ULI Philadelphia

RESILIENCE IN PLACE MANAGEMENT:

ULI Philadelphia & Delaware River Waterfront Corporation Workshop

Workshop Summary Report | MAY 1–2, 2023

About the Urban Land Institute

The Urban Land Institute (ULI) was established in 1936 as a nonprofit educational and research institute. It is supported by more than 45,000 members in 82 countries representing all aspects of land use and development disciplines. ULI's mission is to provide leadership in the responsible use of land to create and sustain thriving communities worldwide. ULI Philadelphia has more than 900 members in the Philadelphia District Council, which includes the Philadelphia metropolitan area, Central Pennsylvania, Delaware, the Lehigh Valley, and Southern New Jersey. ULI provides guidance to nonprofits and municipalities seeking solutions to land use challenges. Its Technical Assistance Panels objectively evaluate specific needs and make recommendations on implementation in an atmosphere free of politics and preconceptions. ULI member and non-member professionals provide their expertise in a voluntary capacity and each has signed an agreement to prevent current and potential conflicts of interest.

Acknowledgments

ULI Philadelphia and the Delaware River Waterfront Corporation would like to thank Allison Schapker, Chief Projects Officer, Fairmount Park Conservancy and Nate Hommel, Director of Planning and Design, University City District for presenting case studies from their organizations. We would also like to thank all of the workshop participants for sharing best practices from your cities and organizations, and engaging in collaborative conversations. Finally, thank you to the DRWC staff for leading the walking tours and hosting the workshop.

Technical Assistance Panel and Project Staff

Kevin Moran
Executive Director

Christina Chavez
Manager

Sigourney Young
Senior Associate

Kelly Cary
Senior Associate

Elisa Ludwig
Technical Writer

Grant Acknowledgment

ULI is grateful for the support of JP Morgan Chase.

ULI Urban Resilience Program

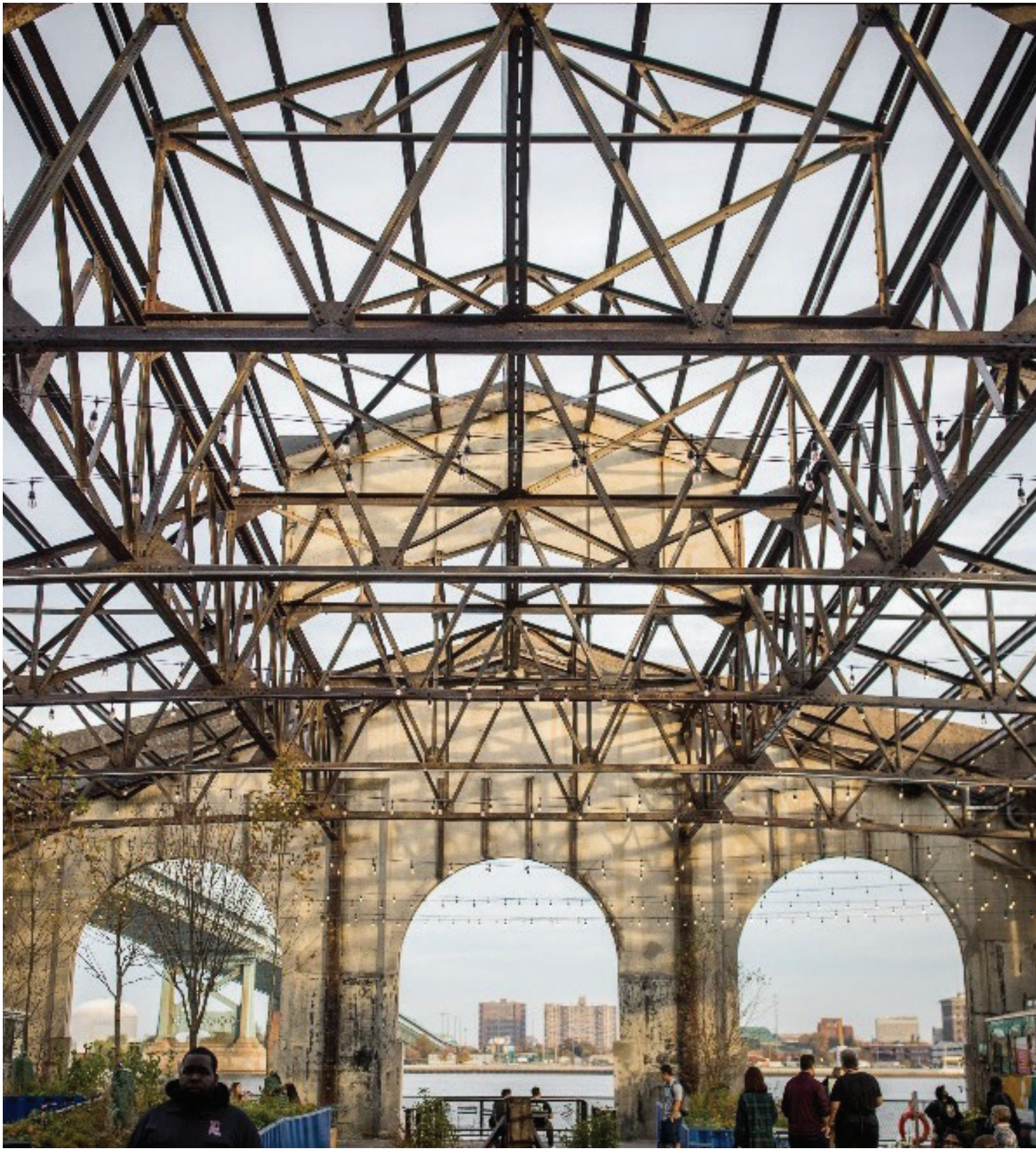
ULI's Urban Resilience program provides ULI members, the public, and communities across the United States with information on how to be more resilient in the face of climate change and other environmental vulnerabilities. The program seeks to provide technical assistance, advance knowledge, and catalyze the adoption of transformative practices for real estate and land use policy, building from the knowledge of ULI members.

