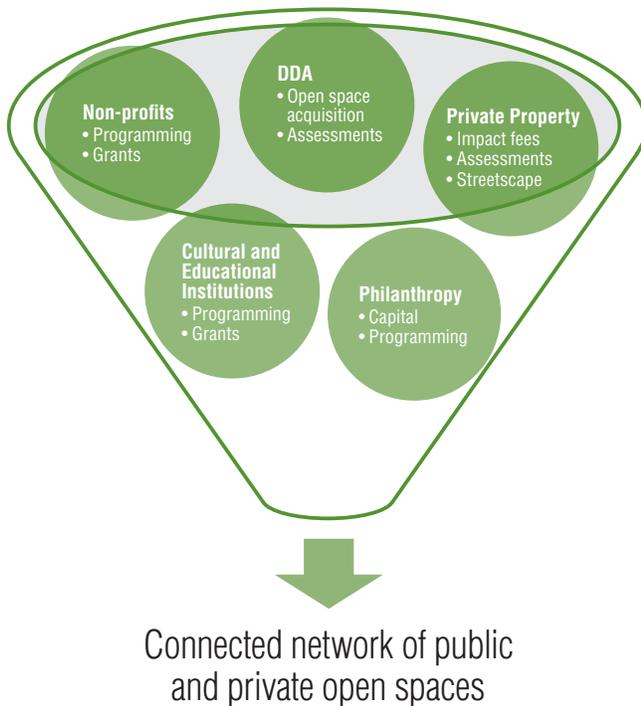
THE CITY OF FORT LAUDERDALE HAS A STRONG INTEREST in having high-quality parks and open spaces, as shown by the passage of the \$200 million bond, but the panel found an apparent lack of a cohesive vision for the park system. As laid out in other sections of this report, this void creates an opportunity to craft a vision to ensure a comprehensive network of parks and open spaces within an expanded downtown, then leveraging that for a broader vision citywide. For downtown, unified management of downtown parks and establishment of a separate funding entity to manage and operate the parks and open spaces are necessary. This recommendation can be piloted along the Riverwalk and in adjacent parks, like Huizenga Plaza.

The \$200 million bond seems like a lot of money, but it is not enough for the full breadth of projects required to create a world-class park system. These funds should be leveraged for more investment. Beyond the city, a multi-tiered approach for additional funding opportunities should bring together entities such as the DDA, cultural and educational institutions, private property owners, nonprofits, and philanthropic organizations. These groups combined with the city can leverage the interests and priorities of the city. With the city and community setting responsibility for transparency, communication, and accountability, the nonprofit and private partners can provide unique opportunities for investment—formal and informal,



STACIE WEST/ULI

The elements that go into unified management of downtown parks.



A variety of funding sources are required to have sustainable, high-quality parks and open spaces.

programmatic and financial—and the DDA will be able to acquire new land for open space downtown.

Recommendations to establish clear governance and to develop processes to implement the panel's recommendations are as follows:

- Create a consensus around a vision for a citywide park system.
- Hire a chief public realm officer position within the City Manager's office.
- Prioritize the bond projects and oversight.
- Develop a nongovernmental entity or entities that can support parks and open space.
- Treat the Riverwalk and adjacent parks and open space as one management space.
- Reconfigure the Parks, Recreation and Beaches Advisory Board to better ensure the community's agreed-upon shared vision and goals are a part of proposed projects.

Create a Consensus on the Vision for a Citywide Park System

The city of Fort Lauderdale can start in downtown by engaging and facilitating conversations with a broad set of diverse

IMPLEMENTING PROJECTS NOW!

The DDA, along with the city and other stakeholders, should develop a list of meaningful projects, programming opportunities, or other partnerships that is driven by community participation, wants, and needs. This list could include capital improvements, programs that could be funded by grants as they come available, and coordinated improvements that could be made by developers or other property owners/operators (e.g., the Panthers or a Huizenga Plaza concessioner) as part of a community benefits agreement for new development.

In Washington, D.C., the Metropolitan Branch Trail plan—which is a rail-to-trail path running along an active rail line—has a menu of items that go toward an overall vision so a number of contributors (private developers as well as city government) can implement the plan incrementally with projects such as lighting, mirrors, landscaping suggestions, and art. Each contribution may fund only one improvement, but the overall vision and plan were developed through a community/city/developer process that was viewed favorably.

