# **Riverlife**

14 10

Completing the Loop Report

Prepared by evolveEA for Riverlife | July 2021

# **Riverlife**

Completing the Loop Report

Prepared by evolveEA for Riverlife | July 2021

#### 2020/2021

## Board of Directors

Kathleen W. Buechel, Secretary (2021) Lashawn Burton-Faulk Andrew Dash Cindy Donohoe, Vice Chair Ali Doyle Dusty Elias Kirk, Secretary (2020) Ray Gastil Dr. Kathy W. Humphrey Sallyann Kluz Jennifer Liptak Mary Lou McLaughlin Kamal Nigam, Chair George Robinson II, Treasurer (2021) Dr. Edie Shapira Sandra E. Taylor Terry Wirginis, Treasurer (2020)

#### Staff

Matthew Galluzzo, President and CEO Stephan Bontrager, Vice President, External Affairs Valerie Fleisher, Chief Operating Officer Anna Withrow Leisher, Planning and Project Manager Sarah Spiegel, Development Manager

#### **Steering Committee**

Matt Barron, The Heinz Endowments Eric Boerer, BikePGH LaShawn Burton-Faulk, Manchester Citizens Corporation Lauren Byrne Connelly, Lawrenceville Corporation Jenna Cramer, Green Building Alliance Darla Cravotta, Office of the Allegheny County Executive Andrew Dash, City of Pittsburgh, Department of **City Planning** Juan Garrett, Riverside Center for Innovation Raymond Gastil, CMU Remaking Cities Institute Sallyann Kluz, Office of Public Art Eric Osth, Urban Design Associates Brittany Reno, Sharpsburg Neighborhood Organization Kelsey Ripper, Friends of the Riverfront Hillary Roman, City of Pittsburgh ADA Coordinator Caryn Rubinoff, The Rubinoff Company Page Thomas, Fukui Architects Sonya Tilghman, Hazelwood Initiative Jeremy Waldrup, Pittsburgh Downtown Partnership Ashleigh Walton, Urban Design Associates



#### Consultants

evolveEA | Implementation Framework & Completing the Loop Report Christine Mondor, Principal Anna Rosenblum, Associate Claudia Saladin, Senior Project Manager Chris Guignon Nico Azel

Jianxiao Ge Srinjoy Hazra Yilun Hong

#### Fourth Economy | Permanent Financial

Instrument Report Rich Overmoyer, President & CEO Jerry Paytas, Vice President, Research & Analytics Chris Worley Kristina Harrold

### Thread Strategies | Development Strategy and Plan

Loree Lipstein, Principal Abigail Rybnicek, Senior Consultant

Photos provided by Riverlife, Emmai Alaquiva, Maranie Staab, Porter Loves Photography, Larry Rippel, Ehren Zaun, Chuck Alcorn, Three Rivers Regatta, Kosslow Photography, and evolveEA, unless otherwise noted (see page 245 for details).

This report has been made possible with funding from the Pennsylvania Department of Conservation & Natural Resources (DCNR) and the Henry L. Hillman Foundation.

July 2021

We gratefully acknowledge the Native Peoples on whose ancestral homelands we gather, as well as the diverse and vibrant Native communities who make their home here today.

# **CONTENTS**

# **Vision Plan**

01	Introduction	8
02	<b>Confluence River Room</b> West End Bridge Golden Triangle North Shore Station Square	42
03	Allegheny River Room River Avenue Corridor Strip District Washington's Landing	80
04	Monongahela River Room South Side Second Avenue Corridor	110

# **Technical Assessment**

05	Riverfront Scorecard	136
06	Planning for the Future of the Loop	152
07	Confluence River Room West End Bridge Golden Triangle North Shore Station Square	164
80	Allegheny River Room River Avenue Corridor Strip District Washington's Landing	196
09	Monongahela River Room South Side Second Avenue Corridor	218
10	Budgeting the Loop	238



The **Implementation Framework** brings together past documents, recently completed strategic planning, and new data and analysis to set tangible milestones and viable implementation strategies in the form of a roadmap for Riverlife. This roadmap describes the future that Riverlife would like to see (Vision), what their role is in achieving that future (Mission), what activities are necessary for this role (Workplan), and how the organization will operate to implement their workplan (organizational operations). This roadmap will guide the organization for the next five years.

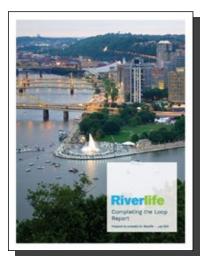
#### 01 Introduction

Letter by Matthew Galluzzo, President and CEO Executive Summary

- 02 Riverlife's Context Organizational History Context Analysis
- 03 Vision for the Future Mission, Vision, & Values Riverlife's Model Priority Business Lines Workplan Evaluation Criteria Role Matrix

#### 04 Organizational Operations Organizational Structure & Capacity Financial Stability & Sustainability Key Partnerships Five-Year Operating Budget Projections Risks & Risk Mitigation

Organizational Evaluation



#### Appendix A

The **Completing the Loop Report** (this report) identifies specific projects and programming needed to complete Pittsburgh's continuous riverfront park and trail system, known as "the Loop". The report includes specific sites for development and will guide Riverlife in carrying out its initial vision for the region's riverfronts.

The Completing the Loop report is a standalone report, but it was created in conjunction with the Implementation Framework and is an Appendix to that document, along with the Permanent Financial Instrument Report and Development Strategy and Stewardship Plan.

#### **Appendix B**

The **Permanent Financial Instrument Report** outlines the plan for funding ongoing riverfront care & maintenance, including a recommendation for financial tools, policies and practices, and a detailed financial model to assist Riverlife in ensuring longevity and financial sustainability.

#### **Appendix C**

#### The Development Strategy and Stewardship Plan

aligns with current and future budget goals, identifies strategies for fundraising from individuals, corporations, and foundations, develops a clear stewardship policy, defines staffing roles, and creates an annual timeline for implementing fundraising strategies.





# 01 Introduction

Completing the Loop: Planning for the Future of Pittsburgh's Riverfronts Completing the Loop: Community Process The Loop Today A Vision for a Thriving Riverfront Measuring Progress River Rooms A Cohesive Solution Pittsburgh's River Rooms A River Room Kit of Parts

# Completing the Loop: Planning for the Future of Pittsburgh's Riverfronts

Completing the Loop is a living document that chronicles Riverlife's ongoing efforts to distill a shared vision of a **riverfront for all**, articulate the projects that make a **world-class riverfront**, and develop a workplan that aligns the efforts of the many people who are striving to create **vibrant riverfronts**.

Completing the Loop is the culmination of a yearlong design collaboration with people and organizations who love Pittsburgh's rivers—from those that visit occasionally to those that make their livelihood on the waterways. Throughout the process, Riverlife has been dedicated to understanding what **rivers for all** can mean, and has ensured an equitable approach to the process, in decisionmaking and in the pursuit of equitable outcomes.

As Completing the Loop efforts continue, Riverlife is committed to working with communities, organizations, and other stakeholders to ensure equitable processes. Riverlife will seek a diversity of voices, ages, abilities, races, income levels, and perspectives to inform its work.

Riverlife is committed to being transparent about what decisions are made and what has informed those decisions.

Lastly, but equally important, Riverlife will work to achieve equity in the outcomes of the work to equitably distribute the benefits of projects, programs, and initiatives.

### "The whole is greater than the sum of the parts."

-Virtual public meeting attendee

Riverlife was formed as an organization dedicated to reimagining Pittsburgh riverfronts as a continuous system of parks and open space accessible to all.

In 2003, Riverlife published *Connecting the Loop*, a report that examined how such a system could be created.

Completing the Loop revisits the 2003 report to refresh the vision, outlines what defines a thriving riverfront, assesses current conditions, and proposes guiding principles for creating a cohesive river experience.

Informed by a rigorous technical investigation of current conditions, *Completing the Loop* outlines key initiatives for the Allegheny, Monongahela, and Confluence "River Rooms" and identifies partners, projects, timelines, and other issues critical to completion.



### Completing the Loop findings include:

Great progress has been made in the past 20 years but much more needs to be done to create a continuous river experience.

Pittsburgh's riverfronts attract many visitors but there are still barriers that prevent people from getting to and getting on the rivers.

Riverfront programming and amenities are not centrally coordinated, creating unequal distribution of publicly accessible facilities, services, and activities.

Unlike publicly owned and maintained park systems in other cities, Pittsburgh's riverfronts rely on the collaborative work of many different types of property owners, making it challenging to maintain consistent access, design quality, and stewardship. Completing the Loop outlines short-term and long-term projects needed close gaps in the landside trails, strategies to get to the water's edge, and how on-river networks can be integrated into a continuous river experience.

Completing the Loop focuses on connecting neighborhoods to the rivers, including those that have been disconnected from emerging river amenities by highways, railroads, and other infrastructure.

Completing the Loop considers the Pittsburgh's riverfronts as a system and proposes equitably located facilities, services, and amenities within unique river districts.

Completing the Loop outlines projects that will require "the work of many hands" to complete, and through the visioning process Riverlife has cultivated the relationships to address maintenance and accomplish ambitious projects.

# Completing the Loop: Community Process

The Completing the Loop process outlined in this report builds on past work to build Pittsburgh's riverfront vision. Similar to the original visioning process, Riverlife gathered the community's aspirations and ideas in a three-phase process over the span of 13 months in 2020 and 2021.

3

AUG

Steering Committee workshops



**Board of Director** 

MAY

## 75+

NUL

Individuals engaged in interviews and focus groups, including organizational stakeholders, public agencies, community representatives, nonprofit organizations, and developers

### **1 LOOKING BACK**

9

**APR 2020** 

This phase examined the history of the Loop and it's evolution. An indepth analysis of the Loop included site visits, interviews, and focus groups. The results of the analysis were presented to the public through an online StoryMap and survey (see the Technical Assessment for the StoryMap documentation.)

" It would be amazing to connect the North Side and West End via safe, bike and pedestrian friendly pathways from the West End Village to the North Side trail ...Manchester and Allegheny West."

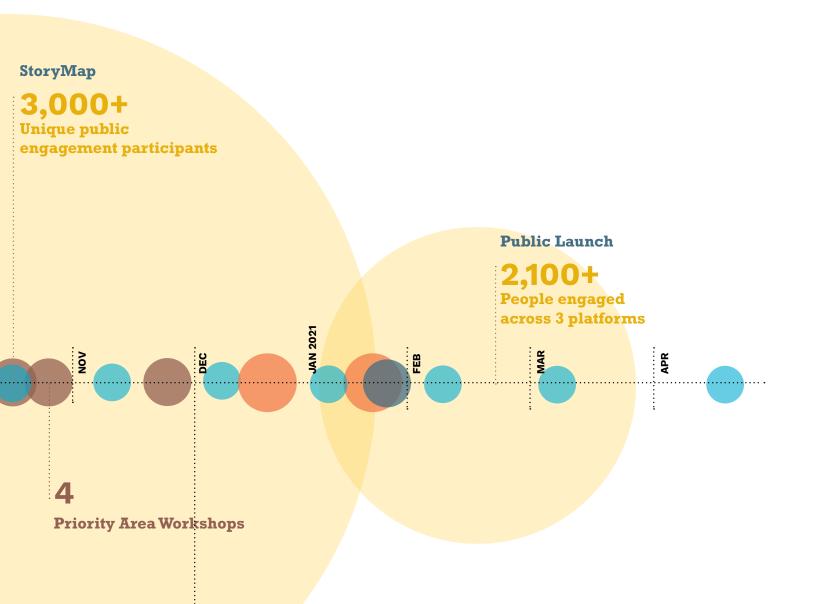
-StoryMap survey respondent

### **2** Design Review Committee Meetings

OCT

### 2 LOOKING AHEAD

Through a series of priority area workshops with stakeholders, property owners, community groups, advocacy organizations, government officials, and Riverlife's Design Review Committee, Riverlife defined the issues and imagined shared solutions. The solutions were further developed into conceptual designs.



### **3 MOVING TO ACTION**

" Linking the riverfront system to Schenley Park trails would be transformative."

—StoryMap survey respondent Riverlife refined the recommendations into specific project and programming recommendations. Riverlife presented these proposals at a virtual public meeting. Input from the virtual public meeting was used to refine the proposals and strategies.

" Focusing on equity instead of just more enhancements for areas such as North Shore and Strip is appreciated."

--Virtual public meeting survey respondent

# The Making of the Loop

Riverlife was formed in 1999 to create a radically different way of thinking about Pittsburgh's downtown riverfronts. Through hundreds of public meetings and feedback from thousands of residents and visitors, Riverlife created a shared vision for Pittsburgh's rivers as a focus of community life, centered on a continuous riverfront park system or the "Loop."

Over the years plans and projects have invited people to the rivers, honoring the varied range of hopes, expectations, and uses in the original vision. Today, the riverfronts are much closer to achieving the original vision of a network of parks and open spaces, but much work remains to fill gaps in the system and ensure its benefits are enjoyed by everyone

## 2001

#### Vision Plan for Pittsburgh's Riverfronts

Riverlife's inaugural vision plan sought to radically rethink Pittsburgh's rivers and riverfronts. Riverlife led a community visioning process involving hundreds of community meetings to arrive at a commonly held vision for the riverfronts involving a continuous system of parks and open space along the City's rivers around Downtown.

#### LOOP MILESTONES



Three Rivers Park Design Guidelines



Riverlife created a resource for landowners and developers advancing new real estate projects along the riverfronts to help implement the *Vision Plan*. These guidelines laid out Riverlife's expectations for riverfront development. Connecting the Loop

2003



Building on the Vision Plan, Riverlife undertook a more tactical planning effort to create the continuous riverfront system of parks, trails and open space. The plan examined existing gaps in the Loop and how to connect them. *Connecting the Loop* guided Riverlife strategy for nearly two decades. 2006 Landscape Management Guidelines



Riverlife developed a set of landscape guidelines for the riverfronts as an ecological system. The guidelines spoke to the use, restoration, and management of Pittsburgh's riverbanks and focused on canopy trees, native species, reducing impervious surfaces, and diversity of landscape cover types.





**Expanded Loop Vision** 



By 2007 Riverlife had expanded its vision of the Loop beyond the downtown area up to the 31st Street Bridge on the Allegheny River and the Hot Metal Bridge on the Monongahela River.

#### 2009

**Mon Wharf Landing** 



After successfully collaborating with partners on projects like the North Shore Great Lawn and the Rivers Casino amphitheater, Riverlife led planning, fundraising, and construction management, in partnership with the City of Pittsburgh, for the linear park and trail connection along the Monongahela River at the historic Mon Wharf.

#### 2012 South Shore Riverfront Park



Riverlife, the Urban Redevelopment Authority, and the Soffer Organization converted the former South Side J&L Steel barge dock into a park providing public access to the Monongahela River for the first time in generations, while also creating a significant connection to the Great Allegheny Passage and Three Rivers Heritage Trail. The 2001 Vision Plan described a park system centered on downtown and stretching from the West End Bridge on the Ohio River to the 16th Street Bridge on the Allegheny to the 10th Street Bridge on the Monongahela. There were a few strong anchors to build upon, like Point State Park and parts of the North Shore, but there were many gaps, unimproved places, and connections to be made before the vision could be realized.

Riverlife's second report, called *Connecting the Loop*, was the organization's implementation guide to create a continuous, linked system of parks and trails along Pittsburgh's riverfronts. The document examined 21 segments of the river, evaluating the segment quality, connections, and made recommendations on how to create and improve each segment. Like most of Riverlife's efforts, the Connecting the Loop report helped others align around a shared vision. It presented a number of ways to establish a continuous trail system and urged property owners, planners, developers, public agencies, and nonprofits to implement these projects.

For over 20 years, Riverlife has worked with land owners, developers, neighborhood groups, and elected officials to realize this vision. While the vision was bold, the growth and investment since 1999 would have been hard to imagine at the Loop's inception. The North Shore Stadiums, the build out of the North Shore Master Plan, the construction of South Side Works and South Shore Riverfront Park, and the renovation of Point State Park were significant accomplishments shared by many.

Completing the Loop

2021

#### LOOP MILESTONES



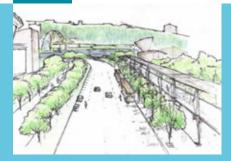
Point State Park Renovation



After years of continuous use and deferred maintenance, Riverlife, DCNR, and the Allegheny Conference led the effort to restore the National Historic Landmark Park's lawns, woodlands, promenade, and iconic fountain.

A Guide to Riverfront Development

2014



Riverlife's guide to successful riverfront development included recommendations about design, connections to the river, public art, environmental sustainability, and more. Some of these guidelines were used by the City as they updated their own riverfront policies.



**Economic Impact** 



This report found that during the 15 years studied, \$132 million in riverfront park improvements had catalyzed \$2.6 billion in riverfront development and nearly \$4.1 billion in total riverfront and adjacent development.



#### 2015

Strip District Riverfront Park Vision Plan



Building on the larger Green Boulevard plan, this plan focused more on detailed strategies for activating the riverfronts and providing riverfront access and open space between 11th Street and 31st Street along the Allegheny River in Pittsburgh's Strip District neighborhood.

#### 2016 North Shore Ecosystem Restoration Project



Riverlife partnered with the U.S. Army Corps of Engineers on the North Shore Riverfront Ecosystem Restoration Project, exploring the costs, benefits, and potential environmental effects of ecosystem restoration on the North Shore.

#### 2018 Mon Wharf Switchback

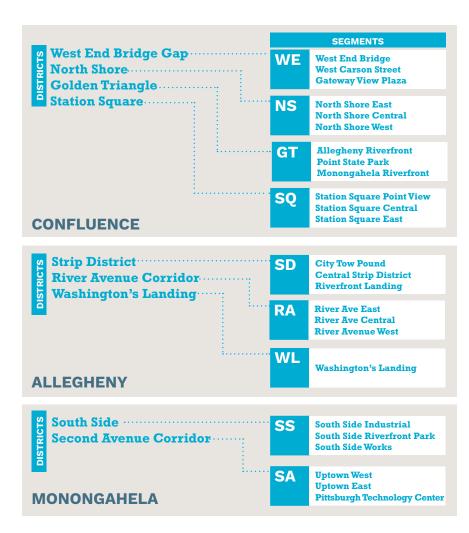


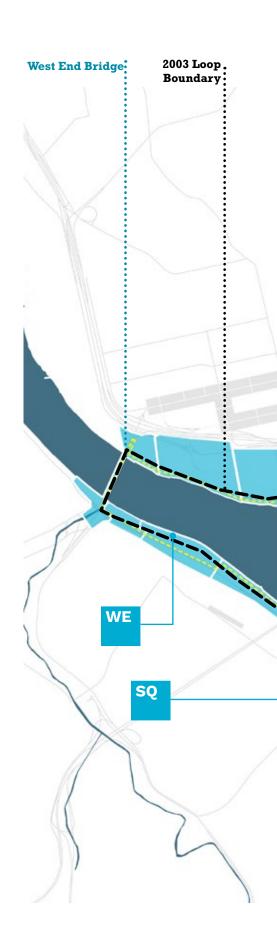
Construction of the Mon Wharf Switchback provided an accessible and bike friendly connection between the Smithfield Street Bridge, the Mon Wharf, the Eliza Furnace Trail and the Great Allegheny Passage.

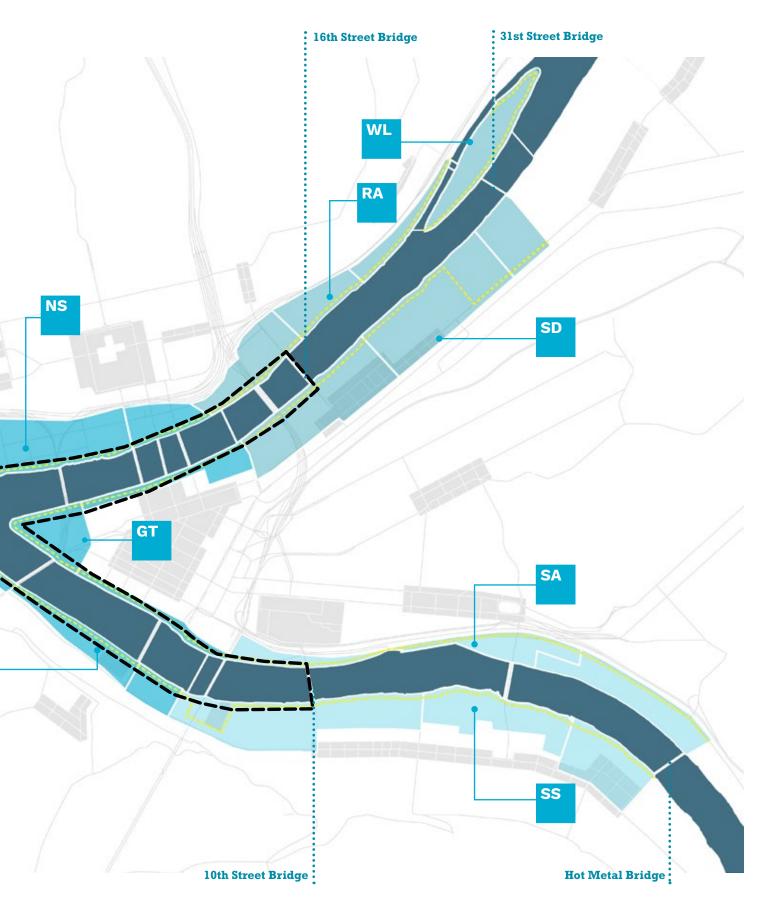
# **The Loop Today**

The *Completing the Loop* report shows that today's Loop is bigger, more connected to the neighborhoods, and puts the rivers at its heart.

The Loop has grown from its original inception in 2003, integrating parks, trails, and development opportunities. Today's Loop is adjacent to 15 neighborhoods with over 41,000 people within a 15-minute walk of the riverfront. The Loop includes over 15 miles of riverfront and consists of 1055 acres, equivalent to Frick and Schenley parks combined. The Loop's expanded geography is organized into 25 segments that consist of nine riverfront districts. This reflects a shift of emphasis from the river's edge to a focus on *districts* with neighborhoods and cross-river connections. Each district consists of one to three segments and each of the 25 segments is defined by physical boundaries, such as highways and steep hillsides, and governance boundaries, including the extents of the riverfront zoning or specially planned districts.







# A Vision for a Thriving Riverfront

Riverlife developed five criteria that define the elements of a thriving, world-class riverfront that belongs to everyone.

As Riverlife develops a shared vision to create and enhance Pittsburgh's riverfronts, it first must define what makes a thriving riverfront. To define world-class riverfronts that belong to all, Riverlife took inspiration from riverfronts around the world and also referenced Pittsburgh's most beloved river places.

Through its exploration Riverlife learned that Pittsburgh's trails are an indispensable part of the region's mobility infrastructure. Riverfront trails connect people

to the rivers, connect the rivers to neighborhoods and create a strong sense of place. Despite infrastructure challenges, moments of exquisite natural beauty and ecological significance exist along the rivers. Places that are well maintained create welcoming destinations. Lastly, and perhaps most importantly, a variety of riverfront experiences encourage people to come to the river for special occasions as well as everyday experiences, embedding the rivers in Pittsburgh's identity.



Thriving riverfronts provide diverse EXPERIENCES in places with unique character







**Thriving riverfronts CONNECT** people to the river, to destinations, and to neighborhoods

Thriving riverfronts are beautiful **PLACES** with amenities, lighting, and quality design







2

Thriving riverfronts are ECOLOGICALLY sound, with natural banks, native plants, and tree cover



Thriving riverfronts are consistently **MAINTAINED** with no litter and safe conditions



# **Measuring Progress**

Every segment of the Loop was evaluated to benchmark current conditions and identify needed improvements.

Riverlife created a scorecard to systematically evaluate the existing conditions of the riverfronts against Riverlife's vision of a thriving riverfront. The assessment created a baseline for evaluating the Loop as a whole, comparing the different segments, and prioritizing areas in need of improvement.

The scorecard evaluated the segments based on five categories: connectivity, ecology, maintenance, sense of place, and experience. The scorecard evaluation was quantitatively scored through extensive site visits and GIS analysis. For experience, the scorecard identified characteristics that describe the scale and character, the riverbank type, and the presence of programming and destinations.

Development of the scorecard was informed by Riverlife's new Mission, Vision, and Values, Riverlife's Landscape Management Guidelines (2006), Guide to Riverfront Development (2014), Pittsburgh's Urban Forest Masterplan and the Riverfront District in Pittsburgh's Zoning Code.

Over 6 miles or 41% of the Loop by length is in need of major improvements

## **Creating a Riverfront Scorecard**



Riverlife's scorecard tracks progress toward a cohesive Loop experience. The scorecard evaluation was conducted using GIS data and extensive on-site analysis. Riverlife used the scorecards to identify the parts of the Loop most in need of attention, and to develop and prioritize recommendations that impact the system as whole. To create the baseline assessment, the Loop's 25 segments were individually evaluated in each of the five categories. The four quantitative categories were aggregated into an overall score, for comparison and to describe the Loop as a system.

#### **Thriving Riverfront Goals**

Does the riverfront <u>CONNECT</u> people to the river, to destinations, and to neighborhoods?



Does the riverfront have well-designed **PLACES** with amenities, lighting, and quality design?

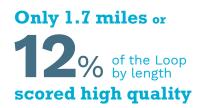


Is the riverfront ECOLOGICALLY sound, with natural banks, native plants, and tree cover?



Is the riverfront consistently MAINTAINED with no litter and safe conditions?

Does the riverfront provide diverse EXPERIENCES in places with unique character? spatial scale spatial character riverbank character destinations programming



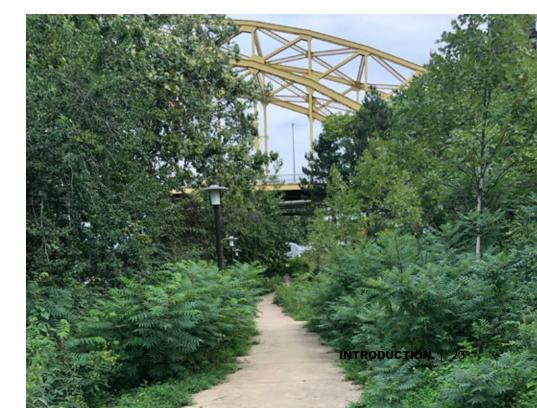
## Most Loop segments share similar concerns:

The riverbank may have invasive species, failing riverbank conditions, and suffer from a lack of maintenance.

Trail conditions are poor in many segments and over 10% of the Loop still lacks a trail.

Maintenance of the Loop is inconsistent, detracting from the overall experience.

Many Loop segments lack amenities such as benches, public restrooms, lighting, and bicycle parking.



#### **Evaluation Criteria**

connectivity along the river connectivity to the neighborhoods connectivity to the river connectivity to bridges

design quality lighting amenities building activation

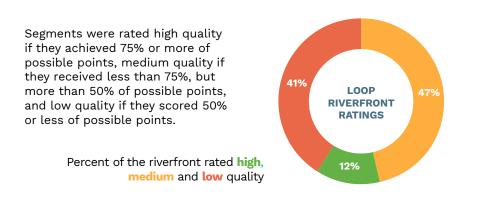
plant community green infrastructure impervious surface riparian zone riverbank condition

removal of trash vegetation management trail surface

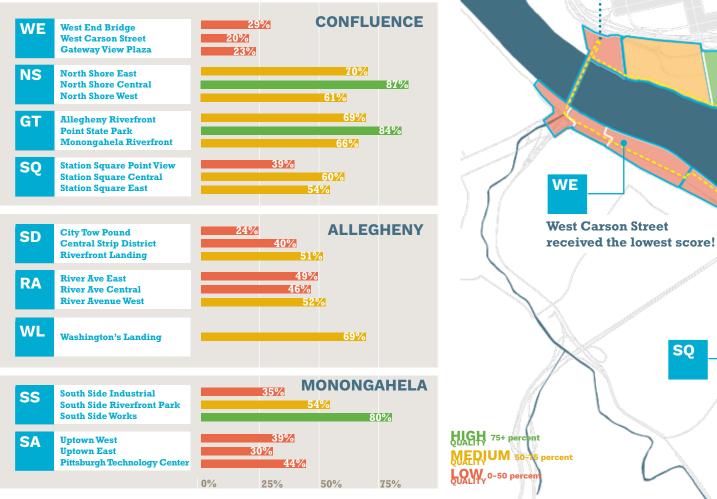
#### Any segment that is deficient diminishes the system as a whole, whether it lacks a trail, regular activities, or is poorly maintained.

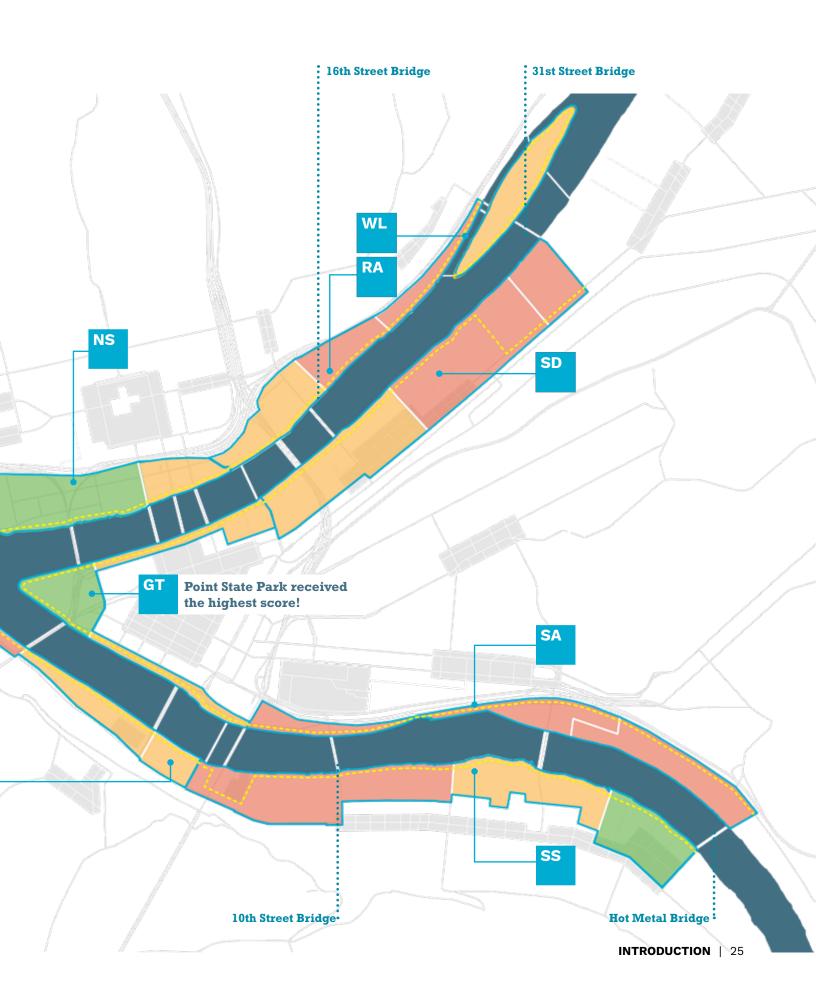
West End Bridge

**S0** 



### **District and Segment Scores Overall**





A comparison of the scorecard quantitative categories indicates that the areas that have received the most investment have scored higher across the board: Golden Triangle, North Shore, Station Square, Washington's Landing, and South Side Works. Ecology scored lowest overall, with only two segments scoring high quality and the majority of segments scoring low quality. Scores indicated that there is work to be done everywhere, but that certain segments and districts of the Loop, particularly the West End Bridge Gap, need more attention.





Survey respondents were asked in what category they would like to see Loop improvements in each district.

#### **Connectivity**

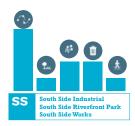
is listed as the most important category in 8 out of 9 districts.





Confluence





Monongahela

### Scorecard Criteria





place

#### connectivity

Connectivity describes the quality, frequency, and type of access to the river, trails, bridges and neighborhoods.

continuous trail next to the river

frequent trail access

direct connections between the segments and adjacent neighborhoods

riverside trail with access for boating or fishing

direct connections from the bridges to the trail

ADA access in each of the conditions above

Place describes the quality, frequency,

and type of uses,

amenities and

**destinations.** thoughtful, human

scale design with durable, quality materials

places to pause and enjoy the riverfront

thoughtful, appropriate, pedestrian scale lighting

amenities such as benches, bike racks at regular intervals

a public restroom in the segment

buildings that face and activate the trail



Station Square Central Station Square East

#### ecology

Ecology describes plant community, riverbank conditions, and impervious surfaces.

canopy cover in comparison to city average

presence of invasive species

condition of the riverbank and riverbank materials

use of green infrastructure

Impervious cover in the segment in comparison to the city average

percent of the riparian zone that is paved



#### maintenance

Maintenance describes the current state of maintenance of the trail.

presence of trash: is trash regularly removed

vegetation management: are weeds controlled? Are invasive species managed? Has there been restoration planting?

trail surface condition: is the trail surface smooth, free of potholes, and in good repair.





