

# Revitalizing Public Spaces Through the Power of Technology



CONFERENCE TRACK



# Inclusive Parks and Public Spaces

Support for this session  
is provided by:



**KNIGHT  
FOUNDATION**



# PROFESSIONAL AND CONTINUING EDUCATION

## GENERAL CEUs

- Ensure your conference badge is scanned upon entering and exiting the session.
- Request your session transcript from a City Parks Alliance staff member.
- Transcript requests will be fulfilled within 10 business days of the request date.

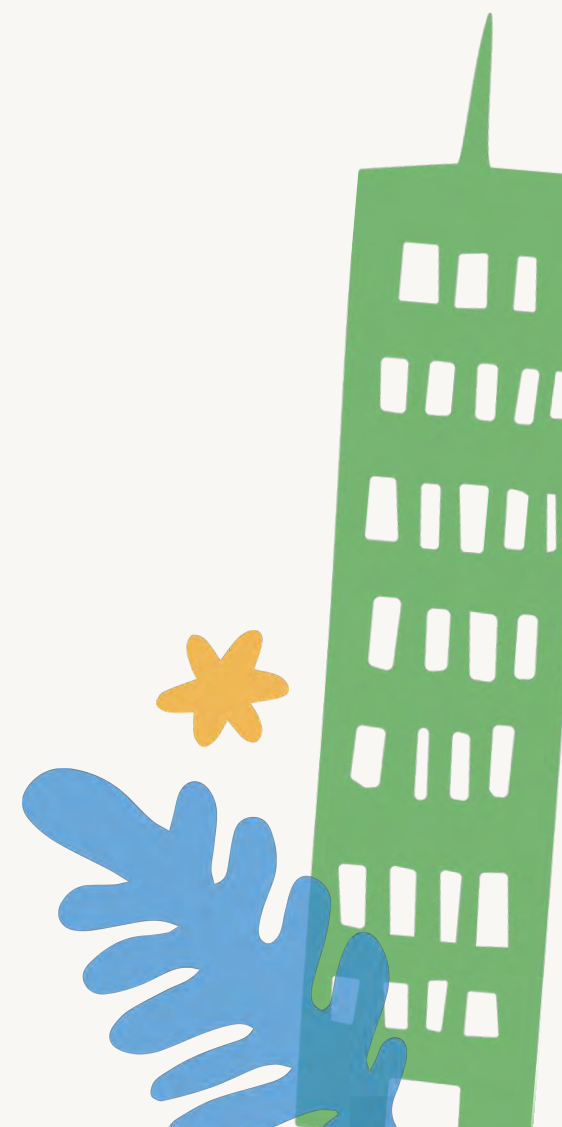
## LA CES

- Ensure your conference badge is scanned upon entering and exiting the session.
- Complete the session evaluation in the mobile app.
- Request your session transcript from a City Parks Alliance staff member.
- Transcript requests will be fulfilled within 10 business days of the request date.

## AICP

- Self-report your participation on the AICP website
- Ensure your conference badge is scanned upon entering and exiting the session.
- Complete the session evaluation in the mobile app.

Participation data is shared electronically with the accrediting agencies.





# Revitalizing Public Spaces Through the Power of Technology

Friends of the High Line





# The High Line, NYC

Operated & maintained by Friends of the High Line



Seated Conversations



Older Adult Wellness



¡Arriba! Latin Dance



# Goals & Objectives

What are we looking to achieve?

- Attract wider range of visitors
- Amplify physical programming
- Identify best practices
- Serve as a model for peers



# Consultant Team



**Neysa Pranger**  
Principal, UrbanSense



**Manasvi Menon**  
Principal, UrbanSense



**Emily Ladau**  
Accessibility Consultant



# Project Phases



**Phase One**  
Accessibility  
Needs Assessment



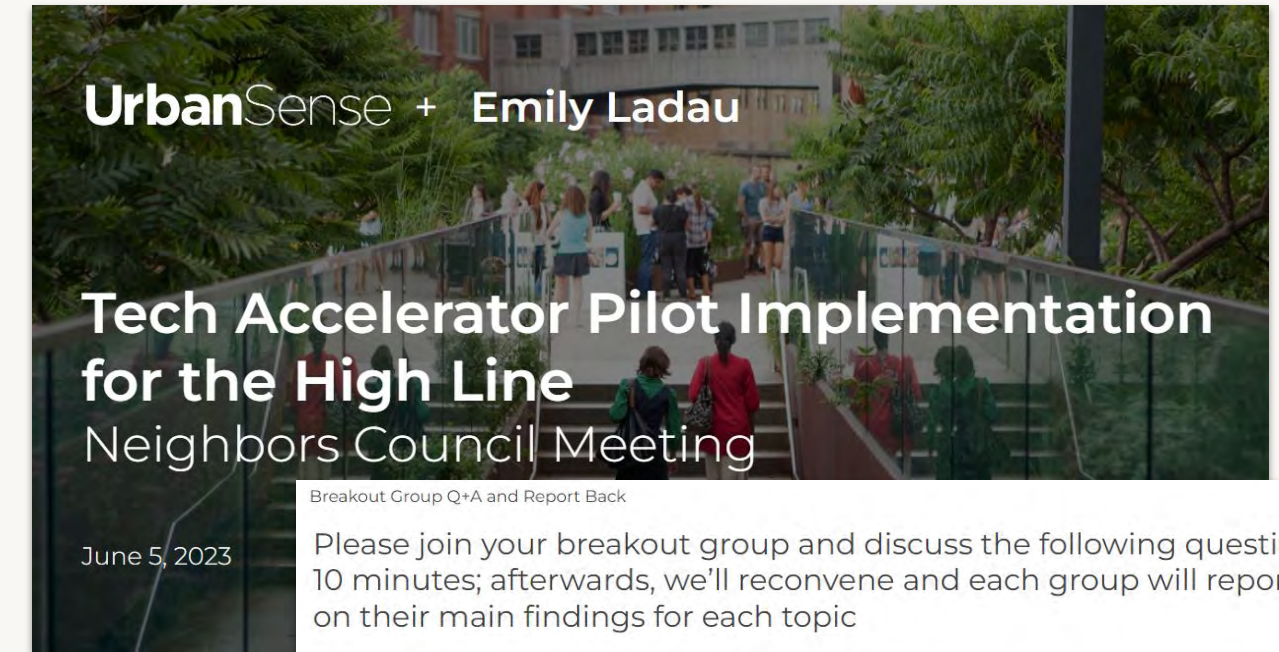
**Phase Two**  
Recommendations  
Roadmap



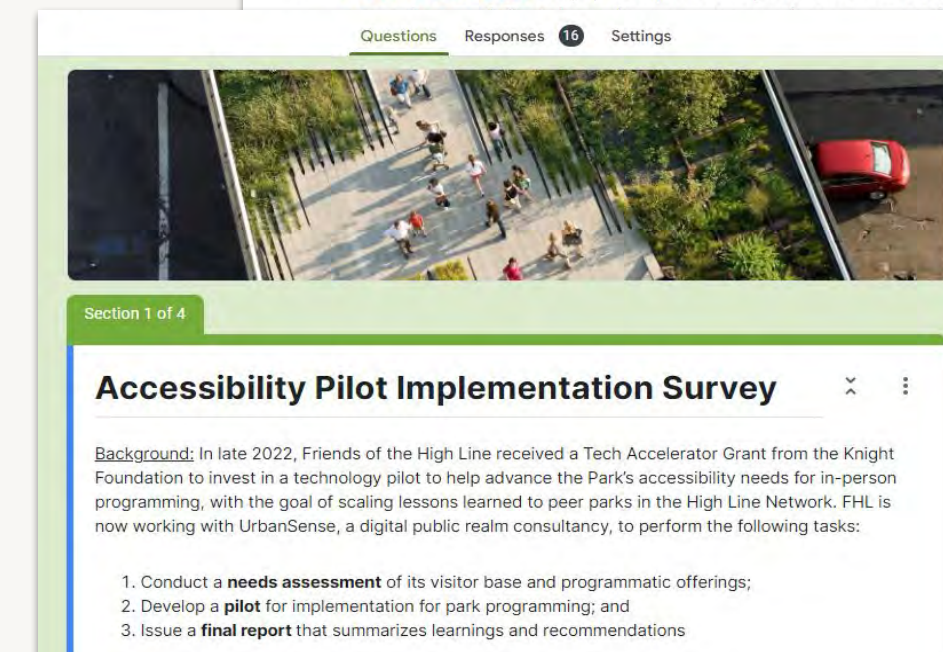
**Phase Three**  
Tech Pilot  
Implementation

# Needs Assessment

- Thorough document review
- Community outreach session
- Staff survey & interviews
- SME focus group



- **Vision:** What is your vision for accessibility with programming at the High Line? What are the criteria that would make it more likely for you to participate in programs (lectures, tours, exhibits, tai chi, guided meditations, etc.)
- **Current State:** What are your experiences, or what are you hearing from your community, in terms of needs and challenges with respect to both physical and digital programming and tools? Have you encountered any barriers (and if so, what)?
- **Peer Practices:** Any peer public spaces or cultural institutions that you have seen or used for programming?