NAN ROHRER/ULI

community members as well as define a structure of oversight, accountability, and compliance. This will enable everyone to go in a similar direction to achieve a clearly defined end goal and be able to identify improvements for the future as well as actions that can be implemented now. This will also allow parks and open space to be the mechanism to make density more livable while better managing longer-term growth. Finally, it will allow a strong feedback loop to ensure that projects are indeed moving toward the vision.

To solidify the vision for a citywide park system, the panel believes the focus should be on the following:

- Activating a connected network of public and private spaces;
- Considering public health concerns and outcomes;
- Using innovative and integrated solutions to build resilience;
- Creating a 10 Minute Walk city; and
- Providing equitable, engaging spaces for Fort Lauderdale's community.

The panel recommends that the first meeting to develop this vision and framework should be a comprehensive public meeting or charrette with a large swath of individuals and

“WHY I’M LEAVING THE *TIMES* FOR A JOB AT CITY HALL”

Christopher Hawthorne wrote about his decision to become the city of Los Angeles’s chief design officer in his last post at the *Los Angeles Times* as the paper’s architecture critic after being asked by Mayor Gil Garcetti to take the new role in 2018. He talks about how various bonds and ballot measures related to public transportation, parks, and homelessness affect the public realm. He describes how his position will better work across city and regional silos to help allocate resources and be more innovative in building a more livable, equitable, and better-managed city. It is a similar position that the panel is proposing for Fort Lauderdale. More can be found at www.latimes.com/entertainment/arts/la-et-cm-hawthorne-notebook-20180312-story.html.

stakeholders. After that, individuals can volunteer and be asked to participate in further discussions depending upon topics and intended outcomes. The following list is a sample of those groups who should be represented in conversations and meetings regarding parks and open space:

- Citizens;
- Businesses;
- Developers/property owners;
- DDA;
- Nonprofits (Riverwalk, Mockingbird Trail, etc.);
- City agencies;
- County agencies;
- Cultural institutions;
- Artists/creative groups;
- Schools;
- Universities;
- Historic preservation groups;
- Marine uses; and
- Tourism.



CITY PARKS ALLIANCE

The city should consider engaging the City Parks Alliance, which can facilitate city workshops focused on cross-sector partnerships, or hire another community organizer or facilitator to complete this work.

Hire a Chief Public Realm Officer

The city of Fort Lauderdale should hire a chief public realm officer within the City Manager’s office. This would be a new role within the city government focused on action, not bureaucracy. The panel intends for this to be a short-term position of about three years with the option to be extended if required. This position would be similar to a chief resilience officer or chief equity office but focused on the public realm.

Using the consensus built around a comprehensive parks vision and priorities, the chief public realm officer would work to provide coordinated, big-picture oversight of all public and private projects to conform with the collective vision for a citywide park system. The officer would identify opportunities for partnerships, appropriate distribution of responsibility, multiorganization financing models, and quick-win projects. That person would also act as a conduit for park, open space, and public realm issues that are multiagency in nature and provide accountability, transparency, and coordinated communication about progress.

Key responsibilities of this position would include the following:

- Act as a coordinator, facilitate public and private partnerships, and push the citywide parks vision forward;
- Work to fill the “gap” in funding since the \$200 million bond will not cover everything that Fort Lauderdale may want or need;
- Leverage parks bond for additional financing of related activities such as streetscape and water infrastructure to capture maximum value;
- Act as donation coordinator lead for the city with entities such as private corporations, representing community

wants and needs and negotiating meaningful opportunities for parks, open space, and the public realm;

- Lead the development of an “a la carte” framework/ funding opportunities document that could be tied to the list of amenities that would be considered in a community benefits agreement; and
- Connect people, ideas, and funding opportunities related to the public realm.

Prioritize Bond Issuance Projects and Oversight

An agreed-upon set of criteria (e.g., location, impact, resilience, maintenance, programming) should be created by using a comprehensive group of stakeholders that was established as part of the visioning process and led by the chief public realm officer. Such criteria will enable better prioritization of the projects and assign a rough order magnitude of costs. This process can begin downtown, with the assistance of DDA, and then expand citywide.

In conjunction with prioritizing bond issuance projects, a system of oversight should be established. A Parks Bond Board or technical advisory committee could be established that would provide oversight, review, and feedback throughout the planning and implementation process. This board should be led by the chief public realm officer and should include the Mayor’s Office, parks and planning departments, several Parks, Recreation and Beaches Advisory Board representatives, business and landowner representatives, philanthropic organizations, schools, and other key institutional partners

such as arts and culture. This will establish a transparent and collaborative process for multipronged input and review for the expenditure of public dollars and fully leverage these dollars. The Parks Bond Board would sunset following the expenditure of the \$200 million bond funds.