Allegheny



#### experience

Spatial structure describes the organization of the riverfront experience and is inspired by the urban structure described in Kevin Lynch's book, *The Image of the City*.

A **node** is a major public space that draws people to the riverfront and often has a strong identity as a destination, like Point State Park.

A **district** is an area where the riverfront segment is woven back into a neighborhood grid with numerous lateral connections, similar to the North Shore.

A riverfront **corridor** has few destinations or connections to neighborhood districts. Corridors can be squeezed between rail lines and the river like in the South Side, or parallel to highways and hillsides like the Eliza Furnace Trail.

#### Survey says.

Riverlife launched a StoryMap to test their assumptions about what makes a great riverfront, to gather input from the public on priorities, and to refine the recommendations. The StoryMap received over 3,000 unique views and over 1,000 survey responses. Survey responses came from across the county and beyond. See the Technical Assessment for more information.

number of survey responses by zip code

0

36

#### Spatial character describes the scale and activities of the segment. The categories were determined through an analysis of the existing conditions.

**Monumental** river places host many different types of activities and can be dominated by large buildings or significant icons like the stadiums or Point State Park's fountain.

**Riverwalks** organize different humanscale experiences along a linear human-scale experience of the river, similar to River Avenue and Allegheny Riverfront Park.

**River neighborhoods** are a complex set of experiences woven into an adjacent districts. Neighborhoods may have different characters, including retail, residential or industrial.

**Vehicular** river places are dominated by highways, roads, or parking lots and are not generally human-centered, similar to the area between Station Square and the West End Bridge.

The layers of scorecard data are Riverlife's north star for creating worldclass riverfronts.

Inspired by the vision of a thriving riverfront, Riverlife will collaborate to achieve a thriving and inclusive riverfront — a project that will be years in the making.

A great riverfront is more than the sum of its parts. Pittsburgh's rivers need a shared vision and a cohesive experience that is centered around

**River Rooms.** 



188

H

+H +H

H

H-

H

Ref. Land

# **A Cohesive River Solution**

A great riverfront is more than the sum of its parts, and Pittsburgh's rivers need a holistic approach.

### Introducing River Rooms

River rooms are designed for land and water experiences. The Loop Scorecard shows that, although there are many moments of brilliance, today's riverfront is physically fragmented and many segments need significant work. The Scorecard analysis has generated a "to do" list of items to address and a way to measure progress. However, Riverlife acknowledges that a "to do" list is not enough A holistic way of thinking about the river experience is needed.

The organization of segments into districts reflects an emphasis on connecting the river's edge to neighborhoods. Similarly, **River Rooms** organize districts and focus on cross-river connections, placing the rivers at the heart of the Loop.

" [I'm excited by] public docks and other infrastructure (temporary and permanent) that connect people to the water and allow them to touch it (not just view it)."

-Virtual public meeting survey respondent

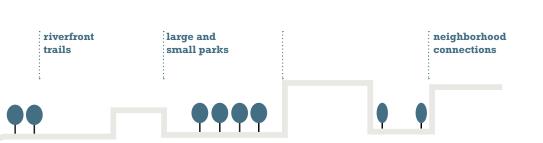


**Allegheny River Room** 

**Confluence River Room** 

Monongahela River Room

#### At 1055 acres, Pittsburgh's three River Rooms are equivalent to Frick Park and Schenley Park combined.



### Land and Water

Most people enjoy Pittsburgh's rivers from the shore, and are drawn to the river edge by a festival, a park, a promenade, or other amenities. A continuous **landside experience** means connecting up and down the river with a series of destinations and weaving the riverfronts back into neighborhoods and communities.

When people get onto the river, they see the city from a new vantage point. People need access to get onto and into Pittsburgh's rivers for a **waterside experience**. The rivers accommodate a diversity of activity—from commercial boats, and pleasure boats, to non-motorized craft and even swimmers.

# One experience, three destinations **Pittsburgh's River Rooms**

River Rooms are places where people come together to enjoy activities near to, next to, and on the rivers.

The three River Rooms are Pittsburgh's water commons. On the landside, Riverlife envisions overlooks, parks, festivals, and fishing places. On the water, Riverlife imagines water trails and boat access, whether human powered, small craft, or larger passenger or commercial boats. River rooms provide places where you can see interesting things up and down the river and have easy access on trails and bridges to get to them.

#### 5 miles of riverfront 1 public river landing

Strip District River Avenue Washington's Landing

> 6 miles of riverfront Point State Park Allegheny Landing Park North Shore Riverfront Park 4 public river landings

West End North Shore Golden Triangle Station Square

> 4 miles of riverfront South Shore Riverfront Park South Side Riverfront Park 3 public river landings

South Side Second Avenue Corridor



#### **Allegheny River Room**

The Allegheny River is Pittsburgh's recreational river with more opportunities to access the river for boating and fishing and less barge traffic. Riverlife envisions a future where there are public parks, public river landings, and trailheads to support festivals, recreation, and enjoyment that are accessible to residents throughout the region.

#### WE NS GT SQ

#### **Confluence River Room**

This area around downtown Pittsburgh was the original Loop. Riverlife envisions a future where the past investments in the Golden Triangle and on the North Shore are balanced by investment in public parks, amenities, and open space around the West End Bridge. This investment will bring the neighborhoods of Manchester-Chateau and West End into the Loop and celebrate the extraordinary West End Bridge and its views.



#### Monongahela River Room

This River Room presents some of the greatest challenges to connecting people and neighborhoods to the River. Riverlife envisions a future where parks and trails provide space to celebrate the river and where the neighborhoods of the Hill District, Uptown, and South Oakland can easily get to riverfront trails and parks. On the South Side Riverlife will work with partners to activate the trail and create better connections from the neighborhood to the river and between the trail and the river.



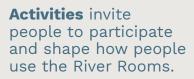
# A River Room Kit-of-Parts

River Rooms have consistent elements that create a world-class experience.

Imagine spending a whole day on the river or on the river's edge swimming in a pool, playing beach volleyball, and walking a dog off leash. To make the Loop a cohesive experience, activities, amenities, and anchors need to be distributed equitably throughout the Loop. Filling gaps in the system will make it possible to spend a whole day along the rivers, whether on land or water.

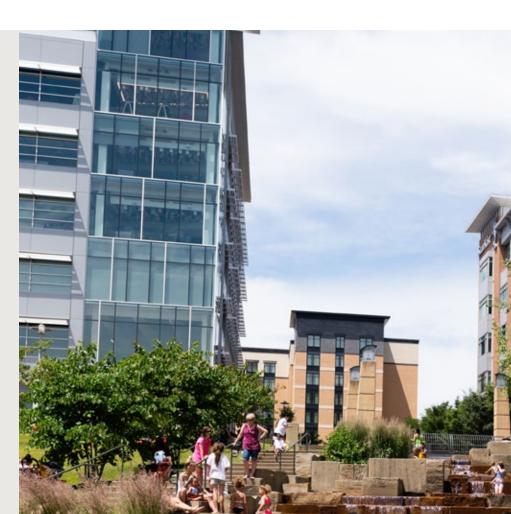
Riverlife is the curator but not the owner of the Loop system and encourages others to contribute to a larger identity. Together with Riverlife's *Guide to Riverfront Development* (2014), the River Room Kit-of Parts enables the many different property owners along the riverfronts to improve their property to a standard and create a cohesive riverfront.

The Kit-of-Parts **Activities** temporarily enliven the rivers and can be formal or spontaneously organized. Amenities are smaller scale capital improvements that often require a commitment to maintenance. **Amenities** should be equitably distributed along the rivers and, in some cases, can be standardized throughout the Loop. **Anchors** are long-term real estate projects that need to be accomplished through the efforts of many stakeholders and with significant capital investment.



**Amenities** create a sense of place and a cohesive experience across the diverse places in the Loop.

**Anchors** are major destinations with unique identities in each River Room.



## Activities

# Activities include temporary installations and events such as:

artwalks & paddles festivals food trucks heritage tours neighborhood loops informal performances pop-up events fishing competitions

# Activities also include long term programming, such as:

interactive water features recreation barges ice rinks water taxi / ferry A variety of activities are essential to create welcoming River Rooms, including **active events**, like a boating race or a swim barge, as well as **passive events** like a performance or concert.

Events should be able to be **formally and informally organized**. For example, some may require a formal permit, like a festival, while other activities, like sidewalk performances or walking tours, can be organized by anyone.

Infrastructure can **scaffold different types of activities**. People can customize the spaces with flexible and reconfigurable infrastructure. For example, grand stairs can attract concert spectators as well as people watchers. Flexible spaces with water and electricity infrastructure can support a summer fountain as well as a winter ice rink.

A **distribution of activities over time** will enliven a River Room year round. This includes activities of different duration, like a temporary art cart or a multiday fishing competition, off-peak uses, like winter light festivals, as well as peak events during warmer weather.









#### Amenities create a

sense of place and a cohesive experience by providing basic services, infrastructure, arts, ecology, and mobility.

#### Amenities include places to begin, end, or rest during a journey:

trailheads & landings rest areas & furnishings repair stations restrooms

#### Amenities express identity and support different activities:

feature furnishings play areas and water places public art

#### Amenities serve as infrastructure:

wayfinding & signage lighting charging stations and wifi

#### Amenities improve the environment:

ecological restoration outfall overlooks & tunnel toppers air quality monitors

#### Amenities make moving easier:

green street connections trail repair & improvement



**Support amenities** provide comfort and safety and should be regularly spaced along the rivers, for both landside and waterside experiences. Comfort facilities and rest areas are especially important in parts of the Loop that are far from development where these facilities are more likely to be found.



#### Arts and activities amenities

can be used to celebrate or augment special places or create a destination where there is none. Underused parts of the Loop could invite people to linger with public art or engaging furniture, such as swings, game tables, large tables, or market stalls. Large and small play areas provide respite for kids and parents and can range in scale from formal playgrounds to informal elements to scramble on. Riverlife will consider vendors for activities like rock climbing, skating, or equipment checkout.

#### trailheads and restrooms

*1 per district* Locate at special points of entry, near transit or existing parking. Include rest area amenities such as repair stations, seating, etc.

#### landings

1 per mile Locate docking or take-out for motorized and nonmotorized craft (kayaks, canoes) and locate near transit or existing parking, include repair stations, seating, etc.

#### rest areas

1 per 1/2 mile Include seating and repair stations in a standard rest area design.

#### seating

1 bench per 1/4 mile Locate at periodic locations on long stretches of trails, at views, and at special places.

#### repair stations

*1 per 1/2 mile* Augment the publicly available stations with branded Loop stations.

#### trash & recycling cans

1 per 1/2 mile Incorporate at major elements or as stand alone elements in remote areas.

#### feature furnishings

min. 3-4 locations per River Room Activate underused spaces or celebrate some aspect of place such as a view, access, or adjacency.

#### play areas

2-3 small areas per River Room 1 large playground per River Room Small areas should be located near adult amenities and larger areas should be designed as a destination with activities for children and adults.

#### water places

1-2 per River Room Fountains and spray parks should be in or near other amenities, especially restrooms, and should be easily accessed for safety.

#### public art

throughout all River Rooms Integrate into infrastructure, wayfinding, and signage as well as permanent features.



Infrastructure provides basic information and services within the Loop. Wayfinding and branding should be consistent on both water and land and should extend back into the neighborhoods. A comprehensive wayfinding study should be done to create a system and identify locations. Lighting is not consistent due to different ownership, but dark sky standard should be encouraged. Locations where power is available for charging personal devices or micromobility should be distributed through out the Loop. Wifi should be added to parks and publicly owned spaces and places with wifi highlighted.



Ecological restoration and

monitoring is essential to a cohesive river experience. Bank restoration paired with ecological restoration will be an ongoing process over many decades and coincides with ALCOSAN's sewer system work and is where periodic maintenance is likely to occur. ALCOSAN's infrastructure can be artistically marked with outfall overlooks and tunnel toppers that provide amenities and build awareness of water issues. Air quality monitors should be placed where people are most exposed to communicate risk.



**Mobility improvements** connect people to neighborhoods and to other riverfront locations. Green street connections are complete streets that connect business districts to the river. Landside trail design standards and complete streets focus on walking and biking, wheelchairs and strollers, as well as other types of micromobility. Policies may be needed as new motorized micromobility technologies emerge.

# wayfinding and signage throughout

Locate at trailheads, entries, and

facilities, also on main streets and locations leading to the river, including maps, place identifiers, and directional signage.

#### lighting

throughout

Focus lighting on underlit areas and public properties. Encourage private property owners to adopt Riverlife standards.

#### charging stations and wifi

rest stops and public spaces Locate in areas remote from publicly accessible commercial spaces with power and wifi.

#### dog parks

throughout all River Rooms Integrate into infrastructure, wayfinding, and signage as well as permanent features. Ensure that dog parks safely and ecologically deal with pet waste and do not exacerbate water quality problems.

#### ecological restoration

at development areas Concentrate restoration projects in ALCOSAN investment areas, new development, and in places where bank restoration is most needed.

#### outfall overlooks and tunnel toppers

at ALCOSAN installations Locate and program as part of a comprehensive initiative with ALCOSAN.

#### air quality monitors

approx. every 1/2 mile Locate at trailheads or rest areas, in places with high exposure, and in places where air quality monitors are missing.

#### green street connections

4-6 locations per River Room Improve infrastructure to main streets, including sidewalks, intersections, tree coverage, bike lanes, and signage.

#### bridge connections

2+ bridge pairings per River Room Bridges with accessible ramps connect directly to the trail and offer a shoreline experience for bikers and those using human powered vehicles. The connections also give mobility options when the railroad is a barrier.

#### trail repair

*as needed* Locate extent for a rolling annual repair and replacement schedule.

# **Anchors** are major public destinations with unique activities and amenities in the Loop.

Anchors, or anchor parks are open spaces that offer many different types of landside and waterside activities. They are typically 5 acres or larger and may be publicly or privately owned or maintained and have a distinct identity as a destination.

Existing anchors are distributed throughout the Loop, with a concentration closer to recently developed areas, and are a combination of public and private facilities. Some parts of the Loop lack anchor parks, especially where there is low population density or difficult access to the river. Proposed anchor parks will fill the gaps in the Loop with increased access to the river and the neighborhoods. The new parks solutions have much in common as they address many of the same challenges and opportunities.

The proposed anchor parks will:

- restore riverside ecology
- address adjacent development
- make new direct bridge connections
- serve as trailheads and landings
- connect back to neighborhoods



#### 40 | Completing the Loop | Vision Plan





#### **Allegheny River Room**

#### **City Landing Park**

This public park will provide much needed green space for the Strip District and provide an additional public landing in a River Room with few public landings. Unique activities on land and water will make this park a destination within the Loop. The site may be activated by complementary development, such as affordable housing and mixed use development.

#### **Confluence River Room**

#### Saw Mill Run Gateway Manchester Gateway

Creating public spaces on either side of the West End Bridge will close a major gap in the Loop and celebrate the West End Bridge. The gateways will be destinations inviting people to visit the West End and Manchester/Chateau neighborhoods and will make it easy for residents to find the river.

#### Monongahela River Room

#### 4th Street Landing @ South Side Riverfront Park

Extending South Side Riverfront Park to 4th Street, expanding the kayak landing, and adding a bridgeto-shore ramp at 10th Street, will create a continuous riverfront experience along the South Side of the Monongahela. This area will benefit from recent development and needs additional improvement to the trail to connect South Side to Station Square. The Confluence **River Room contains** some of the Loop's most loved and most challenged places. People frequently visit the North Shore, the Golden Triangle, and Station Square, but access to the West End Bridge's fantastic city views is elusive. Riverlife's vision is ambitious and will require years of advocacy and action.



WE NS GT SQ



# Confluence River Room The River Room Today

Riverlife determined the River Room workplan through field studies, technical analyses, and an engagement process. The North Shore and the Golden Triangle districts have had decades of investment and are in need of maintenance and activation while the West End Bridge Gap lacks basic infrastructure and require significant investment.

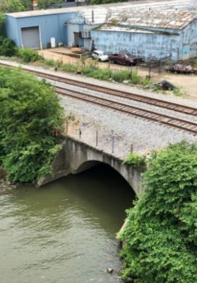
> " While [the North Shore is] certainly one of the nicest parts of the Loop, it is very disconnected from the rest of the North Side, especially Central Northside and Allegheny West." —StoryMap respondent

"There is such a HUGE need to make this area work for the sake of the Loop and areas beyond." —StoryMap respondent " What's missing in [the Golden Triangle] is continuous programming and small business opportunities."

-StoryMap respondent

" It's not easy or immediately obvious how to get off the Fort Pitt Bridge... Expanding the sidewalk or providing a better way from the bridge would be a huge improvement."

—StoryMap respondent









### WE



#### West End Bridge Gap North Shore

The West End Bridge (WEB) should be celebrated as a river landmark.

A pedestrian expansion at the WEB would be a destination to view the iconic Pittsburgh skyline.

The West End Bridge needs to be better connected to riverfront trails and to Manchester, the West End, and Station Square.

This railroad underpass is one of the few places to directly access the river.

The West End Bridge can be the crossroads for regional and national trail systems with safe, accessible, and clear pedestrian and bicycle routes.

Saw Mill Run should be made more visible and its ecological health improved.

Major projects are planned by ALCOSAN, PennDOT, and private developers.

The North Shore needs to be better connected to the neighborhoods to the north.

The North Shore has large areas of lawn and lacks shade and habitat.

The North Shore should be active and welcome diverse activities, even between game days.

**Allegheny Landing Park** can become an active North Shore destination.



#### Golden Triangle

The Mon Wharf needs to be connected to Point State Park with a safe and accessible connection.

**Renovate Allegheny Riverfront Park and extend** it under the Fort Duquesne Bridge.

Activate Fort Duquesne **Boulevard to bring more** activity to the Allegheny riverfront.

Activate the Mon Wharf.

The connection from the Fort Pitt Bridge to Point State Park is not accessible.

# SQ

#### Station Square

**Station Square needs** better wayfinding and infrastructure for pedestrians and cyclists.

**Station Square is one** of the few places on the Monongahela River where you can walk to the river.

The Wabash tunnel could provide trail connectivity to neighborhoods and communities to the south.

The inclines should be improved as a destination and better connected to the Loop.

Station Square needs to be connected to the West End Bridge.

**CONFLUENCE RIVER ROOM** | 45



The Confluence River Room has the highest quality and lowest quality segments in the Loop and will continue to be a long-term priority for Riverlife.



#### WEST END BRIDGE GAP

The lack of riverfront infrastructure at the West End Bridge is an impediment to connectivity across the river and to places beyond. The area is a major gap in a number of regional and national Rails-to-Trails networks, including the Great American Rail Trail and the Industrial Heartland Trail. It also prevents connections to communities west of Pittsburgh, such as McKees Rocks and Beaver County. Gateway View Plaza is a large commercial redevelopment opportunity.



#### **NORTH SHORE**

The North Shore is a major regional destination, with stadiums, concert venues, nationally renowned museums, and restaurants. Significant investment has already been made in the public spaces along the riverfront and the upper esplanade area. While the North Shore is well connected to the river, most North Side neighborhoods are separated from the river by a major highway and railroad infrastructure.



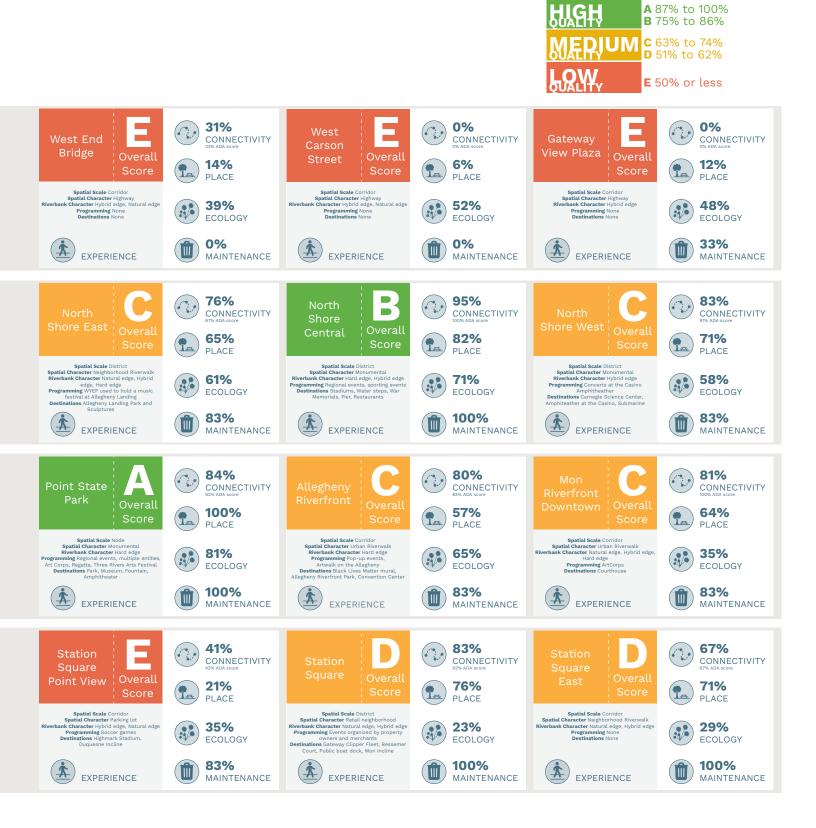
#### **GOLDEN TRIANGLE**

Many investments have been made in the Golden Triangle's riverfront in the last 20 years and it is the most fully developed of the districts. While highways and limited access to the river remain, Point State Park is an iconic park in the riverfront system and is one of the most highly rated segments in the Loop.

# SQ

#### **STATION SQUARE**

Station Square's historic train station complex is being rethought as the acres of surface parking lots are being redeveloped as apartments and mid-rise mixed-use development. Station Square is also home to the iconic Monongahela and Duquesne Inclines and the Gateway Clipper Fleet—all major tourist destinations that are disconnected from each other and a rail line limits access from the trail to the river.



**A** 87% to 100%



According to the Trust for Public Land, communities with access to parks and open space have better mental and physical health outcomes<sup>1</sup>. Mapping the data provides insight into community challenges and helps identify opportunities to connect physically, culturally, and economically. The following maps were excerpted from a GIS analysis that informed Riverlife's proposed programs, amenities, infrastructure, and outreach.





<sup>1</sup> Muqueeth, Sadiya. *Parks: A Vital Community Condition*. Trust for Public Land. 2021

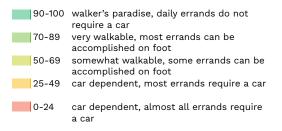


#### PARKS

(within 1 mile radius of the river)

The Confluence River Room has three major parks within a half mile of the river that could connect to the river open space, Point State Park, Allegheny Commons, and Emerald View Park.

Source: WPRDC (Western Pennsylvania Regional Data Center) , Allegheny County Parks Department, https://data. wprdc.org/dataset/allegheny-county-parks-outlines1



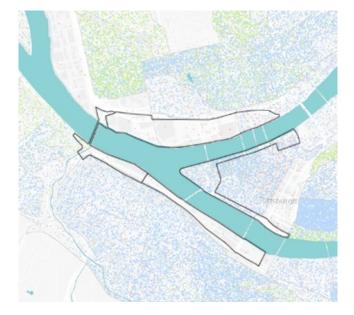
#### NATIONAL WALKABILITY INDEX

The score represents the relative walkability of a block group compared to other block groups. Much of the Confluence River Room is very walkable given the dense network of streets. The more remote areas in the West End and Chateau more car dependent.

Source: WPRDC (Western Pennsylvania Regional Data Center), Allegheny County Department of Health, https://data.wprdc. org/dataset/allegheny-county-walk-scores









#### AVERAGE AGGREGATE HOUSEHOLD INCOME

Household income varies greatly between the Confluence neighborhoods, with areas in the highest and lowest brackets. Special attention should be given to the distribution of riverfront access and amenities and future outreach should target economically diverse households.

Source: Urban Footprint, Allegheny County Census - Income Census Planning Database 2018

0.0 - 5.0	Values range
5.0 - 10.0	from 0 to 100. the
10.0 - 20.0	higher the score,
20.0 - 40.	0 the less exposure
40.0 - 60.	
60.0 - 99.	0 neighborhood.

#### **POVERTY INDEX**

(within 1 mile radius of the river)

Census data indicate that there are areas of high poverty near to the trail system. The Poverty Index is both an opportunity and a cautionary indicator. Connecting lower income populations to the river ensures equitable access for all, but also indicates areas where the risk of displacement may be high. Monitoring changes in the poverty index and instituting policies and projects can maintain affordable living opportunities close to the river.

Source: Urban Footprint, Allegheny County Census - Low Poverty Index 2017



#### **RACE AND ETHNICITY**

There is racial/ethnic diversity in the adjacent Confluence neighborhoods, with some neighborhoods having a more mixed racial distribution than others. Neighborhoods directly adjacent to the river have few residents, although this is changing with new market rate development. Special attention should be given to outreach and access to a representation of residents in the 1 mile radius.

Source: Urban Footprint, Allegheny County Census - Race and Ethnicity Census Planning Database 2019

#### Allegheny Landing & Allegheny Riverfront Park

Parks on both sides of the river are being **renovated and improved** to create a stronger River Room in one of the most visited areas.

HALF

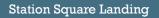
#### Manchester Gateway

At the north end of the West End Bridge, a **new under bridge gateway park** with a sculptural path under the bridge will connect Manchester directly to the river.

Autorite S

#### **Mon Wharf Activation**

Tactical improvements like a kayak launch, lighting, and seasonal activities will activate the Wharf while big ideas like a partial highway cap could connect downtown to the river.



**Expanding and improving the docks** at Station Square will invite more people to get onto the river.

#### Neighborhood Loop: Mt. Washington

**Trail and incline station improvements** will make it easy to stroll along the Monongahela River and along the Mt. Washington overlooks.

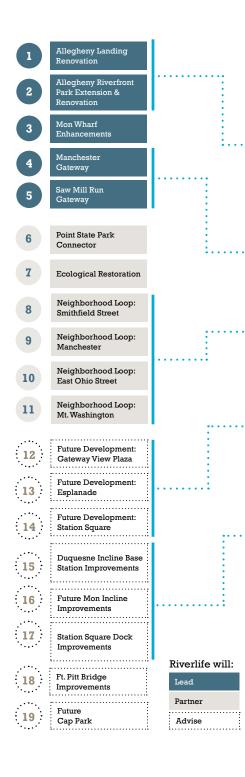
#### Saw Mill Run Gateway

A riverfront park and landing will connect visitors to the West End and provide an accessible connection to the river and the bridge.





The Confluence River Room is a regional destination that attracts visitors to some of the largest landside parks and water spaces in the Loop. Many modes of travel converge and bring vitality, including pedestrians, boats, bikes, buses, inclines, and automobiles.



The Confluence River Room's legacy anchor parks are being refreshed with infrastructure investment and programmed with innovative activities and amenities. The greatest challenge is to create new destinations to anchor remote locations where there has been little previous investment. Highlighted efforts include:

**Legacy riverfront projects** are being rejuvenated with upgraded trails, planting, and infrastructure. Investment in the riverfront by public and private entities encourages adjacent investment and Riverlife's advocacy for design standards ensure that the public realm will be world class.

**Additional anchor parks** create destinations at the most remote part of the Loop system and connect back to adjacent neighborhoods. These projects will require the efforts of many agencies and entities and will be a long-term effort for Riverlife.

**Neighborhood loops** will be planned with the City and the communities to create well marked routes to the river. Safe routes and signage help people discover neighborhood attractions and businesses and give the river presence within the community.

**Major development projects** are slated for the Confluence River Room and will serve as destinations for riverfront experiences. Many of these projects feature riverfront spaces and are a testimony to Riverlife's past advocacy for public access to high quality riverfront places. Riverlife will continue to ensure that future development serves all.

**Boats, buses, bikes, and inclines**, are part of the rich mobility infrastructure that makes the Confluence River Room an exciting place. Celebrate places where these different modes converge and work with other agencies, authorities and businesses to connect the networks to make it the best possible public experience.

**Recommended Activities include:** 

Open Streets on West End Bridge Pop-up events and installations Land-to-River Activation Lighting Installation on the West End Bridge Activity Barges, such as Concert Barges Nighttime Activation Music & Arts Festivals Pittsburgh Creative Corps Black Lives Matter Artist in Residence Artwalk on the Allegheny



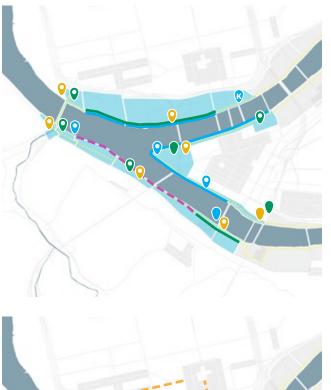
Confluence River Room

# Kit of Parts

Amenities and infrastructure should be well distributed within each River Room and throughout the entire Loop to create a cohesive experience. The amenities are often provided in commercial development areas as well as in dedicated public installations.

> linear area recommended linear area confirmed existing

recommended confirmed existing



SUPPORT AMENITIES Support amenities provide public comfort facilities or river access and should be distributed throughout the river. Privately developed areas often provide many of these amenities. trailheads and restrooms dedicated or publicly available

landings

boat launches and/or docks, kayak launches

rest areas / seating needed in areas with no adjacent development

repair stations

at trailheads or dedicated locations

#### **ARTS & ACTIVITIES AMENITIES**

Arts and activities amenities can activate areas and create seasonal or permanent attractions. Furnishings, play areas, water features, and art have a physical component and can be good opportunities to partner with other organizations on events and programming.

#### feature furnishings

seasonal or permanent to activate spaces

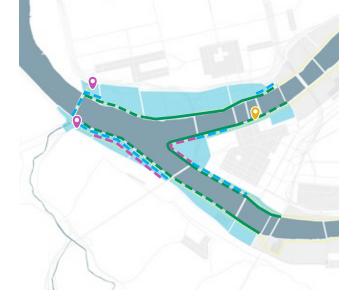
## play areas

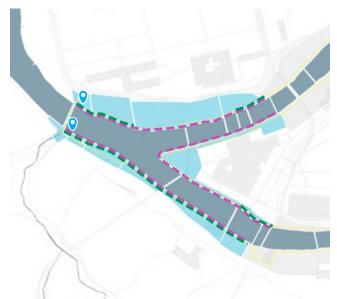
- large or small, destinations
- water places
- seasonal or permanent

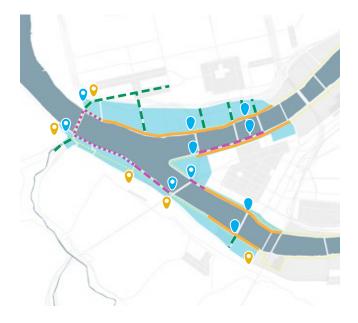
#### public art

seasonal or permanent installations









#### INFRASTRUCTURE

Infrastructure makes it easier to use the riverfronts by orienting people, providing basic services, and creating a sense of safety.

•	wayfinding & signage trailheads, entries, facilities
0	<b>lighting</b> focus on underlit areas
••	<b>charging stations and wifi</b> areas remote from publicly available access
••	<b>dog park</b> dispersed throughout

#### **ECOLOGY**

Ecological improvements create healthier conditions for humans as well as plants and animals. This includes the restoration of river habitat and monitoring sources of water and air pollution.

ecological restoration

poor quality riverbank or ALCOSAN investment areas

- outfall overlooks & tunnel toppers
- existing major CSOs and anticipated tunnel locations
- 👝 air quality monitors
- trailheads, rest areas, high exposure areas

#### **MOBILITY IMPROVEMENTS**

Trails, ramps, green streets, and sidewalks enable people of all abilities to engage with the rivers. Most improvements are landside, but waterside mobility and transfer is also important.

#### green street connections

connections at Neighborhood Loops

#### bridge connections

existing trail-to-bridge ramps and proposed

- trail repair
  - areas in need of repair

#### micromobility stations

located near trailheads, in districts

56 | Completing the Loop | Vision Plan



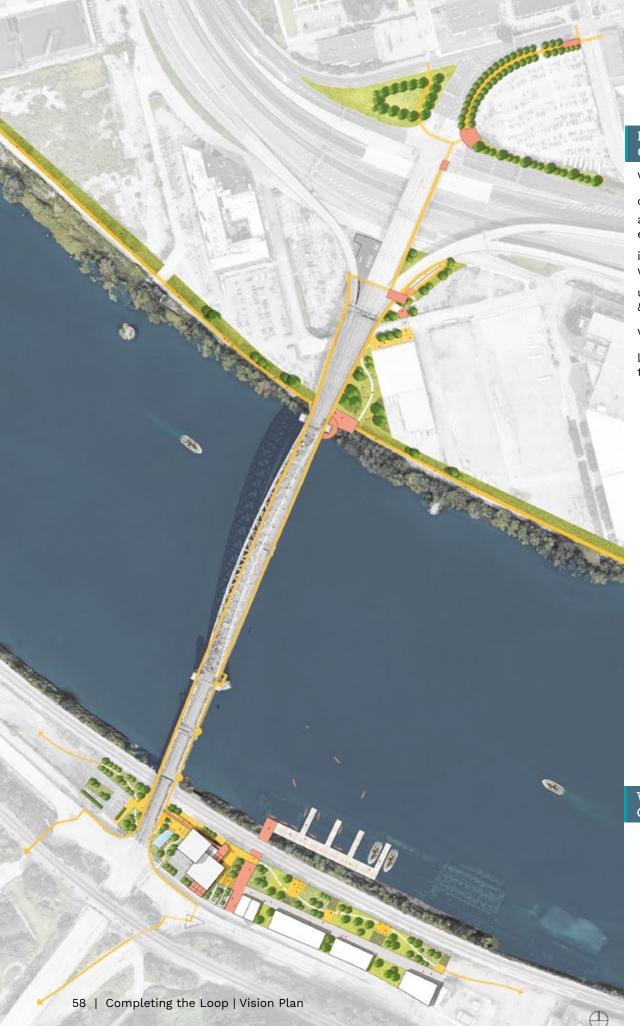
Confluence River Room **Essential Projects** West End Bridge



<image>

Manchester Gateway Park will be an artful destination with an accessible route connecting Manchester, the riverfront, and the West End Bridge. It will host many different activities, from trailhead access to seasonal events and will be an invitation into the Manchester neighborhood.