Resilient Land Use Cohort

This Workshop is part of a larger series of resilience technical assistance and learning opportunities, called the Resilient Land Use Cohort (RLUC). The RLUC is a network of ULI district councils, member experts, and community partners in five cities working together to identify strategies to be more resilient in the face of climate change and other vulnerabilities, including floods, extreme storms, drought, wildfire, and extreme heat, as well as the related social, environmental, and economic impacts.

The RLUC provides on-the-ground technical assistance through ULI's flagship technical assistance models: Advisory Services panels and technical assistance panels. These panels leverage ULI member expertise to advise on complex real estate and land use challenges related to climate resilience, addressing planning, zoning, land use, development strategy, housing, and infrastructure. ULI's Urban Resilience program convenes the cohort regularly to learn from national best practices and discuss peer cities' next steps advancing resilience through land use policies and development strategies.

Cherry Street Pier



DELAWARE RIVER WATERFRONT CORPORATION

CONTENTS

About the Urban Land Institute 2

Introduction 7

Case One:
DRWC—Resetting and Managing Public Expectations about Recreational Space 8

Case Two:
FDR Park—Reimagining Infrastructure in Public and Recreational Spaces 12

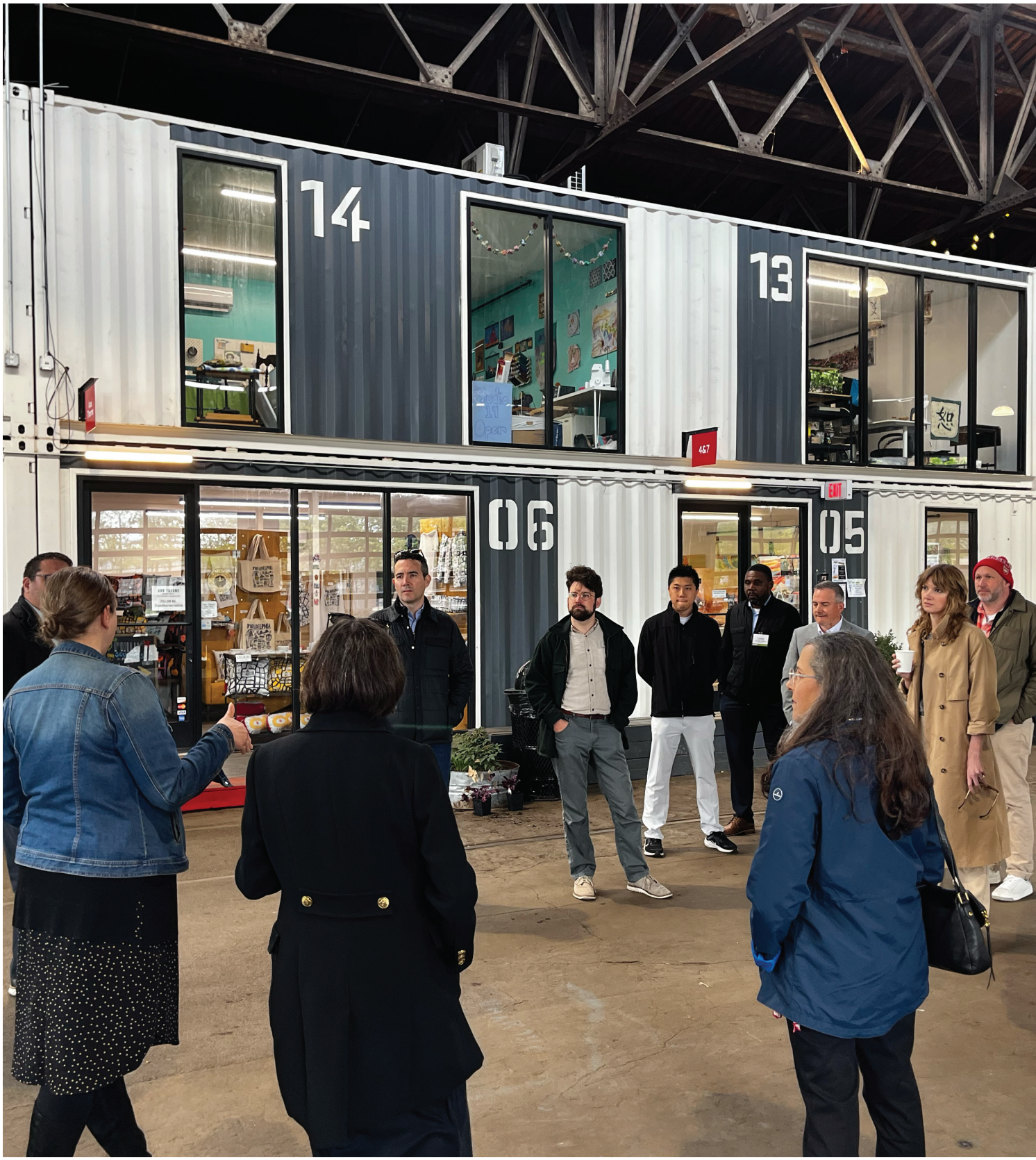
Case Three:
UCD Green City Works—Building A Resilient Social Enterprise 15

For Further Discussion and Exploration 18

Appendix A: ULI Reports for Reference 18

Appendix B: Attendees 19

Tour of Cherry Street Pier with artists' studios in background



ULI PHILADELPHIA

INTRODUCTION

ULI Philadelphia and Delaware River Waterfront Corporation (DRWC) Resilience in Place Management Workshop was held on May 1-2 in Philadelphia. Organized as a result of a recently completed ULI Advisory Services Panel focused on helping DRWC develop strategies for the resilient reuse of finger piers along the Delaware River Waterfront in Philadelphia, the Resilience in Place Management Workshop gathered business improvement district and place management professionals from across North America for two days of focused conversation.

In 2021, DRWC engaged with ULI for an Advisory Services Panel to examine its plans for managing and developing Philadelphia's Delaware River waterfront through a lens of climate change and resilience. DRWC had adopted a 10-year master plan in 2011, but the plan did not anticipate complexities associated with sea-level rise, coastal inundation, or the need for resilient design in integrated public/private redevelopment of the waterfront. The ULI Advisory Services Panel made recommendations to DRWC for addressing flooding risk, and repositioning land and infrastructure with resilient and sustainable investment.