Develop a Nongovernmental Entity or Entities to Support Parks and Open Space

A variety of stewardship models can support parks and open space. Partnerships are joint development funding sources or operational funding sources between two separate agencies, such as two government entities, a nonprofit and a city department, or a private business and a city or quasi-governmental agency. Two partners jointly develop revenue-producing park and recreation facilities and share risk, operational costs, responsibilities, and asset management, based on the strengths and weaknesses of each partner. It is important that clear roles and responsibilities be defined in an appropriate agreement, such as a joint statement of collaboration, an interlocal agreement, a resolution, or a memorandum of understanding.

An agreement should include the following key elements to ensure a successful partnership:

- *Parties, vision, and public purpose:* Consider who is doing each task and why. Determine if they have a shared vision for the outcome of the partnership.
- *Understanding of baseline roles:* The role of government versus the role of private-sector or nonprofit partners sets certain expectations and limits on the transfer of authority

Stewardship Models for Fort Lauderdale

Model	Scale	Functions	Funding	Capacity
Development authority	Neighborhood	Economic development	Tax on nonresidential properties	Acquisition/ownership, public/private partnerships, public realm enhancements
Business improvement district	Neighborhood or group of neighborhoods	Economic development, public space beautification and activation	Tax revenue from property owners, including residential	Clean and safe services, marketing, programming, capital improvements
Parks conservancy	Park or small group of nearby, related parks	Operations, maintenance, programming	Fundraising	Related to fundraising, but typically programming and routine maintenance
Friends groups	Park	Cleanups, grassroots advocacy, events	Volunteer, fundraising	Limited to capabilities and interests of volunteers
Parks alliance	City, county, or region	Advocacy, programming, city coordination	Fundraising, lobby for public funding	Membership, activities vary
Parks advocacy organization	City	Advocacy, research, lobby on broad park issues	Fundraising	Academic studies, community surveys, advocacy training

Source: ULI.

that should be jointly understood. In addition, this step will entail the articulation of public baseline expectations and standards for public access, operations, and maintenance to maintain health, safety, and usability.

- *Understanding of roles beyond baseline:* The operator of the public space will undertake defined additional programming, outreach, and maintenance. The city should provide additional administrative flexibility to help the operator. Though the government is ultimately accountable, the operator would be liable for any breach of duties related to its actions.
- *Ongoing monitoring, evaluation, communication, and accountability expectations:* Decide deliverables and set expectations, holding ongoing conversations and meetings, scheduling renewal deadlines and cycles to avoid timing gaps, and evaluating results and effectiveness.

Some positives of this approach include the ability to pool resources and build shared capacity, given limited resources, and the creation of greater support and advocacy. Some cons of this approach include the potential for a power struggle over operational control and the possibility that a poorly performing partner could affect the future success or reputation. The figure represents several options to establish longer-term stewardship models to support parks, open space, and the public realm.

The panel believes that this agreed-upon nongovernmental entity should act in a similar fashion to Washington, D.C.'s NoMa Park Foundation. Seed funding for this new entity could come from the approved \$200 million parks bond. Using the North of Massachusetts (NoMa) Parks Foundation and NoMa BID as a model, between \$25 million and \$50 million would be appropriate. These funds then could be leveraged for additional investment from the city, state, federal government, philanthropic organizations, and the private sector and be largely self-sustaining. In the case of downtown, the DDA has the authority to own and acquire land, but this land could also be transferred to the city's Parks and Recreation Department.

Treat Riverwalk and Adjacent Parks as One Management Space

The panel believes the management of the Riverwalk and adjacent parks should be considered as one overall space because of its importance and prominence as a high-value public amenity that connects multiple parks and open spaces downtown to residents, visitors, and workers. Interviewees



A pumpkin painting event hosted by the NoMa BID.

saw the Riverwalk as an overwhelmingly positive attribute of Fort Lauderdale. A new body that manages this space should understand large- and small-scale programming, event permitting, and collective marketing and be the first stop and liaison to the park permitting process. This entity can also be established to pilot a broader, more unified entity to manage all parks in downtown Fort Lauderdale.

The panel's vision is for the spaces to become magnets for people throughout the days, weeks, and months in a way that generates positive civic, cultural, and economic activity downtown. The downtown park mission is different from the citywide park mission and should not compete with the citywide park management. To succeed, the unified park entity has to not only promote programming but also share in the revenues of that programming so it can incentivize a full program of events.