Saw Mill Run Gateway Park will be an ecological destination marking the entry of the Run into the Ohio River. It will catalyze future trail connections to the west and serve as an accessible route from the bridge deck to the river's edge. Enhanced connections will invite visitors to explore the West End's business district.



#### Manchester Gateway Park

will include:

complete streets a ramp from bridge to existing walkway

improved bridge walkways

under bridge park & pathway

wider bridge sidewalks

lighting installations on the bridge

West End Gateway Park

will include:

bridge overlooks

public docks

a river trail-to-bridge ramp

riverside park areas

# **Celebrate the West End Bridge**



The West End Bridge is a beautiful, historic bridge with incredible views of the downtown skyline to the east and the Ohio River valley to the west. Riverlife will celebrate this iconic bridge by enhancing the bridge itself through lighting and artistic installations, wider sidewalks, and dramatic overlooks on the bridge.



# **Manchester Gateway Park**

The Manchester-Chateau neighborhoods were bisected by the construction of Route 65 and the large interchange at the West End Bridge. The Manchester Gateway Park is one of a series of reconnection points that can stitch the neighborhoods back together and reclaim the river.



#### **RIVERFRONT OWNERSHIP**



County/State/Community Owned Public Owned Authority Private Owned //// Parcels without Ownership Info Water









# **Existing Conditions**

The space under the West End Bridge (a) covers a parking lot for adjacent warehouse buildings and is cathedral-like in proportion. A chain-link fence prevents access to the riverfront trail.

A stair from the parking lot (b) gives access to a perpendicular under-bridge passage (c). From the perpendicular passage you can cross under the bridge to an accessible ramp at the bridge deck, or can walk through a "chute" to cross the highway.

The perpendicular passage (c) is dark and full of litter and feels unwelcoming. There is little indication on where paths lead and may cause people to feel trapped if they enter.

There are existing sidewalks (d), that lead to the bridge but without access to the riverfront trail, there is no destination. There is no wayfinding to or across the river.

The parking lot (d) is unimproved and is not a strong gateway to the neighborhood. The trees at the perimeter create a path for river to neighborhood connection.



# **Manchester Gateway Park**

#### Precedents



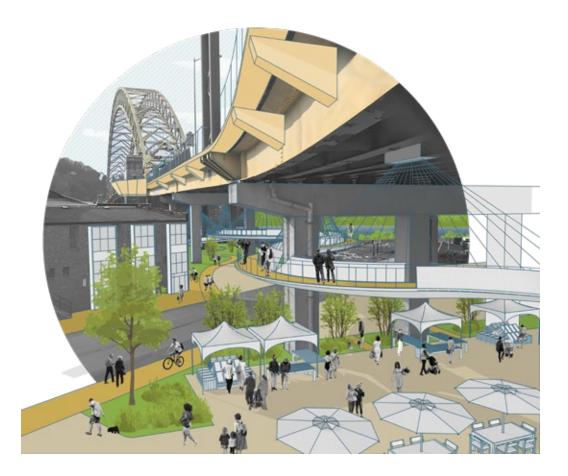
The Buffalo Bayou Promenade in Houston, TX converted freeways, and flood plains into a linear urban park with trails, public art and new street-to-water connections.



The upper and lower walkway railings can be united by creating a continuous ribbon railing that wraps across the bridge and is dramatically lit at night.



The passage could become part of a longer North Side artwalk and the bridge structure can be activated with provocative temporary art pieces.



The area below the West End Bridge has a cathedrallike quality where permanent artistic infrastructure like the hanging serpentine ramp and ground level events can attract people. A widened path makes it easier to cross the bridge.



Before



#### MANCHESTER GATEWAY TIMELINE

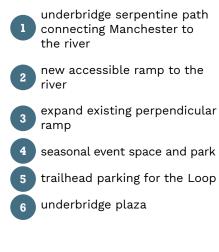
PennDOT bridge improvements Esplanade Development

Manchester gateway park masterplan river level and adjacent parcel redevelopment bridge reconstruction enhancements neighborhood right-of-way improvements



# **River Level**

An underbridge park would provide much needed connection to the river and transform a parking lot into a signature destination. The park could expand in area and could be programmed in coordination with adjacent parcel development. Alternative sites for more direct bridge-to-ground ramps should be explored.





# **Manchester Gateway Park**

#### Precedents



Entry plazas and rest areas should be distributed along the neighborhood passage and have amenities like benches, bike share stations, and signage.



Unique nighttime experiences can make the park a destination and connect it to other North Shore sites that are used for events and festivals. Side arts and cultural institutions.



Art installations can break up the long walk into the neighborhood and invite people to explore North



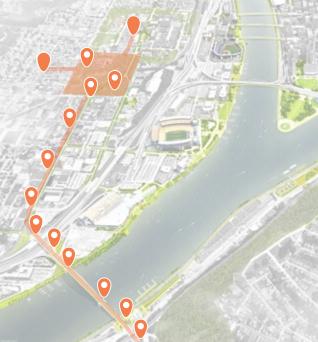
Landscape improvements at the entry to Manchester, such as an off-street sidewalk, benches, planting, and wayfinding, would connect people to destinations deeper in the North Side and should be integrated into future redevelopment of the large parking lot.



Before

The North Side has many arts and cultural institutions that could be represented in an Artwalk to the River. Permanent and temporary site-specific installations could be developed as a linear outdoor gallery, connecting the heart of the North Side to the Ohio River.







# **Bridge Level**

The walk across the West End Bridge is long and can have harsh conditions with wind and traffic. Viewing areas and artistic interventions can help break the long journey into manageable segments and can provide respite from exposure to cars and weather. Pier lookouts, path landings, and entry plazas are places to view, reorient, and discover what lies beyond.

 expansion of bridge deck and pier lookouts
 "hanging plaza" as a crossroads to the bridge, river, and neighborhood
 Manchester neighborhood entry plaza
 green street and plaza to Western Ave commercial district
 new accessible ramp to the river

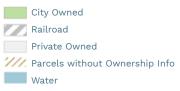


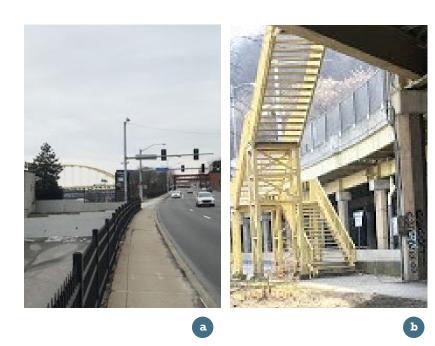
# Saw Mill Run Gateway Park

The West End neighborhood is separated from the river by steep hillsides and many generations of road interchanges at the end of the West End Bridge. The Saw Mill Run Gateway Park can connect the West End and hilltop neighborhoods to the river and celebrate one of the city's only open channel streams, Saw Mill Run.



#### **RIVERFRONT OWNERSHIP**







# Existing Conditions

The river trail currently ends at the Gateway Plaza property and travelers to the bridge use a poor quality sidewalk (a) with high volume traffic whizzing by just a few feet away. There is no safe, accessible route to get to the bridge deck without crossing traffic. There are two stairs (b) leading to walkways on either side of the bridge, but there is no pedestrian crossing at the bridge deck level.

Saw Mill Run has little to no presence at the end of the bridge (c) and the river access tunnel under the railroad is inaccessible because it is the entry to a docked Homeland Security barge.

There are small warehouses and multistory brick structures along the street, some of which are in use and others vacant. The remainder of the parcels is a scrap yards or former industrial sites.

С



# Saw Mill Run Gateway Park



Industrial warehouses and brick buildings can be rejuvenated to house a cluster of like-minded small businesses such as nonprofits, artists, or food purveyors. At ground level, commercial spaces such as a small cafe and meeting rooms offer flexible spaces for community use.



Before

#### Precedents

Bring attention to the natural systems of Saw Mill Run and the rivers by integrating industrial artifacts and restorative ecology. Encourage people to journey to this remote site and mark the gateway to points west with active furnishings that enliven spaces. Public facilities like a cafe or kayak rental will create year-round destinations and should open onto the plaza.





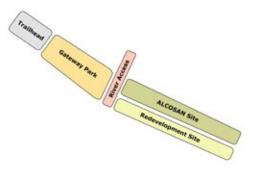
# **River Level**

Saw Mill Run Park will provide a public riverfront landing, new connections to Station Square and to the West, improved connections to the bridge, and year-round amenities that attract people to the site. Artistic installations and lighting will celebrate the West End Bridge and the Saw Mill Run outflow.

The linear park and adjacent nonprofit/arts incubator brings year round activity to the site and creates a new destination. This site is the likely location of staging for the ALCOSAN Ohio River tunnel construction and the park could become part of the ALCOSAN green "leave behind".



- riverfront path connecting to Station Square
- 5 incubator office space for artists / nonprofits coop
- 6 trailhead and location of future westward trails
  - rejuvenate existing structures





# Saw Mill Run Gateway Park



Celebrate the bridge by creating pier overlooks where people can gather and enjoy the views. New artistic elements can be contemporary in language but complimentary to the historical details. The work can be coordinated as part of PennDOT's West End Bridge improvements.



Before

#### Precedents

The sinuous language of the serpentine trail can be woven into the bridge deck expansion and through the river-to-bridge ramps. Lighting installations increase the visibility of the bridge from downtown and invite people to the bridge for after-dark experiences. Art installations on the West Carson railroad underpasses extend the Art Walk and signal the way to the West End Village.





# **Bridge Level**



accessible switchback ramp

Riverside Street plaza to get to trails, river access, and streets

- West End Landing and access road
- 5 redeveloped buildings with artists or river related activities

The path to the river can be aligned with existing trails in Emerald View Park to connect hilltop communities directly to the river—a river-toridge trail with premier views of Pittsburgh.







# Saw Mill Run Gateway Park

Narrow pinch points can be eliminated by doubling the width of the bridge walkway, especially in the large girder beam areas. There are two construction types where this is likely to be feasible, concrete construction and the steel bridge structure.



Before



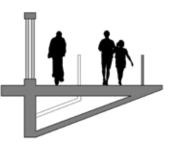








Demolish existing concrete barrier and cantilever extension from beam with full height chain link guard where needed (no railing).



#### b Path Extension b at Steel Bridge Structure

Install new steel brackets from steel beam. Remove and remount historic railing. Full height guard only where necessary.



## **Deck Expansion**

The bridge sidewalks are narrow and unsafe for passing in some areas. Riverlife is proposing to expand the sidewalk along the bridge. In addition to an accessible route to the trails, an expanded sidewalk could create a series of dramatic places to see the city and engage the riverfront. It may be possible to connect the street sidewalk directly to the ramp, making a more direct connection to the river.

- expansion of bridge deck and pier lookouts
- accessible switchback ramp to Saw Mill Run Park and trail

improved pedestrian conditions

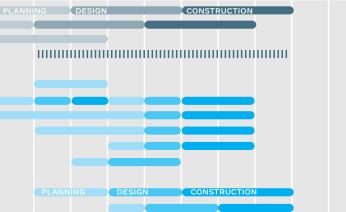
wayfinding and information on the river, the park, the neighborhood, and the Loop

possible direct connection from the bridge/Carson street sidewalk to the switchback.

path extension at concrete construction

path extension at steel bridge structure

#### 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030



#### SAW MILL RUN GATEWAY PARK TIMELINE

PennDOT bridge improvements ALCOSAN tunnel project Saw Mill Run Study Gateway View Plaza Redevelopment (window)

> ecopark masterplan redevelopment of street parcels redevelopment of SMR park site redevelopment of ALCOSAN parcel dock renovation west parking area

bridge reconstruction enhancements neighborhood right-of-way improvements

6 9 186 2 +++ +H HH 8 H LI. TH 11 TH0.0 5

74 | Completing the Loop | Vision Plan

9

9

7

5



North Shore Golden Triangle

> The popular places along the North Shore and Golden Triangle will be refreshed with infrastructure improvements, programs, and activities. Many places were built early in the development of the Loop and are in need of maintenance or updating.



Lead Partner Advise Renovations to **Allegheny Landing Park** have already begun. The Park will become a shining beacon with new programming, such as concerts, music festivals and food festivals.

**Allegheny Riverfront Park** Extension and Renovation will provide a safer and more world-class experience along the Allegheny River and provide a better setting for the **Black Lives Matter Mural** and Artist in Residence Program.

Riverlife will continue to collaborate with the Office of Public Art, the Cultural Trust, and the Pittsburgh Downtown Partnership to activate the riverfronts and engage visitors through **public art**.

**Nighttime activation** and programming of the riverfronts will ensure the use of the North Shore Riverfront Park beyond game days.

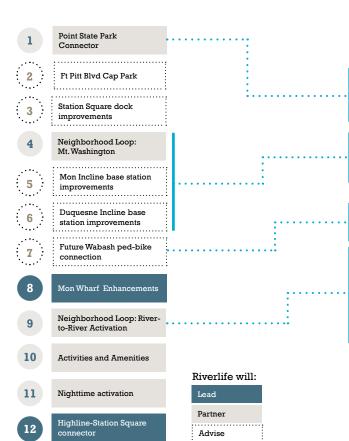


76 | Completing the Loop | Vision Plan





## Golden Triangle Station Square



Station Square and Golden Triangle can come to life with improvements to and better connections between existing river amenities.

The **Point State Park Connector** - providing an ADA accessible and pleasant connection from the Mon Wharf to Point State Park - will begin construction in the later part of 2021.

The **Mount Washington-River Loop** can become a first day attraction with improvements to the **lower incline stations** to connect them to an improved riverfront trail with newly developed destinations.

If the Port Authority opens the **Wabash Tunnel** to bikes and pedestrians, the riverfront can be connected to the Saw Mill Run greenways and future trails.

The Pittsburgh Downtown Partnership (PDP) is conducting a mobility plan for downtown, which includes the idea of **River-to-River Activation**, which would connect the Monongahela and Allegheny Riverfront through Market Square with streetscape and pedestrian improvements.

New developments like the Glasshouse Lofts are transforming parking lots into places.





## Station Square

The hillside inclines are exceptionally difficult to access and the lower station of the Duquesne Incline **(a)** is especially unwelcoming. A decked structure, visible from above, could serve as a park plaza with art and amenities and direct access to the river and would conceal parking and services below.





Precedent

The lower plaza can cross the railroad with a dramatic gesture visible from downtown. This can bring attention to the incline and landing as a destination.

unununununununun

ununununununun

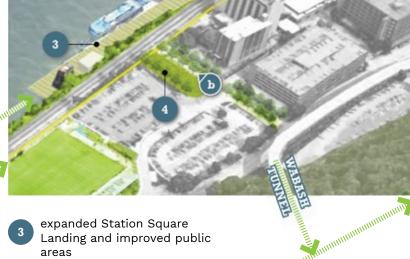


2

new landing for small craft and kayak rental

lower plaza for incline, including accessible route to river and decked parking





- expanded Station Square Landing and improved public

mannannannan

3

The public and commercial docks at Station Square are less than 1/2 mile apart but are rarely accessed without vehicles. The docks could be improved and conjoined for a true riverside experience.

MON INCLINE

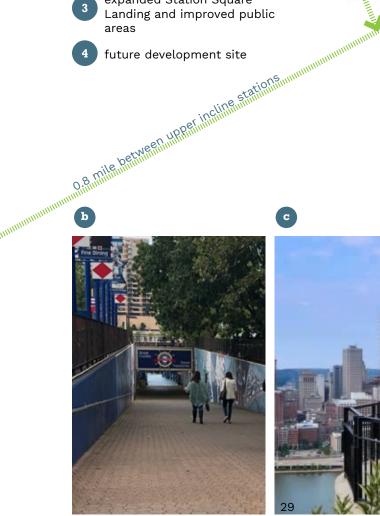
Station Square can also develop a "riverto-ridge" sequence for visitors to travel from the river's edge (b), to the Mt. Washington overlooks (c). Port Authority's ongoing renovations to the Mon Incline and PennDOT's safety improvements at West Carson Street are essential foundation blocks for the future.

#### Precedent

SMURING GEOGRAPHICAS

The trail that connects the Freighthouse to the Duquesne Incline lacks amenities and is separated from the river by the railroad. A new accessible floating riverwalk could connect the landings and provide rare riverfront access on the Mon.







The Allegheny River is Pittsburgh's recreational river with less barge traffic and more access for boating and fishing. This **River Room also** contains one of the last publicly-owned riverfront parcels that could become a public park ensuring that growth serves everyone.



RA SD WL



# Allegheny River Room The River Room Today

Riverlife determined the River Room workplan through field studies, technical analyses, and an engagement process. The River Avenue Corridor is heavily used and is primed to become a riverfront district. Similarly, the Strip District is undergoing significant growth, but is a patchwork of riverfront destinations and is not yet functioning as a linear park. Lastly, Washington's Landing, one of Pittsburgh's first riverfront destinations, can continue to improve and invest.

> " I feel like Troy Hill is unfairly excluded from the trails since there is no easy way to connect to them" —StoryMap respondent

### " There are portions here that feel simply unsafe" (River Avenue)

-StoryMap respondent



' In my almost half century, I have never experienced the Strip District Waterfront. I've never seen it... but it's something I'd like to see and experience"

-Virtual public meeting participant







## RA

## River Avenue Corridor

The River Avenue Corridor is poised for major development.

The River Avenue Corridor needs a better threshold and entry to the Loop at the 31st Street Bridge.

Calm traffic along River Avenue and provide better streetscape and crossing.

Create and enhance opportunities to pause and enjoy the river.

Provide better wayfinding into the district and between this district and neighboring districts.

Lighting and safety improvements are needed along the trail.

## Strip District

SD

The city tow pound site has 1,100 linear feet of publicly owned riverfront that is not publicly accessible.

The Strip District needs to be connected to the busway.

The Strip District is one of the fastest growing neighborhoods but lacks a park or open space.

The neighborhood would like a continuous, accessible, and high quality riverfront trail system.

Completing the Allegheny River Green Boulevard would connect the Strip to Lawrenceville and would increase opportunities to live car-free.

## WL

## Washington's Landing

Washington's Landing is one of a handful of places where you can dine on the river.

The back channel is a unique ecological habitat where beaver and other wildlife have been sighted there.

The back channel is home to regional rowing institutions and hosts regional and national activities and rowing events.

The URA owns a large vacant lot at River Avenue that could become a trailhead.

Additional amenities are needed at Washington's Landing North, such as bike racks and picnic tables, would diversify park use.

An abandoned railroad bridge at the island's north end could serve as a bike crossing to Millvale.



Allegheny River Room

**Existing Conditions** 

The Allegheny River Room includes the Strip District, River Avenue Corridor, and Washington's Landing. This River Room has been transformed by development in the past 20 years and is likely to see future decades of commercial and residential development.



### **STRIP DISTRICT**

The Strip District riverfront is rapidly transitioning from warehouses to mixed use developments. Tying the riverfront into the neighborhood should be easier in this district due to the dense urban grid and lack of an active rail line. However, the trail has gaps and varies in quality due to ambiguous riverfront ownership, railroad rights-of-way, and the diversity of development types. The City Tow Pound is a large, publicly owned parcel that could become park space providing community benefit, economic opportunity, and contributing to the tax base.



#### **RIVER AVENUE CORRIDOR**

River Avenue is a neighborhood scale street, parallel to the riverfront. The trail along the entire River Avenue Corridor is owned by the City. There are periodic parking places along the trail off of River Avenue. Although technically part of the Troy Hill Neighborhood, these segments provide limited opportunities to connect to the heart of Troy Hill or Spring Garden beyond. This area is also home to the new Light of Light Mission shelter and has an active community organization, the River Avenue Partnership.



#### WASHINGTON'S LANDING

Washington's Landing, a former brownfield site, was developed in the 1980s and 1990s with commercial and residential development as well as motorized and non-motorized boat access. It is one of the few areas of the Loop with single family housing and waterfront dining along the riverfront. It offers stunning river views and includes a privately maintained public park whose landscaping was recently renovated.







## Allegheny River Room

The River Room Context

According to the Trust for Public Land, communities with access to parks and open space have better mental and physical health outcomes<sup>1</sup>. Mapping the data provides insight into community challenges and helps identify opportunities to connect physically, culturally, and economically. The following maps were excerpted from a GIS analysis that informed Riverlife's proposed programs, amenities, infrastructure, and outreach.







#### PARKS

(within 1 mile radius of the river)

The Allegheny River Room has no major parks within a half mile of the river that could connect to the river open space. The River Avenue district is better connected to the North Shore and to Millvale's Riverfront Park. The shoreline is mostly naturalized with access, making the edge feel more park-like.

Source: WPRDC (Western Pennsylvania Regional Data Center) , Allegheny County Parks Department, https://data. wprdc.org/dataset/allegheny-county-parks-outlines1

90-100	walker's paradise, daily errands do not require a car
70-89	very walkable, most errands can be
	accomplished on foot
50-69	somewhat walkable, some errands can
	be accomplished on foot
25-49	car dependent, most errands require a
	car
0-24	car dependent, almost all errands
	require a car

#### WALK SCORE

River Avenue has good shoreline trails but is not well connected to adjacent communities because of slope conditions or poor infrastructure. The Strip District has good walkability to the river but does not have a continuous trail. Washington's Landing is a self-contained walkable environment, but is relatively remote from other neighborhoods.

Source: WPRDC (Western Pennsylvania Regional Data Center), Allegheny County Department of Health, https:// data.wprdc.org/dataset/allegheny-county-walk-scores

<sup>1</sup> Muqueeth, Sadiya. *Parks: A Vital Community Condition*. Trust for Public Land. 2021





#### AVERAGE AGGREGATE HOUSEHOLD INCOME

Historically there was not much housing density in the Allegheny River Room so much of the housing is newer and market rate and upper brackets. Special attention should be given to the distribution of riverfront access and amenities and future outreach should target economically diverse households.

Source: Urban Footprint, Allegheny County Census - Income Census Planning Database 2018

0.0 - 5.0
5.0 - 10.0
10.0 - 20.0
20.0 - 40.0
40.0 - 60.0
60.0 - 99.0

Values range from 0 to 100. the higher the score, the less exposure to poverty in a neighborhood.

#### **POVERTY INDEX SCORES**

(within 1 mile radius of the river)

Census data indicates that there are areas of high poverty near to the trail system but not adjacent to it. Connecting lower income populations to the river will require investment in streetscape improvements and coordinated transit and/or micromobility. Monitor changes in the poverty index to maintain affordable living opportunities close to the river.

Source: Urban Footprint, Allegheny County Census - Low Poverty Index 2017



#### **RACE AND ETHNICITY**

Population density is relatively low in the adjacent districts. Neighborhoods directly adjacent to the river have few residents, although this is changing with new market rate development. Neighborhoods just beyond are much more dense and diverse in race and ethnicity. Special attention should be given to outreach and access to a representation of residents in the 1 mile radius.

Source: Urban Footprint, Allegheny County Census - Race and Ethnicity Census Planning Database 2019

#### Neighborhood Loop: Strip District

Connections between the Penn Avenue business district and the riverfront will activate both places and create a more cohesive experience.

#### City Landing Park

Design Futures Allegheny River Room

This public park will provide much needed open space for the Strip District and provide an additional public landing in a River Room.

----

#### Strip Landings and Riverbank Restoration

More places to access the water will activate the shoreline. Riverbank restoration will restore a more natural ecology

#### **River Avenue District**

A strong link between River Avenue Corridor improvements and river-oriented development will strengthen the District.

#### Neighborhood Loop: Troy Hill

Green streets, intersection improvements, and wayfinding will bring the neighborhood to the river and the river to the neighborhood.

#### **River Avenue Trailhead**

The trailhead and path will create a better connection between the 31st Street Bridge and River Avenue and create an entrance into the Loop.



Allegheny River Room
Anchors, Activities, & Amenities





Riverlife will: Lead Partner Advise

Restoration

The Allegheny River Room is the fastest growing River Room with incremental, parcel-based additions to the Loop. The greatest challenge is to maintain a cohesive design standard at the river and ensure that the amenities serve all.

**Publicly owned parks** will ensure that the public has long-term access and will provide amenities that are unlikely to be built on private property. If possible, the properties can include development that helps to support and possibly subsidize park improvements.

**Regularly spaced river landings** create a rhythm of destinations in the Strip, one of the most visited locations in the Loop. Although many of the landings have been promised as part of adjacent development plans, consistent design standards, amenities, and maintenance will need to be coordinated across property owners.

**Bridge connections** will provide safer and more direct connections to the riverfront, making it more inviting to cross from one side of the river to the other and completing an off-street bike-ped trail system.

**Neighborhood loops** will be planned with the City and the communities to create well marked routes to the river. Safe routes and signage help people discover attractions and businesses that are near the river and give the river presence within the community.

**Connections to public transit and mobility choice** needs to be a priority and will support public spaces on the riverfront. Existing public transit routes on Liberty Avenue and Penn Avenue would be augmented with a busway station that provides fast service to major destinations in East Liberty and Downtown. A robust bike-ped network will decrease the number of vehicles and be a competitive advantage, as Strip residents and employers can be less car-reliant.

Recommended activities include: Activity barges, such as swim barges Kayaking and boating events Open Streets on the 31st Street Bridge Open Streets on the 16th Street Bridge Tree planting events Nature walks, birding events Food truck festivals Nightime activation Lighting installations Dragon boat races Other non-motorized boat races Triathlon Allegheny River Room Fun Run-Walk Artwalk on the Allegheny Allegheny River Room



**Kit of Parts** 

Amenities and infrastructure should be well distributed within each River Room and the entire Loop to create a cohesive experience. The amenities are often provided in commercial development areas as well as in dedicated public installations.



- linear area recommended
- linear area existing
- recommended
- confirmed existing

#### SUPPORT AMENITIES

Support amenities provide public comfort facilities or river access and should be distributed throughout the river. Privately developed areas often provide many of these amenities.

- trailheads and restrooms
  - dedicated or publicly available

landings	
boat launches ar	1

- boat launches and/or docks, kayak launches
- rest areas / seating needed in areas with no adjacent development
- repair stations
  - at trailheads or dedicated locations



Arts and activities amenities can activate areas and create seasonal or permanent attractions. Furnishings, play areas, water features, and art have a physical component and can be good opportunities to partner with other organizations on events and programming.

#### feature furnishings

seasonal or permanent to activate spaces

## play areas

- large or small, destinations
- water places
- seasonal or permanent

#### public art

seasonal or permanent installations









#### INFRASTRUCTURE

Infrastructure makes it easier to use the riverfronts by orienting people, providing basic services, and creating a sense of safety.

••	wayfinding & signage trailheads, entries, facilities
••	<b>lighting</b> focus on underlit areas
••	charging stations and wifi areas remote from publicly available
	dog park

dispersed throughout

#### **ECOLOGY**

Ecological improvements create healthier conditions for humans as well as plants and animals. This includes the restoration of river habitat and monitoring sources of water and air pollution.

access

#### ecological restoration

poor quality riverbank or ALCOSAN investment areas

	outfall overlooks & tunnel toppers
$\mathbf{\mathbf{\nabla}}$	existing CSOs and anticipated tunnel locations

air quality monitors

trailheads, rest areas, high exposure areas

#### **MOBILITY IMPROVEMENTS**

Trails, ramps, green streets, and sidewalks enable people of all abilities to engage with the rivers. Most improvements are landside, but waterside mobility and transfer is also important.

#### green street connections

connections at Neighborhood Loops

#### bridge connections

existing trail-to-bridge ramps and proposed

#### 🗕 trail repair

areas in need of repair

#### micromobility stations

located near trailheads, in districts

94 | Completing the Loop | Vision Plan

C

1

....

5

2

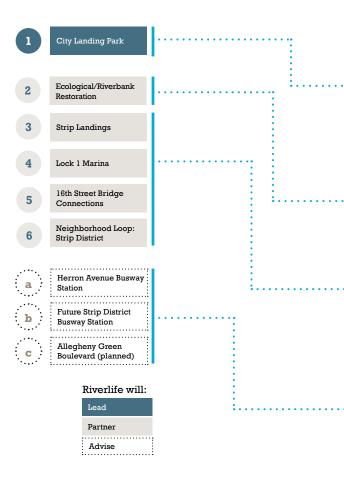
3

4

3

H





The Strip District improvements fall into three major categories, a major public park, landings, and transit infrastructure.

The **City Landing Park** is the major destination of the Allegheny River Room and is a 14 acres redevelopment opportunity. The 1,100 linear feet of frontage is over 12% of the frontage in the Strip District and can anchor the district and the Loop. The Park will also serve the neighborhoods northeast of the Strip, including Lawrenceville and Bloomfield and will be near to future major developments at the historic Iron City Brewery.

**Ecological and riverbank restoration** is especially critical in the Strip, as the conditions are poor and the development is close to the river edge. A parcel-by-parcel approach to restoration will be difficult and collaboration across properties would likely be more cost effective.

Landings should be spaced every 3-4 blocks and will be the conduit to the Penn Avenue business district. To create a cohesive series of destinations, the landings can be branded with locational names such as "Landing @15th" or by a series of historical and nearby landmarks. Riverlife's Strip District Vision Plan laid out a plan for a series of public space along the Strip's riverfront. Riverlife's advocacy may be needed to help coordinate amenities and programming across the locations.

**Future transit infrastructure** could better serve the businesses and residents of the Strip and decrease the impact of vehicles. New/expanded busway stations and transit oriented development would become gateways into the neighborhood and possibly into the upslope communities of Polish Hill and the Hill District. The Allegheny Green Boulevard is the major conduit to Lawrenceville and eventually to further afield neighborhoods like Morningside and Highland Park.



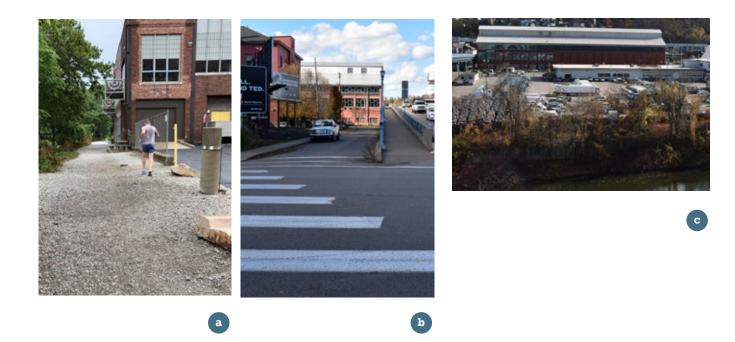
Strip District

## **Existing Conditions**



The City's tow pound site is one of the largest in the Strip and has long accommodated multiple uses. To break down the scale of the site and to deliver utilities and infrastructure, the parcel should be organized into areas

of similar uses. Pedestrian and vehicle connections should be integrated into the Strip's street grid. View corridors and ecological corridors should connect the neighborhood to the river and create a walkable and welcoming site.



#### **RIVERFRONT OWNERSHIP**

City Owned County/State/Community Owned Public Owned Authority Railroad Private Owned Water

ALLEGHENY RIVER ROOM | 97





#### Precedents



Floating barge on the Danube River, Budapest



PHS Pop Up Garden at uCity Square, Philadelphia

## **City Landing Park**

As one of the last large publicly-owned parcels along the river, this site provides an unparalleled opportunity to create a unique destination riverfront park. The public site can also incorporate affordable housing and community organizations, to ensure equitable access in the Strip District neighborhood.

Riverlife will advocate for and facilitate a community driven process to achieve mixed-use, mixed-income development, public space, river access and a new bridge connection that is accessible to all. New park and river oriented commercial spaces would invite people to the park and provide much-needed amenities along the riverfront. Visitors can enjoy a variety of active and passive recreation opportunities and experience different outdoor rooms with swings, benches, or other creative ways to watch the river.

A new connection to the 31st Street Bridge will make it easier to get to the river and provide better connectivity for communities across the river.