Two years later, DRWC hosted a convening of like-minded organizations to share best practices, challenges, and firsthand experiences from their waterfronts, including national participants from Brooklyn Bridge Park, Waterfront Partnership of Baltimore, Riverlife Pittsburgh, Buffalo Bayou Park, Boston Harbor Now, Downtown Norfolk Council; and local participants from Fairmount Park Conservancy, University City District, Riverfront North Partnership, and Schuylkill River Development Corporation.

Participants reviewed three detailed case studies and were asked to consider the following questions:

- How do you effectively manage and activate public spaces in the face of evolving climate conditions?
- What are the unique challenges related to providing public space management services in areas featuring a large amount of resilient infrastructure?
- What strategies should be explored to institutionalize equity within operations, particularly from a workforce development perspective?

CASE ONE: DRWC—RESETTING AND MANAGING PUBLIC EXPECTATIONS ABOUT RECREATIONAL SPACE

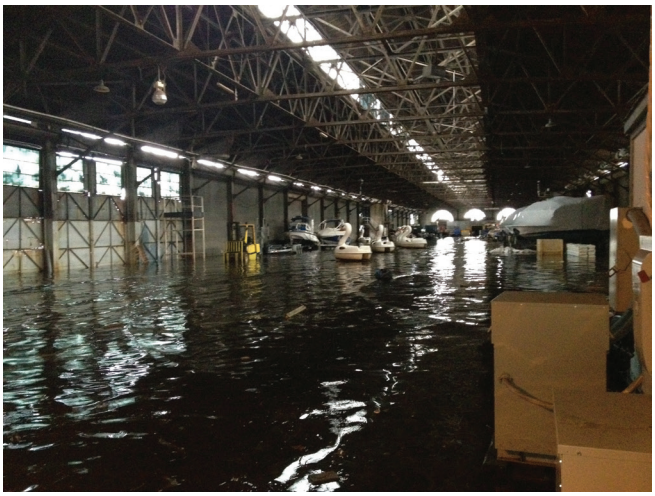
Established in 2009, the Delaware River Waterfront Corporation (DRWC) is a nonprofit organization whose mission is to design, develop, and manage the central Delaware River waterfront. DRWC was founded as a successor to the Penn's Landing Corporation in order to implement a citizen-driven Master Plan for the six-mile stretch of land along the Delaware River from Oregon Avenue to Allegheny Avenue, addressing decades of post-industrial disinvestment and poor planning. The Master Plan includes building out public infrastructure such as trails, parks, and right of way improvements with the goal of transforming public space and encouraging desirable private development that is consistent with the organization's vision.

The Master Plan has three public realm principles:

- Redeveloping public space. To date, DRWC has completed four new permanent pier parks; three miles of multimodal trails; five new connector streets; the design of a new wetlands park; and plans to redevelop its anchoring Penn's Landing park; with more trails and parks on the way.
- Encouraging private investment in residential, commercial, entertainment, and light industrial development in keeping with the Master Plan's urban design principles.
- Programming existing public spaces on the waterfront, including art hub Cherry Street Pier and seasonal activations at Blue Cross RiverRink Winterfest in the colder months, and the Blue Cross RiverRink Summerfest and Spruce Street Harbor Park in the warmer months.

A Vulnerable Location

The Delaware River is a tidal river, and flooding regularly occurs both related to and unrelated to storms. An increasing number of major storms have only exacerbated this problem—and even storms that don't touch down in Philadelphia can still have a damaging effect to the city's waterfront via rising tides from storms upstream or downstream. The historic bulkheads around the piers of the Delaware River cannot be removed, due to shipping activity, but they slow the recession of water after a flooding event. An added concern is that upstream tide gates in the Delaware that could mitigate flooding are not functioning optimally. Flooding, which now occurs at least five times a year, impacts trails and parks with brackish water and debris causing damage, cancellations, and closures, adding to operational costs and reducing revenue for DRWC.



DELAWARE RIVER WATERFRONT CORPORATION

Flooding at Cherry Street Pier

Redefining Programming and Space Activation

Since their inception, seasonal activations and attractions on the waterfront have been wildly successful. However, climate change and increased instances of flooding have wrought uncertainty for DRWC and the outlook of these offerings. An ironic telltale moment arose in February 2023, when a scheduled drag ice dance performance about climate change called "Beards on Ice" was canceled due to warm weather conditions that prohibited the use of the ice rink.

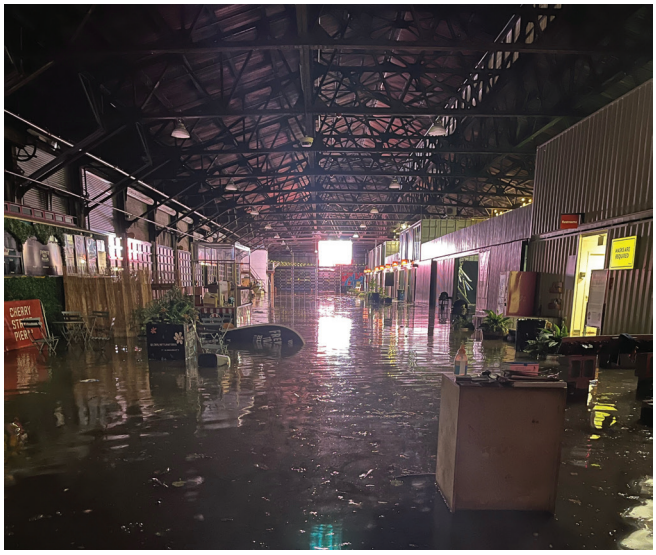
Indeed, the peak season for the ice rink was diminished throughout 2023 with a reduced number of days the rink could operate. In previous years, heavier wet snow due to warmer temperatures has presented another logistical challenge. More difficult to remove from the rink than powdery snow, the heavier snow caused opening delays and added maintenance costs.