The management of the Riverwalk and adjacent parks should be inclusive of the wide diversity of users and be a more formal entity than the existing "friends of" group or private operators. The scope of the responsibilities for management of the Riverwalk should be delineated. The panel recommends the inclusion of the north and south Riverwalk, Laura Ward Plaza (and potential future Tunnel Top Park), Huizenga Plaza, the Wharf, History Fort Lauderdale, Esplanade Park, Smoker Park, and any future or current opportunities that front the Riverwalk not identified here, in collaboration with private property owners along the Riverwalk. As referenced regarding the variety of stewardship models, each of these various entities has distinct roles and responsibilities. The intention is for each of these differing entities to further enhance and channel energy and resources into improving the public realm but in a more coordinated and effective manner.

NOMA BID/NOMA PARKS FOUNDATION

The North of Massachusetts Business Improvement District (NoMa BID), located in Washington, D.C., was established in 2007 by the Council of the District of Columbia and the mayor. Its 35-block area is funded through a special assessment collected from property owners. Following the construction of a new Metrorail station in 2004, the mostly industrial area began to redevelop as office and residential uses, albeit slowly at first. In 2010, a couple of hundred residents lived in the core of NoMa BID, but by 2017 it was home to more than 7,000 residents and 44,000 in the market area.

A gap in parks and open space was identified where no city-owned properties were available to develop as parks. NoMa BID worked with the District government, developers, and residents to create a framework plan for parks—NoMa Public Realm Design Plan—showing all opportunities and big ideas for parks and open space in NoMa. The District provided a six-year capital grant of \$50 million to fund planning, land acquisition, design, and construction of new parks and public realm in NoMa through a newly established 501(c)(3): the NoMa Parks Foundation. A new approach to funding was required by the

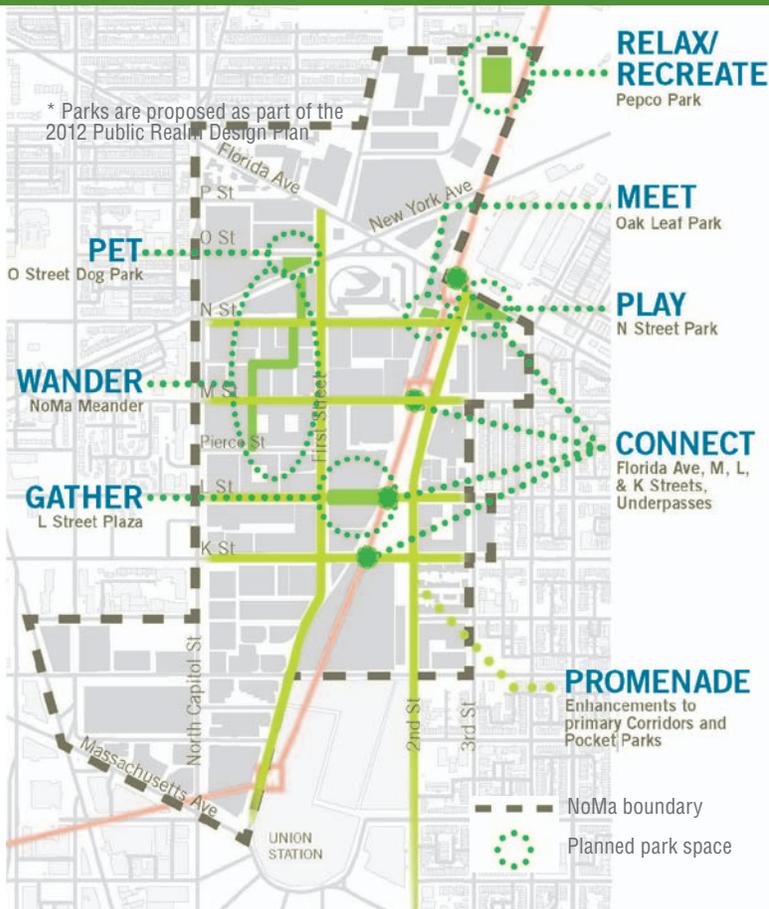


NOMA PARKS FOUNDATION/SAM KITTNER

Swampoodle Park is a playground for both children and dogs. The park's name was voted on by residents and was the name of the Irish American neighborhood where Union Station and the yards are now located.

District because of uncertainty about specific parcels and developers' lack of appetite to subdivide parcels to meet the framework guidelines. Flexibility in the grant administration by the District allowed the NoMa Parks Foundation to quickly make acquisitions without needing D.C. Council approval for those contracts over a million dollars that is typically required. The first acquisition was made within 30 days of the initial grant.