Underbridge skate park, Stockholm



"We need unique things to do to make this park a destination." —StoryMap respondent



#### 20**21** 20**22** 20**23** 20**24** 20**25** 20**26** 20**27** 20**28** 20**29** 20**30**

PLANNING DESIGN CONSTRUCTION

#### **CITY LANDING PARK TIMELINE**

park masterplanning/proforma/developer RFP landing construction park construction commercial/housing site development new connection to 31st street bridge





picnic lawn



active recreation



City Landing Park supports many different activities and is a destination on land as well as on the water. accessible ramp to bridge
 anchor development
 cafe









river viewing



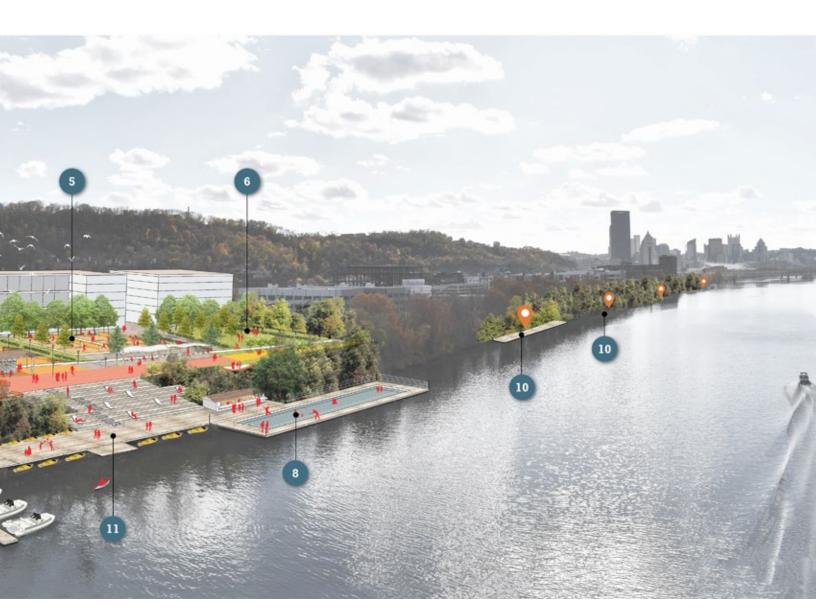
treetop ramp



seasonal dining

people watching

swings





active recreation

passive recreation



8

swim barge

river landing/docks



strip district landings

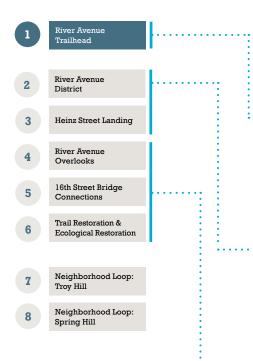
riverfront beach steps

accessible path to the river





## **River Avenue Corridor**



The River Avenue Corridor will have a proposed new trailhead anchored by the incremental development of a commercial and residential neighborhood at the historic Heinz Lofts.

The **River Avenue Trailhead** is an important entry point to the trail system for people who live in hilltop neighborhoods and other neighborhoods who primarily access the Loop by car or public transit. Parking and trailhead amenities orient people to the Loop and advocacy for transit access will diversify mobility options. Safety improvements at the 31st Street Bridge intersection will include off-street access to the new trailhead.

The **River Avenue District** is anchored by Heinz Lofts and future development can orient to the river with public spaces and small cafes/shops that attract trail users. There are few places in the Loop for riverfront dining or river-oriented commercial development. The River Avenue District is an opportunity to integrate these elements.

**Trail maintenance and ecological restoration** are complimentary activities. Many of the riverbanks in the River Avenue District are accessible and naturalized. People often scramble down to the river's edge to fish or to sit on the narrow gravel beaches and there are landmarks like a shipwreck that are popular with kayakers and trail users. Providing stairs and a few areas of safe descent will make the river's edge more accessible. ALCOSAN deep tunnel work and improvements to combined sewer structures could provide fully accessible River Avenue overlooks.



#### Typical Trailhead Elements

Every trailhead should have some combination of the following: parking lighting signage seating bike parking bike repair station trail access





## Washington's Landing



Washington's Landing is already a desirable destination within the Loop, with a marina, restaurant, residential and commercial uses, and an outdoor park. It is home to crew teams from around the region and the back channel is an excellent place to get onto the river.

The proposed **Washington's Landing trailhead** will help people orient to the island's amenities. The existing parking lot could serve as a designated trailhead with trail orientation signage and a map of island amenities. Additional amenities such as picnic tables and other seating at the northern end of the island would take advantage of the existing park and views. Some pinch points on the trail could be improved for safety.

**Island landscaping** has recently been updated and invasives will continue to be a problem here and elsewhere in the Loop. Coordination of efforts can yield an economy of scale.

The **back channel** is popular with non-motorized craft like rowers, kayakers, and dragon boaters. Commercial or public facilities would provide much needed amenities.

The existing abandoned **railroad bridge** could be restored to provide another access to the shoreline trail and help make the island less of a "cul-de-sac" on the trail.







Before



## River Avenue Corridor

#### **River Avenue Trailhead**

A new trailhead will raise the visibility of the Loop and will be an entry point for people driving to the river as well as those walking or biking over the 31st Street Bridge. The site could support food trucks or other temporary activity.

The sidewalk is off-street for a safer, accessible, and more pleasant journey to the trail entrance.

Pedestrian and cyclist improvements are needed to calm traffic and allow people coming from the 31st Street Bridge and from Troy Hill to cross both busy intersections.

Regional destination signage will alert drivers to the trailhead and riverfront access.



#### RIVER AVENUE TRAILHEAD TIMELINE

park masterplanning/proforma/developer RFP

#### 20**21** 20**22** 20**23** 20**24** 20**25** 20**26** 20**27** 20**28** 20**29** 20**30**





#### Precedents

PennDOT's control of the 31st Street Bridge will make alterations difficult but other local communities have worked with similar constraint to invite people to their riverfront.

Trail furniture and signage can be integrated to keep the vocabulary simple across the many different types of installations. Use of a consistent system will orient people to local destinations, to distant destinations, and to the river.







## River Avenue Corridor Washington's Landing



Pleasant, well lit, and safe crossings under the railroad and over highways will connect nearby neighborhoods and institutions like the Sarah Heinz House to the river.



The Allegheny River Room is one of the few places in the Loop where people can live within easy reach of the water, attracting people who enjoy river activities and housing that accommodates kayaks, bikes, and active living.

The homes on Washington's Landing and the Heinz Lofts, as well as housing clusters in the Strip, are the beginning of a riverfront residential neighborhood. Creative, riveroriented infill housing, inclusive of affordable unites, can transform disconnected clusters on the Allegheny into a unique residential and mixed-use neighborhood.

On-river houseboat communities are popular in other cities and might be possible on the Allegheny, given its low volumes of commercial river traffic. River housing might also extend to river-oriented hotels that offer amenities and unique forms that take advantage of being near the water.

Unit diversity will enable people with different income levels to live in riverfront neighborhoods. Market-rate units are needed to meet demand across the City. Affordable housing on the river are also essential to create equitable development. A growing and diverse population will attract neighborhood amenities such as cafes, small grocers, and other shops that compliment the regional attractions in the Strip District. Allegheny River Room housing is in clusters of multifamily and townhouse developments with riverside dining and dock services nearby.



#### Precedents

Riverfront housing can take advantage of views, sun, wind, and other contextual conditions.

Houseboat neighborhoods can be permanent or seasonal.





Some of the city's most populous neighborhoods line the Monongahela River, but there are few places to get to the shoreline. Expanded parks, bridge connections, accessible neighborhood trails, and new landings will celebrate the connections and overcome railroads, highways, and other challenges to river access.



SS SA



# Monongahela River Room The River Room Today

Riverlife determined the River Room workplan through field studies, technical analyses, and an engagement process. The South Side and Second Avenue Corridors are functional but few people feel inspired by the poor conditions or difficult alignment and access that prevents the River Room from growing.

> "Portions of the Eliza Furnace Trail...don't feel safe as a woman. Exits are limited and the only "eyes on the trail" are cars zooming by."

-StoryMap respondent

" Continue to focus on areas that have been marginalized and disinvested in, these are the areas where increased access will have the most impact."

-Virtual public meeting participant

"[South Shore Riverfront Park] looks nice, but there is no reason to spend any time there, no programming, commercial activity, or 'stickyness.'"

—StoryMap respondent







SA

### South Side

### Second Avenue Corridor

There are only three places to access the trail between South Shore Riverfront Park and 4th Street.

Additional connections to the trail need to be created where possible.

Where connections to the trail do exist, they should be celebrated with clear connections into the neighborhood.

The on-street detour at Fourth Street should be replaced with a continuous riverfront trail.

The existing South Side Riverfront Park is well loved and well used, but could benefit from some improvements.

The area between South Shore Riverfront Park and 4th Street feels abandoned and uncared for.

4th Street by the Highline is an ideal location for a new trailhead and improved water landing. The Eliza Furnace Trail does not provide a riverfront experience.

A seldom used rail spur that runs along the river at the Pittsburgh Technology Center (PTC) could be repurposed to as a riverfront trail.

Second Avenue Corridor lacks green space and river access. A park can be created at the M19 Sewer Outfall.

Once a park and riverfront trail are established, additional river landings could be created.

Additional Eliza Furnace Trail entrances should be created to connect it to Uptown and the Hill District via Brady Street and to South Oakland via Bates Street.



# Monongahela River Room Existing Conditions

The Monongahela River, or the Mon, is Pittsburgh's "working river" where barges still carry tons of coal, coke, iron, and steel. Known to the Native Americans as the "river with high banks that fall," the Mon's steep topography and its legacy industrial uses mean that few people live next to the riverfront and access is difficult. Making the most of the connections that do exist and creating new connections where possible is a priority on both sides of this River Room.



### SOUTH SIDE

The South Side district has a continuous riverfront trail that is separated from the adjacent neighborhood by an active rail line. Connecting to the riverfront is challenging because only three railroad crossings exist: Tunnel Park at South Side Works, 18th Street, and 4th Street. Much has been done already: a significant portion of the riverfront is already designated and managed as park space including South Shore Riverfront Park at South Side Works and South Side Riverfront Park. The area west of 18th Street is not managed as a park but is maintained by volunteer efforts.



### SECOND AVENUE CORRIDOR

The Second Avenue Corridor contains the regional Eliza Furnace Trail and is the GAP trail entry into downtown. While it provides an accessible, well-used commuter route, it is disconnected from both the river and the adjacent neighborhoods and its location between the two highways makes for noisy, uncomfortable trail conditions. The Pittsburgh Technology Center has spectacular views of the river and city skyline, but it lacks a continuous trail along the river.







# Monongahela River Room The River Room Context

According to the Trust for Public Land, communities with access to parks and open space have better mental and physical health outcomes<sup>1</sup>. Mapping the data provides insight into community challenges and helps identify opportunities to connect physically, culturally, and economically. The following maps were excerpted from a GIS analysis that informed Riverlife's proposed programs, amenities, infrastructure, and outreach.



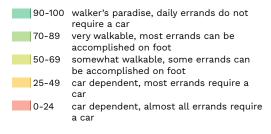


### PARKS

(within 1 mile radius of the river)

The Monongahela River Room has the South Side Riverfront Park within a half mile of the river and a few hillside parks just beyond 1/2 mile. There are few small parks and no large parks within 1/2 mile of the Second Avenue district.

Source: WPRDC (Western Pennsylvania Regional Data Center) , Allegheny County Parks Department, https://data. wprdc.org/dataset/allegheny-county-parks-outlines1Data:



### NATIONAL WALKABILITY INDEX

It is easy to walk around the South Side, but the grid is pinched and has few places to cross the railroad. The Second Avenue district has little neighborhood fabric and so is not easily walkable.

Source: WPRDC (Western Pennsylvania Regional Data Center), Allegheny County Department of Health, https:// data.wprdc.org/dataset/allegheny-county-walk-scores

<sup>1</sup> Muqueeth, Sadiya. *Parks: A Vital Community Condition*. Trust for Public Land. 2021







### AVERAGE AGGREGATE HOUSEHOLD INCOME

The Second Avenue district has few people that live within the boundaries. In adjacent neighborhoods, the average household incomes are low but there is more income diversity as new housing is being built. The South Side has a mix of incomes with a diversity of housing types and conditions.

Source: Urban Footprint, Allegheny County Census - Income Census Planning Database 2018



Values range from 0 to 100. the higher the score, the less exposure to poverty in a neighborhood.

#### **POVERTY INDEX**

(within 1 mile radius of the river)

Similar to the Household Income index, the Second Avenue district has few people that live within the boundaries, although those that do have high exposure to poverty. The South Side has lower exposure to poverty with its mix of housing types and conditions.

Source: Urban Footprint, Allegheny County Census - Low Poverty Index 2017



#### **RACE AND ETHNICITY**

The Second Avenue district has few people that live within the boundaries. Adjacent neighborhoods, to the north are diverse with a majority African American population. The South Side district and adjacent neighborhoods also have a diverse population, with the majority White population.

Source: Urban Footprint, Allegheny County Census - Race and Ethnicity Census Planning Database 2019

### Neighborhood Loops: The Hill, Uptown, Oakland, & Schenley Park

Road safety improvements and direct riverfront access will better connect city neighborhoods and regional parks to the river and Eliza Furnace Trail.

### Riverbank Restoration

Riverbank restoration will improve the structural and ecological conditions along much of the river.

118 | Completing the Loop | Vision Plan

### Neighborhood Loop: Carson Street

Green streets and wayfinding signage will connect the neighborhood and river, bringing new life to both.

### Park Extension & Bridge Connection

Expanding South Side Riverfront Park to 4th Street will extend a safe and pleasant trail experience and a new bridge ramp at 10th Street will provide a better connection to regional trail networks.

### Fourth Street Landing

Trail and landing improvements will allow recreational and industrial users to use the riverfront safely and will better connect Station Square to the trail network.







Riverlife will:



The Monongahela River Room is anchored by one of the most recent riverfront developments, South Side Works, but has little development that is river oriented. The restricted access due to the railroads and highways is the greatest challenge to creating a robust River Room with activity on both sides of the river.

A designation of a continuous riverfront public park and private development in the South Side District could improve the conditions of the existing trail areas and clarify ownership and maintenance requirements. Additional bridge access points could provide crucial links from the South Side neighborhood and increase the perception of safety on the trails.

**Neighborhood connections** are important to connect communities who have historically been disconnected from the river and could be distant from current planned improvements. Physical improvements like sidewalks, bike lanes, signals, signage, and other infrastructure can be planned with the City and the communities to create well-marked routes to the river. Many of these connections are also being studied in neighborhood planning efforts and it is a good opportunity to align processes.

**Ecological restoration** is needed along all the banks, but especially those that are not visible or are not often visited.

**River-oriented masterplanned developments** such as the newly developing Hazelwood Green or the long-established Pittsburgh Technology Center (PTC) offer opportunities to make, add, or improve trails and connect more people to the Loop. Riverlife will advocate for and advise others who want to improve their properties and enhance the Loop.

Recommended activities include: Kinetic art sculptures (Eliza Furnace trail) Land Art Generator Solar Power competition Boating, fishing, and kayaking events Monongahela River Room Fun Run Public art murals (Eliza Furnace trail) Light Art at 10th Street Bridge Monongahela River Room

**Kit of Parts** 

SA



Amenities and infrastructure should be well distributed within each River Room and the entire Loop to create a cohesive experience. The amenities are often provided in commercial development areas as well as in dedicated public installations.



#### **ARTS & ACTIVITIES AMENITIES**

Arts and activities amenities can activate areas and create seasonal or permanent attractions. Furnishings, play areas, water features, and art have a physical component and can be good opportunities to partner with other organizations on events and programming.

#### feature furnishings

seasonal or permanent to activate spaces, at a view

### play areas

large or small, destinations

### water places

seasonal or permanent

### public art

seasonal or permanent installations



### INFRASTRUCTURE

Infrastructure makes it easier to use the riverfronts by orienting people, providing basic services, and creating a sense of safety.

••	wayfinding & signage trailheads, entries, facilities
••	<b>lighting</b> focus on underlit areas
••	charging stations and wifi areas remote from publicly available access
♥ ●	<b>dog park</b> dispersed throughout

#### **ECOLOGY**

Ecological improvements create healthier conditions for humans as well as plants and animals. This includes the restoration of river habitat and monitoring sources of water and air pollution.

ecological restoration

**v** poor quality riverbank or ALCOSAN investment areas

- outfall overlooks & tunnel toppers
- existing CSOs and anticipated tunnel locations
- air quality monitors
- trailheads, rest areas, high exposure areas

#### **MOBILITY IMPROVEMENTS**

Trails, ramps, green streets, and sidewalks enable people of all abilities to engage with the rivers. Most improvements are landside, but waterside mobility and transfer is also important.

### green street connections

connections at Neighborhood Loops

### bridge connections

existing trail-to-bridge ramps and proposed

### trail repair

areas in need of repair

### micromobility stations

located near trailheads, in districts



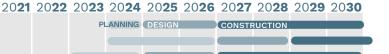
### Fourth Street Landing & Park Extension



### SOUTH SIDE TIMELINE

park extension - trail lighting 10th street bridge connector and landing 4th street landing and trailhead

4

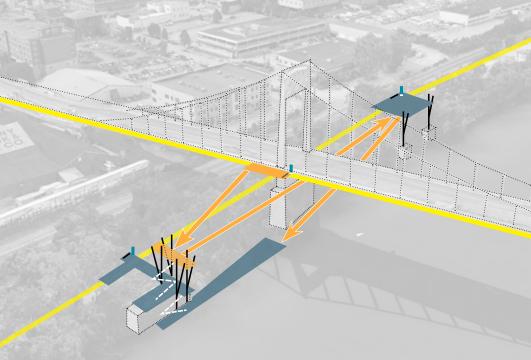




- Highline-Station Square connector
- park extension
- green street connector
- 4th Street Landing
- 5 streetscape improvements
- 6 direct trail-10th street bridge connection
  - trailhead

The continuous trail on the South Side varies in quality and in the types of adjacent amenities. An expanded South Side Riverfront Park would give the South Side a true linear riverfront park and ensure a consistent standard of care. The extension would terminate at the Fourth Street Landing, also referred to as Color Park, and would be served by the Highline development and amenities.

The CSX railroad limits legal crossings to Fourth Street and Eighteenth Street. A direct bridge-to-trail ramp at 10th Street would more easily connect the South Side and Uptown to the riverfront. The ramp could incorporate the existing bridge pier and a nearby abandoned bridge pier and have a river landing.



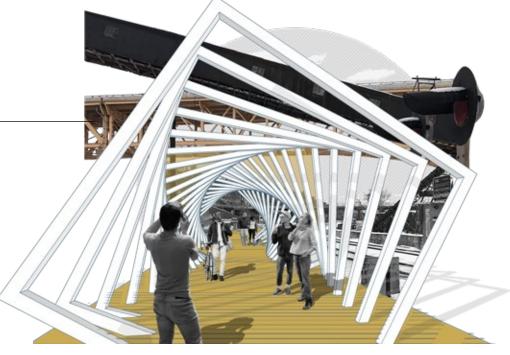


### Fourth Street Landing & Park Extension





Before: The trail currently diverts to the road to avoid passing under existing industrial uses and crossing onto railroad property.



The Highline-Station Square Connector will create a safe, continuous riverfront experience without forcing trail users to detour on narrow city streets with heavy truck traffic. There are pinch points between the railroad property, a portion of the highline building, the concrete plant and the County garage. Artistic installations at the concrete plant will allow for trail users, industrial users, and the railroad to safely coexist and can become a destination. Renovating the existing 4th Street Kayak landing will create a larger, more accessible facility.

All these projects will require working with adjacent property owners, the City, the railroad, and ALCOSAN.



	1	expanded kayak landing
l	2	4th street trailhead
8	3	highline-station square connector
1 Card	4	future station square east development
11000	•	existing railroad crossing



### Pittsburgh Technology Center

A new Pittsburgh Technology Center spur to the Eliza Furnace Trail can be a riverfront alternative that connects Schenley Park and Hazelwood Green and provides riverfront access to Uptown and the Hill.



Before

### South Side Riverfront Park

Improvements to South Side Riverfront park can happen concurrent to ALCOSAN's likely deep tunnel project. The park is heavily used and in need of trail maintenance, stormwater control, and furnishings and amenities.



Before





### **LOOP WAYFINDING**

Three types of signage help people move through the Loop, find destinations outside the Loop, and get to the Loop.

### WASHINGTON, DC 283 miles

Signage promotes the GAP trail and connects Pittsburgh to national destinations.

### **OAKLAND** 1/4 mile

Signage directs people to neighborhood destinations.



### **South Side Works**

The South Side Works is a major destination for riverfront experiences, including restaurants, retail, and ample trail parking. Recent investments in the public space will focus more attention on the river and South Shore Riverfront Park Marina.







### Eliza Furnace Trail Connections

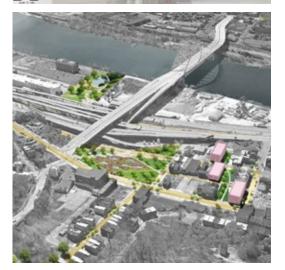
Steep slopes and more than 15 highway lanes of traffic separate adjacent neighborhoods from the north shore of the Monongahela River.

"Connectors" on the Eliza Furnace Trail are respite areas with repair stations, signage, and other amenities that promote the nearby neighborhood destinations.

Each of these trailheads also corresponds to a sewer outflow that will likely need to be rebuilt or reconfigured in future sewage system upgrades and each can become a unique destination along a part of the trail that has few places to stop. A consistent design language and complimentary amenities can create a sense of unity for each of the unique locations.









Concept plans for connecting Uptown to the Eliza Furnace Trail via Brady Street (above images: Uptown Eco-Innovation District Plan and Pashek/MTR) Concept for an Eliza Furnace Trail Connection and Outlet Park (bottom image: PWSA, Green First Plan, evolveEA)

### **ELIZA FURNACE TRAIL TIMELINE**

2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

DESIGN

@Brady street, including connection to Forbes @Bates Street

DESIGN	CONSTRUCTION

CONSTRUCTION

### **Oakland Connector**

This highly congested area leads directly to Pittsburgh's densest neighborhood, Oakland. Although it is close to the PTC landings and the Hot Metal Bridge, there is no direct connection to the trail.

### **Uptown Connector**

Navigating the maze of highway infrastructure with a safe trail connection would connect the Uptown, Hill District, and Oakland neighborhoods to the riverfront when a future outfall park is created.

### Four Mile Run Connector

Thousands of people live near Schenley Park and Hazelwood Greenway, which are less than a quarter mile from a possible outflow park at Hazelwood Green.





# Loop Technical Assessment

相關

05 Riverfront Scorecard

atten of the station

Inc

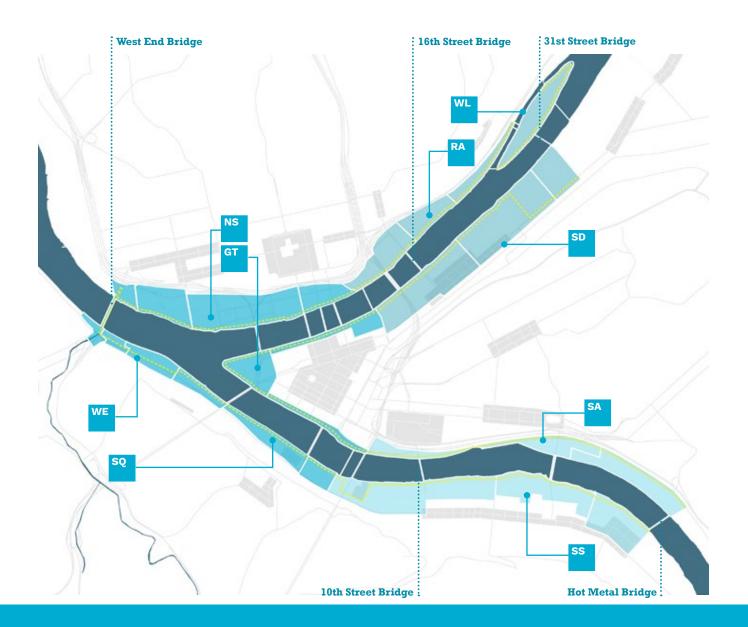
- 06 Planning for the Future of the Loop
- 07 Confluence River Room
- 08 Allegheny River Room
- 09 Monongahela River Room
- 10 Budgeting the Loop

## Introduction

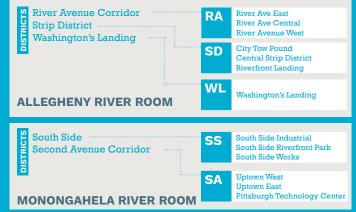
The technical assessment provides the detailed description of the process and analysis that led to the vision and design concepts presented in the vision plan, benchmarks current conditions within the Loop, and serves as a checklist as Riverlife works to *Complete the Loop*.

The next chapters provide additional details on the riverfront scorecards and on the public engagement process and how these informed the vision and recommendations. Chapters for each of the three River Rooms present the site assessment for each district, detail the site inventory based on the scorecard criteria, and identify opportunities and challenges. These chapters provide a snapshot in time against which future improvements in the Loop can be measured.

Pages <b>134 -149</b>	<b>RIVERFRONT SCORECARD</b> Detailing the five criteria used to evaluate the Loop, identify priority gaps, and benchmark existing conditions.
Pages <b>150-161</b>	<b>PLANNING FOR THE FUTURE OF THE LOOP</b> Documenting the public engagement during the <i>Completing the Loop</i> process and how public engagement was used to develop design recommendations and establish priorities.
Pages <b>162-193</b>	RIVER ROOM CHAPTERS
Pages <b>194–215</b> Pages <b>216–235</b>	Site Assessment by District Scorecards for the River Room Comparing the segments within each River Room on overall scores in each of the numeric scorecard categories. Opportunities and Challenges by District Site Inventory by District Site inventory organized by the five scorecard criteria
Pages <b>236-243</b>	BUDGETING THE LOOP High-level estimate of the order-of-magnitude cost to Complete the Loop.









# 05 Riverfront Scorecard

Connectivity Place Ecology Maintenance Experience

----

6111

. .

H

1111 COLD

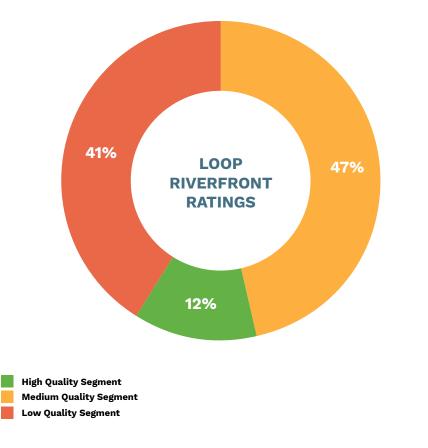
## **Riverfront Scorecard**

Riverlife developed a scorecard to assess the existing conditions of the riverfront that informed the development and prioritization of recommendations.

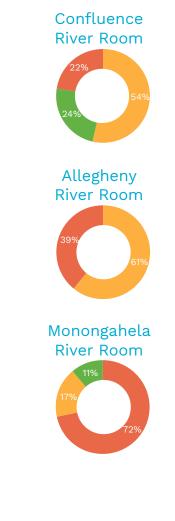
The scorecard criteria are informed by Riverlife's new mission, vision, and values, the *Guide to Riverfront Development* (2014) document, the *Landscape Management Guidelines* (2006), and the Riverfront Zoning Design Guidelines that were created as part of Pittsburgh's riverfront zoning code (referred to as the "RIV").

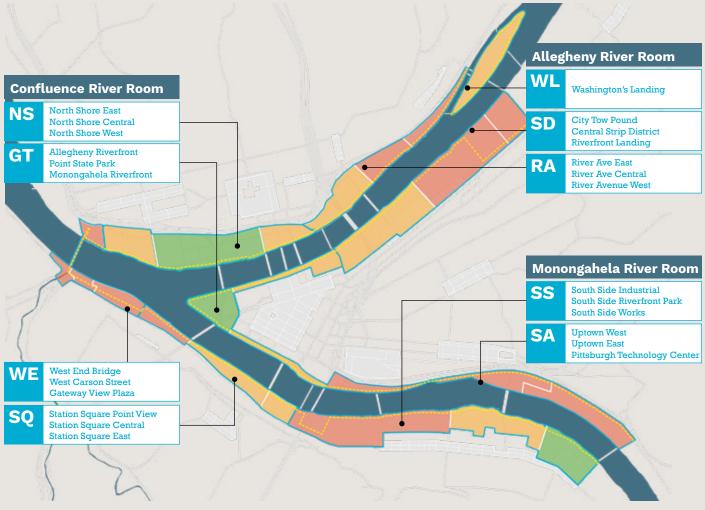
The scorecard evaluates each of the 25 segments of the Loop individually and objectively. While the scoring was performed on a segment-bysegment basis, the Loop must still be viewed as a system. Any low quality segment, whether that is due to a lack of trail, a poorly-maintained area, or a lack of connection or activation, diminishes the system as a whole.

The scorecard evaluation was conducted using GIS data and visual inspections during extensive site visits. The results of the scorecard assessment were used to identify areas of the Loop that are most in need of improvement, and to develop and prioritize recommendations that impact the system as a whole. The scorecard will be updated periodically and will allow Riverlife to assess progress at regular intervals.



### Percent of the riverfront rated high, medium and low quality





Overall scores by segment

### Areas that are...



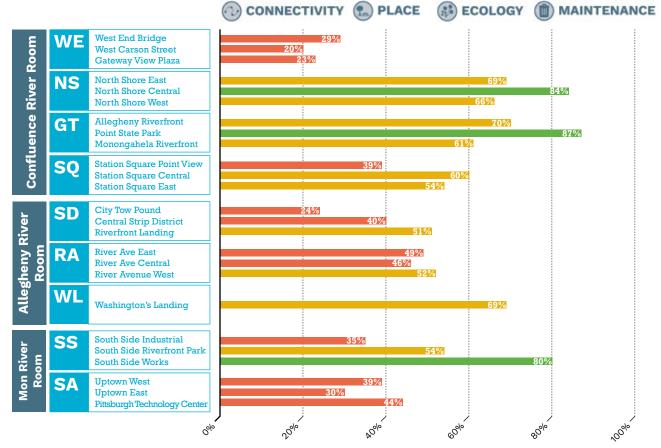
### OVERALL SCORES

The overall scores consist of the combined score for four of the five criteria: Connectivity, Place, Ecology, and Maintenance. The experience criteria identified qualitative characteristics and did not receive a quantitative score. Because of this, experience was not included in the overall score, although it is still a critical component of the Loop scorecard.

Segments that earned 75% or more of possible points are rated **high quality**. Segments that earned more than 50% of possible points, but less than 75% are rated **medium quality**. Segments that earned 50% or less of possible points are rated **low quality**.

The areas of the Loop that scored highest are areas that have seen significant investment in the last 20 years and are often the areas designed and maintained as parks or other public space (such as the North Shore, Point State Park, and South Side Works).

### The overall scores are the combined scores for:



140 | Completing the Loop | Technical Assessment

6.2 miles

of the Loop scored

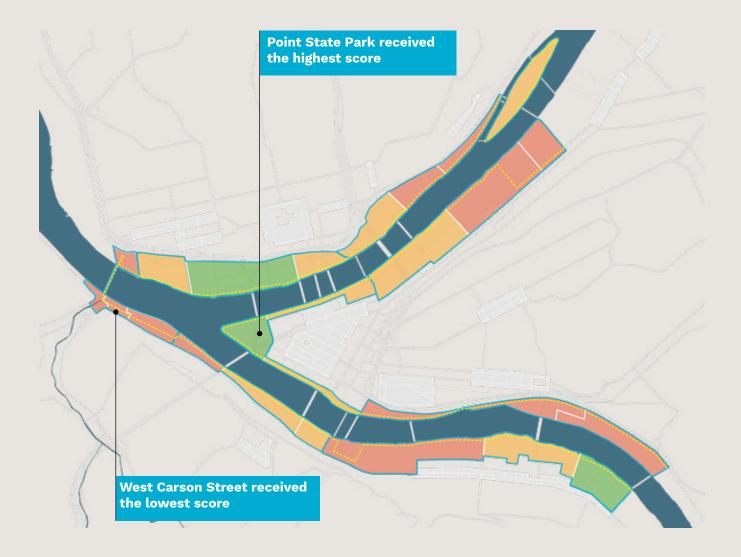
LOW quality,

of the Loop

by length

this is

41%



### Areas that are...

HIGH 75+ percentare doing well but may still need<br/>programming and maintenance attentionMEDIUM 50-75 percenthave made progress but still need<br/>projects and other workLOW 0-50 percentare major gaps or places that have<br/>significant room for improvement



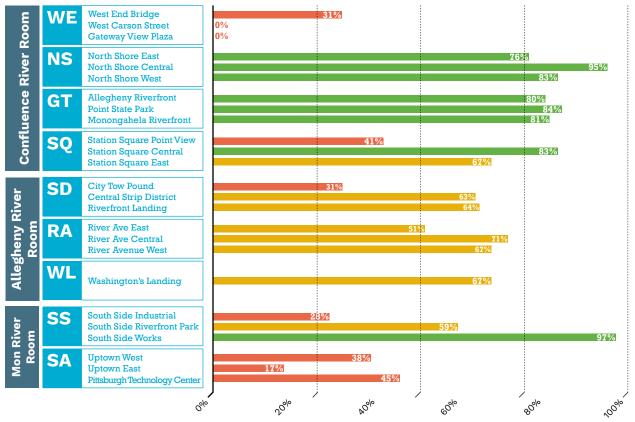
## Thriving riverfronts connect people to the river, to destinations, and to neighborhoods.