With operations increasingly impacted by park closures and event cancellations due to abnormal temperatures, weather patterns, and flooding, DRWC is working to adapt its programming for a less predictable future.

DELAWARE RIVER WATERFRONT CORPORATION

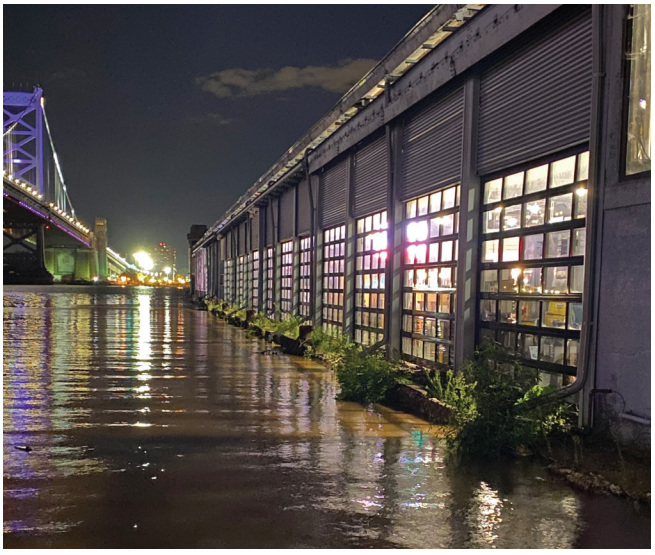
Cherry Street Pier with artist studios

A saving grace for Winterfest is that skating is just one of its offerings. What initially began as an ice rink in a parking lot has since evolved into a recreational enclave with a beer garden, food, and arcade games. While DRWC has had to answer to legacy pressure from skaters and the community expecting an ice rink in February, these additions have helped soften the blow of ice rink closures, and provided additional revenue-generating activities for visitors. A similar expansion of amenities in the warmer months beyond stand-alone events and festivals has helped reduce the impacts of weather-related event cancellations, though DRWC is beginning to see a reduction in visitors, and subsequently revenue, from unpredictable and increasingly uncomfortable weather.



DELAWARE RIVER WATERFRONT CORPORATION

Flooding at Cherry Street Pier

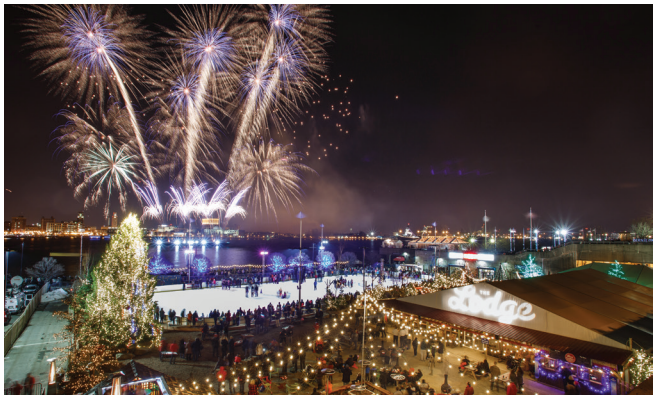


DELAWARE RIVER WATERFRONT CORPORATION

High tide adjacent to Cherry Street Pier

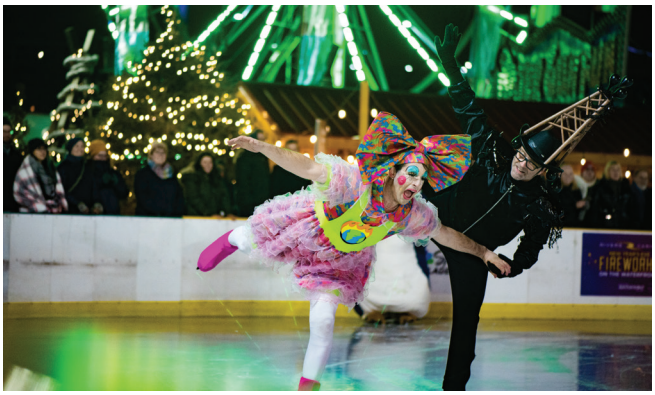
Smarter Flood Mitigation By Design

Many cities' waterfront areas were built with bulkheads to hold back wave, wind and tide erosion. However, this onetime best practice has since become outdated (though in some cities bulkheads continue to be legally required) as understanding about flooding and flood damage has evolved. In Brooklyn Bridge Park, the park's initial design called for the removal of bulkhead wherever possible, and replacing it with rip rap edge, a softer, more porous rock wall that slopes down to the water, enabling floods to recede more quickly. Rip rap also requires less regular maintenance than bulkheads, which makes it a more environmentally sustainable long-term solution. Beginning in 2008, the bulkhead to rip rap replacement process has been ongoing, as the Park continues to expand. As a result of this upgrade, when Hurricane Sandy hit in 2012, the Park was better armored against the rising saltwater and suffered much less damage than it would have had the floodwater been trapped for a longer period of time. An added benefit to replacing the five-foot bulkhead with rip rap wall is that it opens up the view and allows visitors to feel more connected to the water.



DELAWARE RIVER WATERFRONT CORPORATION

DRWC Winterfest



DELAWARE RIVER WATERFRONT CORPORATION

Beards on Ice

Programming has also been a concern at the open-air Cherry Street Pier, a 100-year-old shipping pier converted into a multi-functional space housing artist studios, exhibition and public market space, and an outdoor beer/garden and restaurant overlooking the water. When the pier was built in 2018, flooding was anticipated and flood mitigation was incorporated into the design. Utilities were raised to minimize damage, but it was not possible to incorporate a raised floor. Flooding has occurred numerous times, more than had been anticipated during the design phase.

In response, modifications and adaptations continue to be made at Cherry Street Pier. Exhibitions are designed to keep artwork and expensive equipment raised above floor level which has increased operational cost. (DRWC stipulates that if installation elements can't be elevated and they can't get wet, they can't be incorporated into the exhibition.) Artist studio space is available both on the ground floor and upper level, with the upper level providing more safety. DRWC warns resident artists on the lower level of upcoming flood conditions and assists them with relocating their belongings when needed.