NoMa Parks Foundation has had a close partnership with the city's real estate and maintenance agency, which has provided grant oversight and assistance as needed. All acquisitions and purchases made by the grant belong to the District, including plans, studies, surveys, land, and capital assets. The relationship of the foundation to the NoMa BID has enabled it to create leverage and partner with developers on acquisitions to provide additional acreage for parks at no cost against the grant. In one example in 2016, partnering with a developer allowed acquisition of an additional half-acre of park to create a two-acre park. The value at the time of the transaction in 2016 was between \$3 million and \$4 million, and the most recent assessment shows that land value is nearly \$7 million.



MICHAEL VERGASON/LANDSCAPE ARCHITECTS

The vision for the parks and open space within NoMa. The foundation has executed this plan.



A game of Jenga hosted by the NoMa BID.

The board structure should include downtown resident, business, and property owner representatives, Parks and Recreation staff, the Riverwalk Fort Lauderdale organization, DDA, adjacent cultural institutions, and the chief public realm officer as voting members. Because this is a public amenity—with private, nonprofit, and public ownership—regular reporting will be necessary on how public funds dedicated to the Riverwalk are spent as well as tracking of performance metrics related to public access and use. The permitting process should be clear and transparent with a balance of large- and small-scale, formal and informal, and private and public events.

Dedicated, consistent maintenance and capital life-cycle replacement standards to ensure the Riverwalk and adjacent parks remain of high quality should be established, including baseline funding from the city. The management agency, or other entity, could raise additional funds to enhance the parks, but commitment from the city is crucial. For new projects, an endowment should be established to ensure long-term maintenance. A good rule of thumb for the establishment of a park's endowment is 20 to 40 percent of the upfront capital costs of the project. This endowment could be held by the previously mentioned nongovernmental entity that supports parks and open spaces downtown.

Reconfigure the Parks, Recreation and Beaches Advisory Board

The panel recommends that the Parks, Recreation and Beaches Advisory Board be reconfigured with terms of three years and one renewal for up to a total of six years. This board should be empowered with expanded authority to review projects and actions for conformance with the community's agreed-upon shared vision and goals, review annual permits and specific permit requests, and review nonpark projects (e.g., streetscaping or lighting) in conjunction with the chief public realm officer. Development projects that may affect parks, open spaces, and beaches should come before the board. Then board recommendations—either on specific projects or citywide vision setting—should be given “great weight” to be provided to the City Commission. Feedback and revisions from the board should be brought back to the community at future board meetings. Finally, board reports and recommendations should be shared with the Planning and Zoning Board for consideration in planning and zoning decisions.

This is to ensure that parks and open space remain at the forefront of the city's mind as well as enable city and county agencies—and private property owners (for projects of a certain scale)—prioritize the collective goals. This reconfigured board would complement the panel's recommendations for a Parks Bond Board. This will increase the communication and transparency of decision-making and magnify the impact of the \$200 million parks bond.



Conclusion

DOWNTOWN FORT LAUDERDALE HAS SEEN TREMENDOUS GROWTH, and the panel believes this growth will continue. As mentioned earlier in the report, the city is currently undergoing a journey to density, and parks and open space will make downtown and the neighborhoods more livable, enjoyable, and human-scaled regardless of the size of the buildings.

The panel sees a bright future for downtown Fort Lauderdale, but a much more concerted, deliberate, and long-term effort will be needed to achieve the ideas laid out in this report. In the weeks, months, and years following this panel visit, the sponsors should be discussing next steps based on the recommendations. Project leaders should be identified. Forums

should be conducted to involve key decision-makers and interested citizens. The panel looks forward to returning to downtown Fort Lauderdale in the years to come and celebrating its successes.

Appendix A: Urban Design Principles and Goals

The following figure identifies urban design principles and goals identified by the panel.