# Subject Matter Expert Focus Group



**Chancey Fleet**



**Meryl Evans**



**Nefertiti Matos**



# Recommendations Roadmap

Needs & Recommendations

Evaluation Criteria

Pilot Candidate  
Shortlist



# Outcomes & Next Steps

- Needs Assessment → Ongoing accessibility strategy
- Recommendations Roadmap → Accessibility priorities & solutions
- Roadmap & Pilot → Future funding requests & opportunities
- Lessons learned → High Line Network

# Thank You!







# Technology at Philadelphia's Rail Park

Plan & Policy Framework  
for Public Wifi





# The Rail Park

## Philadelphia, PA

An infrastructure reuse project transforming historic rail line into vibrant & inclusive public green space.

Friends of the Rail Park's mission is to enrich the health, culture, and ecology of the city, creating inclusive opportunities for neighbors and residents.



# The Site Today

SOFT CUT

TUNNEL

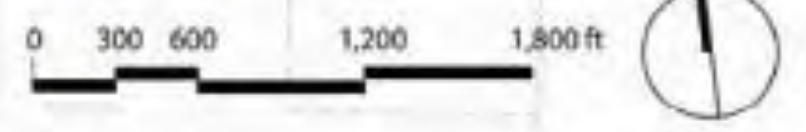
HARD CUT

PHASE I

VIADUCT

## The 3-Mile Vision

Connecting Philadelphians to the city and each other like never before!





# Research Goals

# Background & Context

Pre-planning work laid the foundation for FRP's longer-term goal of understanding how technology can be a binding agent in the organization's broader thinking, planning, and advocacy work around the community and equitable development in the 10+ neighborhoods the Rail Park touches, and Philadelphia as a whole.





**How should FRP prepare for and establish data and privacy policies and practices that are realistic, embraced by the public, and advance Park goals?**

# Research

## Focus Areas

- Implementation & Cross Sector Partnerships
- Data Collection & Access
- Community Engagement, Outreach, Accessibility, & Equity





# Process Design



# Team

## FRIENDS OF THE RAIL PARK

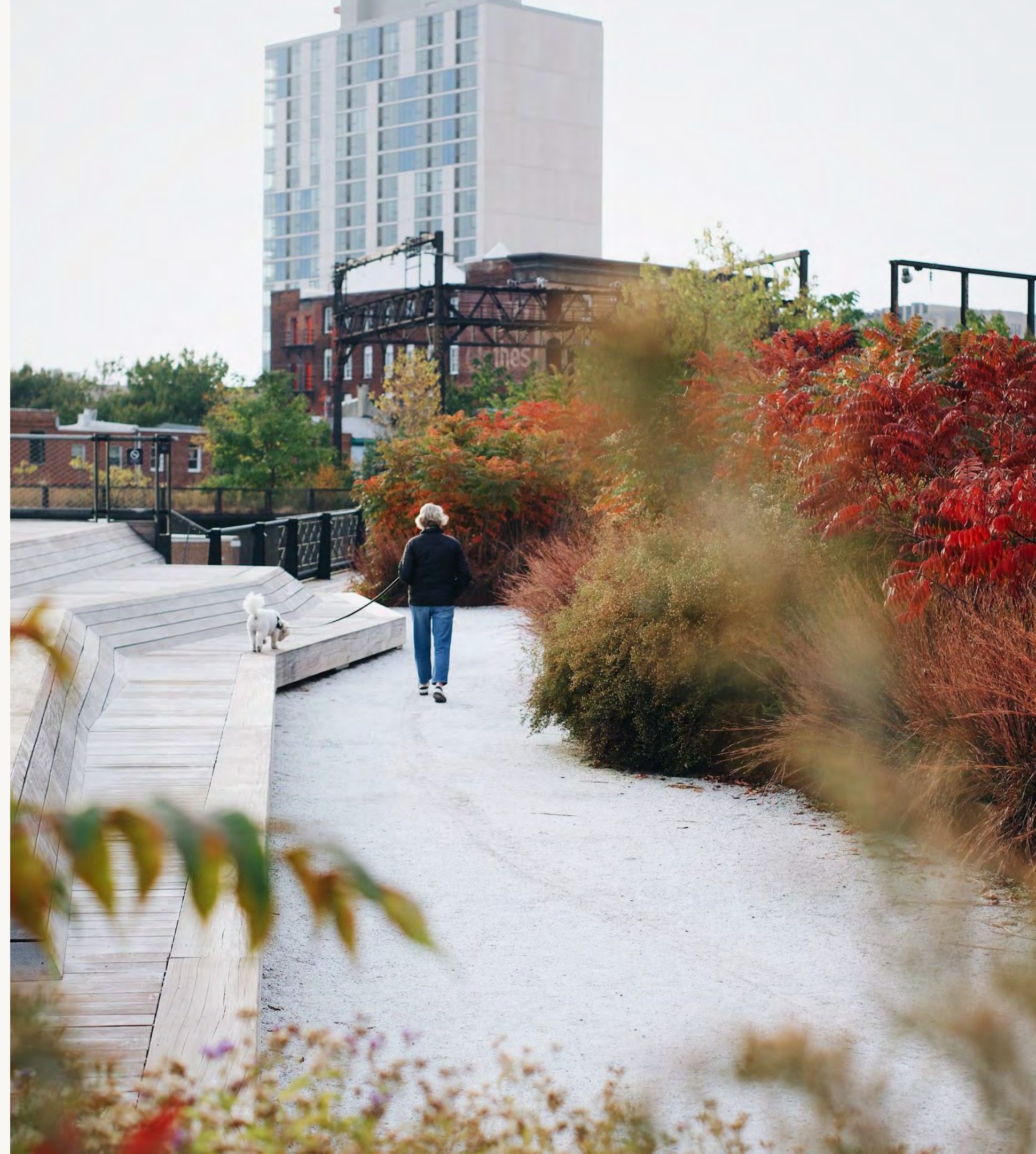
Executive Director and Community  
Development Staff

## URBANSENSE PARTNERS

Consultant with expertise in user-centered  
and community-driven approaches to  
technology planning for the public realm

## COMMUNITY

Advisory group providing necessary local  
political and infrastructural context





# Designing for Outcomes

## Intended Outcomes:

- Field scan and applicable case studies
- Policy recommendations for public wifi use and data collection
- Recommendations for implementation
- Document the discovery process
- Identify funding opportunities to continue and scale the work
- Identify additional partners & capacity needed for implementation

# Research Process



# Spotlight: Advisory Committee

- Expertise in climate technology, GIS, private investment & funding, tech advocacy, community development funding, digital inclusion
- Stakeholders from city government, academic institutions, funders, and tech companies
- Participated in full group discussions, individual interviews, and provided feedback on analysis





# Results & Recommendations



# Recommendations

## Implementation & Partnerships

Consider various funding sources (inc. government or entrepreneur grants, and university partnerships), leverage emerging technologies

## Data Policy & Access

Use guiding values as north star, needs of end users should determine information collection, rely on best practices, partner thoughtfully

## Engagement & Outreach

Partner with adjacent communities, integrate STEM in fun and creative ways, be destination & connector for Philly neighborhoods

# Implementation Roadmap

Develop a Wi-Fi / Data Privacy Policy	Explore Partnerships for Wi-Fi deployment	Implement Wi-Fi	Foster Community Engagement through Digital	Pursue funding for technology-enhanced programs
#1 Pilot an open source communications standard	#3 Outreach to potential ISPs and delivery partners	#4 Research alternative deployments	#9 Explore programming partnerships with schools and local organizations	#12 Create a repository of potential funders
#2 Establish a data and privacy FAQ		#5 Outreach to neutral host providers	#10 Explore additional features in Boomerang and/or new CRM tools	
		#6 Explore a mesh network	#11 Enhance tours with QR codes	
		#7 Evaluate costs of going solo versus splitting costs among partners		
		#8 Outsource telecom management		



# Looking Forward





What is your hope for your community?  
你对所在社区有什么希望?  
你对铁路公园有什么希望?