At the same time, DRWC has discovered Cherry Street Pier's vital function and usability as a gathering space. During the COVID-19 pandemic, the large, open, and

Engaging Friends and Volunteers for Recovery Efforts

Waterfront organizations and BIDs can't work in a vacuum, particularly when it comes to weather event cleanup. The Schuylkill River Development Corporation (SRDC) in Philadelphia is a five-person nonprofit working with the city to oversee the revitalization of the Schuylkill River banks, at the heart of which is an eight-mile riverfront trail connecting neighborhoods while providing recreation and transportation. During Hurricane Ida in September 2021, widespread flooding in the region dumped up to six feet of water on the trail. When the flood receded, it left behind fish and turtles and a foot of sewage-tinged silt. Lacking adequate insurance to cover the cleanup efforts, SRDC had to be creative about its recovery plan. With the "Made in America" two-day festival presented by Jay-Z scheduled to take place just a few days later close by on Benjamin Franklin Parkway, the City of Philadelphia Parks and Recreation agreed to help expedite cleanup. To supplement, SRDC called on its passionate network of friends and volunteers—500 of whom showed up over three days to remove silt with shovels. The cleanup effort continues to this day, but the assistance of volunteers accomplished a lot in a short period of time.

well-ventilated structure provided a place for people to safely attend art shows and performances while maintaining social distancing. DRWC offered artists the opportunity to use the space at low cost if they offered their programming to the public for free.

Looking Ahead: Building with Resilience

At the time of the workshop, DRWC was close to announcing a groundbreaking for its new Penn's Landing CAP park, a $300 million, five-year project that will replace the existing Great Plaza which has traditionally been used for festivals and live music events, and will require a redesign of the Winterfest and Summerfest sites. Despite warming weather, the beloved ice rink will be relocated and operated for as long as it's possible for DRWC to keep it open.

The Penn's Landing planning process has integrated strategies for resilience. The park will be graded to slope toward the river, with a trough structure underneath that enables the planting of 500 trees on the CAP. Trees will provide shade but a mass timber pavilion and cafe space—the first net zero carbon building in the city—will also offer a shaded structure for hot and inclement weather days. The ice rink will remain outdoors but DRWC hopes a better-designed rink system will allow the rink to adapt better to changing weather patterns. Additionally, the new development will feature an accessible playground, amphitheater, water feature, pollinator gardens with educational components, and a new pedestrian bridge crossing I-95 that will connect the waterfront park to the city.

DELAWARE RIVER WATERFRONT CORPORATION

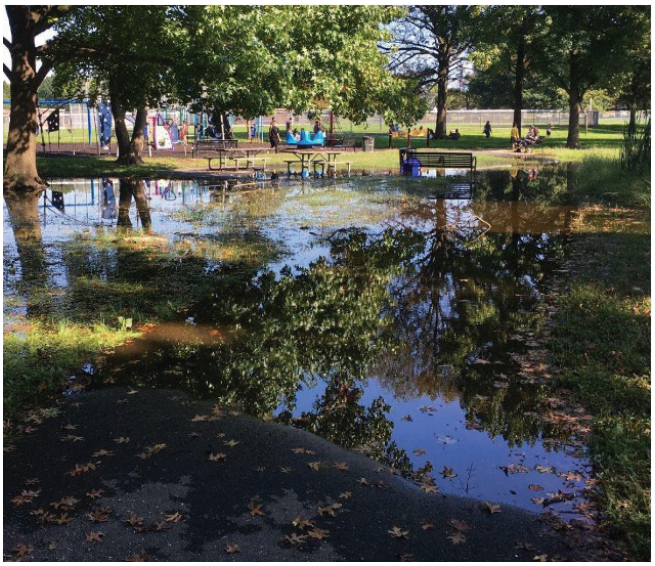
DRWC Penn's Landing Park Overall Aerial

CASE TWO: FDR PARK—REIMAGINING INFRASTRUCTURE IN PUBLIC AND RECREATIONAL SPACES

Founded in 1997, Fairmount Park Conservancy is a nonprofit organization that partners with the City of Philadelphia to assist with planning, fundraising, construction, programming, activations, and implementation of parks in the Fairmount Park system. FDR Park is a 348-acre park that is part of the City of Philadelphia's larger system of parks and recreation. Located in South Philadelphia, the park was first developed by the Olmsted Brothers in 1914 and later modified in time for the 1926 sesquicentennial. Today, it sits among the Philadelphia sports stadiums (Philadelphia is the only city in the country to have located all of its major stadiums in one neighborhood), adjacent to the Navy Yard, and less than two miles from Philadelphia International Airport.

While some of the initial site was co-opted for the municipal stadium site and recreational facilities such as a swimming pool and tennis courts, much of the park's green space and lakes have remained intact. However, the park is located on a 100-year floodplain at the bottom of the watershed. Sunny day flooding has been an ongoing challenge, particularly on the park's municipal golf course, which is both literally and figuratively underwater. Due to the flooding, the park site is already starting to lose its tree canopy. Additionally, the park absorbs untreated highway and urban storm runoff, which impact the quality of groundwater.

In 2019 the Fairmount Park Conservancy began planning to redevelop FDR Park and adapt its design for a hotter, wetter future.



FAIRMOUNT PARK CONSERVANCY

Flooding from Meadow Lake encroaches on the parks only playground.

Addressing Unusable Space

In addition to the flood-prone 148-acre golf course, FDR Park in its current incarnation manages programs and facilities in locations that are vulnerable to flooding and groundwater fluctuation. Forty acres in the southwest corner of the park had been used as a dump site and was overrun by invasive species. Playing fields and tennis courts are also flooded for a large portion of the year.

At the same time, the park is more widely used than ever before, with 2,000,000 unique visitors a year. Changing demographics, a high density of families in the neighborhood and an expected 5,000 to 8,000 new units of housing in the neighborhood will necessitate that the new park balances activity, water and nature relevant to 21st century Philadelphians.