General	Streets/connectivity	Multimodal	Resilience	Park design	Funding and implementation
Public health concerns: heat, freshwater, flooding, safety and perception of safety	Enhance east–west 95 to beach	Encourage multimodal transportation (water trolley/taxi, walking, biking, scooter, freebee, etc.)	Elevate Adaptation Action Area (AAA) framework to be part of all decision-making processes	Parks are for people, not just for viewing	Create incentive programs for private developers to include resilience strategies in projects
Signage	Connect 95 thoroughfare with north–south pedestrian routes to encourage downtown walkability	All of the pieces are important in terms of a network; auto traffic is important, but not the only factor	Have a citywide temperature reduction goal	Adjacent parks should engage with Riverwalk	Leverage outside funding sources at all government levels and from sources both public and private
Instagrammable moments	Do road diets where they make sense, like non–main arteries	Gateways to create sense of arrival and place	Shading/canopy	Streets and parks should interact with one another; streets are extension of park	Layer public and private financing for design, capital, maintenance, marketing, and programming
10-minute walk	Use medians to provide shade and plants, focus on creating pleasant boulevard experiences	Protected bike and pedestrian lanes	Have shelter/ protection available in case of an event	Pursue pocket parks in downtown zones	Identify opportunities to use "blue acres" program to manage "holdouts"
Create a road map for success	Better streetscape connections, NW area (Sistrunk/CRA area) walking toward Riverwalk and downtown	Pedestrian signage, even if temporary	Cool and pervious paving	In zoning and planning uses, identify and preserve open space as buffer for adaptive uses	
Keep focus on importance of public realm during growth periods		Use bridges as pedestrian routes, connect north and south sides of Riverwalk	Heat impact study	Demand variety and equity in park use through design	

General	Streets/connectivity	Multimodal	Resilience	Park design	Funding and implementation
When designing maintenance, programming, and funding thereof, consider need (accountability)		Forge planning consensus on trail and bike network by coordinating design standards, leverage cost sharing, find quick wins for both	Natural systems		
Do not just plan, create timelines (present–3 years, 3–10 years, 10+ years)		Link community-based organizations with mobility partners	Coastal flood protection		
Understand who your users are, who uses the public spaces		Focus on connecting destinations, including cultural institutions, job centers, parks	Incorporate elements that inform/educate regarding adaptation strategies		
Encourage visual connectivity			Be bold; try to use initiatives to solve as many problems as possible		

Source: ULI.

Appendix B: Recommendation Matrix

The following figure identifies recommendations by the panel for design, use, maintenance/management, permitting, and finance.

Park Recommendations

Design	Use	Maintenance/management	Permitting	Finance
Community consensus is necessary for the big picture	Holiday Park: reserve space for passive recreation, particularly around the southwest corner; in addition, create a park with shade, playground, picnic area, dog park, fitness opportunities	Identify who is responsible for maintaining and programming which locations	Improve and clarify existing permit system	Consider concessions as funding source for operations, maintenance, future improvements
Riverwalk should be a priority and a destination	Incentivize new public and private open spaces along the river	Hire chief public realm officer in City Manager's office to coordinate public and private sectors' efforts for the park and open-space system	Issue RFP for a private, for-profit entity to program, permit, and market events in downtown parks for 2–3 years	Keep a business mentality when constructing the best outcome for Fort Lauderdale and the parks and open spaces
Enhance access and viewsheds to the water	Incorporate art and engineering for public good	Identify sustainable funding sources and levels for maintenance of all assets within the system, but especially for those that are heavily used	Consider a sound ordinance, be clear on specifics and expectations with permit holders, community, and enforcement officers	Explore all funding options and mechanisms: philanthropy, public financing, private investment, concessions, permitting
Consider future flooding risk in design	One-stop shop: retain significant portion as park, activate street edge with temporary and permanent uses	Create clarity and transparency regarding operations and management		Use private partners' (nonprofits, cultural institutions, landowners) resources to build things instead of providing money
New River should be activated as its own public realm	Tunnel Top: build in concessions to connect to Las Olas Boulevard	Create long-term stewardship by standing up a nonprofit that includes in its mission the support of parks and the public realm		Create a Parks Bond Board, chaired by the chief public realm officer, to serve as oversight of parks bond
Riverwalk should function as a consistent loop, so it can be used as a comprehensive travel corridor	Provide low-cost, high-impact tech upgrades to public space (public wi-fi, cameras, artistic lighting)			

Design	Use			
Incorporate shade through variety of mechanisms, trees, iconic art pieces	Focus on small wins that further equitable and desirable public spaces (movable tables/chairs, food trucks, yoga groups, Yappy Hour, ice cream vendor)			
Huizenga Plaza should have better connection to the river and the art museum	Promote Instagrammable locations throughout the park system (e.g., big chair)			
Provide authentic spaces, honor history	Movable tables/chairs at Huizenga Plaza			
Build infrastructure to support multiple uses	Use the railroad line as a park			
Think long-term and evolving uses; do not plan just for today's wants and needs	Provide consistent uses and experiences throughout the system (coffee, art/sculptures, pop-up boutiques)			
Consider events, and work with event planners to determine design	Create opportunities to interact with water in the parks, open spaces, and other public realm areas (spray pads, misting posts)			
Expand the width of the Riverwalk where possible	Activate and program Stranahan Park and library plaza simultaneously			
Improve small park spaces adjacent to the Riverwalk	Use museums, libraries, cultural/performance institutions to program open spaces throughout the system			
Use crosswalks into parks as an opportunity to connect the open space to the surrounding buildings; consider a competition for artistic crosswalk design				
Huizenga Plaza: provide spray feature, bathrooms				
Huizenga Plaza: consider topography as part of the resiliency and sustainability design				
Add water bottle filling stations, include dog bowl at bottom				
Connect Stranahan Park to the library plaza				