The connectivity scores identified significant gaps where there is either no trail, the trail is away from the river, or the trail is of poor quality.

The connectivity score asked:

- Is there a continuous trail along the river? (3 points)
- Is that trail ADA accessible? (3 points)
- Are there frequent opportunities to access the trail? (3 points)
- Are these access opportunities ADA accessible? (3 points)
- Are there direct connections between the segments and adjacent neighborhoods? (3 points)
- Are these neighborhood connections ADA accessible? (3 points)
- Is the trail along the river? (4 points)
- Does the riverfront trail provide opportunities to access the river for boating or fishing, and are those opportunities ADA accessible? (2 points)
- Are there direct connections from the bridges in the segment to the trail or is a detour required? Are these connections ADA accessible? (4 points)
- In the segments with bridges, is there at least one bridge that provides direct ADA access to the trail? (1 point)

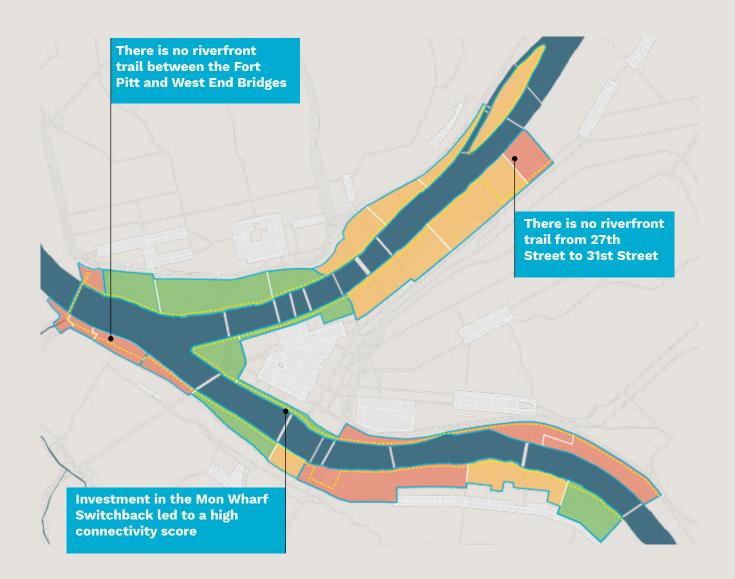
By taking a broader view of connectivity, Riverlife learned that even though this category ranked highest of the four, much work remains to be done to create a fully connected and accessible Loop.



1.5 miles

of the Loop have no trails, this is

> 10% of the Loop by length





SS South Side Works



SA Pgh Technology Ctr





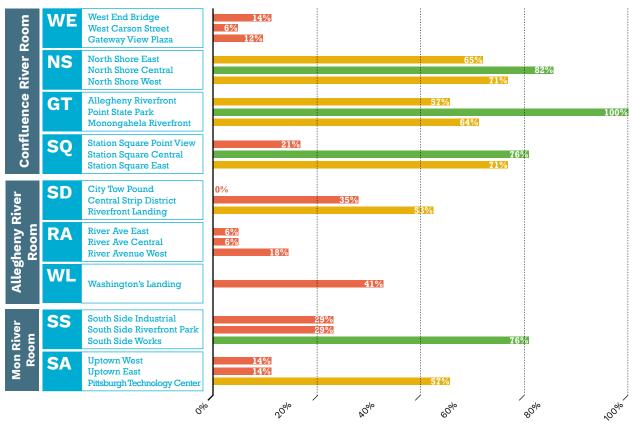
## Thriving riverfronts are beautiful places with amenities, lighting, and quality design.

The place scores looked beyond connectivity to understand how enjoyable the Loop is for users.

The place score asked:

- Is the design of riverfront places thoughtful and human scale
- Do they use durable and quality materials? Are there places to pause and enjoy the riverfront? (3 points)
- Is there thoughtful, appropriate, and pedestrian scale lighting? (6 points)
- Are there amenities, such as benches and bike racks, at regular intervals?
- Is there a public restroom in the segment? (5 points)
- Where buildings are adjacent to the trail, do they activate the trail and riverfront? Activation includes prominent riverfront entrances, ground floor transparency, and facilities of public accommodation along the riverfront, such as a cafe or restaurant. (3 points)

New riverfront development has the opportunity to drive improvement in this area if it addresses and engages the river. The place scores also expose the need to address the entire Loop as a place-making opportunity by ensuring regular placement of amenities that make it a usable, enjoyable, and cohesive experience.

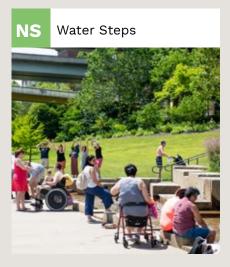


### 8.5 miles

of the Loop scored low for quality of place, this is

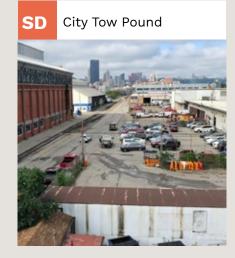
> 56% of the Loop by length













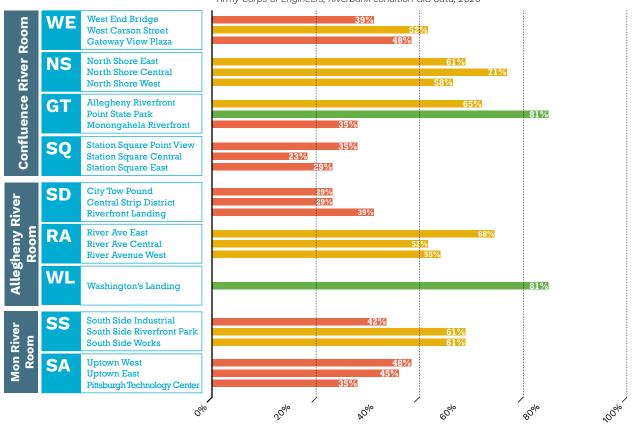
Thriving riverfronts are ecologically sound, and include natural riverbanks, native plants, and tree canopy cover.

The ecology score asked questions related to plant community, stormwater, and riverbank condition:

- Is planting in the segment primarily invasive or volunteer vegetation, or is it composed of native species? (4 points)
- Are the canopy trees primarily native or invasive species? (2 points)
- How does the percentage of canopy cover in the segment compare to the city average of 40%?<sup>1</sup> (4 points)
- What percentage of the segment is impervious surface? How does this compare to the city average of 40%?<sup>2</sup> (3 points) Is there green infrastructure present in the segment? (1 point)
- What percentage of the riparian zone (the area within 75 feet of the river) is paved?<sup>3</sup> (3 points)
- · How has the Army Corps of Engineers rated the condition of the riverfront? (10 points) Has the Army Corps found any areas of the riverbank to be failing?<sup>3</sup> (4 points)

Due to the industrial legacy of the rivers, the ecology of the riverfronts is often compromised, with low overall tree canopy cover, a dominance of invasive species, eroded and unstable riverbanks, and a high percentage of impervious surface. These existing conditions reduce the quality of the Loop experience, regional ecology, and the health of the rivers.

<sup>1</sup>PASDA, Tree canopy cover GIS data, 2015; <sup>2</sup> PWSA , Allegheny County flyover GIS data, 2017; <sup>3</sup>Army Corps of Engineers, Riverbank condition GIS data, 2020



# 7.6 miles

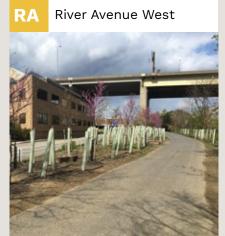
of the Loop scored low for ecology, this is

## 50% of the Loop

by length









# 6.2 miles

of the Loop scored low for maintenance, this is

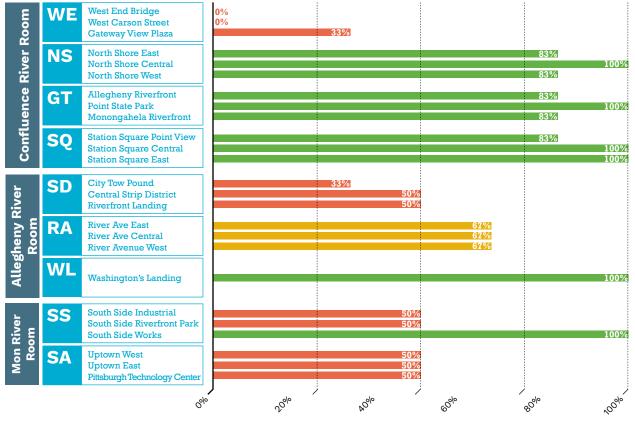
> 41% of the Loop by length

### **MAINTENANCE**

Thriving riverfronts have consistent maintenance with no litter and clear trails.

The maintenance score asked whether trash was picked up, whether the trail surface was maintained, and whether vegetation is managed throughout the segment. (6 points) The level of maintenance and the maintenance routine varies among the different property owners along the riverfront. Currently there are 180 parcels adjacent to the riverfront along the Loop, excluding Washington's Landing. Ownership, however, is concentrated in much fewer hands with the top 21 owners owning 83% of the parcels.

Although more segments scored high quality on maintenance than on any other criteria, there is a level of inconsistency in the maintenance of the Loop that detracts from the overall experience. Riverlife has conducted a separate study investigating the current maintenance of the Loop in detail and exploring options for more consistent maintenance in the future. The maintenance scores helped establish the baseline for this study.



148 | Completing the Loop | Technical Assessment





RA River Avenue West





# 8.7 miles

of the Loop is characterized as corridors, this is

> 57% of the Loop by length

# 2.4 miles

of the Loop has vehicular spatial character, this is

> 16% of the Loop by length

# 

Thriving riverfronts provide a diversity of experiences, including grand, civic places and cozy, neighborhood-scale places.

While the first four scorecard criteria were evaluated numerically, Riverlife recognizes that a thriving riverfront should provide diverse experiences and places with unique character. The experience criteria of the scorecard therefore looked qualitatively at the size and feeling of the spaces along the riverfront.

### SPATIAL SCALE

**Spatial scale** is a way of categorizing the size and shape of a space. Riverlife has identified three spatial scales along the riverfront: nodes, districts, and corridors.

- **Node** are major public spaces that draw people to the riverfront. Point State Park and South Shore Riverfront Park are examples of nodes.
- **Districts** are areas where the segment and the rivers are knitted together as a single experience. The North Shore and the historic part of Station Square are examples of districts.
- **Corridors** are primarily about movement through. River Avenue Corridor and the Eliza furnace trail are examples of corridors. Currently, corridors dominate the Loop.

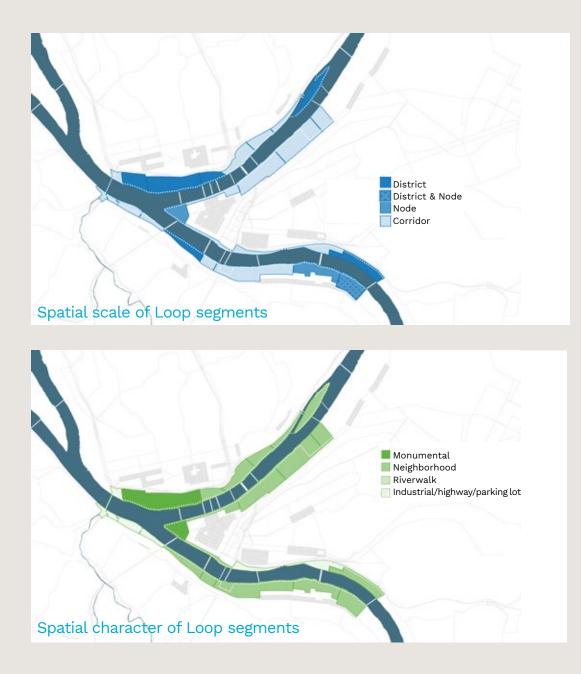
Ideally, to activate and engage the river and riverfront experience, Riverlife wants to see more nodes and districts and fewer corridors within the Loop. In places where active rail lines separate the river from neighborhoods (like the South Side), districts will be harder to achieve. Places without this constraint that are currently corridors, such as the Strip District and River Avenue, have the potential to become robust districts.

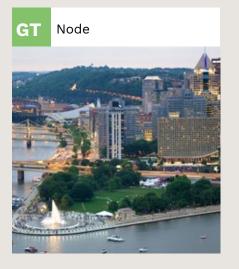
### SPATIAL CHARACTER

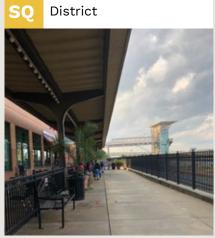
**Spatial character** refers to the features and uses of spaces and how they differ from one another. Riverlife recognizes that the neighborhoods of the Loop have unique character and not every segment or public space should be like Point State Park or the North Shore.

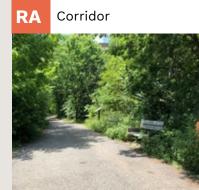
- **Monumental** character is dominated by large buildings (like the sports stadiums) or significant icons (like the Point State Park fountain).
- **Riverwalks** are smaller scale and provide a human scale experience of the riverfront. River Avenue Corridor and Allegheny Riverfront Park are examples of riverwalks.
- **Neighborhoods** are also smaller scale and are related to the district in which they reside. Neighborhoods may have different characters, including retail, residential or industrial.
- **Vehicular** character is for areas that have the character of a highway or parking lot and are not human-centered.

The first three spatial characters reflect the diversity of the Loop and the City. Riverlife seeks to foster that diversity of experience as it works to complete the Loop by creating riverfront experiences that prioritize the human-scale experience over the vehicular experience.











# 06 Planning for the Future of the Loop

Public Engagement Stakeholder Engagement

1117

# **Public Engagement**

Riverlife engaged over 5,000 people during the planning process, and their feedback shaped the Completing the Loop recommendations.

#### **STORYMAP**

In October 2020, Riverlife launched an online, interactive engagement tool that uses maps, the riverfront scorecard, photos, and other information to tell the story of Pittsburgh's riverfronts (referred to as a StoryMap). The tool summarized the findings from the first phase of the project and includes opportunities and challenges for every district within the Loop.

The tool prompted participants to reflect on the condition of Pittsburgh's riverfronts and to share their experiences and aspirations for the future of Pittsburgh's riverfronts through the use of surveys.

The StoryMap received over 3,000 unique views and over 1,000 survey responses, with the average person spending over 10 minutes viewing the StoryMap. There was one survey that asked questions regarding the riverfront overall, and shorter surveys throughout the tool that asked questions about specific districts. Many participants chose to write comments for the optional open-ended questions, indicating a high level of interest and engagement about the future of Pittsburgh's riverfronts.

The survey results provided several key findings, a selection of which are listed on the next spread. Riverlife used the survey responses to refine their understanding of what makes a great riverfront and gather input regarding existing conditions and aspirations for the Loop. Along with the riverfront scorecards, the survey responses assisted Riverlife in identifying priority areas along the Loop (West End Bridge Gap, River Avenue Corridor, South Side Industrial, and the Strip District City Tow Pound) to focus their efforts, and the comments informed the recommendations in this report.

Riverlife's StoryMap received extensive local media coverage, including articles by WPXI, Pittsburgh Post Gazette, and Next Pittsburgh, in addition to being posted on Facebook by Pittsburgh's Mayor, William Peduto.

The StoryMap is still available to view <u>online</u>, but the surveys are now disabled.

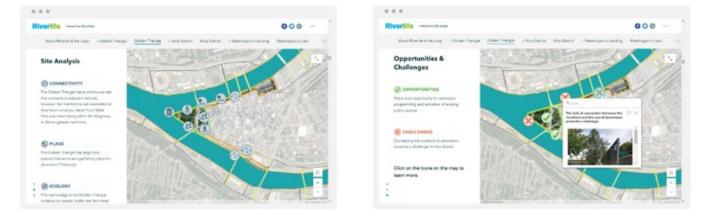
Select comments from survey respondents:

"Linking the riverfront system to Schenley Park trails would be transformative."

"It isn't really a Loop If it isn't connected, is it?"

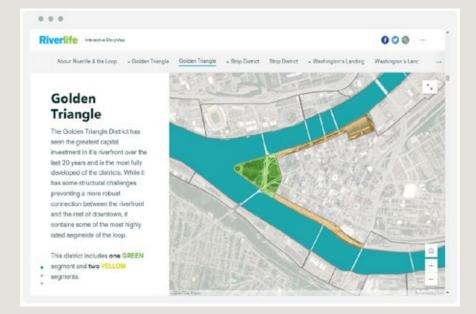
"Without connectivity and maintenance, the rest is irrelevant."

"I do not feel welcome here (Washington's Landing)."



### The StoryMap included a site analysis and opportunities and challenges for each district

### The significant participation rate for the StoryMap indicates a high level of public interest in the future of Pittsburgh's riverfronts



3,008 unique page views

10:04 average time on page

**473** Pittsburgh Riverfronts survey responses

**532** District survey responses

### The StoryMap received significant local media coverage

### What do you want to see along Pittsburgh's river banks? Local group wants your thoughts





Finishing the job: RiverLife develops plans to complete Pittsburgh's riverfront trail system





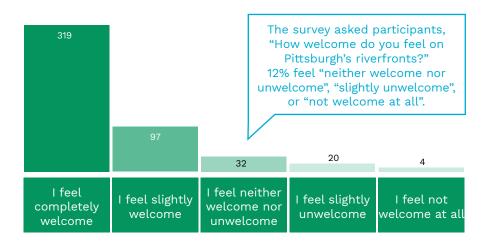
Completing the Loop: Riverlife asks Pittsburghers to weigh in on

Left: WPXI article, 19 Oct 2020 Top: Pittsburgh Post Gazette article, 25 Oct 2020 Bottom: Next Pittsburgh article, 20 Oct 2020

#### The survey asked participants, "What category of improvements would you like to see?" Key findings from the StoryMap include: Increased connectivity was the top choice in all but one district. **INCREASE** CONNECTIONS The public values connections between the riverfront, neighborhoods, and parks. Increasing connections to create a continuous Loop WE S0 SD SA NS GT WL RA SS should be a priority. CONFLUENCE ALLEGHENY MON. Connectivity Place Ecology Maintenance Experience

# NOT EVERYONE FEELS WELCOME

While a significant percentage of survey respondents feel "completely" or "slightly welcome" on the riverfronts, 12% of respondents do not. There is still much work to do to make the riverfront a place for everyone.



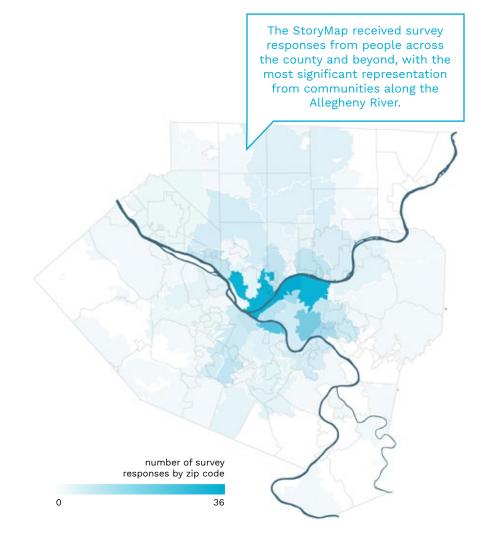
# INCREASED ACCESS TO PROGRAMMING

Survey respondents showed enthusiasm for more programming to activate the riverfronts. Comments from survey respondents:

"A place to grab coffee or even a cocktail would be great down here [River Avenue Corridor]."

"There's a huge opportunity for Market-Square-like programming at South Shore Riverfront Park" EQUITY IN OUR PROCESS

While participation in the StoryMap was significant, participation from neighborhoods that are historically disconnected from the riverfronts was low (such as Homewood, Hill District, Uptown, West End, and Chateau).



#### SIGNIFICANT GAPS

The public identified several gaps in the Loop, supported by the riverfront scorecard results, where they would like to see additional investment (West End Bridge Gap, River Avenue Corridor, South Side Industrial, and the Strip District City Tow Pound). Comments from survey respondents:

"It would be amazing to connect the North Side and West End via safe, bike and pedestrian friendly pathways from the West End Village to the North Side trail as well as neighborhoods such as Manchester and Allegheny West." "This is a hostile and unloved place (West End Bridge Gap)"

> "The Strip needs at least a path from 31st to 27th ASAP!"

# PRIORITY AREA MEETINGS & DESIGN REVIEW COMMITTEE MEETINGS

Informed by the site assessment process, riverfront scorecard evaluation, and feedback from the StoryMap, Riverlife identified four priority areas where the Loop is most in need of improvements. Riverlife engaged community stakeholders, government agencies, and nonprofits in a series of meetings to discuss possible design solutions that improve quality and connectivity in these four areas. Riverlife's Design Review Committee also participated in the priority area meetings to provide design guidance.

During these meetings, Riverlife presented their analysis of the priority areas and engaged attendees in an intensive dialogue to hone the site analysis and identify recommendations. The meetings were conducted by video conference and utilized a simple, interactive, online whiteboard tool to allow participants and facilitators to view drawings and plans together, sketch, and make notes, much as they would during an inperson meeting. Issues, concerns, and ideas raised in the priority area meetings contributed directly to the recommendations developed around the West End Bridge, City Landing Park, River Avenue Corridor, and South Side Industrial sites.

Several months later, Riverlife held a follow-up meeting with all participants from the priority area meetings to share the detailed design proposals and ensure that participants' concerns had been addressed.

### **4** Priority area meetings

**2** Design Review Committee meetings

**35+** Participants

### **1,000s** Of virtual post-it notes



Meeting participants provided observations, concerns, and design recommendations for the four priority areas

Bike/Ped improvements on McKean needs to happen, but not a replacement for riverfront trail

Wayfinding to river and Central Business District

### STEERING COMMITTEE

Riverlife assembled a Steering Committee that included representatives from elected officials, public agencies, developers, urban planning professionals, nonprofits, disability rights, and community-based, arts and culture, environmental, and recreation organizations. The Steering Committee's role was to inform both the Implementation Framework and the Completing the Loop report by identifying challenges in completing the Loop, reviewing the site analysis and assisting in priority areas and essential project identification, providing insights to inform Riverlife's new model, and reviewing and refining the recommendations. The Steering Committee meetings provided several insights, some of which include:

- Stakeholders would like to see Riverlife elevate social equity in their work, especially in regards to the types of projects they pursue, their process, and their partnerships.
- Feedback on the riverfront scorecard criteria indicated that specific neighborhoods may choose to weight the scorecard categories to reflect their specific needs and values, but for Riverlife's evaluation purposes, every category should be weighted equally.
- The Steering Committee emphasized the need to respect and preserve the unique character of each part of the Loop. Just because Point State Park received the highest score on the scorecard does not mean that every public space in the Loop should resemble it.

Riverlife hosted three Steering Committee meetings throughout the planning process. These meetings were conducted by video conference and consisted of presentations and small and large group discussions.

### 3

Steering Committee meetings

**20+** Steering Committee participants

# Steering Committee members engaged in presentations, small group discussions, and large group discussions





### **INTERVIEWS & FOCUS GROUPS**

Riverlife engaged over seventy-five stakeholders in interviews and focus groups to solicit their insights on the future of Pittsburgh's rivers and Riverlife. The interviews and focus groups informed many aspects of Riverlife's Implementation Framework and helped Riverlife frame the issues facing Pittsburgh's riverfronts, as well as establish opportunities for partnerships, collaboration, and synergies.

The interviews and focus groups provided several key insights, including:

- The need for Riverlife to amplify social equity in their work and the variety of ways to achieve this
- Riverlife's organizational history and unique role as the convener and collaborator who brings together a variety of stakeholder groups
- Suggestions of how and where to expand Riverlife's thematic and geographic scope
- Emphasis that Riverlife should complete and improve the existing Loop geography
- The success and need for Riverlife to continue being the standard bearer for Pittsburgh's riverfronts
- The need to revisit the organization's focus on community engagement and act as the liaison between community members, developers, and the City

### 75+ individuals engaged directly, including

Organizational Stakeholders

**Public Agencies** 

Nonprofit Organizations

Community Representatives Developers

Land Owners

### **Example interview and focus group questions included:**

 What do you see as
 In what areas should Riverlife be working?

 What role should Riverlife play in regards to issues of social equity?

 How does Riverlife add value to the greater
 What do you see as the

What do you see as the biggest challenges facing Riverlife right now? What about 5 years from now?

**Pittsburgh region?** 

### RIVERLIFE BOARD & STAFF ENGAGEMENT

Riverlife's Staff and Board were engaged in meetings and workshops to make key decisions, review progress, and co-design the Completing the Loop recommendations with evolveEA. These meetings occurred throughout the process, including nine Board meetings and over seventyfive Staff working sessions.

Riverlife Board and Staff members provided numerous contributions to the Completing the Loop planning process, a selection of which includes:

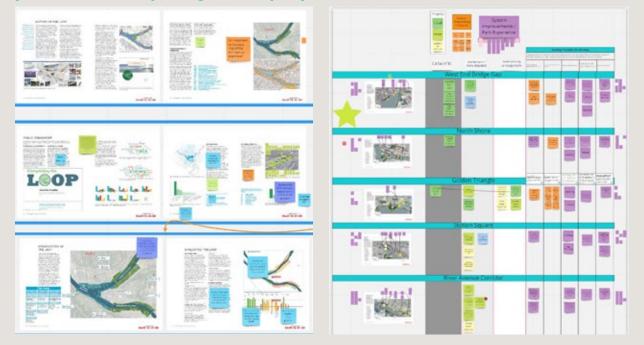
- Groundtruthing riverfront scorecard data and providing feedback and review of the riverfront scorecards.
- Extending personal invitations to community partners, Riverlife stakeholders, and the public to participate in the process.
- Identifying priority areas, facilitating priority area meetings, and refining design recommendations.
- Coordinating between the Implementation Framework and Completing the Loop processes, ensuring that the organization has the capacity and budget to implement the design recommendations and to ensure that the recommendations align with Riverlife's new bedrock statements.
- Analyzing public feedback, integrating ideas from the public into the design recommendations, and answering questions from the public in response to the StoryMap and Virtual Public Meeting.

**9** Board meetings

&

75+ Staff working meetings

# Riverlife participated in several working meetings to produce the Completing the Loop report.



### VIRTUAL COMMUNITY MEETING

Riverlife hosted a virtual public meeting on February 25, 2021 to share the Completing the Loop recommendations, answer questions, and acquire feedback. The presentation included a brief summary of the planning process, principles for the overall Loop design, and recommendations for specific sites.

The meeting began with a presentation that was broadcast via Zoom and Facebook live, followed by a live question and answer session. The meeting recording was posted to YouTube following the event and a survey was made available to all participants who attended live or watched the recording. Riverlife also provided written answers to all questions received during the live event on their website, as there were more questions received during the live event than could be answered during the meeting.

The survey solicited feedback on the design recommendations and asked attendees to prioritize the recommendations. Participation in the live event and the recordings were promoted via the Riverlife website, social media feeds, and local media. The virtual public meeting was viewed in part by over 2,100 people and the survey received 138 responses.

The survey results provided several key findings, a selection of which are listed on the adjacent page. While the survey responses confirmed many of the conclusions and recommendations that were developed through the process, there were several surprises. Riverlife used the survey responses to refine the final recommendations in this report, and they informed the timeline and prioritization of Riverlife's five-year workplan. The Virtual Community Meeting recording is still available to view <u>online</u><sup>1</sup>.

# Select comments from survey respondents:

#### "I love the

improvements for the West End Bridge. Especially for the Manchester side that is vastly underutilized right now."

"Continue to focus on areas that have been marginalized and disinvested in, these are the areas where increased access will have the most impact"

Riverlife answered over 60 questions live with written and verbal responses during the virtual public meeting



1. https://www.youTube.com/watch?v=yknvteN9IoQ

2,100+ People watched the meeting in part

**1,300+** People watched the

meeting in full

### 200+

People asked questions live, liked, or shared the meeting

**138** People answered the survey

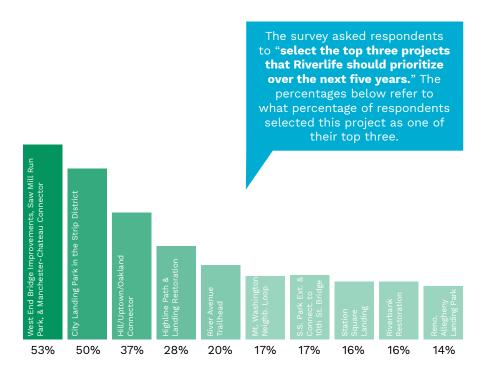
#### Key findings from the Virtual Public Meeting include:

### WEST END BRIDGE AND CITY LANDING PARK ARE TOP PRIORITIES

The survey asked respondents to select the top three priority projects for Riverlife to address in the next five years. People overwhelmingly chose the improvements at the West End Bridge and the new City Landing Park in the Strip District as the top two priorities.

### ELEVATE HILL/UPTOWN/ OAKLAND CONNECTOR

The Hill/Uptown/Oakland connector to the riverfront, was rated a higher priority for survey participants than the creation of a continuous path on the South Side between 2nd and 4th Street or the River Avenue improvements. The latter two projects had been identified as priorities through Riverlife's process to this point. As a result, Riverlife has elevated the Hill/Uptown/Oakland connector in the final report and in their five-year workplan.



Comments from survey respondents:

EXPAND LOOP GEOGRAPHY & WATER PROGRAMMING The responses to the optional

open-ended questions indicated that participants thought the Loop and Riverlife's focus should be expanded beyond the current geography. In addition, participants in this meeting placed greater importance on facilitating water-based activities than had been mentioned previously. "[I'm excited by] public docks and other infrastructure (temporary and permanent) that connect people to the water and allow them to touch it (not just view it)."

"Please strive to finish the existing Lawrenceville river trail, we just need a little connection point around the railway and we could essentially get downtown!"



# 07 Confluence River Room

A 6. 64

the sea is the sea of the sea of the

Site Assessment Scorecards Opportunities & Challenges Site Inventory



### West End Bridge Gap

A pedestrian bridge expansion to the West End Bridge would provide a truly iconic view of the Pittsburgh skyline.



3

4

5

- Station Square needs to be connected to the West End Bridge.
- The north end of the West End Bridge needs to be better connected to the riverfront trail and to Manchester.
  - The south end of the West End Bridge needs to be better connected to the West End.
- This is one of the few places where direct access to the river is possible under the railroad tracks.



7

Saw Mill Run should be made more visible.

The West End Bridge has potential to act as the crossroads for regional and national trail systems. However, this is currently impeded by the absence of safe, accessible, and clear routes for pedestrians and cyclists to get onto the Bridge.



11

- ALCOSAN is planning major investments in this area.
- PennDOT is planning renovations to the West End Bridge.

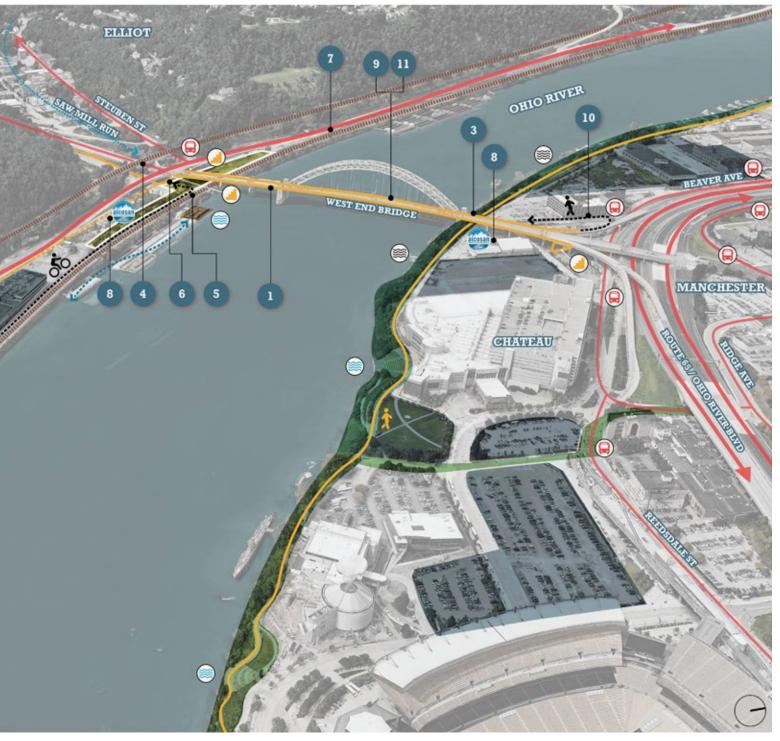


- Major private development is planned for this area near the bridge.
- The bridge should be celebrated.