A New Design

The new concept for FDR park calls for an active urban edge surrounding an ecological core. The "core" encompasses existing lakes, marshland, wetlands, or areas that will be permitted to flood, with boardwalks and elevated picnic structures that encourage some human activity. Elevating the urban edge by five to eight feet will create space needed to manage storm runoff with rain gardens and subsurface basins, mitigating damage to the park's creeks and tidal wetlands.

The "urban edge" will be elevated to ensure that sorely needed recreational facilities will be taken out of the floodplain. The new park will also consolidate these previously spread-out amenities. The first phase of development, already underway, includes the Gateway, a new inclusive and accessible playground, the adaptive reuse of a former park stable into a Welcome Center that delivers much needed amenities, and a 15-acre Great Lawn. It will restore original recreational space anchored at the north end by a renovated Welcome Center with new coworking space, a large courtyard for vendors, and event space. Future phases will include five new miles of soft surface trail, tidal wetland, a wildflower hill, multipurpose fields, concessions, a nature playground, picnic plaza, and more.

The planning process for FDR Park itself involved 200 hours of engagement in five different languages with over 3,000 people to ensure that the new park reflected diverse community interests and needs. Additional information on the FDR Park Master Plan can be found at: https://myphillypark.org/what-we-do/capital-projects/fdr-park/

Paying for FDR Park

The Conservancy raised planning dollars from the William Penn Foundation and from Councilman Kenyatta Johnson and has leveraged both private investments and public/private partnership agreements to cover the cost of its development.

Building Flood Management Into Moakley Park

Boston Harbor Now is a nonprofit organization with a mission to steward the city's waterfront, harbor, and islands to ensure economic and environmental vitality. The largest waterfront park in Boston Harbor Now's purview is Moakley Park, which is a 60-acre span adjacent to a 35-acre state beach. When the City of Boston conducted climate resilience planning, it was also determined that the park, which had largely been used for athletic recreation, needed to be upgraded due to flood damage. Given that the park was in a major flood pathway that could potentially impact up to five neighborhoods of the City of Boston, the climate plan became an opportunity to both improve the quality of the park and to improve the waterfront's defense posture against flooding. The plan involved building a berm across the park on infilled wetland to raise it above the floodplain, protecting a nearby housing project from flooding, while creating a natural space for the water to flood on the beach side. The berm will also provide connectivity and visual access to the waterfront. The berm phase has been funded and construction will begin in fall 2023. The plan also calls for more flexible sports fields, a children's play area, an area for picnicking, an amphitheater, and an event space and additional green infrastructure strategies (including stormwater management and the introduction of 500 new trees and native plants) to ensure its resilience into the future.

By fortuitous timing, Philadelphia International Airport had simultaneously begun its own planning process to expand its cargo terminal, requiring the infill of small fragmented and low quality wetlands nearby. In order to offset the impact of that development, the Airport negotiated with the Army Corps of Engineers and with the City of Philadelphia Department of Parks and Recreation to create a 30-acre rare tidal wetland at FDR Park. The new wetland will replace a 40-acre dump site in the southwest corner of the park with 7,000 new trees and 1,900 native shrubs. Critically the excavation of the airport wetland will generate 300,000 cubic yards of fill that will be used to bring the active edge out of the floodplain. The Airport also agreed to fix the tidal gate, which had not been properly functioning, to help alleviate some flooding. In total, the airport invested $30 million which made the new park design possible.

The Fairmount Park Conservancy is investigating the possibility of developing mitigation credits within the park itself that can be sold for ongoing maintenance and/or capital needs.

Managing Responsibilities

The new FDR Park will depend on a broad coalition of stakeholder organizations not only for funding but for its management. T he Conservancy will be working with PPR to codify responsibilities for management and maintenance with Parks and Recreation, Friends of FDR Park, and other interested entities.

FAIRMOUNT PARK CONSERVANCY

FDR Park Master Plan

Creating a Tax Credit for Waterfront Development

Riverlife Pittsburgh is a nonprofit working to build a community vision for Pittsburgh's waterfronts through community-driven, equitable development and high-quality, regenerative design. In 2016, Riverlife led a bipartisan coalition to create legislation to encourage and incentivize more waterfront development with a tax credit program. Pennsylvania's Waterfront Development Tax Credit Program was established by Act 84 of 2016 for the purposes of providing tax credits to businesses who provide contributions to waterfront development organizations undertaking development projects. The program was established to encourage private investment in waterfront property with public access to the water, increases property value, restores ecology, and encourages further investment and job creation. The tax credit is administered by Pennsylvania/s Department of Community and Economic Development. The establishment of the tax credit helped Riverlife find funding for its Allegheny Landing revitalization project in 2021. More recently, in 2022, Riverlife was behind an effort to expand the tax credit allowance from $1.5 million to $5 million through legislation signed into effect on July 8, 2022.

CASE THREE: UCD GREEN CITY WORKS—BUILDING A RESILIENT SOCIAL ENTERPRISE

Located in West Philadelphia, University City District is a special services district. It is a nonprofit organization funded largely by anchor institutions, grantmaking entities, and philanthropic contributions from local business and neighborhood residents whose mission is to improve the district's economic vitality. From the outset, University City District has taken an ambitious, data-driven approach to its endeavors—transforming public spaces, programming events, driving economic development, and overseeing street maintenance, cleaning, and safety.

University City District used to engage with outside companies, often based in the outlying suburbs, for its landscaping needs. However, the arrangement was not ideal, given that the landscape construction industry is exploitative and unsustainable from both an ecological and human resources standpoint. In 2014, the organization saw an opportunity to reimagine it. As part of its West Philadelphia Skills Initiative, the organization launched its subsidiary Green City Works in 2016, investing in workforce development for a more local and resilient approach to design-build-maintenance landscaping services.