About the Panel

Stephen Whitehouse

Panel Chair
New York, New York

Whitehouse is a landscape architect and urban planner whose diverse pursuits share a concern for the environmental quality and social vitality of places. Raised in Cleveland and educated at Harvard, his professional training and practice has been based in New York City's environs. He formerly served as chief of planning for the New York City Department of Parks & Recreation, where he was instrumental in many facets of New York's physical rejuvenation: launching the city's greenway system, nurturing public/private partnerships, acquiring natural lands and neighborhood parks, setting standards for park creation and operation by private developments such as Riverside South, and managing the expansion of the USTA National Tennis Center. As a cofounder of Starr Whitehouse, his urban work has expanded outward to address the planning and design issues of suburban and developing exurban communities. Starr Whitehouse represents a step to join together a group of people who can serve clients, embrace complex planning issues, and deliver responsive, innovative design.

Rather than focusing on a single aspect of the work, Whitehouse has always been most fascinated by the juncture points. "Natural systems, patterns of settlement, infrastructure—seeing all these come together to make a place is interesting to me, not just as abstract concepts," he says, "but in terms of seeing good results in the end." He describes his role at Starr Whitehouse in terms of junctures as well. "I'm the translator," he says. "I serve as the mediator between the specialists and the public. I like communicating with people, and seeing things shaped by the creative interactions of people and institutions."

Garrett Avery

New York, New York

Avery is a landscape architect and project manager with more than a decade of experience leading multidisciplinary teams creating sustainable and resilient landscapes, water-sensitive urban environments, coastal saltmarsh and riverine restorations, and nature-based science education facilities. As a whole-systems advocate and leader in AECOM's NYC Metro Resilience Practice, Avery is currently focused on integrating the natural and urban systems driving social, ecological, and economic resilience in the region.

Before AECOM, Avery served as a project manager for EDAW in San Diego and as a landscape designer with Dargan Landscape Architects Inc. of Atlanta. He received a professional degree in landscape architecture with emphasis in sustainable design and development from Clemson University, School of Architecture, Arts, and Humanities. He is currently an executive committee member of the Ocean Discovery Institute and a member of the American Society of Landscape Architects, Urban Land Institute, and U.S. Green Building Council.

David Cheney

Washington, D.C.

With a strong background in institutional and base building projects, Cheney possesses the knowledge, skills, and management ability required to create successful projects. With over 25 years of experience, his design skills and technical knowledge of innovative construction materials, value engineering, construction methods, and architectural standards bring a high level of competency and expertise to CORE architecture and design. Cheney works to meet the overall project goals with careful management of the project team and consultants, project schedules, the production of schematic and design documents as well as coordination of construction administration.

He holds a bachelor of architecture, cum laude, from Norwich University in Northfield, Vermont. He is a registered architect in Virginia, Washington, D.C., Maryland, New York, Vermont, and Tennessee.

Josh Murphy

Washington, D.C.

Murphy serves on the faculty of the Urban & Regional Planning program and is senior spatial analyst with the Coastal Services Center of the National Oceanic and Atmospheric Administration (NOAA).

He is an expert in the field of coastal resilience planning. He has spent his career focused on geospatial analysis and geographic information systems (GIS), with over a decade of experience in the development and delivery of programs that integrate GIS tools and methods with urban planning. In his position at NOAA, he develops tools and methods that facilitate the application of geospatial information to coastal management issues.

A frequent speaker on issues of coastal resilience, Murphy supports federal efforts directed at enhancing the resilience of our nation's coastal landscapes, populations, and infrastructure by building tools and capacity to enable greater collaboration between local and federal agencies. He is an active member of the multisector NOAA Digital Coasts Partnership whose mission is to foster next-generation data sharing and cross-sector knowledge collaboration.

He holds a BA in geospatial analysis from Pennsylvania State University.

Jean Myerson

San Francisco, California

Myerson is an experienced member of public and private company boards of directors with a demonstrated history of working in the commercial real estate industry. She is skilled in governance, asset management, real estate private equity and finance, investment properties, and real estate transactions.