Existing Trail & Bike Loop Existing Transit Existing Railroad Existing Stream Existing Transit Stop Existing Steps
 Existing Water Access
 Existing Parking
 ALCOSAN Outfall
 Possible ALCOSAN
 Construction Sites

# **Site Assessment**

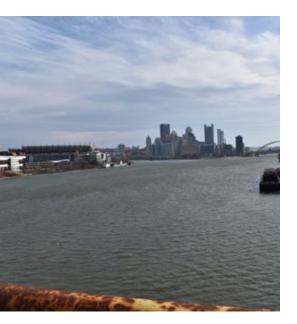


Recent, planned or likely development Business District Park/Proposed Green Street Proposed Gateway

--- Proposed Path Proposed Ramp Proposed Boardwalk/Dock
Proposed Water Landing



### West End Bridge Gap



#### A pedestrian bridge expansion to the West End Bridge would provide a truly iconic view of the Pittsburgh skyline.

The West End Bridge provides a truly iconic view of the Pittsburgh skyline to the east and down the Ohio River valley to the west. A pedestrian bridge addition should provide moments to pause and enjoy these views. Design solutions should not only be robustly engineered, but also human-scale and artistic in design in keeping with the historic character of the bridge.



#### 2 Station Square needs to be connected to the West End Bridge.

The area from Station Square to the West End Bridge is one of the few remaining gaps in the Loop. To get from Station Square to the North Shore on foot or by bike requires using West Carson Street, which has a narrow sidewalk and no bicycle infrastructure. Although there are sidewalks on both sides of the West End Bridge, getting from Carson Street onto the West End Bridge requires going up a flight of stairs.

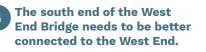
Riverlife believes it is critical to provide a Riverfront trail in this section of the Loop. Riverlife will work with the owners of Gateway View Plaza and the railroad to create a riverfront path between Station Square and the West End Bridge.



#### The north end of the West End Bridge needs to be better connected to the riverfront trail and to Manchester.

The area on the north side of the West End Bridge needs to have sidewalks on both the east and the west sides of the bridge, creating a new ramp that connects the walkway to the riverfront trail. Currently, a flight of stairs connects the West End Bridge to the street and there is no direct connection to the trail. Much of the property under the bridge is publicly owned, easing the process of creating landings, a trailhead, and new public space. The existing pedestrian walkway over route 65 is narrow and unpleasant (although it is ADA accessible), and can feel unsafe and uncared for.





Although it is possible for a pedestrian or cyclist to connect from the West End Bridge to the West End neighborhood, it is not a pleasant or safe experience. The area on the south side of the West End Bridge also needs ADA access from Carson street to the Bridge and a more generous pedestrian connection into the West End. Similar to the north end of the bridge, the south end is surrounded by vacant and underutilized parcels, although none are publicly owned.

#### 5 This is one of the few places where direct access to the river is possible under the railroad tracks.

The area between the river and West Carson Street provides one of the few places between Liberty Bridge and West End Bridge where visitors can directly access the water through an existing underpass below the railroad. This area is currently used for docking of barges, Coast Guard, and Homeland Security vessels. Since the area will be difficult to develop because it is narrow and has limited access to West Carson Street. this site creates an opportunity for a new public park. The park could contain a ramp connecting the Bridge to the trail and riverfront, a trailhead, and a boardwalk over the river that would allow people to access the water via a canoe and kayak launch.



## 6 Saw Mill Run should be made more visible.

Currently, Saw Mill Run is only visible at the bottom of a concrete channel. Creating Saw Mill Run Gateway Park at this location would celebrate the outflow of Saw Mill Run and would provide access to the river and the trail system, including a connection to a potential future Saw Mill Run Park.











The West End Bridge has potential to act as the crossroads for regional and national trail systems. However, this is currently impeded by the absence of safe, accessible, and clear routes for pedestrians and cyclists to get onto the Bridge.

Addressing this gap in the Loop would also provide communities west of Pittsburgh, such as McKees Rocks, with access to the Loop and downtown. It would also provide opportunities to connect into other regional trail systems, such as the Montour Trail and the Industrial Heartland Trail, and national rails to trails systems, such as the Great American Rail Trail.

# 8 ALCOSAN is planning major investments in this area.

The first phase of ALCOSAN's deep tunnel planning and construction efforts will take place in 2021 - 2029. ALCOSAN will likely use a portion of this area for construction staging for the Ohio River deep tunnel. This park could be part of the green "leave behind" by ALCOSAN when they have finished the deep tunnel work.

#### PennDOT is planning renovations to the West End Bridge.

The West End Bridge is owned by PennDOT and is part of the 2028 Transportation Improvement Plan (TIP). Riverlife has historically engaged with PennDOT and PennDOT was on the jury for the 2006 West End Bridge design competition conducted by Riverlife. Riverlife will continue to advocate for better pedestrian and cyclist infrastructure on the bridge, ADA accessible connections to the bridge, and will lead on the development of implementable and equitable solutions.



# 10 Major private development is planned for this area near the bridge.

The planned Esplanade development in Chateau to the west of the Bridge and the associated TRID study is an opportunity to create multimodal improvements. Riverlife will participate in the TRID study committee for the Esplanade and advocate for solutions that provide greater and more equitable connections for Manchester and Chateau to the riverfront and an improved West End Bridge. Riverlife will also collaborate with Millcraft, the developer of the Esplanade site.

# The bridge should be celebrated.

The West End Bridge itself is iconic and should be celebrated. In 2017 Open Streets Pittsburgh and BikePGH hosted a Bridge City Route event, which closed the West End Bridge to car traffic, allowing pedestrians and cyclists to safely travel over the West End Bridge to the West End. Riverlife will support similar efforts in the future that allow people to experience the possibilities of a connected West End Bridge. Other potential activities that would highlight the bridge include a temporary lighting installation (similar to the Energy Flow Bridge Installation on the Rachel Carson Bridge), pop-up events, and a temporary ferry to shuttle people between the two sides of the river while the bridge modifications are in process.



#### The North Shore needs to be better connected to the neighborhoods to the north.

- Allegheny Landing Park has the potential to become an active North Shore destination.
- The North Shore should be active and welcoming to all users, even between game days.

2

3

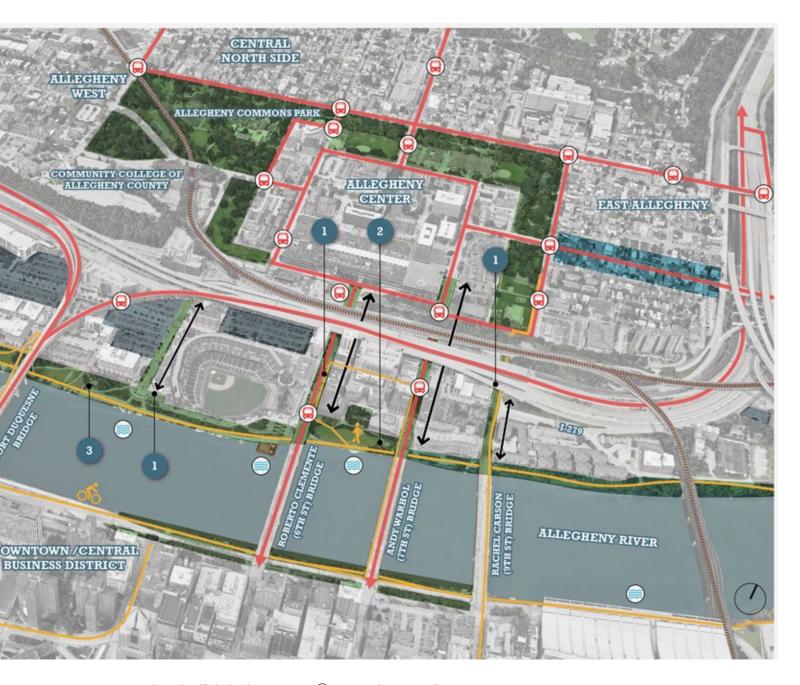
The North Shore has large areas of lawn and lacks shade and habitat.





 Existing Steps
 Existing Water Access
 Existing Parking
 ALCOSAN Outfall
 Possible ALCOSAN Construction Sites

# **Site Assessment**





Recent, planned or likely development
 Business District
 Park/Proposed Green Street
 Proposed Gateway

Proposed Water Landing





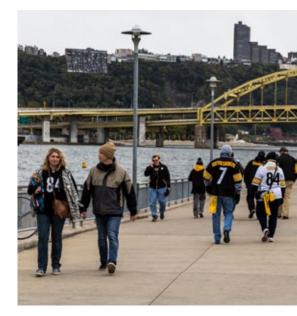
# The North Shore needs to be better connected to the neighborhoods to the north.

Connecting the North Shore to the neighborhoods on the other side of the highway is a major challenge, preventing the riverfront from weaving into the broader neighborhood. Riverlife will advocate for better connections to the river for the Allegheny, Chateau, and Manchester neighborhoods, as well as connections to Allegheny Commons park.



#### 2 The North Shore has large areas of lawn and lacks shade and habitat.

The large areas of lawn provide little in the way of ecosystem services and attract geese. These areas are often empty except on game days and become filled with goose droppings, which are a nuisance. Planting trees and restoring more native plantings will help create shade, discourage geese, and improve ecological health and function in this area.



#### The North Shore should be active and welcome to all users, even between game days.

3

The large scale of some of the North Shore public spaces, which are designed to accommodate large crowds, can feel empty or desolate when a major event is not taking place (such as Steelers games, the Regatta, and concerts). These spaces should utilize programming to activate the riverfront, particularly between major events, and should include more small-scale community spaces along the river.



#### Allegheny Landing Park has the potential to become an active North Shore destination.

Allegheny Landing Park needs to be reimagined as a community destination. Specific activities would include repairing the river access/dock, renovating the park to provide ADA access between the upper and lower portions of the park, and exploring whether the awkward path connection behind the pier of the 6th Street bridge should be improved and widened.

Riverlife would also like to work with Friends of Allegheny Landing, the City, and adjacent property owners to activate the park with programming. WYEP used to host music festivals at Allegheny Landing Park and Riverlife would like to see similar activity here in the future, such as concerts and food festivals.



Mon Wharf needs to be connected to Point State Park with a connection that is safe and accessible.



3

- Renovate Allegheny Riverfront Park and extend it under the Fort Duquesne Bridge.
- Activate Fort Duquesne Boulevard to bring more activity to the Allegheny riverfront.



- Activate the Mon Wharf.
- The connection from the Fort Pitt Bridge to Point State Park is not accessible.





Existing Steps Existing Water Access Existing Parking ALCOSAN Outfall Possible ALCOSAN Construction Sites

Ø

# **Site Assessment**





Recent, planned or likely development Business District Park/Proposed Green Street Proposed Gateway









#### Mon Wharf needs to be connected to Point State Park with a connection that is safe and accessible.

The Point State Park Connector, which will provide an ADA accessible and pleasant connection from the Mon Wharf to Point State Park, will begin construction in the later part of 2021. Riverlife led the design and implementation of this project, and it is the culmination of many years of leadership by Riverlife. Once this project is complete, the entire downtown riverfront will be accessible.

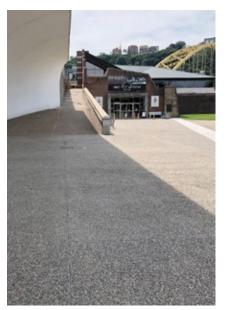
#### 2 Renovate Allegheny Riverfront Park and extend it under the Fort Duquesne Bridge.

The area under the Fort Duquesne Bridge has recently become a riverfront destination due to the addition of the Black Lives Matter mural. Riverlife has taken steps to improve the area by repairing pavement, but the walkway is narrow and lacks any edge protection. Additional modifications are needed to make this area safe for visitors. Concepts to extend Allegheny Riverfront Park into this area were developed by Michael Van Valkenburgh Associates (the original designer of the park), and would include widening the walkway by creating a cantilevered platform over the water, similar to the main portion of Allegheny Riverfront Park. The original park, which is over 20 years old, is in need of renovation as well.

#### Activate Fort Duquesne Boulevard to bring more activity to the Allegheny riverfront.

Riverlife will collaborate with the Pittsburgh Downtown Partnership and the Cultural Trust to activate Fort Duquesne Boulevard as a way to bring more activity to the riverfront and to create better connections to the cultural district. Encouraging activity along the riverfront is currently a challenge because the riverfront is separated from the rest of downtown by major roadways.







### Activate the Mon Wharf.

To capitalize on the investment in the Mon Wharf, Riverlife will lead some additional improvements such as lighting and activation of the site (which could include kinetic elements like swings or sculptural lighting elements). In addition, the use of concert barges could help activate the downtown riverfronts. To better connect the Mon Wharf, Riverlife will explore the concept of a "cap park", which would be constructed over the parkway east to create an upper Mon Wharf Park.

#### 5 The connection from the Fort Pitt Bridge to Point State Park is not accessible.

The connection between the bridge and Fort Pitt Museum is steep, narrow, and in need of resurfacing. Creating a more generous and accessible connection should be part of the discussion when the bridge undergoes renovations.







3 The Wabash tunnel could provide trail connectivity to neighborhoods and communities to the south.

The inclines should be improved as a destination and connection to the Loop.

Station Square needs to be connected to the West End Bridge.





Existing Steps Existing Water Access Existing Parking ALCOSAN Outfall Possible ALCOSAN Construction Sites

0

ō

è

## **Site Assessment**

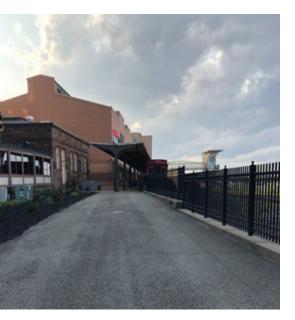




Recent, planned or likely development Business District Park/Proposed Green Street Proposed Gateway



Station Square



#### Station Square needs better wayfinding and infrastructure for pedestrians and cyclists.

The heart of Station Square was developed prior to the creation of Riverlife and it was one of the earliest riverfront redevelopments. The trail through the central, historic section of Station Square is narrow and confusing and should be improved for both cyclists and pedestrians. Better wayfinding signage is needed to direct visitors through Station Square to the Smithfield Street Bridge, South Side, and the West End Bridge (once that connection is created).

As new sections of Station Square are built to the east and west of the central historic district, Riverlife will partner with the developer to ensure riverfront amenities are sized appropriately, to help activate the rivers, and to provide places to celebrate the rivers.



#### Station Square is one of the few places on the Monongahela River where you can walk right up to the river.

The existing underpass under the rail line provides direct access to the river and is currently used to access the Gateway Clipper Fleet. This area could be expanded to provide pedestrian access to the river and could contain a kayak and canoe launch point, in addition to serving the Gateway Clipper Fleet. Riverlife will work with the Gateway Clipper Fleet and other partners to realize this enhanced river connection.



#### The Wabash tunnel could provide trail connectivity to neighborhoods and communities to the south.

3

Opening the Wabash Tunnel to bikes and pedestrians would help connect the riverfront to the Saw Mill Run greenway and to future trails that are currently being explored by the Port Authority of Allegheny County and other organizations.





#### The inclines should be improved as a destination and connection to the Loop.

The Station Square district is home to both of Pittsburgh's working inclines, which are major destinations for locals and out of town visitors in addition to being regional icons. The inclines have the potential to be the threshold that introduces visitors to the Loop and the rivers. The inclines also provide much needed connectivity from the riverfront into the neighborhoods of Mount Washington and Duquesne Heights. These connections should be strengthened, safety improvements should be made, and their role as the riverfront and Loop threshold should be emphasized.

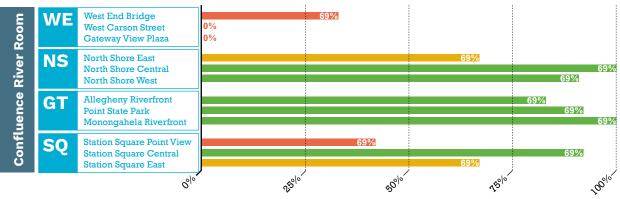
#### 5 Station Square needs to be connected to the West End Bridge.

Currently the trail at the western end of Station Square stops where West Station Square Drive intersects West Carson Street. The trail that runs through the Duquesne incline parking lot is little more than a sidewalk and oftentimes cars parking in that lot block the trail. It is critical that a continuous riverfront trail is created that runs from Station Square to the West End Bridge through the Gateway View Plaza property.

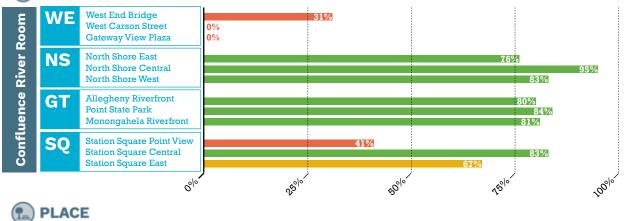


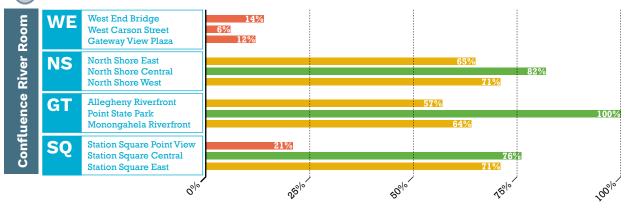
The Confluence River Room contains some of the most highly rated segments in the Loop (such as Point State Park and the North Shore) as well as some of the lowest rated segments in the Loop (such as the West End Bridge, West Carson Street and Gateway View Plaza).

#### **OVERALL SCORES**



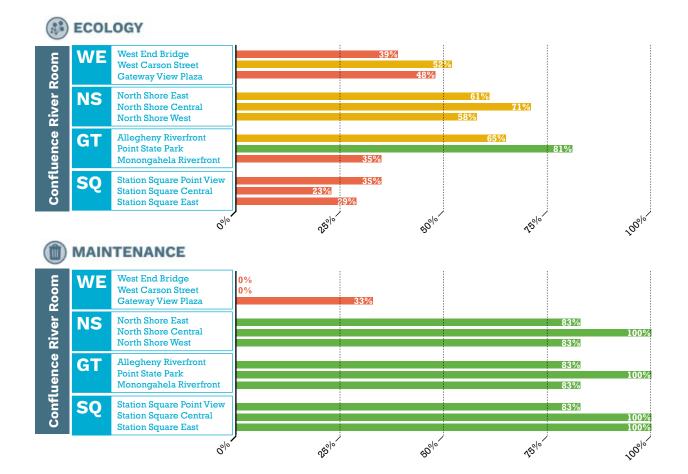
#### CONNECTIVITY







#### **Confluence River Room Overall Scores**







- West Carson Street does not have a trail along the river and instead people must use the sidewalk next to the street, which is not ADA accessible due to the surface condition and cross slope.
- Connections are noisy, close to traffic, and not family friendly.
- People must walk up a tall flight of stairs to access the West End Bridge or to access the West End neighborhood from West Carson Street.

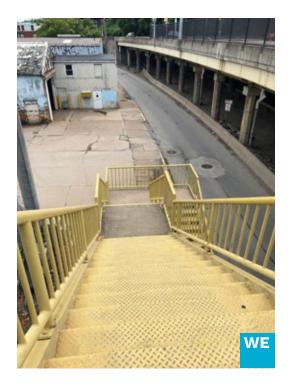
#### NORTH SHORE

- The trail along the North Shore riverfront is continuous and ADA accessible, with frequent connections between the riverfront and destinations in the central part of the district.
- The highway on the north side of the district creates a barrier between the riverfront and the adjacent neighborhood.

#### GOLDEN TRIANGLE

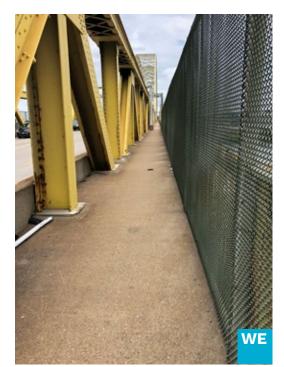
- The Golden Triangle has a continuous trail that connects to adjacent districts, however, the riverfront is not connected to downtown between Point State Park and the Allegheny or Monongahela riverfronts.
- Significant investment has been made to increase connectivity of this district to adjacent places with projects such as the Mon Wharf Switchback and the soon to be constructed Point State Park Connector.
- The downtown trail is separated from downtown by major roadways making it difficult to find and access the riverfront.

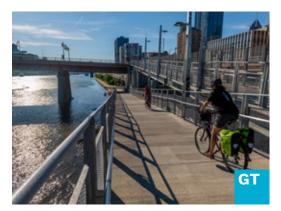
- Station Square has a continuous trail adjacent to the river. The steep slopes of Mount Washington separate Station Square from the neighborhood, but this district has better connectivity options compared to other districts due to the inclines.
- The trail is ADA accessible, although narrow in places, which makes accommodating both bicycle and pedestrian traffic difficult.
- Station Square has one of the few public and ADA accessible docks in the city. Although, access over the railroad, which involves two elevators, is cumbersome.



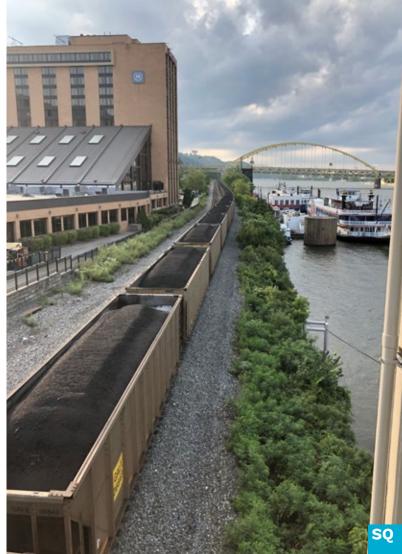
















• This district is not an enjoyable to experience. The district has highway-scale cobra head lights and the buildings do not activate the riverfront or the street.

#### NORTH SHORE

- The North Shore has many well designed spaces and portions of it are cohesive with similar design elements and durable, quality materials.
- Allegheny Landing has deteriorating materials (such as asphalt paths) and site furnishings that are in disrepair.
- Restaurants that face the upper riverwalk esplanade activate the riverfront.

#### **GOLDEN TRIANGLE**

- The Golden Triangle has large civic spaces that serve as a gathering place for downtown Pittsburgh.
- The places in this district are largely grand civic spaces, reflecting the context of downtown Pittsburgh.
- The riverfront is a level below the street, giving little opportunity for buildings to activate the riverfront.

- Station Square has amenities and places to pause and enjoy the riverfront.
- The portion of the trail that passes Highmark stadium has no shade, amenities, or charm.
- The Sheraton turns it's back to the riverfront and this portion of the trail feels desolate and unwelcoming.











- Walking along West Carson Street feels like walking on the shoulder of a highway. There is no cycling infrastructure and minimal and poor quality pedestrian infrastructure.
- The view to the river is blocked by buildings and billboards.

#### NORTH SHORE

- The North Shore is designed to support crowds for large gatherings, such as game days. The eastern portion of the North Shore between the Three Sisters bridges is the only part of this district that is neighborhood scale.
- The North Shore is a destination within the region for people visiting sporting events, boating, dining at restaurants, or visiting places along the trail such as the water steps.

#### **GOLDEN TRIANGLE**

- Point State Park is well programmed during the summer with events such as the Regatta and the Three Rivers Arts Festival.
- The entire riverfront has a hard constructed edge.

- There are a number of destinations at Station Square including the Riverhounds Stadium, riverfront restaurants, the Gateway Clipper Fleet, a hotel, and several stores. The two inclines are also in Station Square, which are a major tourist draw.
- The completed portions of Station Square are neighborhoodscale.













- The West End Bridge Gap district has minimal trees along the riverbank and the plant community is dominated by invasive plant species.
- The riverbank condition is fair to favorable throughout the district, as defined by the Army Corps of Engineers.
- The majority of the riparian zone (within 75' of the riverbank) is more than 66% paved.

#### NORTH SHORE

- The North Shore has minimal tree canopy (5%) and planting is dominated by open lawn, which attracts geese.
- There are elements of green infrastructure in some areas of the North Shore, including Allegheny Landing and the Casino.
- The riverbank from Allegheny Landing westward has a hard constructed edge with no riparian buffer, but is rated in fair or favorable condition by the Army Corps.
- The impervious cover for the North Shore overall exceeds 80%.

#### **GOLDEN TRIANGLE**

- The Golden Triangle riverfront is urban in nature with a constructed hard edge and no riparian buffer zone.
- Portions of the downtown riverfront along the Monongahela are rated in poor condition by the Army Corps.
- The tree canopy along the Golden Triangle riverfront is minimal (less than 12%).
- The Golden Triangle has high rates of impervious surface. The majority of the riparian zoned is more than 66% paved.

- Station Square has limited tree canopy of 11%. The riverbank condition is a mix of natural and constructed and is rated poor by the Army Corp of Engineers.
- All portions of the riverbank have been rated in poor condition by the Army Corps with significant areas found to be failing.











• This district does not appear to be maintained and is littered with trash and weeds along the riverbank and the streets.

#### NORTH SHORE

• Maintenance of the riverfront along the North Shore is conducted by private property owners, the Sports and Exhibition Authority, and the City. The quality of maintenance is not consistent throughout the district.

#### **GOLDEN TRIANGLE**

• The City of Pittsburgh, the Department of Conservation and Natural Resources, and PennDOT maintain the Golden Triangle riverfront to accommodate for large-scale public uses.

#### STATION SQUARE

- The trail is maintained by the adjacent property owners and is mostly in good condition.
- Some parts of the trail could be better maintained, such as the areas behind the hotel, along the parking lots to the west, and along the fence near the railroad track.









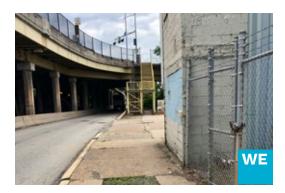
1. A thorough analysis of Loop maintenance is provided in the Permanent Financial Instrument report included as Appendix 5 to RIverlife's Implementation Framework Report.



- The lack of ADA access and the barriers along the riverfront make it challenging to create continuous, accessible riverfront access for all.
- While there is ADA access from the West End to the West End Bridge, there is no ADA access to the West End Bridge from the North Shore or West Carson Street.
- There is no ADA access from the West End to the riverfront/ West Carson Street.
- The significant elevation change between the riverfront and the West End Bridge will require a long ramp to create ADA access.
- The active railroad track along the river and lack of crossings makes it difficult to access the riverfront.
- Property will have to be acquired in order to create the landings for a pedestrian bridge.

#### NORTH SHORE

- Connecting the North Shore to the neighborhoods on the other side of the highway is a major challenge, preventing the riverfront from weaving into the broader neighborhood.
- The large scale of some of the public spaces, which are designed to accommodate game day crowds, can feel empty or desolate when a major sporting event is not taking place.
- Geese on the great lawn are a challenge, particularly in spring and summer when they have goslings.









#### **GOLDEN TRIANGLE**

- The lack of connection between the riverfront and the rest of downtown presents a challenge.
- It is challenging to ensure that everyone feels welcome in the grand civic spaces of the Golden Triangle.
- The diversity of ownership and management of the spaces within the Golden Triangle leads to the need to clarify roles and responsibilities for maintenance and programming.

- The physical boundaries at the western end of Station Square and the presence of active rail lines limit connectivity to the riverfront and the rest of the Loop.
- The trail in the heart of Station Square is too narrow to accommodate cyclists and pedestrians safely.
- The Sheraton turns it's back to the trail as does the Riverhounds Stadium. This portion of the trail feels desolate and unwelcoming.
- New plantings at the Grand Concourse building include nonnative and invasive species.
- There is poor definition between the trail and the parking lot, particularly in the Point View section. Cars often pull up with their fronts hanging over and obstructing the trail. The trail feels like an afterthought in this section.







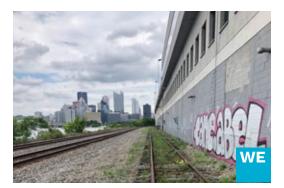




- The views to downtown Pittsburgh in this district are spectacular and iconic where you can see them. Creating better public space amenities in this district would be an opportunity to create a regional and national destination.
- There are many hidden opportunities for increased riverfront and neighborhood access in the West End Bridge Gap district.
- The Saw Mill Run outfall is in this district, which presents an opportunity to connect to a future Saw Mill Run greenway.
- An existing underpass under the railroad tracks near the West End Bridge gives direct access to the river.
- Underutilized properties on the south side of the West End Bridge create **opportunities for a park** that provides better access to the bridge, riverfront amenities, a connection point to Saw Mill Run and a future Saw Mill Run linear park, as well as a **better connection to Station Square**.
- ALCOSAN deep tunnel work is planned near both the south and north landings of the West End Bridge. Possible property acquisition related to this work creates an opportunity for a future landing site for accessible ramps that lead from the West End Bridge to the trail as well as new trail heads or thresholds.
- The West End Bridge is scheduled for refurbishment starting in 2028. This is an opportunity to construct bicycle and pedestrian facilities on the bridge.
- The planned Esplanade development in Chateau will provide TRID funds to improve bike and pedestrian connections in the area, although the Esplanade site doesn't quite touch the bridge. The TRID study will be conducted in 2021 and Riverlife will participate in the TRID committee.

#### NORTH SHORE

- Improving access, programming, and tree canopy in the Allegheny Landing portion of the North Shore will enhance the experience and ecology of this district.
- Friends of Allegheny Landing and Riverlife are engaging stakeholders to discuss improvements to Allegheny Landing, which will improve access between the upper and lower portions of the park.
- Riverlife's new office and home base at Allegheny Landing will allow them to focus closely on capital improvements and programming opportunities.









#### **GOLDEN TRIANGLE**

- Riverlife has an opportunity to partner with the Pittsburgh Downtown Partnership and the Cultural Trust on programming and activation of existing public spaces.
- There is an opportunity to connect Allegheny Riverfront Park to Point State Park.
- Pittsburgh Cultural Trust is a partner organization interested in renovating Allegheny Riverfront Park.
- Allegheny Landing and Allegheny Riverfront Park are directly across the Allegheny River from one another, providing the opportunity to renovate in tandem for River Room improvements.

- The existing underpass under the rail line provides direct access to the river. It is currently used to access the Gateway Clipper Fleet.
- There is an opportunity for future projects within the district to incorporate more trees and green infrastructure.
- Station Square provides one of the few ADA accessible and public docks in the Loop.
- The Smithfield Street Bridge provides human-scale bike and pedestrian connections across the river to the Golden Triangle district.
- The inclines are a major tourist destination, but the state of the lower stations is lamentable. The inclines should be celebrated as regional icons. This is currently a missed opportunity to connect out of town visitors to the Loop and the riverfronts. The Mon incline is owned and operated by the Port Authority of Allegheny County. The Duquesne incline is owned by the Port Authority of Allegheny County, but since 1964 it has been operated by the Society for the Preservation of The Duquesne Heights incline.











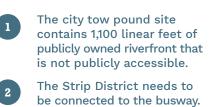
# 08 Allegheny River Room

1.0

345555

Site Assessment Scorecards Opportunities & Challenges Site Inventory





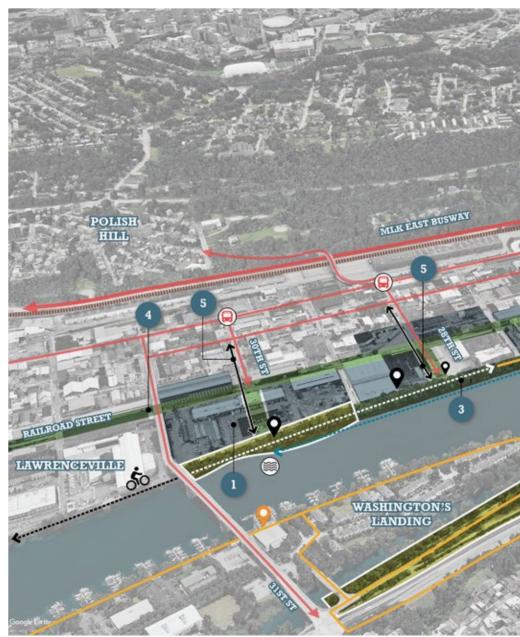
The Strip District needs a continuous, accessible, and high quality riverfront trail system.



3

Completing the Allegheny River Green Boulevard would enhance the Loop.