I hope world  
pecie

[www.therailpark.org](http://www.therailpark.org)  
[@therailpark](https://twitter.com/therailpark)  
[friends@therailpark.org](mailto:friends@therailpark.org)



Write, draw, photograph, or record your answers  
写下, 画出, 拍下或录制你的答案

What is your hope for  
你对所在社区有  
你对铁路公园有

Dirigo

Loong





DETROIT  
**RIVERFRONT**  
CONSERVANCY

Rachel Frierson,  
Senior Director of Programs and Public Spaces  
[Rachel.Frierson@detroitriverfront.org](mailto:Rachel.Frierson@detroitriverfront.org)

An aerial photograph of a modern waterfront pavilion at sunset. The pavilion features a large, white, tent-like canopy supported by several tall, thin poles. The structure is situated on a paved plaza with a metal railing overlooking a large body of water. The sun is low on the horizon to the left, casting a warm, golden glow over the scene. The sky is a mix of orange and blue. In the background, a line of trees and distant buildings are visible across the water. The overall atmosphere is serene and inviting.

**"BEAUTIFUL, EXCITING,  
SAFE, ACCESSIBLE..."**

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**...WORLD-CLASS  
GATHERING PLACE...**

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A wide-angle photograph of a public square. In the foreground, a large water fountain with many small jets of water is active. Numerous children and adults are playing and walking around the fountain. In the background, there are several modern, glass-clad skyscrapers. The sky is blue with scattered white clouds. The overall scene is bright and lively.

...FOR ALL"



# FOUNDING PARTNERS



THE  
KRESGE  
FOUNDATION





**ATWATER STREET**



**CULLEN PLAZA**





**DEQUINDRE CUT**



DEQUINDRE CUT



# THE DETROIT RIVERFRONT

— EXISTING RIVERWALK — PARKS & GREENWAYS



WOODBIDGE

POLETOWN EAST

CORE CITY

MIDTOWN

EASTERN MA

McDO



RALPH C. WILSON, JR. CENTENNIAL PARK

SOUTHWEST GREENWAY

WEST RIVERWALK

ROBERT C. VALADE PARK

DENNIS ARCHER GREENWAY

UNIROYAL PROMENADE

SOUTHWEST

DOWNTOWN

ELMWOO

RIVERSIDE PARK

AMBASSADOR BRIDGE

RALPH C. WILSON JR. CENTENNIAL PARK

WEST RIVERWALK

HART PLAZA

GM PLAZA

CULLEN PLAZA

MILLIKEN STATE PARK

ARETHA FRANKLIN AMPITHEATER

ROBERT C. VALADE PARK

STROH RIVERPLACE

HARBORTOWN

MT. ELLIOTT PARK

UNIROYAL PROMENADE

GABRIEL RICHARD PARK

BELLE ISLE

SOUTHWEST GREENWAY

DEQUINDRE CUT

DENNIS ARCHER GREENWAY

BELTLINE GREENWAY

# COMPLETING THE VISION

EXISTING RIVERWALK FUTURE RIVERWALK

PARKS & GREENWAYS



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# DETROIT RIVERWALK BEST IN THE USA

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**10** USA TODAY  
10BEST  
**READERS'  
CHOICE**  
2021