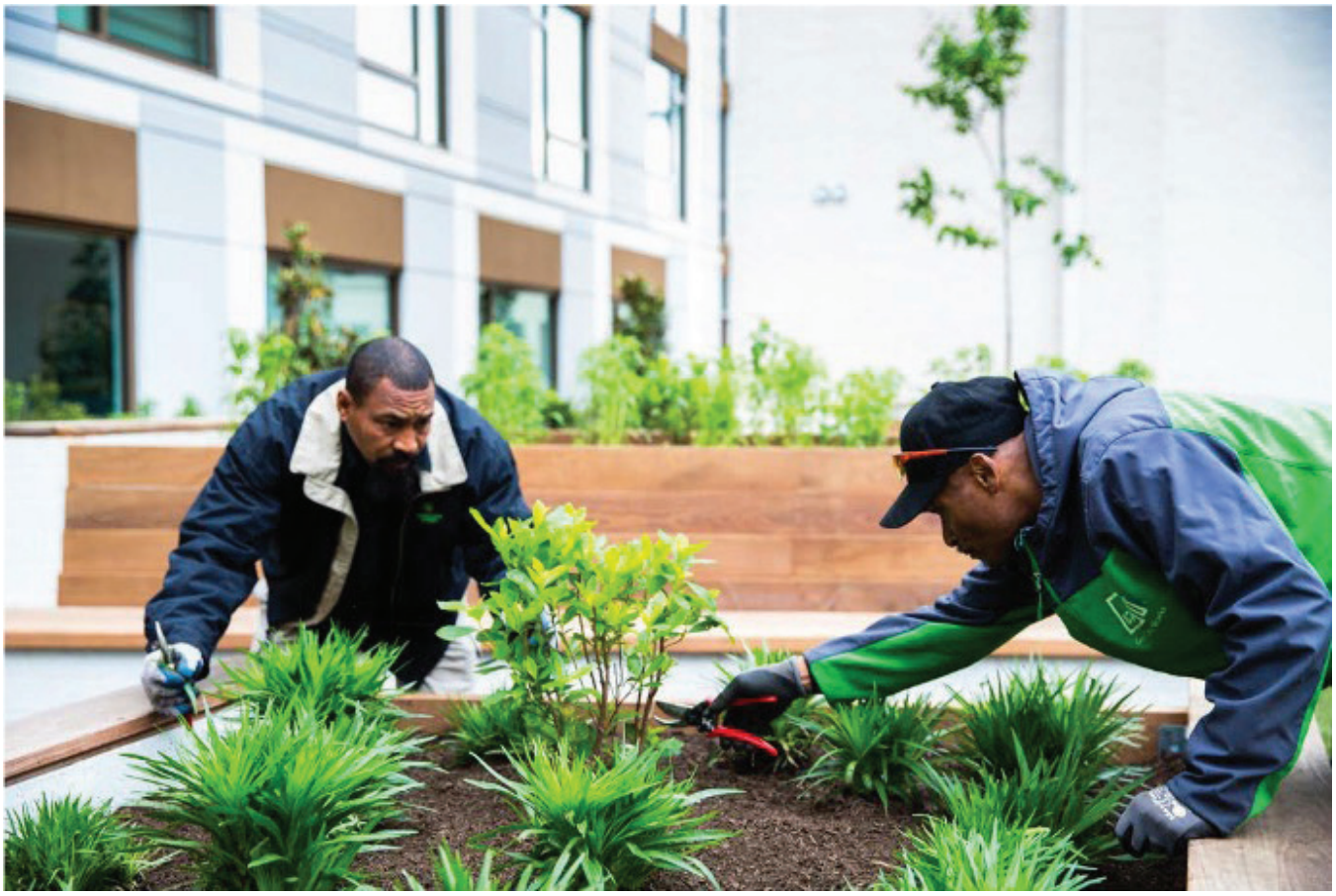
Fee-for-Service Placemaking

Green City Works draws on University City District's expertise in placemaking and sustainable landscaping to offer design and installation, maintenance, stormwater management, tree planting, and snow removal services to other area businesses and institutions. As the program has built up its client base, GCW has invested in its own equipment.

Green City's workers are local residents who are trained in cohorts. When they are hired, they are paid $15 an hour as a starting salary, while supervisors earn $22,

Contracting with a Workforce Development Program

The Waterfront Partnership of Baltimore is a nonprofit dedicated to maintenance, beautification, and visitor services on Baltimore's harbor front. In 2009, the WPB partnered with the Living Classrooms Foundation to supplement its workforce for cleaning. The Living Classrooms trains, hires, and pays the employees, most of whom come to Living Classrooms looking to restart their lives after incarceration or upon the completion of alcohol and substance abuse programs. While the Living Classrooms provides its own job readiness training and wraparound services, WPB established its own on-staff position about six years ago to ensure that individuals would be consistently trained in waterfront cleaning and graffiti removal. Despite a fair amount of turnover and employee unreliability, currently, about 45 percent of WPB's employees come from the workforce development program. Many of those who have successfully completed a six-month stint at the Waterfront have gone to work full time at WPB (sometimes moving into other service areas and into supervisory roles) and/or find employment at other area businesses and organizations. WPB is currently working to expand the program to include landscaping workers.



UNIVERSITY CITY DISTRICT

Partnership with Philadelphia Ronald McDonald House

UNIVERSITY CITY DISTRICT

Partnership with Philadelphia Ronald McDonald House

including three weeks paid vacation time. Workers are given year-round employment and 40-hour weeks with the possibility for overtime, plus 80 percent paid full healthcare benefits—all of which are rare if not unheard of in the conventional landscaping industry.

In 2019, Green City Works grossed $1.2 million and has grown each subsequent year. Not only does this investment ensure a more circular economy in West Philadelphia, but it ensures that workers are treated with dignity and develop a skill set they can use elsewhere.

A Mission-Driven Social Enterprise

Designed to close the opportunity gap for workers, the West Philadelphia Skills Initiative (WPSI) works primarily with second chance workers—those who have been unemployed on average for 53 weeks—and links them with local employer partners seeking

Purchasing Land for Affordable Housing

Located in Houston, TX, Buffalo Bayou Partnership "creates and stewards welcoming parks, trails and unique spaces" along Houston's biggest natural waterway. As a community development organization, Buffalo Bayou Partnership is expanding its purview from a focus on public space and parks to a broader mission that encompasses the vitality of the region. During the master planning process for its Buffalo Bayou East, the organization dedicated 18 acres to affordable housing bordering the park. Phase one kicked off in 2022, and the first multi-family development, which will be complete by the end of 2023, will have 80 units. Two more phases will add an additional 135 to 155 units. Not only will the value of the property remain high due to its proximity to the park, but it guarantees a long-term affordability for the housing and gives people in the community a greater ability to benefit from improvements such as commuting paths, new parks, and other amenities. With a $100 million gift from the Kinder Foundation, the development which will also include cultural destinations and infrastructure improvements is on track to complete in ten years.

talent. For Green City Works, WPSI participants are trained on the job in landscaping skills.