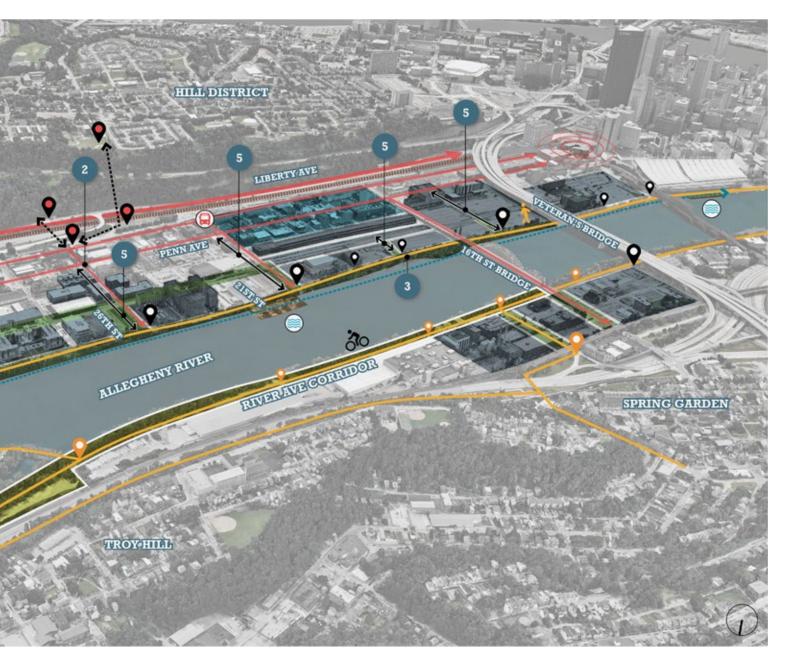
Create better perpendicular connections from the riverfront into the heart of the Strip.





Existing Steps Existing Water Access Existing Parking ALCOSAN Outfall Possible ALCOSAN Construction Sites

## **Site Assessment**





Recent, planned or likely development
Business District
Park/Proposed Green Street
Proposed Gateway

Proposed Path
 Proposed Ramp
 Proposed Boardwalk/Dock
 Proposed Node
 Proposed Transit Stop
 Proposed Water Landing



Strip District





#### The city tow pound site contains 1,100 linear feet of publicly owned riverfront that is not publicly accessible.

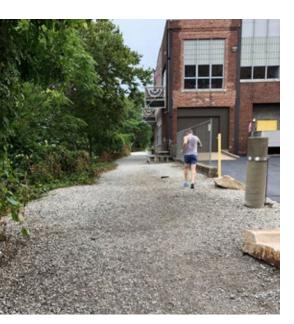
As one of the last largescale, contiguous City-owned properties along the river within the Loop, the city tow pound lot just downstream of the 31st Street bridge should include a public park amenity along the riverfront. This would provide an opportunity to stabilize and restore the riverbank and make it possible for people to access the water. A water landing on this site could include an accessible canoe and kavak launch and could be used to dock activity barges, such as a swim barge or concert barge.

This would be a unique, active, riverfront park (a first for Pittsburgh) that would act as a destination for the region.

The portions of the site located closer to the Strip District neighborhood could still be privately developed, balancing the economic benefit of private development with the community benefit of the park. When the time is right, Riverlife will collaborate with the City and the community to plan and program the site.

#### The Strip District needs to be connected to the busway.

Creating a new stop on the Martin Luther King Busway at 26th Street would put 1,700 additional people within a 10-minute bus ride of the riverfront. Creating better transit connections will also benefit residents and merchants of the Strip District. Riverlife supports and will advocate for the creation of a busway stop.





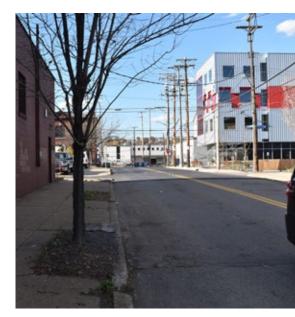
## The Strip District needs a continuous, accessible, and high quality riverfront trail system.

A lack of clarity regarding ownership of the defunct rail line in the Strip District has resulted in inconsistent surfaces, ADA inaccessible trail portions, and has left parts of the trail without maintenance or improvement.

Riverlife will support the work of the City and Friends of the Riverfront to create a continuous, accessible, and high quality riverfront trail system in this portion of the Loop. Building on the work of the Strip District Vision Plan, Riverlife will also work with partners and adjacent property owners to tie the riverfront back into the street grid and to create nodes of activate public space through the Artwalk on the Allegheny program as well as through pop-up events.

#### 4 Completing the Allegheny River Green Boulevard would enhance the Loop.

The Allegheny River Green Boulevard remains a priority for Riverlife and is a key part of the Loop. Riverlife will continue to work with partners to implement this plan.



#### 5 Create better perpendicular connections from the riverfront into the heart of the Strip.

Streetscape improvements and wayfinding are needed to connect the riverfront to the Penn Avenue business district, transit connections, and the 16th street bridge. Strong perpendicular connects support the riverfront and the neighborhood.



1

4

5

6

8

development.

Street Bridge.

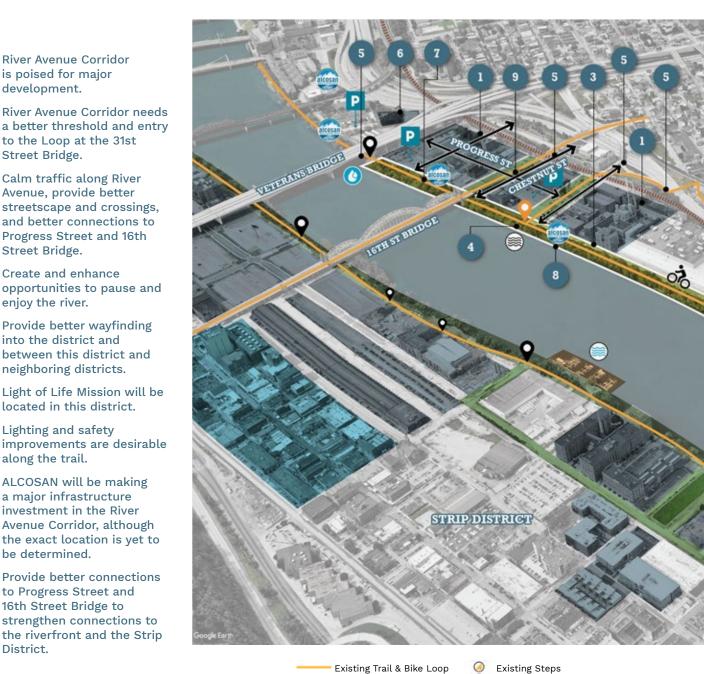
Street Bridge.

enjoy the river.

along the trail.

be determined.

District.





Existing Steps **Existing Water Access** Existing Parking ALCOSAN Outfall Possible ALCOSAN Construction Sites

 $\odot$ 

P

0

## **Site Assessment**





Recent, planned or likely development Business District Park/Proposed Green Street Proposed Gateway

**9** Proposed Node

Proposed Water Landing





## River Avenue Corridor is poised for major development.

This district is likely to see significant development in the next decade, particularly at the western end of the district between the North Shore and Heinz Lofts. Riverlife will work through its Design Review Committee to ensure that future development faces and activates River Avenue and the riverfront.



#### River Avenue Corridor needs a better threshold and entry to the Loop at the 31st Street Bridge.

The long, narrow stretch of property between River Avenue and the railroad closest to 31st Street is owned by the Urban **Redevelopment Authority** (URA) and is likely too narrow to be developed. This property could be developed into a new Loop threshold and trailhead that would provide an ADA accessible connection from the 31st Street Bridge to the trail. This site could also provide parking and possibly other amenities, such as public restrooms, a food truck parking area, Healthy Ride bike rental station, bike parking, and bike repair station.



#### 3 Calm traffic along River Avenue, provide better streetscape and crossings,.

The trail is accessed by crossing River Avenue, which is used as a cut through by drivers. Improving the streetscape and implementing traffic calming measures along River Avenue would increase safety and improve the quality of the riverfront trail and district. Riverlife will work with partners to advocate for such improvements to River Avenue.

#### Provide better connections to Progress Street and 16th Street Bridge to strengthen connections to the riverfront and the Strip District.

Connections between Progress Street, where the 16th Street Bridge lands, and the riverfront are need to be strengthened through streetscape improvements and wayfinding. This will also strengthen cross river connections to the Strip District.



#### Create and enhance opportunities to pause and enjoy the river.

River Avenue Corridor provides opportunities to get to the river, but none are accessible and they could be more welcoming. The riverfront trail in this area could be enhanced by creating additional moments to access the water, go fishing, or simply enjoy the river. Existing moments to access the river should be improved and one example is to create new outlooks at existing ALCOSAN outfall sites.

The terminus of Heinz Street near the Heinz Lofts is a natural place for a riverfront public space and landing. Heinz Street is one of the few places where the street grid connects under the railroad and over Route 28 into the neighborhood beyond. Enhancing this connection should be a priority.



#### 5 Provide better wayfinding into the district and between this district and neighboring districts.

It is important to have better wayfinding and riverfront threshold moments at key trail intersections, such as

- under the Veterans Bridge where the trail transitions from the North Shore to the River Avenue Corridor,
- at the intersection where Heinz Street meets the riverfront trail, and
- at the Herr's Island pedestrian bridge landing.

#### ALCOSAN will be making a major infrastructure investment in the River Avenue Corridor, although the exact location is yet to be determined.

Work in the River Avenue Corridor is part of the Ohio River Tunnel work, currently scheduled to take place in 2021 - 2029. Some portion of the work proposed by Riverlife could form part of the green "leave behind" when tunnel construction is complete



### Light of Life Mission will be located in this district.

Light of Life Mission provides a home for the homeless and food for the hungry in Pittsburgh and Allegheny County.

#### Lighting and safety improvements are desirable along the trail.

The trail is actively used as a commuter route but it does not have lighting. The recently constructed Light of Life Mission will bring increased foot traffic to the area and the River Avenue Partnership, which includes Riverlife, has been working to understand what this will mean for the district. The Partnership is working to develop a lighting plan, which Riverlife will support and advocate for.



#### Washington's Landing

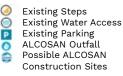
- Washington's Landing is one of a handful of places where you can dine on the river.
- 2
- Provide a Loop trailhead at the URA lot.
- Provide better signage and wayfinding to make people feel welcome and safe.

To make users feel more comfortable and clearly delineate the public and private areas on Washington's Landing, Riverlife recommends improved signage and a map showing where the public trail and private areas are. Signage should recommend that cyclists walk their bike on the path. The path at the southern end of the island is narrow, gravel, and close to the steep riverbank. Widening the path would be challenging because of the slope, so encouraging people to treat this as a pedestrian path is desirable.

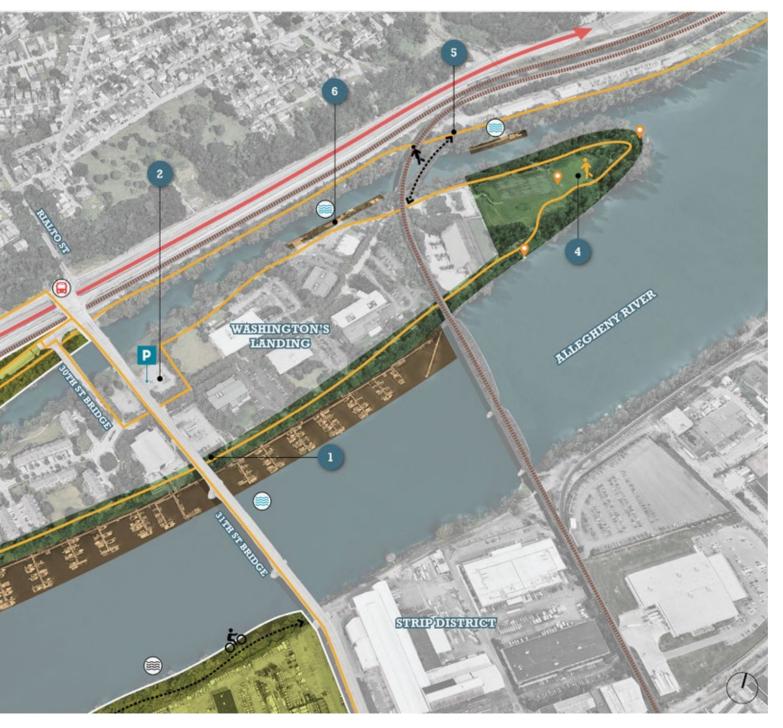
- 4 Provide additional amenities at Herr's Island North Park, such as bike racks, so that people can stop and enjoy the park and views.
- 5 Create a bike-pedestrian path connection to the Millvale trail, using the abandoned railroad bridge at the northeast end of the island.
  - Strengthen the Three Rivers Rowing node because this area provides one of the best places in this district to get into the river.



Existing Trail & Bike Loop Existing Transit Existing Railroad Existing Stream Existing Transit Stop



### **Site Assessment**



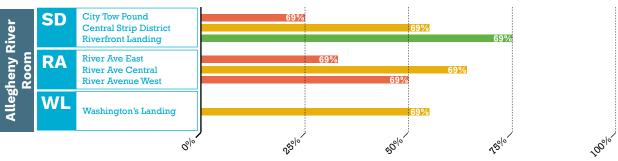


Recent, planned or likely development Business District Park/Proposed Green Street Proposed Gateway •••••• Proposed Path
Proposed Water Landing

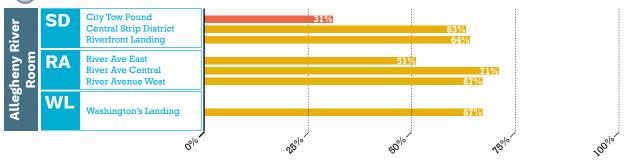


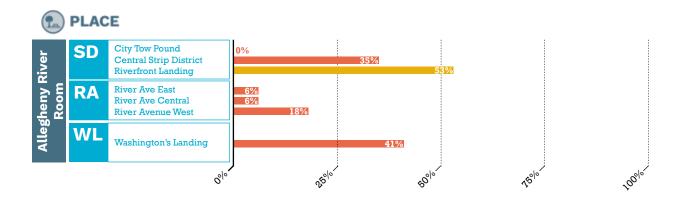
The Allegheny River Room has mixed ratings. While the trail is continuous through most of the River Room, the low scores are due to inconsistent maintenance, minimal tree canopy, dominance of invasive species, the mixed quality of the trail surface, and lack of activation along the riverfront throughout much of the River Room.

#### **OVERALL SCORES**

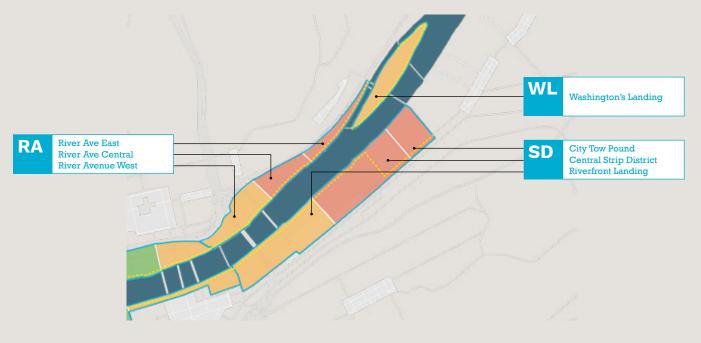


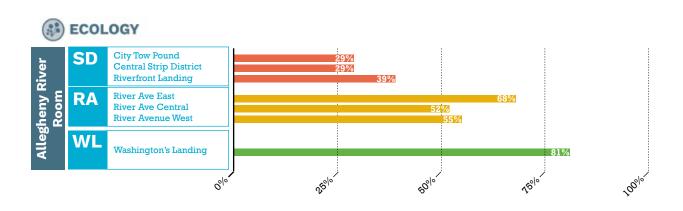
#### 

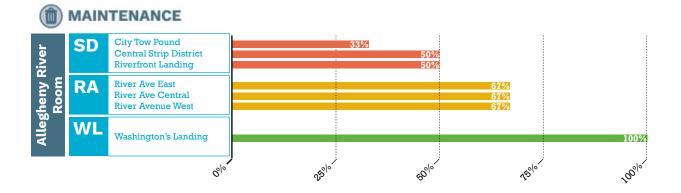




#### **Allegheny River Room Overall Scores**









## Site Inventory



#### STRIP DISTRICT

- The Loop trail continues from downtown into the Strip District, but stops at 27th Street.
- The trail is not ADA accessible throughout due to surface material of the trail. Both the 16th Street and 31st Street bridges have ADA access, but trail users must take a detour to Penn Avenue to get to the bridges.
- The regular, small scale street grid of the Strip District provides many perpendicular connections to the trail.
- Wayfinding between Penn Avenue and the riverfront is needed.

#### RIVER AVENUE CORRIDOR

- The River Avenue Corridor district has a continuous, ADA accessible trail along the river.
- The riverfront is cut off from the adjacent Troy Hill neighborhood by Route 28 and an active rail line.
- While there are a number of places to fish and get close to the water, none of these places are accessible.
- Access to the 31st Street Bridge is a steep, narrow sidewalk with overgrown vegetation.
- There is no crosswalk to access to the 16th Street Bridge and sidewalks and side streets are in poor condition.
- Wayfinding between Progress Street and the riverfront and between Troy Hill and the riverfront is absent.

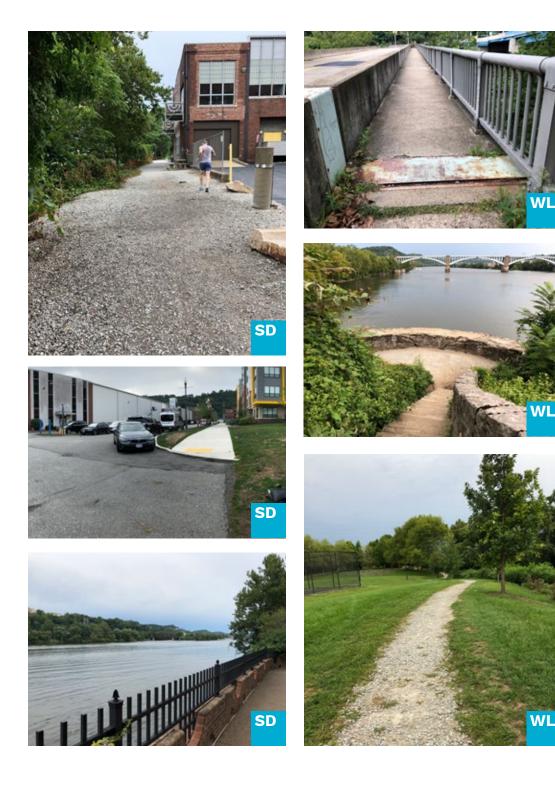
#### WASHINGTON'S LANDING

- Washington's Landing has a continuous trail along the river and has spectacular views. However, it is a narrow, crushed gravel path that is not ADA accessible.
- Washington's Landing can be accessed via the 30th Street bridge or the pedestrian-only Herr's Island Bridge. Both bridges are bikeable, but the slopes might be too steep to comply with current ADA standards.













- The riverfront trail varies in materials and quality.
- New buildings have provided site amenities, including seating areas, bike racks, and bike repair stations.
- The only portion of the Loop in the Strip District that has consistent lighting is the Riverfront Landing section. Otherwise, the only trail lighting is from building entrances.

#### RIVER AVENUE CORRIDOR

- The riverfront trail contains amenities such as benches and places to access the river to go fishing, however, many of the amenities are old and in disrepair.
- There is no lighting along the path and no buildings to activate the path.
- There are frequent parking locations along the trail, however none of these locations provide ADA access to the trail.
- Much of the area bounded by the Veterans Memorial Bridge, Heinz Street, and the railroad corridor is underutilized and vacant. This area is ripe for revitalization and redevelopment.
- While there is a great riverfront park experience on the trial, there is a lack of human scale amenities off the trail.

#### WASHINGTON'S LANDING

• The trail has amenities including seating, overlooks, and one of the region's few riverfront restaurants (Redfin Blues), but the trail does not have consistent lighting in this district.









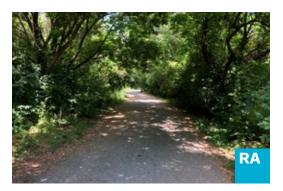
- The trail is small-scale and feels like a residential street.
- There are no public opportunities to access the river in this district, however there is a private marina.

#### RIVER AVENUE CORRIDOR

- The riverfront trail is informal in character.
- There are few large-scale destinations along the River Avenue Corridor, but there is a fishing spot and the shipwreck on the Allegheny.
- Traffic calming measures are needed to improve River Avenue for bicycles and to provide safe crossings for pedestrians.
- This portion of the trail is heavily used.

#### WASHINGTON'S LANDING

- The riverfront on Washington's Landing is small-scale due to the presence of single family homes.
- There is a park on the northeastern tip of the island.











- There are some mature trees along the river, including native sycamores, but the understory is dominated by invasive species that block the view of the river.
- The tree canopy cover in this district is under 4%, the lowest of any of the districts in the Loop.
- The riverbank is weedy and overgrown.
- Some of the newer building developments have elements of green infrastructure, such as vegetated swales.
- Riverbank conditions are mostly rated poor or fair condition by the Army Corps with areas of failed riverbank throughout.
- The district has an overall rate of impervious cover over 90%.

#### RIVER AVENUE CORRIDOR

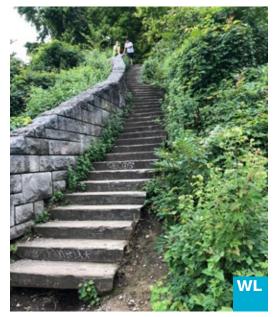
- There are large mature trees (primarily sycamores) along the riverbanks, and volunteer groups have recently planted more trees along the western portion of the district.
- The riverbank is vegetated and is mostly in fair condition or favorable condition with some areas in poor condition, according to the Army Corps of Engineers.
- The understory is dominated by invasive species and plant growth blocks views to the river.
- Thoughtful native plantings have been installed along the trail corridor.
- The River Avenue Corridor is in need of streetscaping.
- The tree canopy cover in this district is 16%.
- The riparians zone (within 75' of the riverbank) is mostly less than 66% paved and in some cases less than 33% paved according to the Army Corps.

#### WASHINGTON'S LANDING

- The tree canopy on Washington's Landing is the most significant out of all the districts in the Loop at 42%, the only segment in the Loop to exceed the city average of 40%.
- Invasive plants close to the trail are well controlled. There are more invasives closer to the water and on the northeastern tip of the island.
- The riverbank is natural and vegetated, although quite steep. It is mostly in fair condition, according to the Army Corps, but the back channel back was not assessed.
- Planting along the riverfront trail includes non-native and invasive species.
- Washington's Landing has the lowest rate of impervious cover in the Loop at 43%.









- The trail and associated amenities in the Strip District are maintained by adjacent property owners. The riverbank and the areas where streets meet the trail are not maintained.
- Oftentimes there is a gap between where the sidewalk ends and the trail begins that is of poor quality, is poorly maintained, and is not ADA accessible.
- The area between the trail and the river is not maintained.

#### **RIVER AVENUE CORRIDOR**

• Nonprofits lead trail cleanups and the City removes trash in this district.

#### WASHINGTON'S LANDING

• The riverfront is well maintained, and is presumably cared for by a homeowners association.







1. A thorough analysis of Loop maintenance is provided in the Permanent Financial Instrument report included as Appendix 5 to *RIverlife's Implementation Framework Report*.



- The Strip District Riverfront Park Vision Plan envisions nodes of public space along the riverfront at points where the trail meets the street grid. This is still a vision worth pursuing to activate the riverfront trail.
- There is an opportunity for enhanced programming in this district, such as the Artwalk on the Allegheny program that is currently in development by Riverlife and the Cultural Trust.
- Significant residential development is occurring within this district, which is creating a population of riverfront trail users and potential riverfront advocates.
- Developing the City Tow Pound lot would fill a critical gap in the Loop. It is one of the few Loop gaps that is publicly owned, which means that when the property is put on the market the RFP should require the site to include public access to the riverfront.
- The City has rail-banked the rail line from 24th Street to 33rd Street, creating the opportunity to build and improve the trail in this zone.

#### RIVER AVENUE CORRIDOR

- There are opportunities along the Loop in the River Avenue Corridor to create amenities and improve the trail.
- The ALCOSAN outfall structures provide outlooks to the river. These could be more formally designed, providing safe and accessible pedestrian access.
- The URA owns the long narrow parcel of land between River Avenue and the rail line next to the 31st Street bridge. This parcel will be difficult to develop because of it's narrowness. This provides an opportunity to create a threshold into the Loop as well as an accessible, trail-like connection to the 31st Street bridge.
- Improving the River Avenue Corridor may encourage development of adjacent vacant properties, which would include associated riverfront improvements.
- Riverside Center for Innovation is interested in using its parking lot at the corner of Madison Street and River Avenue for pop-up events during after-hours and weekends.
- Private property positioned for future development is in an opportune location for river-focused development and adjacent infrastructure improvements.

#### WASHINGTON'S LANDING

- Three Rivers Rowing on Washington's Landing provides an excellent opportunity for people to get close to and utilize the river. It also provides a place for kayaks and canoes to launch into the water or to stop and rest.
- The abandoned railroad bridge on the northeast end of the island provides an opportunity to connect to the Millvale section of the Three Rivers Heritage Trail.









#### STRIP DISTRICT

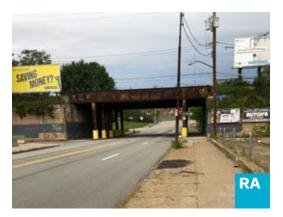
- The overall condition and maintenance of the trail in the Strip District is a challenge.
- The lack of clarity about ownership of the defunct rail line has left many portions of the trail and riverfront without maintenance.
- Many people visit the Strip District but do not realize they are adjacent to the river. There is no connection to the river, wayfinding to the river, and no destinations on the river.

#### RIVER AVENUE CORRIDOR

- The rail line and Route 28 limit connectivity between the riverfront and the adjacent neighborhoods.
- In certain locations the riverbank is in poor condition and riverbank stabilization is needed. This creates an opportunity for habitat restoration and the creation of a more ecologically robust riparian buffer zone.
- The Veterans Memorial Bridge creates a large divide in the middle of the neighborhood.
- Neighborhood businesses would like to utilize the space beneath the Veterans Memorial Bridge for parking.

#### WASHINGTON'S LANDING

- The residential, western portion of the island feels private, which makes some people feel unwelcome here.
- The trail on Washington's Landing is too narrow to accommodate both cyclists and pedestrians safely and it's proximity to the steep riverbank slope limits the ability to widen the trail.











1 mm

UPMC

# 09 Monongahela River Room

Site Assessment Scorecards Opportunities & Challenges Site Inventory



- There are only three places to access the trail between South Shore Riverfront Park and 4th Street.
- 2

3

5

6

7

Additional connections to the trail need to be created where possible.

The gap where the trail detours onto City streets between 4th and 2nd Streets needs to be closed.

The existing South Side Riverfront Park is well loved and well used, but could benefit from some improvements.

The area between South Shore Riverfront Park and 4th Street feels abandoned and uncared for.

4th Street by the Highline is an ideal location for a new trailhead and water landing.

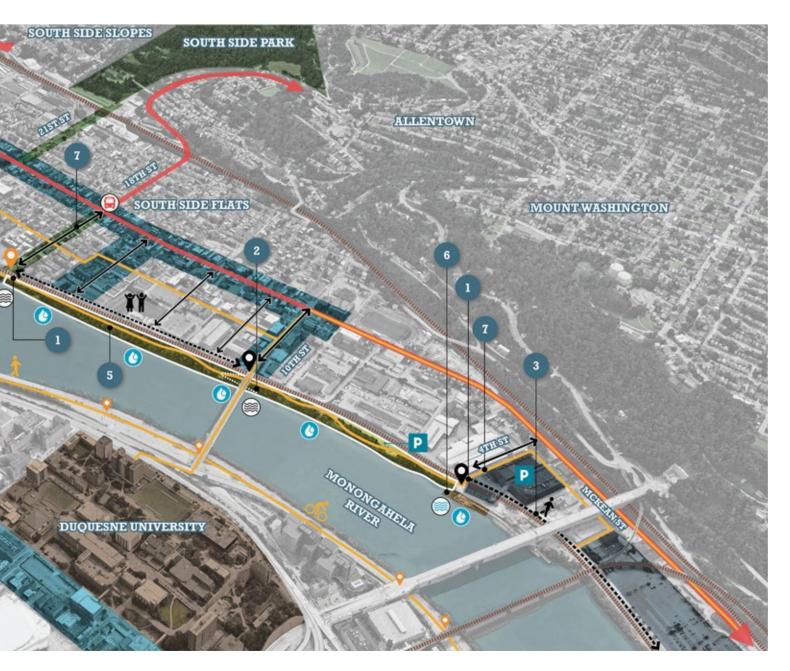
Where connections to the trail do exist, they should be celebrated with clear connections into the neighborhood.



Existing Trail & Bike Loop Existing Transit Existing Railroad Existing Stream Existing Transit Stop  Existing Steps
 Existing Water Access
 Existing Parking
 ALCOSAN Outfall
 Possible ALCOSAN Construction Sites

220 | Completing the Loop | Technical Assessment

## **Site Assessment**





Recent, planned or likely development
Business District
Park/Proposed Green Street
Proposed Gateway

••••• Proposed Path

- Proposed Ramp
- Proposed Node
- Proposed Water Landing





#### There are only three places to access the trail between South Shore Riverfront Park and 4th Street.

The existing active rail line acts as a barrier that separates the riverfront trail from the neighborhood. South Side Works created a park on the existing tunnel that runs over the railroad, which better connects the neighborhood to the trail and the riverfront. The tunnel ends at 27th Street and the next opportunity to legally cross the railroad tracks is at 18th Street (which is the entry to South Side Riverfront Park). After 18th Street, the next opportunity to cross the tracks is at 4th Street near the new Highline Plaza, which is over 3⁄4 of a mile away. Previously there was a crossing at 9th Street that has since been closed (the paving was removed and a physical barrier was put in place).

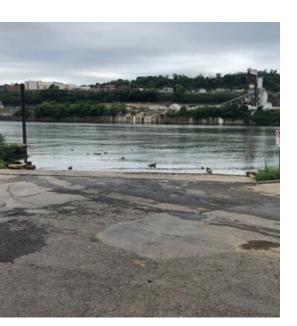
#### 2 Additional connections to the trail need to be created where possible.

To create greater trail connectivity and to provide access to the trail that does not require a railroad crossing, Riverlife recommends creating a direct connection from the 10th Street Bridge to the trail, which could be accompanied by additional river access. 10th Street is an important connection across the river to Downtown and Uptown, as well as connecting to Carson Street.



#### The gap where the trail detours onto City streets between 4th and 2nd Streets needs to be closed.

The northwest corner of the Highline building sits on the edge of it's property line and the county garage under the Liberty bridge has only a two feet setback from it's property line. A direct trail through this area would require approval from the railroad (CSX) to locate the trail on their property. A similar condition exists at Station Square where the trail is close to the rail line and a decorative fence keeps trail users off of the tracks. If this trail were created, it would pass under the concrete plant's conveyor and would require overhead protection for trail users.



#### The existing South Side Riverfront Park is well loved and well used, but could benefit from some improvements.

The South Side Riverfront Park area will be impacted by ALCOSAN's Monongahela River Tunnel work, likely occurring after 2031. Improvements to South Side Riverfront Park and the connection node at 18th Street should be included in ALCOSAN's green improvements to this area following construction. These improvements could include green infrastructure in the parking lot, tree plantings, and ADA accessible boat docks and kayak launches.



#### 5 The area between South Shore Riverfront Park and 4th Street feels abandoned and uncared for.

The area west of South Side Riverfront Park (from 18th Street to 4th Street) includes a mix of private and government owned properties and is maintained primarily through volunteer efforts. Riverlife proposes to officially extend South Side Riverfront Park from 18th to 4th Street, with a new trailhead and accessible river access on the riverfront to the east of the 4th Street railroad crossing.



#### 6 4th Street by the Highline is an ideal location for a new trailhead and improved water landing.

As one of the three possible locations to cross the railroad tracks in this district, 4th Street is a natural entry point for the Loop. Creating a trailhead and water landing here will make it easier for people to get onto the water. There is an existing landing at 4th Street, but it is not accessible and could be expanded.

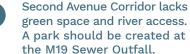
#### Where connections to the trail do exist, they should be celebrated with clear connections into the neighborhood.

Given how few trail connections exist, those that do exist should be celebrated. The entry points to the trail should have a sense of arrival. Streetscape improvements and wayfinding can stitch together the riverfront, the neighborhood, and the existing commercial district along Carson Street.





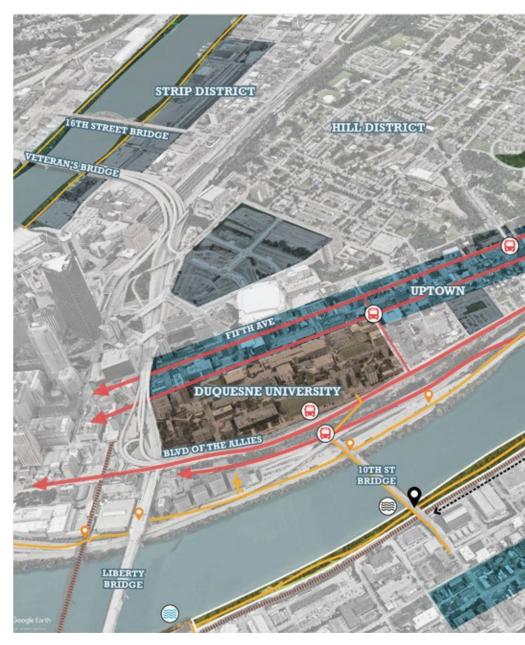
A seldom used rail spur that runs through the Pittsburgh Technology Center (PTC) along the river could be repurposed to provide a riverfront trail experience.