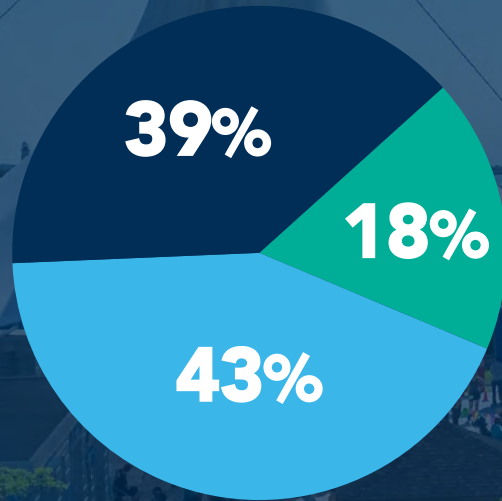


**10** USA TODAY  
10BEST  
**READERS'  
CHOICE**  
2022



**10** USA TODAY  
10BEST  
**READERS'  
CHOICE**  
2023

# DETROIT RIVERFRONT COMMUNITY



**39%** Detroit

**43%** Southeast Michigan

**18%** Other Michigan, USA & International

**3,000,000+**

Annual Visitors

**320,000+**

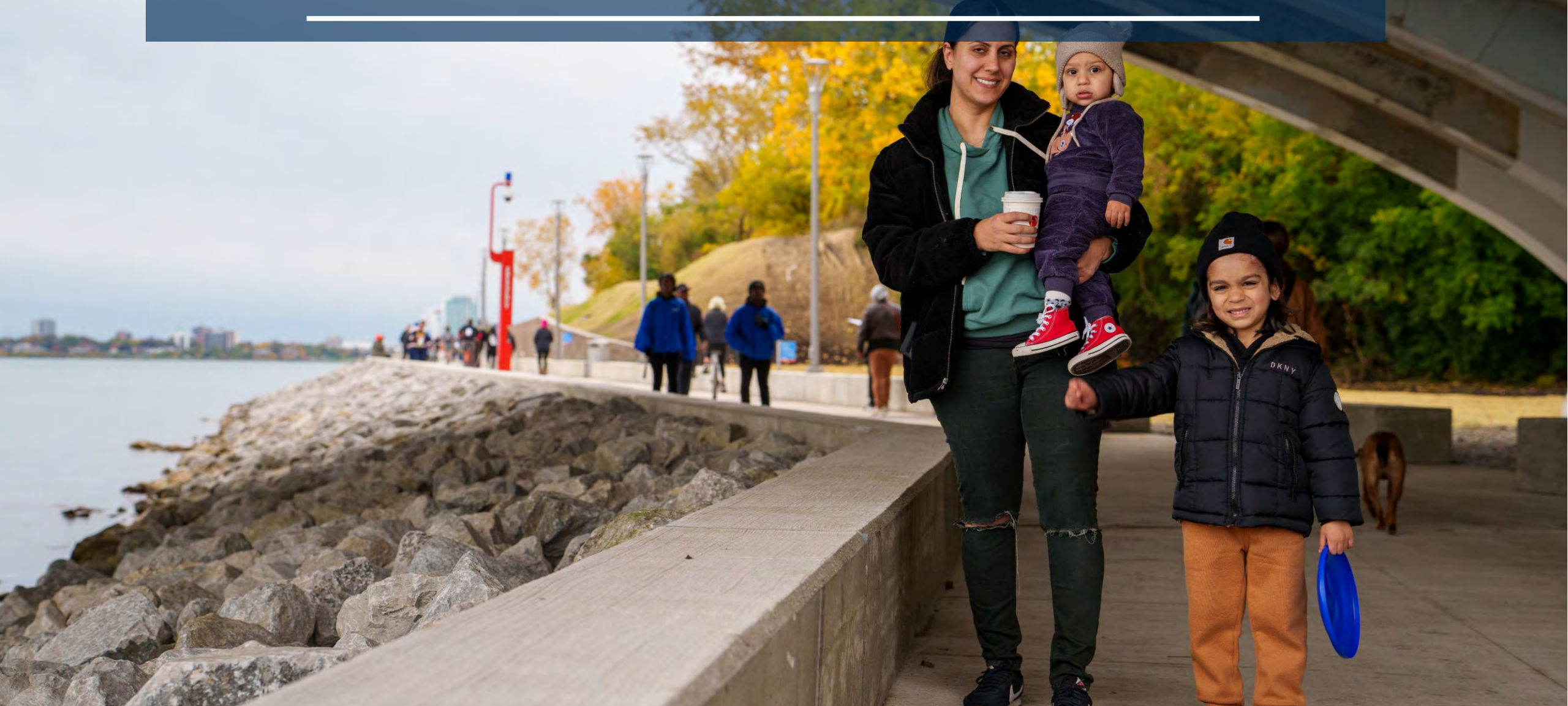
Program Participants

**100%** of Detroit

zip codes visited in 2023



# MEASURING USE THROUGH EXISTING INFRASTRUCTURE

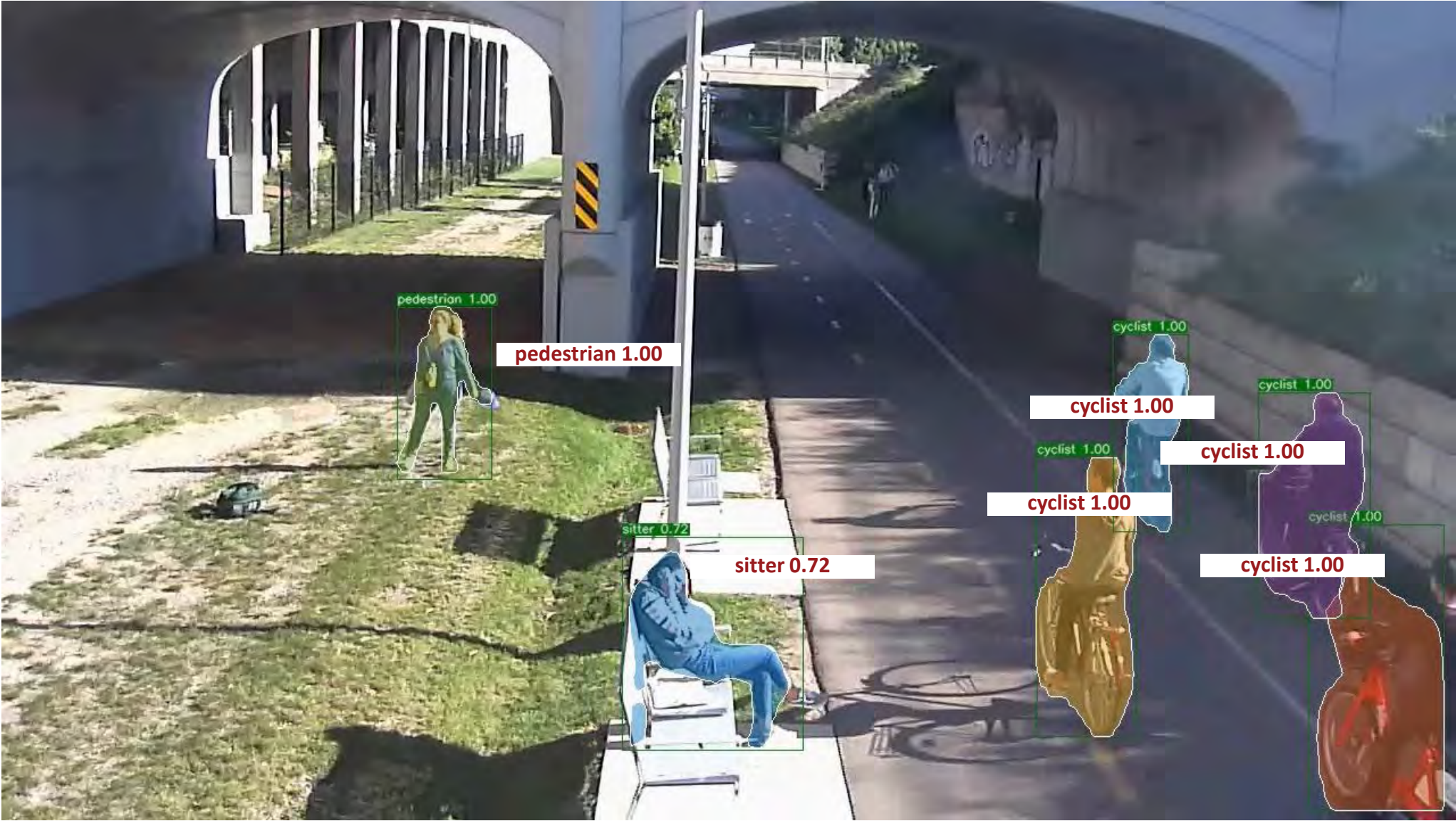


A photograph showing two individuals, a woman on the left and a man on the right, both wearing blue shirts, focused on a small black electronic device placed on a light blue plastic Adirondack chair. The woman is leaning over the device, and the man is sitting on the chair, looking at the device. The background consists of green trees and a building under a clear sky. A semi-transparent dark blue banner with white text is overlaid across the middle of the image.

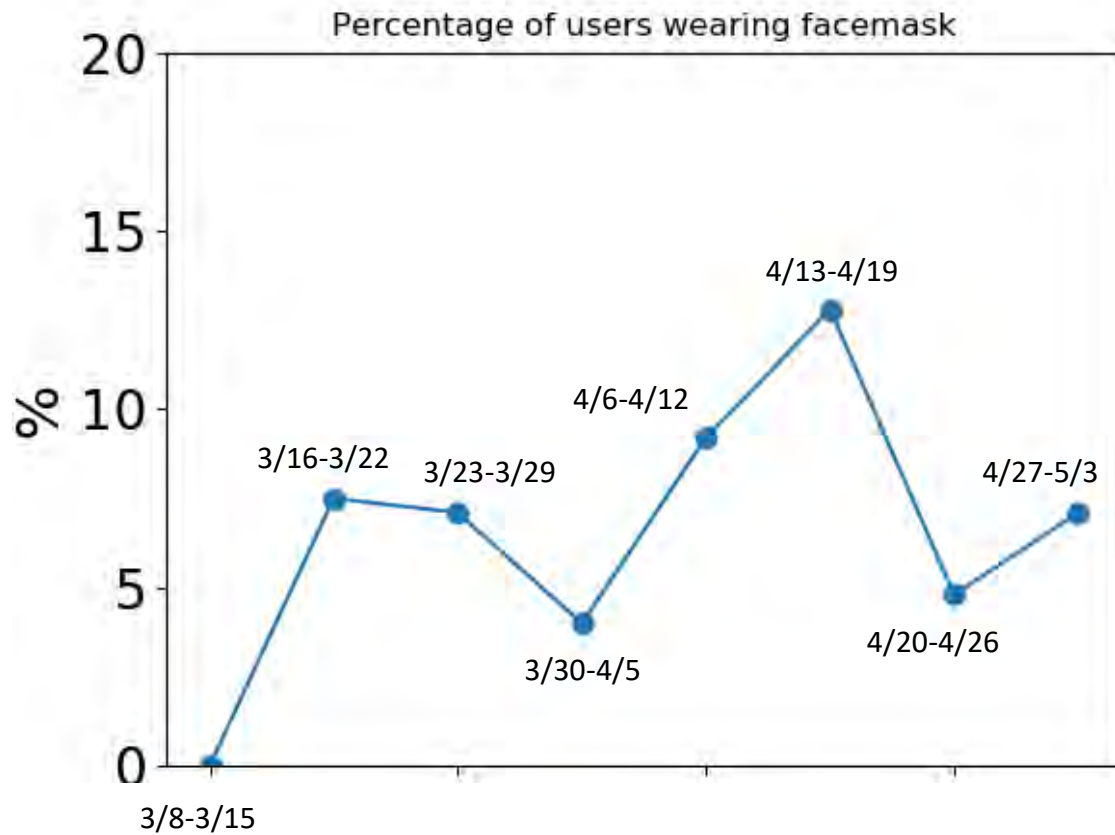
**UNIVERSITY OF MICHIGAN PARTNERSHIP**



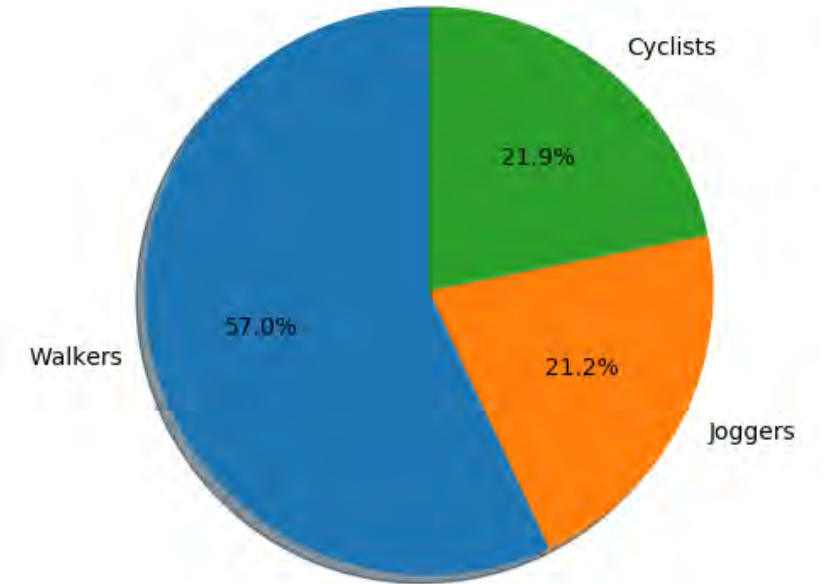
# RESULTS: PEOPLE DETECTION



# TOOLS DURING THE PANDEMIC



Who is wearing the detected masks?