Wraparound supports help workers adapt to the job and in many cases, eventually work up to supervisory roles. In the colder months when there is no landscaping work, employees dedicate their time to education about specialized topics such as pesticide management. Green City Works is currently looking ahead as to how it can expand the program to other service offerings and how it can adopt more environmentally friendly battery-operated equipment.

An Inspiring But Challenging Model

Green City Works has exceeded expectations, but University City District has learned that the model is not without its challenges. Given the social and personal barriers many of its staff face, management must maintain a commitment to workers even when they make mistakes or don't abide by rules. It also requires a degree of flexibility in scheduling, and ongoing education to ensure high quality work.

What's more, while staffing for clean and safe and landscaping services is an ongoing challenge for BIDs and waterfront organizations, the Green City model is not easily replicable, or even possible. For instance, The Downtown Norfolk Council, which operated its own clean and safe program until 2018, found that managing human resources for the program's workers took too many internal resources away from the organization's mission. Today, the organization contracts with a national service provider, which has been more efficient for its smaller staff and offers the added benefit of critical data collection. As such, all hiring decisions are made by the third party vendor.

Some organizations already have a workforce development component, usually working with a third party organization, and establishing one from within may not be feasible or fall within the scope of the mission. Green City Works' unusual approach was built on the pre-existing West Philadelphia Skills Initiative, which had infrastructure and supports for career development already in place.

FOR FURTHER DISCUSSION AND EXPLORATION

The Resilience in Place Management Workshop discussion surfaced a number of key issues about which participants expressed mutual concerns, frustrations, or interest in seeing more data. While solutions to some of these topics were scarce, they are included here as topics for further examination.

Insurance/indemnity issues: Many BIDs and nonprofit organizations overseeing placemaking and management of waterfront property struggle to appropriately insure the property against flooding and other climate related risk. How can municipalities work with these organizations to help with insurance, and/or are there other solutions for this problem?

Upstream threats: Despite waterfront organizations' best efforts to mitigate flooding risks, many still grapple with conditions created upstream that can worsen flooding impact, such as broken flood gates, sediment, and erosion. How can waterfront organizations solve for these threats outside of their oversight area?

Outdated zoning codes: While some cities have enabled more resilient development, many continue to have inequitable, antiquated zoning codes that make it impossible to make changes needed to address climate change, such as building on elevated ground, or laying an elevated foundation, among others. How can organizations in these cities work around existing zoning code, and/or advocate for zoning reform?

Legislation to enable research and demonstration space: One way to make vulnerable coastlines more resilient is to dedicate land to testing innovative approaches. In Boston, Stone Living Lab investigates nature-based solutions and operates as a partnership between Boston Harbor Now, UMass Boston's School for the Environment, the City of Boston, the Massachusetts Department of Conservation and Recreation, the Massachusetts Executive Office of Energy and Environmental Affairs, the National Park Service, and the James M. and Cathleen D. Stone Foundation. Boston Harbor Now is working to affect regulatory change to enable its work in the near-shore area. What other cities might replicate this model to encourage the development of leading-edge solutions?

APPENDIX A: ULI REPORTS FOR REFERENCE

Reports available at uli.philadelphia.org

1. ULI Parks that Protect: Leveraging Waterfronts for Resilient Communities (2023)
2. Eastwick TAP: Exploring Pathways to Community Safety and Restorative Justice in Eastwick, Philadelphia (2022)
3. ULI Advisory Services Panel Report: West Fairmount Park Philadelphia, Pennsylvania (2022)
4. Philadelphia, PA vASP: Washington Avenue Waterfront Piers & District (2021)

APPENDIX B: ATTENDEES

Kathy Abbott
President and CEO
Boston Harbor Now
Boston, MA

Christopher Dougherty
Senior Planner and Project Manager
Delaware River Waterfront Corporation
Philadelphia, PA

Joseph A. Forkin
President
Delaware River Waterfront Corporation
Philadelphia, PA

Matthew Galluzzo
President and Chief Executive Officer
Riverlife
Pittsburgh, PA

Nate Hommel
Director of Planning and Design
University City District
Philadelphia, PA

Jackie Lai
Director of Parks and Attractions
Delaware River Waterfront Corporation
Philadelphia, PA

Rachel McCall
Vice President
Downtown Norfolk Council
Norfolk, VA

Stephanie Phillips
Executive Director
Riverfront North Partnership
Philadelphia, PA

Ian M. Rosenberg
Senior Vice President, Capital Projects and Planning
Buffalo Bayou Partnership
Houston, TX

Jeffrey Sandgrund
Chief Operating Officer
Brooklyn Bridge Park
Brooklyn, NY

Allison Schapker
Chief Projects Officer
Fairmount Park Conservancy
Philadelphia, PA

Laurie Schwartz
President
Waterfront Partnership of Baltimore
Baltimore, MD

Joseph Syrnick
President & CEO
Schuylkill River Development Corporation
Philadelphia, PA

Karen Thompson
Director of Planning, Policy, and Engagement
Delaware River Waterfront Corporation
Philadelphia, PA

Lavelle Young
Vice President, Operations
Delaware River Waterfront Corporation
Philadelphia, PA

Gavin White
Director of Planning and Projects
Riverlife
Pittsburgh, PA

Lizzie Woods
Senior Vice President, Strategic Planning and Real Estate Development
Delaware River Waterfront Corporation
Philadelphia, PA

ULI Philadelphia c/o Langan

1818 Market Street, Suite 3300
Philadelphia, PA 19103

philadelphia@uli.org

philadelphia.uli.org/