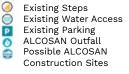
3

Once a park and riverfront trail are created, additional river landings could be created.

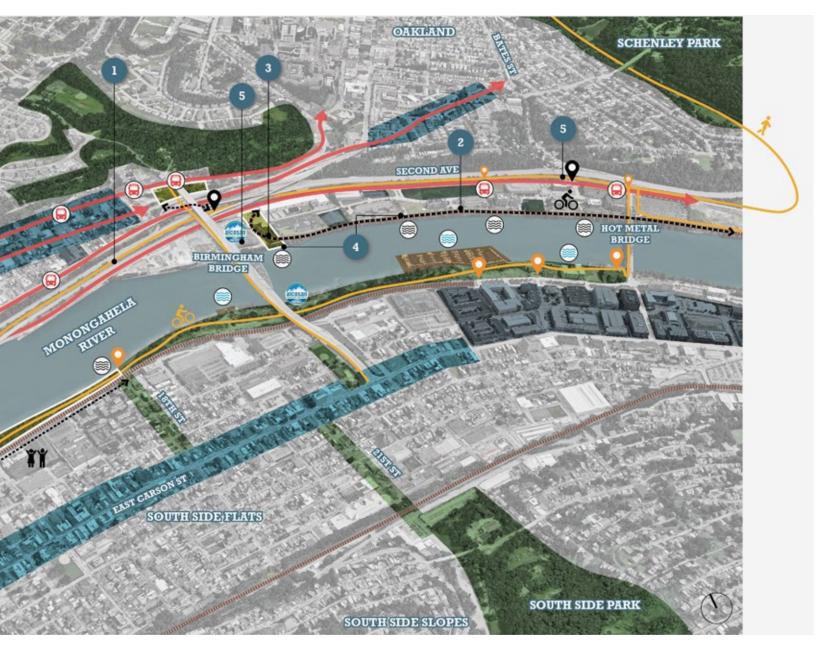
Additional Eliza Furnace Trail entrances should be created to connect it to Uptown and the Hill District via Brady Street and to South Oakland via Bates Street.







## **Site Assessment**





Recent, planned or likely development Business District Park/Proposed Green Street Proposed Gateway Proposed Path Proposed Ramp Proposed Boardwalk/Dock Proposed Node

Proposed Water Landing

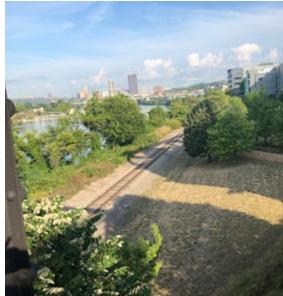






The continuous trail in this district is the Eliza Furnace Trail, which acts as a commuter corridor sandwiched between two major roadways, and is not immediately adjacent to the riverfront. Historically, Friends of the Riverfront has been the primary steward of the Eliza Furnace Trail.

Riverlife will support the work of Friends of the Riverfront in this district while seeking opportunities to get people closer to the river. The Eliza Furnace Trail could also benefit from public art, such as an air quality monitoring installation (which could be pursued in partnership with the Breathe Project), kinetic art pieces that capture energy from movement along the trail, and murals along the highway retaining walls. Riverlife received many comments from the public regarding the lack of trees along this portion of the trail. Planting more trees would have an ecological benefit and would provide a more pleasant trail experience. Riverlife would work on tree plantings in partnership with Friends of the Riverfront, Tree Pittsburgh, and the Western Pennsylvania Conservancy's Red Bud project.

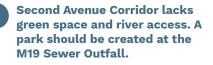


A seldom used rail spur that runs through the Pittsburgh Technology Center (PTC) along the river could be repurposed to provide a riverfront trail experience.

Unfortunately, many of the buildings at the Pittsburgh Technology Center turn their backs to the river and in some cases portions of the buildings extend all the way to the riverfront property line. This makes the creation of a riverfront trail through PTC impossible. ALMONO partners recently acquired the rail spur that runs along the river at the Pittsburgh Technology Center, which creates an opportunity to use the rail spur for a future riverfront trail. While it would not create a continuous riverfront connection within the Loop, it could be an important part of the Loop that allows people to get close to the river and enjoy the spectacular views.







The PWSA Green First Plan envisions a green infrastructure park at the M19 outfall near the base of the Birmingham Bridge. ALCOSAN will be engaging in deep tunnel construction work in the same area and will work with Riverlife to facilitate a community engagement process to determine what the area should look like following construction, which could include an Outfall Park.

#### 4 Once a park and riverfront trail are established, additional river landings could be created.

There are no river landings on the north bank of the Monongahela River. Creating a riverfront trail at PTC and a new Outlet Park would open up river access and could include river landings.



Additional Eliza Furnace Trail entrances should be created to connect it to Uptown and the Hill District via Brady Street and to South Oakland via Bates Street.

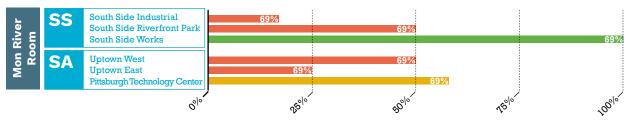
5

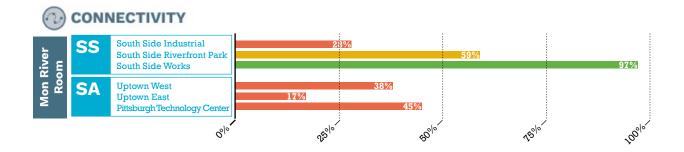
There are very few opportunities for Uptown and the Hill District to access the Eliza Furnace Trail and the river. The Uptown EcoInnovation District Plan envisions a future connection to the Eliza Furnace Trail at Brady Street and the city developed conceptual drawings in 2019 to study how this connection could be created. There is also a desire to create a trail connection at Bates Street. which would provide greater connectivity between South Oakland and the trail.

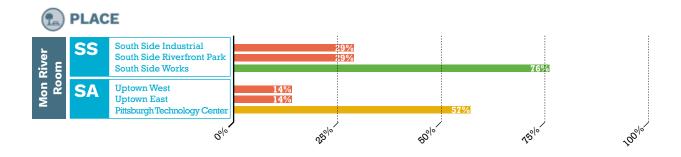


Due to the current and historical industrial uses of the riverfront on both sides of the river, the riverfronts are disconnected from the adjacent neighborhoods. On the Second Avenue side the river is largely inaccessible. Enhancing existing connections and creating new ones where possible is a priority on both sides of this River Room. South Shore Riverfront Park is the only segment that scored high quality in any category.

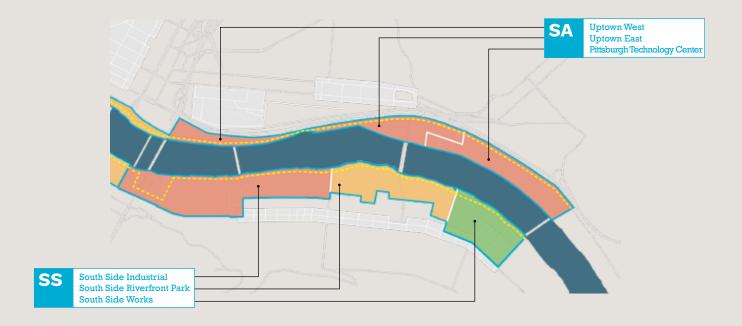
#### **OVERALL SCORES**



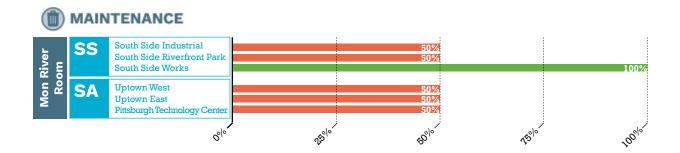




### Monongahela River Room Overall Scores



#### ECOLOGY South Side Industrial SS 42% **Mon River** South Side Riverfront Park 61% 61% Room South Side Works Uptown West Uptown East SA 48% 45% Pittsburgh Technology Center 35% 25010 \$0°% 2000/0 15010 0%





#### SOUTH SIDE

- The South Side has a continuous trail along the riverfront that ends at 4th Street, however, portions of the trail are not ADA accessible.
- The trail is disconnected from the neighborhood.
- South Side Riverfront Park and South Shore Riverfront Park have good connections to the water.

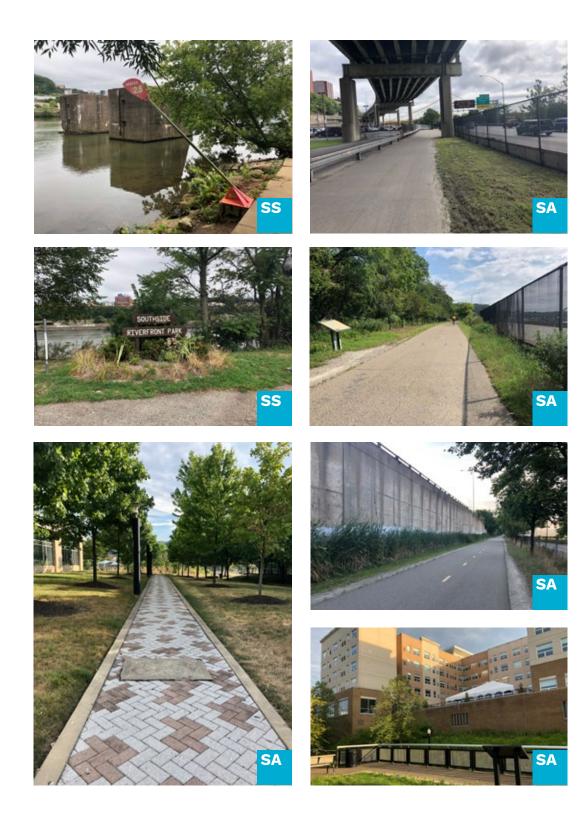
- The Second Avenue Corridor district has a continuous trail, however, it lacks continuity at the eastern end, connectivity to the adjacent neighborhoods, and connectivity to the river.
- The Eliza Furnace Trail provides commuter connectivity to downtown, but does not provide a connection to the river.
- There are very few places where people can access the Eliza Furnace Trail and there are no access points to the trail from the Uptown neighborhood.
- There are some public outlooks to the river from the PTC and some paths along the river.
- Better wayfinding is needed between the Eliza Furnace Trail and riverfront opportunities at PTC.















- South Shore Riverfront Park is a high quality, ADA accessible public space.
- The trail downstream of South Shore Riverfront Park is in poor repair, making it not ADA accessible in places. This portion of the trail is lacking lighting and does not have buildings along it to activate the trail.

- There are no destinations or amenities to entice people to this district unless they work in one of the buildings at the PTC.
- The buildings at the PTC mostly turn their backs to the riverfront and do not activate the ground level.









- South Shore Riverfront Park is a grand civic gathering space, while South Side Riverfront Park is more neighborhood scale.
- The area downstream of South Side Riverfront Park is wild in character.

- The main trail of the Loop, the Eliza Furnace Trail, is sandwiched between Second Avenue and the parkway. It functions well as a commuter corridor but not a place.
- The PTC has stunning views of downtown, but is a missed opportunity to activate and engage the river.













- There are mature trees (primarily sycamores and silver maples) along the riverbanks, however, the understory is dominated by invasive plant species that block the view of the river. The tree canopy cover in this district is 14%.
- Although the riverbank is vegetated, the majority of the riparian zone (within 75' of the riverbank) is more that 33% paved, with the district overall having an impervious cover of over 75%.
- The riverbank is a mix of natural and man-made materials and includes some areas that are in poor condition, according to the Army Corps of Engineers, with some areas in found to be failing.

- The tree canopy in the Second Avenue corridor district is minimal (less than 12%) and the close proximity of the trail to two major roadways presents an air quality concern.
- At the PTC there are planters on the back side of the street curbs that do not have street trees.
- The Eliza Furnace Trail is directly adjacent to two major roadways and a concrete plant, which presents an air quality concern.
- The riparian zone outside of Pittsburgh Technology Center is all more than 66% paved.
- Riverbank condition in this district is mix of fair, favorable and poor, with the majority of th riverbank at PTC being rated poor by the Army Corps and found to be failing.











• The City performs basic maintenance at South Side Riverfront Park (such as trash removal), and South Shore Riverfront Park maintenance is managed by the URA. However, the rest of the trail appears to be minimally maintained or is maintained primarily through volunteer efforts.

#### SECOND AVENUE CORRIDOR

- The trail surface is well maintained and largely free of trash. Vegetation maintenance is limited to mowing and cutting back weeds. There are invasive plant species growing in the planted areas on either side of the trail.
- The large vacant lawn areas at the PTC attract geese.









1. A thorough analysis of Loop maintenance is provided in the Permanent Financial Instrument report included as Appendix 5 to *Riverlife's Implementation Framework Report.* 



- There are several opportunities to improve the ecological health of the riverfront, including green infrastructure and riverbank stabilization.
- ALCOSAN is planning construction in this district, which will most likely be located in South Side Riverfront Park near the base of the Birmingham Bridge. Once construction is completed, these sites can be restored and improved.
- Stormwater runoff from the parking lot at South Side Riverfront Park is causing erosion along the riverfront trail. Green infrastructure can mitigate this erosion.
- Riverbank stabilization is an opportunity to provide a more natural riparian buffer and restore the native plant community.
- The Highline building has made significant improvements to the outdoor space on the side of the railroad track opposite the river, however, there is an opportunity to improve the riverfront at this location as well. The Highline's improvements also include a separate bicycle track along 4th Street.

- Additional tree planting on the south side of the Eliza Furnace Trail would provide shade and mitigate air pollution.
- Future buildings at PTC should better engage the riverfront.
- Planning around the Second Avenue Corridor provides opportunities for better transit and bike infrastructure.
- Almono Partners has acquired the rail line along the river from Hazelwood Green to its terminus near the Birmingham Bridge. This creates an opportunity for a future riverfront trail as a Loop spur. However, it is uncertain if the trail could feasibly extend to downtown Pittsburgh along the river.
- Trail and park improvements that are taking place in Junction Hollow/Schenley Park may lead to a better connection between Oakland, Schenley Park, and the Loop.
- The Hazelwood Green development presents an opportunity to expand the Loop and further activate the river.











- The railroad acts as a barrier that prevents connectivity between the riverfront and the adjacent neighborhood.
- The trail includes a detour from 4th Street to 2nd Street. Previously there was a continuous trail along the railroad tracks, but this was closed by the railroad company. There have been accidents involving cyclists along McKean Street.
- The location of the concrete plant barge prevents the creation of a boardwalk on the river.
- The Highline building and the county garage are very close to their property lines, which means that to create a trail along the river, property or an easement will need to be acquired from the railroad.

- There are many challenges preventing the creation of a continuous trail along the river in this district, as well as challenges that prevent connections between the riverfront and the adjacent neighborhoods.
- There is no opportunity to create a continuous trail along the river at the Pittsburgh Technology Center because in many cases the buildings have been built to the property line. Additional challenges preventing a continuous riverfront trail include the rail line, a downstream paving plant, and the lack of available land between Second Avenue and the river west of the Birmingham Bridge.
- There is little opportunity to activate the trail in this district and most of the buildings at PTC do not activate either the street or the riverfront.
- There is little opportunity to connect the Eliza Furnace Trail to the adjacent neighborhoods of South Oakland and Uptown due to the highway.









# 10 Budgeting the Loop

Methodology Budget Overview

1.1.1.111

# Methodology

Riverlife performed a budgeting exercise to estimate the approximate cost to implement the recommendations contained in the *Completing the Loop* report.

The results of this budgeting exercise will help Riverlife plan for the future of the Loop. Since the *Completing the Loop* report is a planning document and does not provide as much detail as a design document would, the cost estimates are not as precise as those based on construction documents. As Riverlife moves forward from planning to conceptual design of these projects, the cost estimates will be refined.

#### ESTABLISHING THE COST BASIS

Historic cost data from previous Loop projects and URA of Pittsburgh projects (such as Liberty Green and Larimer's Village Green) were used to determine unit costs, which served as the cost basis for the high-level estimates. Once the unit costs were established, RS Means historic cost indices were used to escalate costs from the year of project completion to 2020 costs, making all the unit costs comparable.

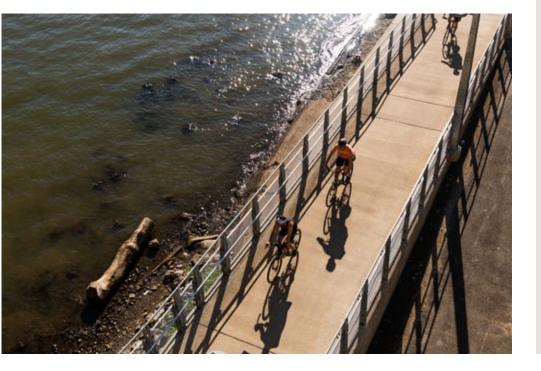
Unit costs were divided into several categories based on the proposed projects described in the *Completing the Loop* report.

- **New parks:** The unit cost for new parks was based on square footage costs for other parks in Pittsburgh, with South Shore Riverfront Park being the primary influence. (Unit cost: \$70/sf)
- **Renovation of existing parks :** The unit cost for renovations of existing parks was informed by estimates that Riverlife has received to renovate the Allegheny Landing Park. (Unit cost: \$35/sf) This was also half of the new park cost.
- **Structures:** Some parks include structures, such as small activity buildings, storage buildings, or concession stands. The unit cost for these structures was informed by the recently completed Tree Pittsburgh Headquarters building. (Unit cost: \$267/sf)
- **Structured switchbacks:** Switchbacks that connect bridges to the trails below are proposed at the West End, 31st Street, and 10th Street Bridges. As the only comparable precedent, the switchback that connects the Mon Wharf to the Smithfield Street Bridge (the Mon Wharf switchback) informed the unit cost on a linear foot basis. (Unit cost: \$5,800/lf)
- **Custom structure:** For the custom structure at the High Line-Station Square Connector, which has qualities of both structure and fence, an average between the linear foot cost of structured switchbacks (\$5,800/ lf) and the linear foot cost of a 4' tall traditional steel ornamental fence (\$400/lf) was used. (Unit Cost: \$3,100/lf)
- **Green Street Connections:** Green street connections include sidewalks, linear rain gardens, and street trees. The unit cost was informed by the *Meadow Street Microshed Study* that was conducted by the Pittsburgh Parks Conservancy. (Unit cost: \$2,100/lf)

• **Green Parking Lots:** For the sake of this cost estimate, green parking lots consist of a standard 62 foot wide parking bay with porous pavers in the parking stalls, concrete in the drive lane, and a 5' linear rain garden on either side with trees 30 feet on center. The unit cost for green parking lots was informed by the *Meadow Street Microshed Study*. (Unit cost: \$24/sf)

As Riverlife implements projects the cost database will be reviewed and refined as both a means of evaluating bids and establishing budgets for future projects. Property acquisition was not included in the estimates.

Soft costs (design, engineering and permitting) were estimated to be 20% of construction costs for projects on the ground and 30% of construction costs for structured projects (ramps and switchback connecting to bridges). The higher estimate for the structured projects was due to greater engineering needs and permitting requirements.



## **Riverlife Projects**

This list includes proposed projects from the report that Riverlife will lead.

#### West End Bridge Gap

Manchester Gateway

Saw Mill Run Gateway

Bridge Widening

#### **Golden Triangle**

Allegheny Riverfront Park Extension

Allegheny Riverfront Park Renovation

Mon Wharf Enhancements

#### **North Shore**

Allegheny Landing Renovation

#### **River Avenue Corridor**

River Avenue Trailhead

#### **Strip District**

City Landing Park

New Connection to 31st Street Bridge

#### South Side

4th Street Landing & Trailhead

Highline-Station Square Connector

South Side Riverfront Park extension

10th Street Bridge Ramp

#### SAMPLE PROJECT

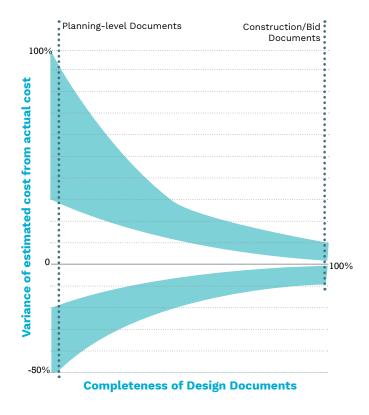
#### Saw Mill Run Gateway Units Quantity **Unit Cost Total Cost Ground-level Construction** Saw Mill Run Park Building construction/renovation SF 20,000 \$267 \$5,340,000 Park construction and amenities SF 94,094 \$70 \$6,586,580 New Connection to Station Square through Gateway View Plaza New asphalt bike path between 1 F 2,100 \$88 \$184,800 building and railroad (from Station Square Drive to Musk Way) Protective fence along new asphalt LF 2,100 \$400 \$840,000 bike path along railroad **Construction Total** \$12,951,380 Soft Costs (20%) \$2,590,276 **Total Estimate** \$15,541,656 \$15,541,656 to \$31,083,312 modified AACE Class 5 Cost Estimate Range (estimate to +100%) **Overhead Structures** Bridge to switchback (east side) LF 200 \$1,160,000 \$5,800 Bridge to switchback (west side) LF 250 \$5,800 \$1,450,000 Switchback LF 600 \$5,800 \$3,480,000 Widening bridge sidewalks to pier \$5,800 \$4,234,000 LF 730 (east side) Widening bridge sidewalks to pier LF 640 \$5,800 \$3,712,000 (west side) **Construction Total** \$14,036,000 \$4.210.800 Soft Costs (30%) \$18,246,800 **Total Estimate** modified AACE Class 5 Cost Estimate Range (estimate to +100%) \$18,246,800 \$36,493,600 to \$33,788,456 Saw Mill Run Gateway Total modified AACE Class 5 Cost Estimate Range \$33,788,456 to \$67,576,912 (estimate to +100%) Cost used in Budget (average of high and low) \$50,682,684

#### DEVELOPING THE ESTIMATES

Using the cost basis established above, Riverlife developed estimates for the proposed projects in this report. These are very high level, orderof-magnitude, or modified level 5 cost estimates. A level 5 cost or rough order-of-magnitude estimate has the lowest level of accuracy, because it is completed using planning documents as opposed to construction drawings, which have a greater level of design detail. In a level five cost estimate, the actual construction costs may vary anywhere from 50% below the estimate to 100% above the estimate.

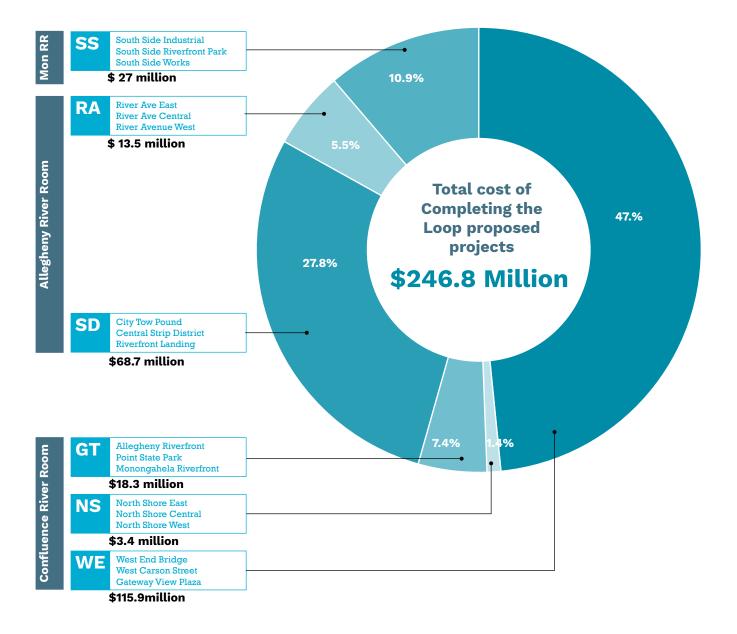
The modified level 5 cost estimate identified a cost range for each project, with the low end being the estimate developed using the cost basis described above and the high end being 100% above that estimate. The overall costs presented in this section represent the average between the high and low costs. As more detailed designs are developed for each of these projects, more detailed cost estimates will be completed.

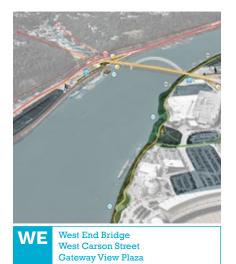
The only exceptions to the cost estimating methodology described above are the Allegheny Landing Park renovation and the extension of the Allegheny Riverfront Park under the Fort Duquesne Bridge to Point State Park. Riverlife is already actively engaged in designing and cost estimating the renovations for Allegheny Landing Park and so the actual budget was used for that project. For the Allegheny Riverfront Park extension, the low end represents the estimated cost based on the square footage of the project and the unit cost of the original project. The high end is a cost estimate for the extension that was prepared by Michael Van Valkenburgh Associates in 2001 (the designer of Allegheny Riverfront Park) that has been escalated to 2020 dollars.



The graph at the left shows the relationship between the level of completeness of design drawings and the variance of the estimate from actual costs. Adapted from the Associate for the Advancement of Cost Engineering, Cost Estimate Classification System.

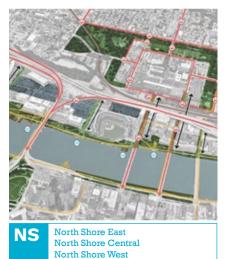
## **Essential Projects in 6 Districts**



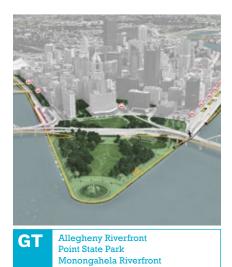


### **Essential Projects**

Manchester Gateway Saw Mill Run Gateway		
Bridge Widening		
Cost:	\$115,897,944	
Timeline:	10 years	



**Essential Projects** Allegheny Landing Renovation \$3,400,000 Cost: **Timeline:** 2 years



#### **Essential Projects**

Allegheny Riverfront Park Extension and Renovation Mon Wharf Enhancements

Cost:	\$18,322,948
Timeline:	5 years

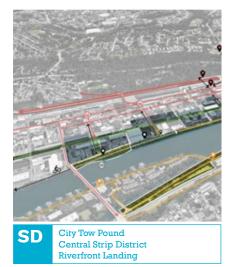


River Ave East River Ave Central **River Avenue West** 

#### **Essential Projects**

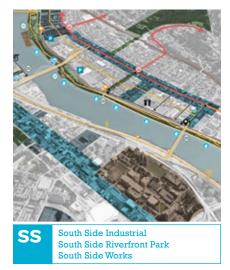
**River Avenue Trailhead** 

Cost:	\$13,531,025
Timeline:	5 to 7 years



#### **Essential Projects**

City Landing Park Ramp connection to 31st Street Bridge Cost: \$68,710,189 **Timeline:** 10 years



#### **Essential Projects**

4th Street Landing & Trailhead Highline-Station Square Connector South Side Riverfront Park extension Ramp connection to 10th Street Cost: \$26,977,759

**Timeline:** 10 years

## Images

All images without numbers provided by Riverlife and the consultant team unless otherwise noted.

#### Credits

1. http://ventureoutdoors.org

2. Golden Triangle Bike Rental. http://bikepittsburgh.com/

3. 7 things you need to do at Smale Riverfront Park. https://ohparent.com/ 7-things-you-need-to-do-at-smaleriverfront-park/

4. Pittsburgh Shakespeare in the Parks needs cast for fall play. https://triblive.com/aande/ theater-arts/pittsburgh-shakespeare-in-theparks-needs-cast-for-fall-play/

5. Brooklyn Bridge Park. https://en.wikipedia. org/wiki/Brooklyn\_Bridge\_Park

6. Bundle up and take Breather: A Winter Hiking Snapshot. https://madeinpgh.com/ lifestyle/winter-hiking/

7. Bike repair station. www.stolenride.co.uk/ cycle-parking-solutions/public-bike-repairstation/

8. Public seesaws. twitter.com/slowottawa/ status/699244113934159873

9. Human-scale lighting www.lumens.com

10. Air quality sensor. www.cpr.org/ 2018/10/30/one-mountain-west-city-istackling-air-pollution-and-childhoodasthma-with-smart-city-technology/

11. James Stynes Bridge, a lightweight bridge structure for cyclists and pedestrians. www.coxarchitecture.com.au/project/jimstynes-bridge/

12. http://landezine.com/index.php/2015/09/ buffalo-bayou-promenade-by-swa/

13. https://designboom.com/architecture/ daewha-kang-design-circe-floatingpavilion-05-14-2018/

14. www.designboom.com/art/city-fabricinstallation-rebecca-bayer-matthew-soulesvancouver-bc-09-24-2015/

15. https://nnala.com/sw-montgomery-greenstreet-portland-oregon/

 https://signify.com/en-us/blog/archive/ showcase/dazzling-christmas-lightinginstallations

17. https://stacylevy.com/street-lagoon

18. Mattress Factory. http://newsroom.ysu. edu/pittsburgh-artist-lectures-on-campusthis-week/

19. Children's Museum. https://toddlingtraveler. com/tag/pittsburgh-childrens-museum/

20. Turenscape Landscape Architecture, Zhongshan Shipyard Park. http://landezine. com/index.php/2012/07/zhongshan-shipyardpark-by-turenscape/ 21. https://archdaily.com/883856/ triumfalnaya-square-buromoscow/5a0ec3a 6b22e386e1800015b-triumfalnaya-squareburomoscow-photo

22. https://archdaily.com/927154/patomcafe-nitaprow

23. https://archdaily.com/923081/lillelangebro-cycle-and-pedestrian-bridge-wi lkinsoneyre/5d54c2ee284dd13c9500002elille-langebro-cycle-and-pedestrian-bridgewilkinsoneyre-photo

24. https://hennepin.us/stories/archive/ lighting-the-way

25. https://treepack.net/

26. https://post-gazette.com/life/ recreation/2016/09/03/Walkatop-returnsfor-more-strolls-around-the-top-of-Pittsburgh/stories/201608220143?utm\_ source=newsletter&utm\_medium=email& utm\_content=most-viewed-life&utm\_ campaign=Headlines-Newsletter

27. https://post-gazette.com/opinion/ letters/2016/08/16/City-Council-mustrethink-allowing-cyclists-on-the-Emerald-View-trails/stories/201608120082

28. https://dezeen.com/2021/03/05/sexzaryadye-park-mocow-elizabeth-diller-news/

29. https://post-gazette.com/news/ corona2020/2020/03/30/Pittsburghcloses-Mount-Washington-overlooksbasketball-courts-covid-social-distancing/ stories/202003300068

30. Jim Stynes Bridge, Melbourne, by Cox Architecture. https://www.coxarchitecture. com.au/project/jim-stynes-bridge/

31. https://inhabitat.com/floating-urbanbeach-barge-sets-sail-on-the-danube/ beachbarge-ed02/

32. https://philly.eater.com/platform/amp/ maps/best-beer-garden-summer-philadelphia

33. https://parklets.wordpress.com/

34. https://salemnews.com/gallery/photosannual-salem-willows-black-picnic/ collection\_05618d4a-6b04-11e7-b747-7b2f40c3b310.html

35. https://hollandevenementengroep.nl/en/ activities/beachvolleyball/

36. https://www.archdaily.com/916769/ yangpu-riverfront-south-section-phase-iida-landscape/5cd4eaf3284dd1cde4000042yangpu-riverfront-south-section-phase-ii-dalandscape-photo

37. https://www.wvxu.org/post/new-swingsopen-smale-riverfront-park#stream/0

38. https://archdaily.com/775301/ paprocany-lake-shore-redevelopment-rsplus/561df6fee58ece0d5a0004b2-paprocanylake-shore-redevelopment-rs-plus-photo

39. https://fastcompany.com/90411150/thistreetop-bike-path-takes-you-30-feet-upinto-the-canopy-of-a-forest 39. https://archdaily.com/793536/arborybar-and-eatery-jackson-clementsrrows/57b519ace58ecec208000101-arbory-barand-eatery-jackson-clements-burrows-image

40. https://archdaily.com/793536/arbory-barand-eatery-jackson-clements-burrows/ 57b519ace58ecec208000101-arbory-bar-andeatery-jackson-clements-burrows-image

41. https://dowhatwelove.com/

42 & 43. https://essapunt.com/proyectos/ senaletica-riu-llobregat/

44. https://zillow.com/homedetails/220-Heinz-St-APT-R207-Pittsburgh-PA-15212/2088061396\_zpid/?mmlb=g,7

45. https://zillow.com/homedetails/21-Overlook-Ct-Pittsburgh-PA-15222/11512574\_ zpid/?mmlb=g,13

46. https://fisherarch.com/portfolio-posts/ the-river-house/

47. https://medium.com/airbnbmag/ houseboat-living-621c76317759