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# WHAT IS SOCIABILITY?

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# Sociability Index- volume and interaction



## Goals of park programs:

- Build community : 👤👤👤👤👤👤👤👤 (8)
- Make the place approachable : 👤👤👤👤👤👤👤👤 (8)
- Increase patron time on site : 👤👤👤👤👤👤👤 (7)
- Encourage mental wellness activities : 👤👤👤👤👤 (5)
- Drive traffic : 👤👤👤 (3)
- Expose people to new things : 👤👤 (2)
- Create spontaneous interactions : 👤👤 (2)
- Outdoor education : 👤👤 (2)
- Build relationship with space : 👤👤 (2)
- Bring in/support local business : 👤 (1)
- Highlight diverse cultures and minorities : 👤 (1)

# Activity Index – traffic, activity, duration

## Goals of park assets:

- Facilitate conversation and connectivity : 👤👤👤👤👤👤👤👤👤👤👤 (11)
- Increase comfort/sense of belonging : 👤👤👤👤👤 (5)
- increase accessibility : 👤👤👤👤👤 (5)
- Does it fit a need?  
-sit/respice/shade : 👤👤👤👤👤 (5)
- People are using it : 👤👤👤👤 (4)
- Facilitate connection to nature : 👤👤 (2)
- Encourage people to spend more time in space : 👤👤 (2)
- Self sustaining : 👤👤 (2)
- Facilitate interactions between strangers : 👤 (1)



# BUILDING A SOCIABILITY FRAMEWORK

**Movement layer:** Stroll, Jog, Standing, Sitting (w/ dog/stroller), cyclist

**Location/furniture layer:** Dining, Plaza, Bench, Bike lane, river view fence, fountain, etc.

**Social layer:** Passive, Fleeting, and Enduring relationships

Social Activity report:

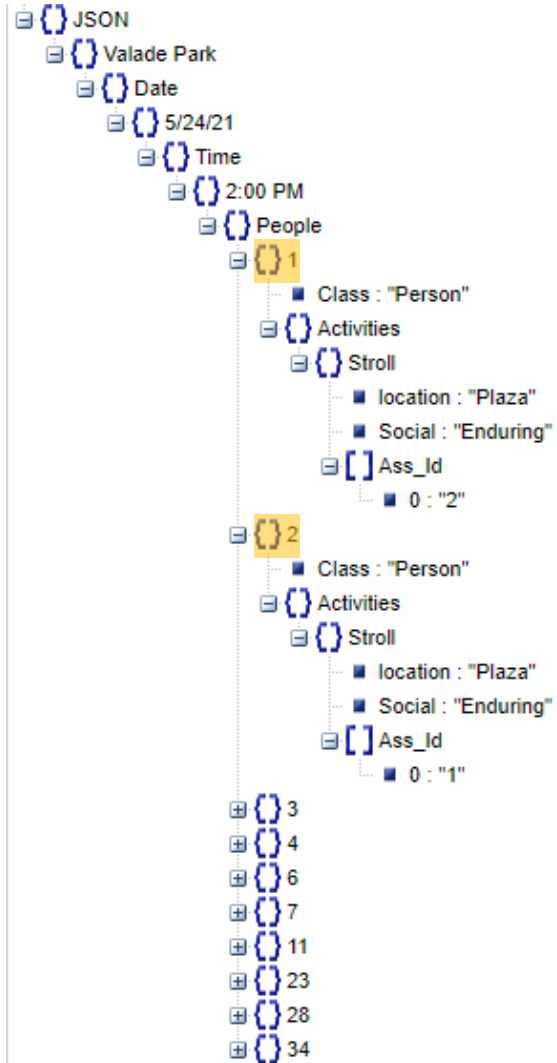
ID4: Enduring stroll in Plaza (with ID 3)

ID1: Enduring sitting in dining area (with ID 2)