While Myerson was with the Swig Company, the company accomplished a smooth transition from its respected roots in the hospitality industry to a recognized urban office investor and manager of over 9 million square feet of office space.

Before joining the Swig Company, she was president and chief executive officer of Bailard Biehl & Kaiser Real Estate Investment Trust, a private REIT with a diversified, national investment portfolio. Before joining BB&K, Myerson was director of facilities and real estate worldwide for NeXT Computer Inc. of Redwood City, California. She joined NeXT from Metropolitan Life Real Estate Investments where she held senior management positions in Boston, New York, and Northern California.

Myerson has been recognized as one of the most influential women in the San Francisco business community by the *San Francisco Business Times*, is a member of the board of directors of BRE Properties Inc., a developer and operator of multifamily properties, and is chair of its real estate committee and is on the Northern California Advisory Board of City National Bank.

She has been a member of the Urban Land Institute for 15 years, serving on multiple National Product Councils, and has been a longtime sponsor of ULI San Francisco. She graduated from Grinnell College (BA with honors) and Harvard University (MCRP).

Nan Rohrer

Baltimore, Maryland

Rohrer has been actively involved in improving Baltimore for the 18 years she has called the city home. She is the president of Midtown Community Benefits District, a management authority overseeing work in four unique neighborhoods in the geographic and cultural heart of the city.

For 11 years, Rohrer worked as vice president of economic development and planning at the Downtown Partnership of Baltimore, where she spearheaded the Strategic Plan, Pratt Street Redesign, Preston Gardens Renovation, Retail Strategy, and Downtown Open Space Plan. She was the founding director of the Office of Partnerships in the Department of Recreation and Parks, and a neighborhood liaison in the Mayor's Office of Neighborhoods. She has a broad range of experience in project and fiscal management, business outreach, strategic planning,

grant writing and program development; and she uses these skills for both public and private consulting clients, such as the National Park Service, South Baltimore Gateway Partnership, and small businesses focused on growth.

Rohrer is on the boards of the Baltimore Museum of Industry and Chesapeake Shakespeare Company. She is also an active member of the Enoch Pratt Free Library Advisory Council and the Friends of Patterson Park. She holds a BA from Yale University.

Katie Troutman

Washington, D.C.

Troutman is a strategic adviser and international realty specialist with the U.S. Department of State, focusing on real property acquisitions and disposals within a global portfolio. She has managed and closed over \$330 million in transactions in more than 60 countries.

Before her tenure at State, Troutman worked as a senior debt analyst at Holliday Fenoglio Fowler LP in Washington, D.C., arranging debt and equity for commercial real estate deals and managing the debt analytical team. Before joining HFF, she worked for Trammell Crow Company. She holds a real estate salesperson's license in Washington, D.C., Maryland, and Virginia.

Troutman earned a BA in architecture at Yale University, an MS in real estate at the Carey School of Business, Johns Hopkins University, and a certificate in entrepreneurship from Stanford University's Graduate School of Business.

Stacie West

Washington, D.C.

West is the director of parks projects for NoMa Business Improvement District/NoMa Parks Foundation. NoMa is a vibrant, growing neighborhood nestled among Union Station, the U.S. Capitol, Shaw, and the H Street NE corridor in Washington, D.C. Already, NoMa contains more than 17.6 million square feet of office, hotel, retail, and residential space. Each day, more than 92,000 people are out and about in the commercial core of NoMa. More than 38 percent of NoMa's office space is home to private-sector tenants, including a concentration of media, think tanks, and associations such as NPR, Google, Mathematica, and the American Medical Association. Through a public/private partnership with the District government and a capital investment of \$50 million, NoMa is designing and building great new parks and public spaces.

Before joining the NoMa Parks Foundation, West was a community planner and a Capital City fellow with the D.C. Department of Parks and Recreation. She led development of the comprehensive Play DC Parks and Recreation Master Plan and orchestrated an improvement initiative to renovate all city-owned playgrounds. She managed over a dozen capital projects and was involved in all aspects of the projects, including design charrettes and construction management. She also previously worked for the District Department of the Environment creating a public outreach strategy for the 20-year Sustainable DC plan. At the Rails-to-Trails Conservancy, she focused on community impacts related to cycling, pedestrian, and transportation projects.

West has a master of community planning degree from the University of Maryland, College Park.



Urban Land Institute
2001 L Street, NW
Suite 200
Washington, DC 20036-4948
uli.org