ID6: Passive stroll with dog in Plaza



# MEASURING SOCIALIBILITY





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# ARCHER GREENWAY

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STOP

NO  
MOTOR  
VEHICLES

EMERGENCY

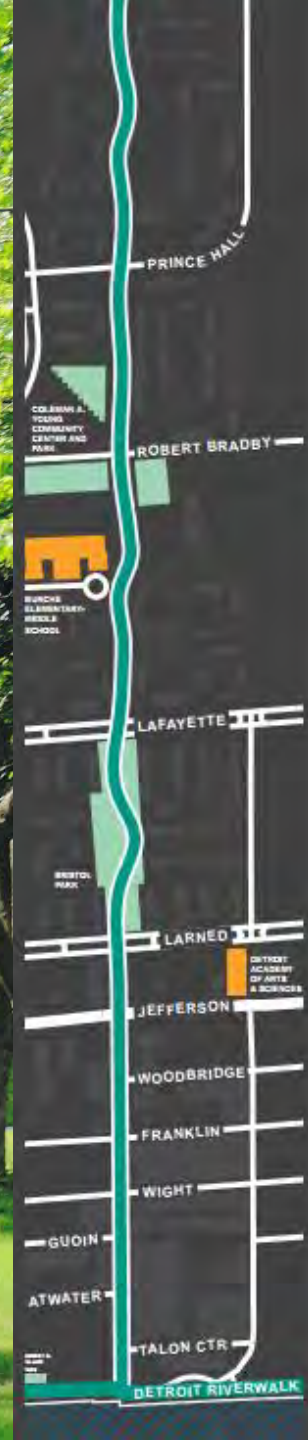
# INTERVENTIONS



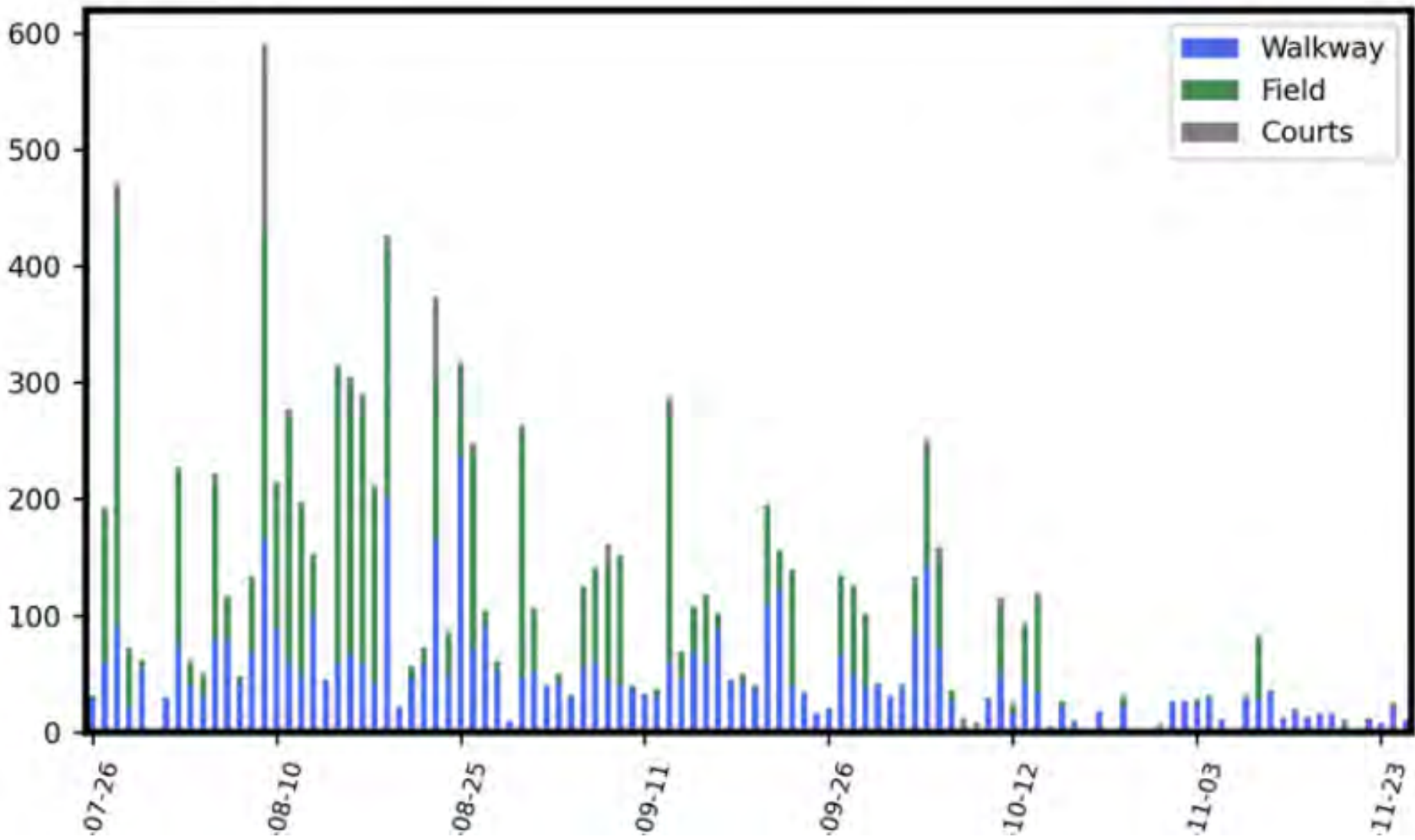


*Greetings from the*

**MAYOR DENNIS W.  
ARCHER GREENWAY**



**DETROIT  
RIVERFRONT  
CONSERVANCY**



**Ice cream:**

Walkway 14 days prior: 695 patrons  
 Walkway 14 days after: 1057 patrons  
**52% increase**

**Mailer:**

Walkway 7 days prior: 270 patrons  
 Walkway 7 days after: 298 patrons  
**10% increase**



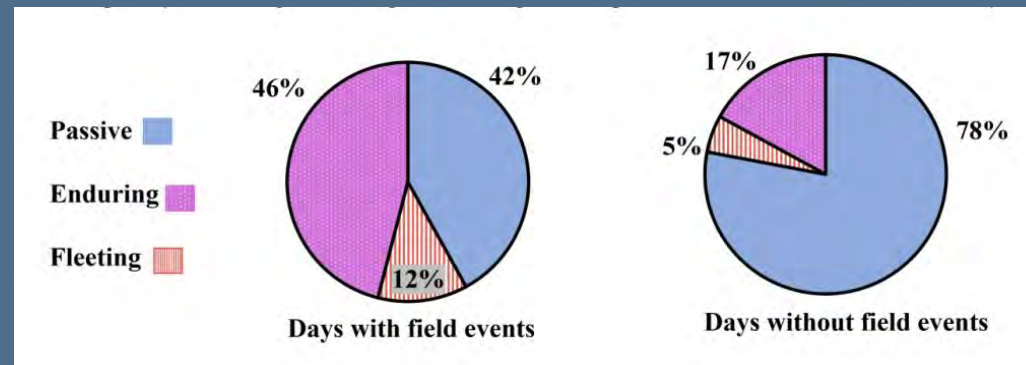
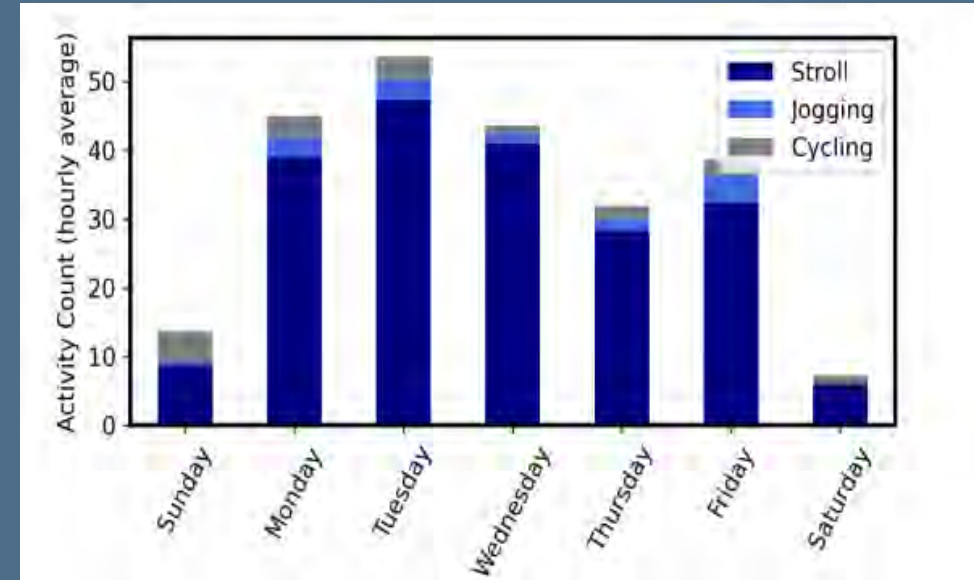
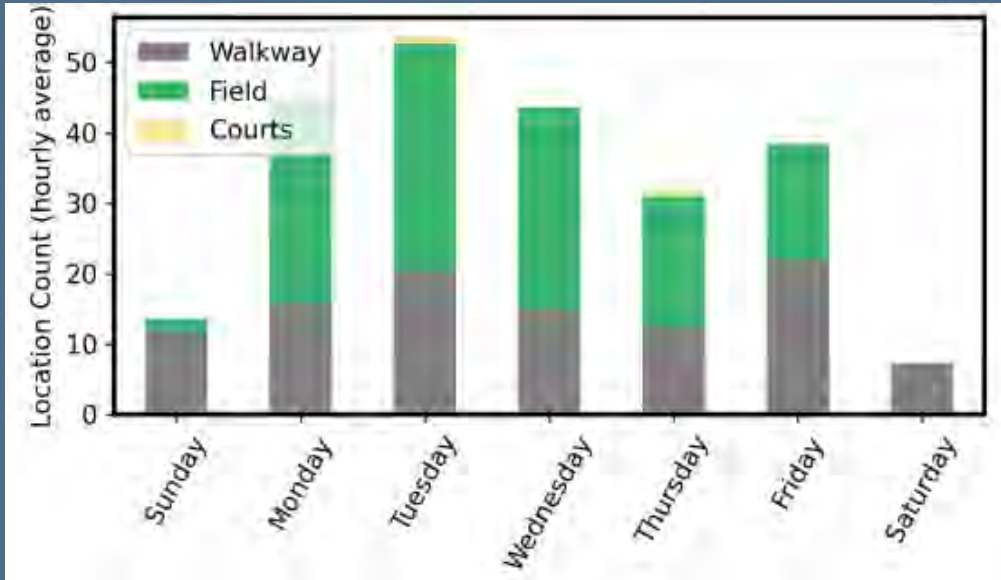
# Detroit Riverfront

83K followers • 394 following





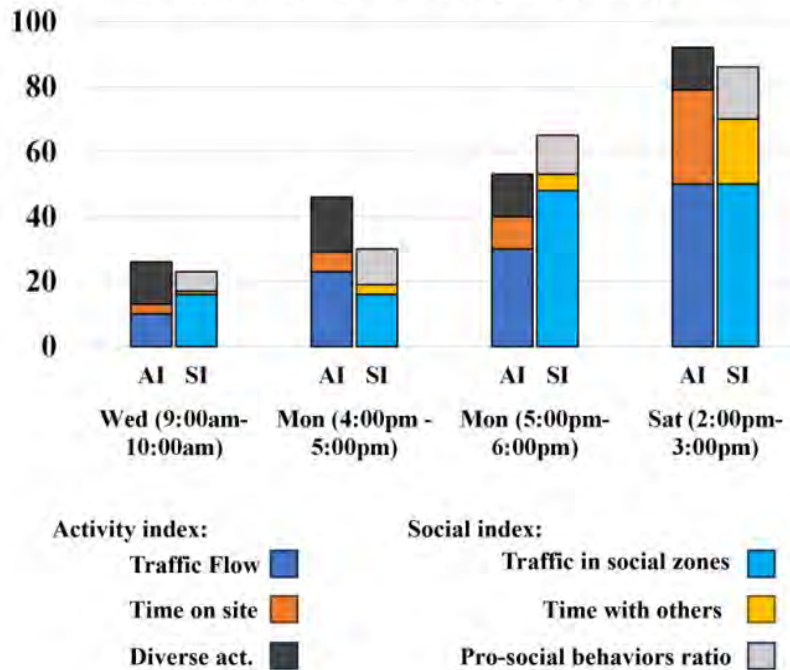
# ARCHER GREENWAY + UM DATA







Activity and Social Indices Example - Valde Park



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## WHAT WE'VE LEARNED

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- Find a good research partner or service
- Ask big questions
- Physical counts vs Social counts
- How data explains the importance of parks





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## OUR CHALLENGES

---

- Find a good research partner or service
- Sustainability of this work
- Transparency with the public due to alternative use
- Second use infrastructure



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# THANK YOU

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DETROIT  
RIVERFRONT  
CONSERVANCY

# the bentway

Revitalizing Public Spaces Through  
the Power of Technology

built for  
a mid-century city





# the Gardiner must be **more** ...

Toronto is blooming upwards, hugging tightly around an elevated downtown highway.

**Today, more than 200,000 people reside next door to the Gardiner Expressway, largely in dense high-rise developments lacking in public space or cultural life.**

But what if the Gardiner could do more?

What if we unlocked its opportunities to build stronger communities?



# bentway 1.0 as vital public space

Bentway 1.0 opened in 2018 and quickly became a vital urban backyard; a beloved destination for play, and greenspace.

**We're investing in hybrid infrastructure and building new possibilities for our city.**



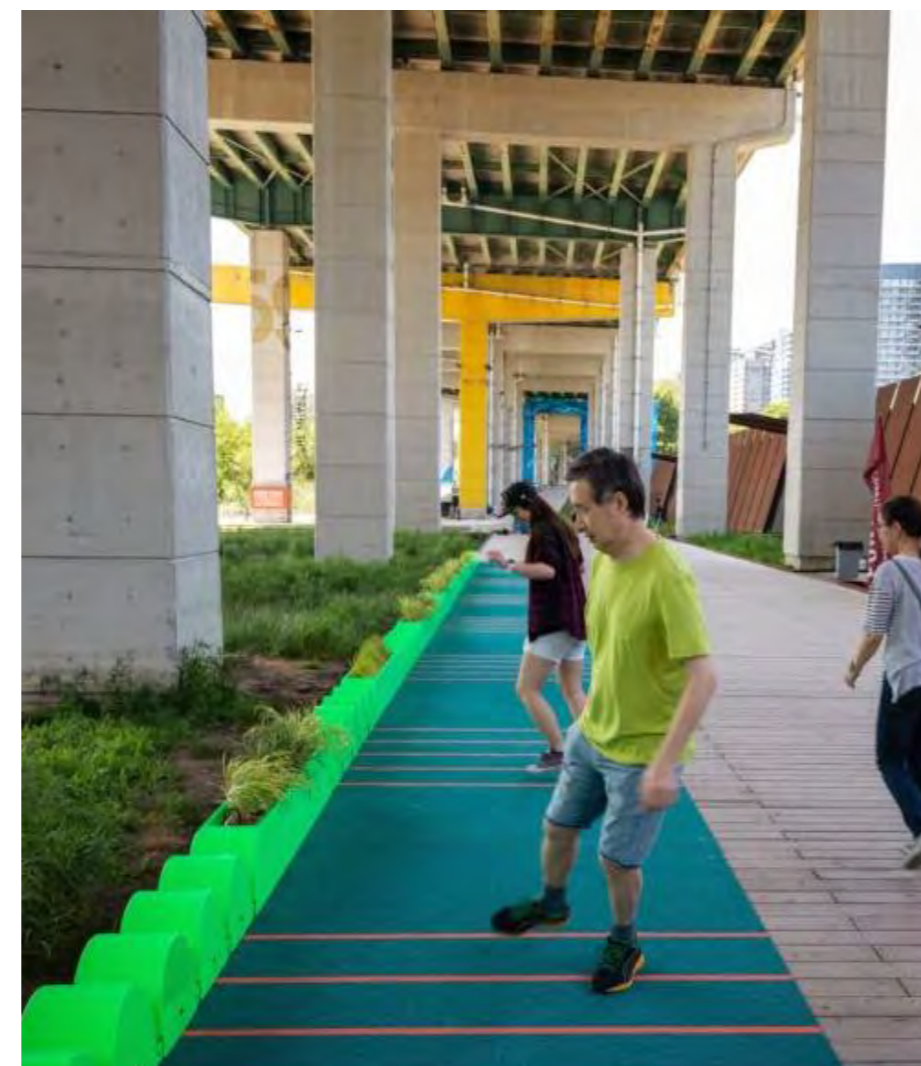




# bentway 1.0 as creative platform

The Bentway works with artists, designers and creatives to present free public art, performances, educational and recreational programs.

**Together, we explore the city as site and subject.**





# igniting the urban imagination

- **Active participants:** Programming that engages neighbours, communities, and the general public as active, primary participants in city-building (*not* as subjects)
- **With creative voices:** Artists and creatives in dialogue with, and about, the city
- **Co-creation:** Co-creation with broader communities, championing diverse voices, perspectives and expertise
- **As a catalyst:** Work that lives a larger life beyond a single site, season, or city

# active participants/ responsive spaces



Walk, Walk Dance, Daily Tous Les Jours, 2021

# co-creation/ public agency

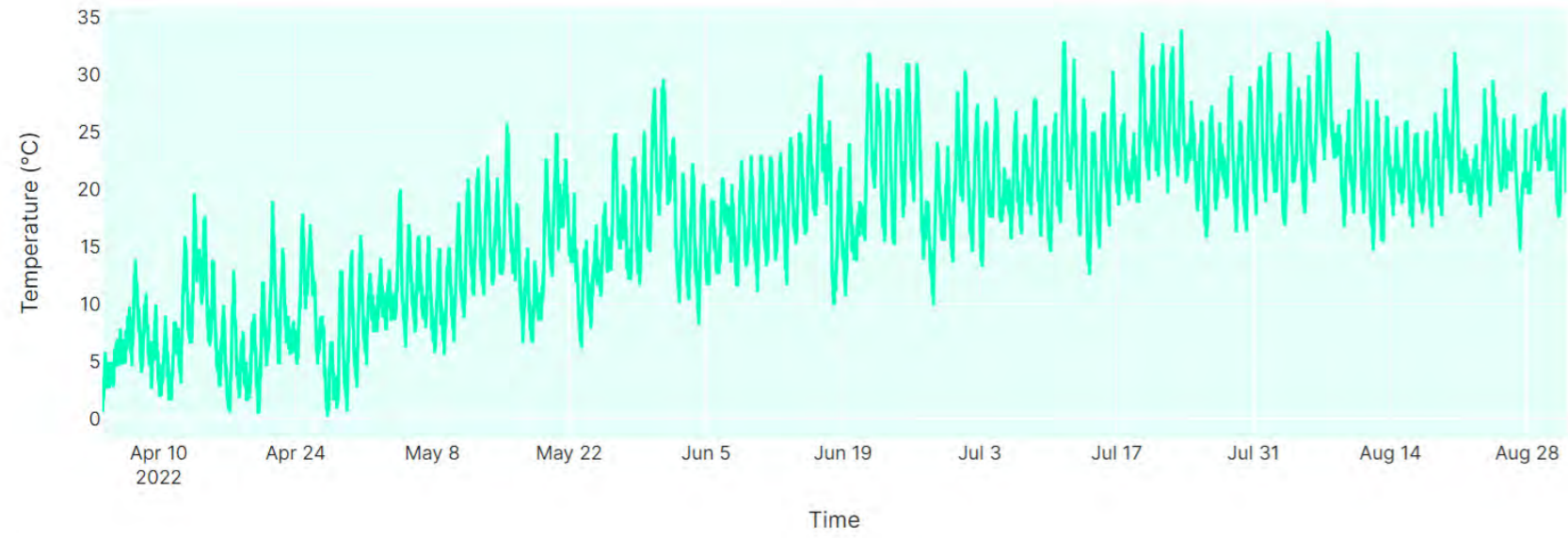


Receipts, Public Visualization Studio, 2020



# adaptive artifacts

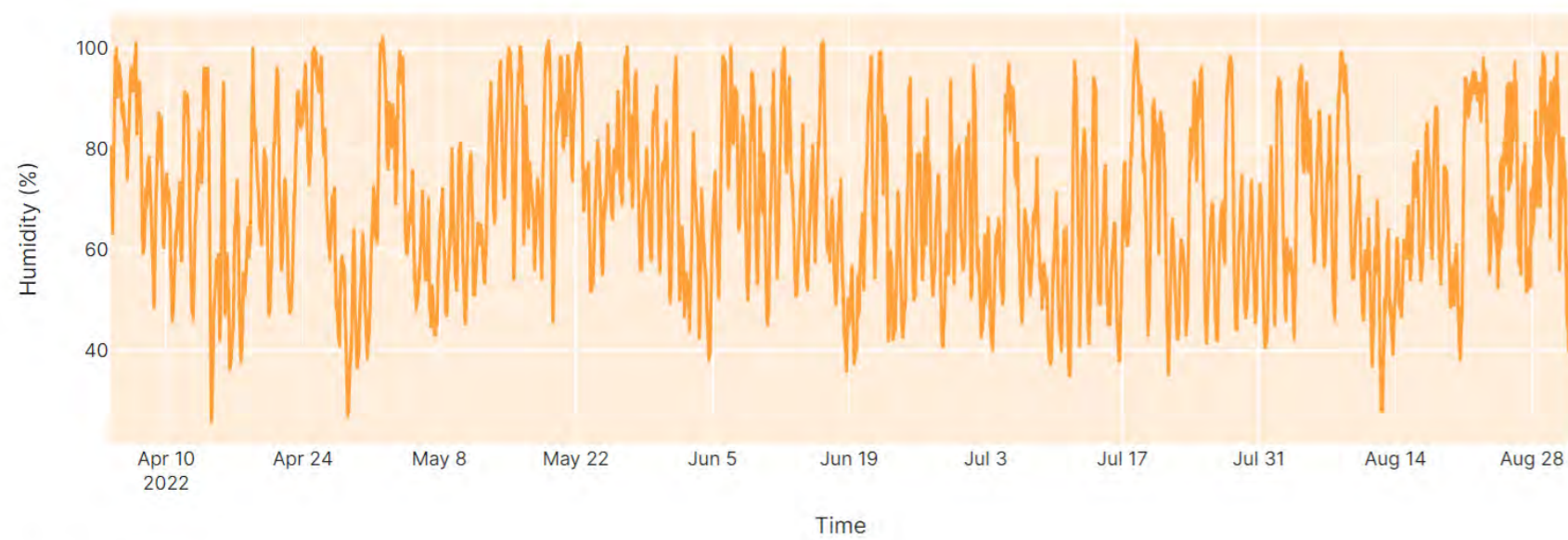
WS2 Temperature



Date Range

April 4, 2022 – September 1, 2022

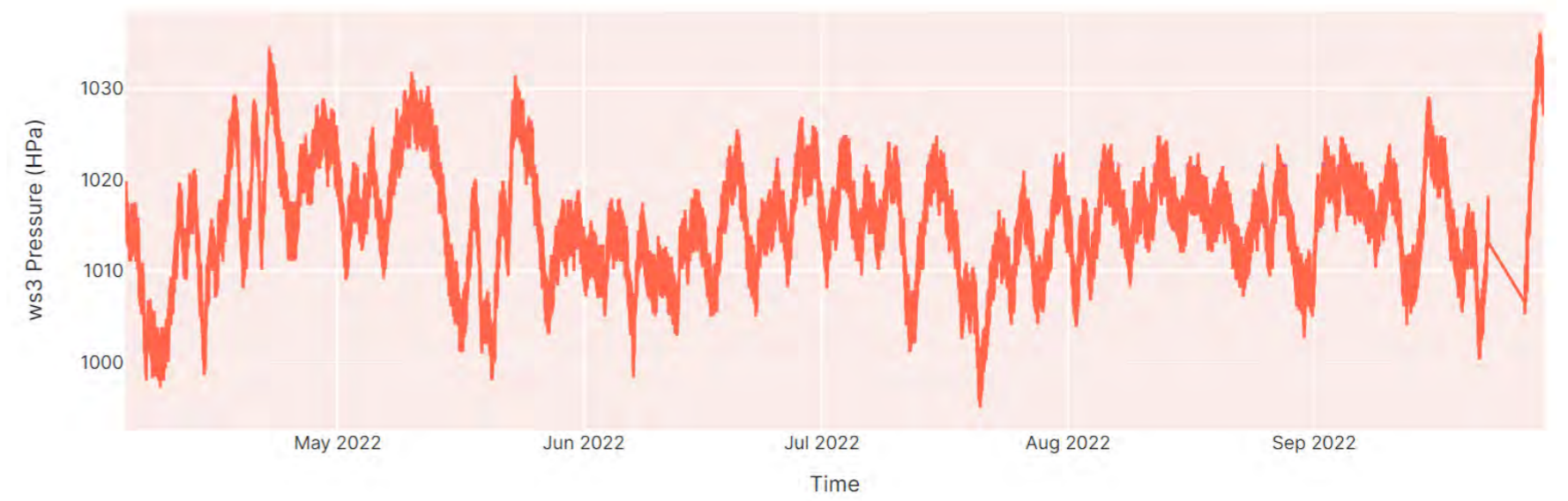
WS2 Humidity



Date Range

April 4, 2022 – September 1, 2022

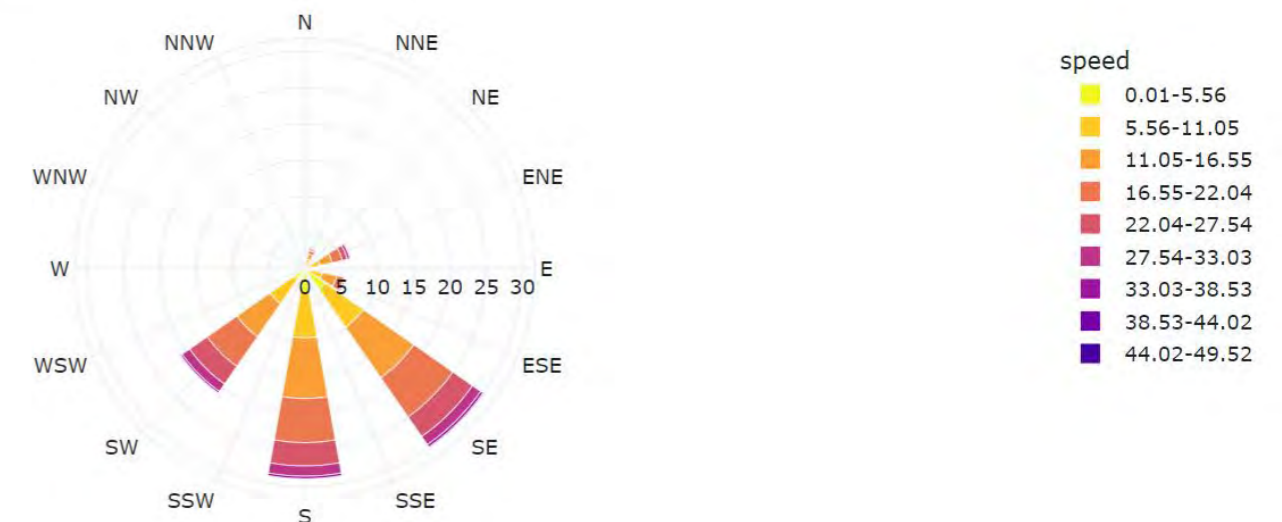
WS3 Barometric Pressure



Date Range

April 4, 2022 – September 30, 2022

WS2 Wind Speed Distribution (Km/H)



Date Range

April 4, 2022 – September 1, 2022

# atmospheres/ as a catalyst



Atmospheres, Public Visualization Studio, 2023



# atmospheres/ as a catalyst



Atmospheres, Public Visualization Studio, 2023



# atmospheres/ as a catalyst

atmospheres

What is it  
that I have  
to leave to  
chance?

Nehal El-Hadi



atmospheres

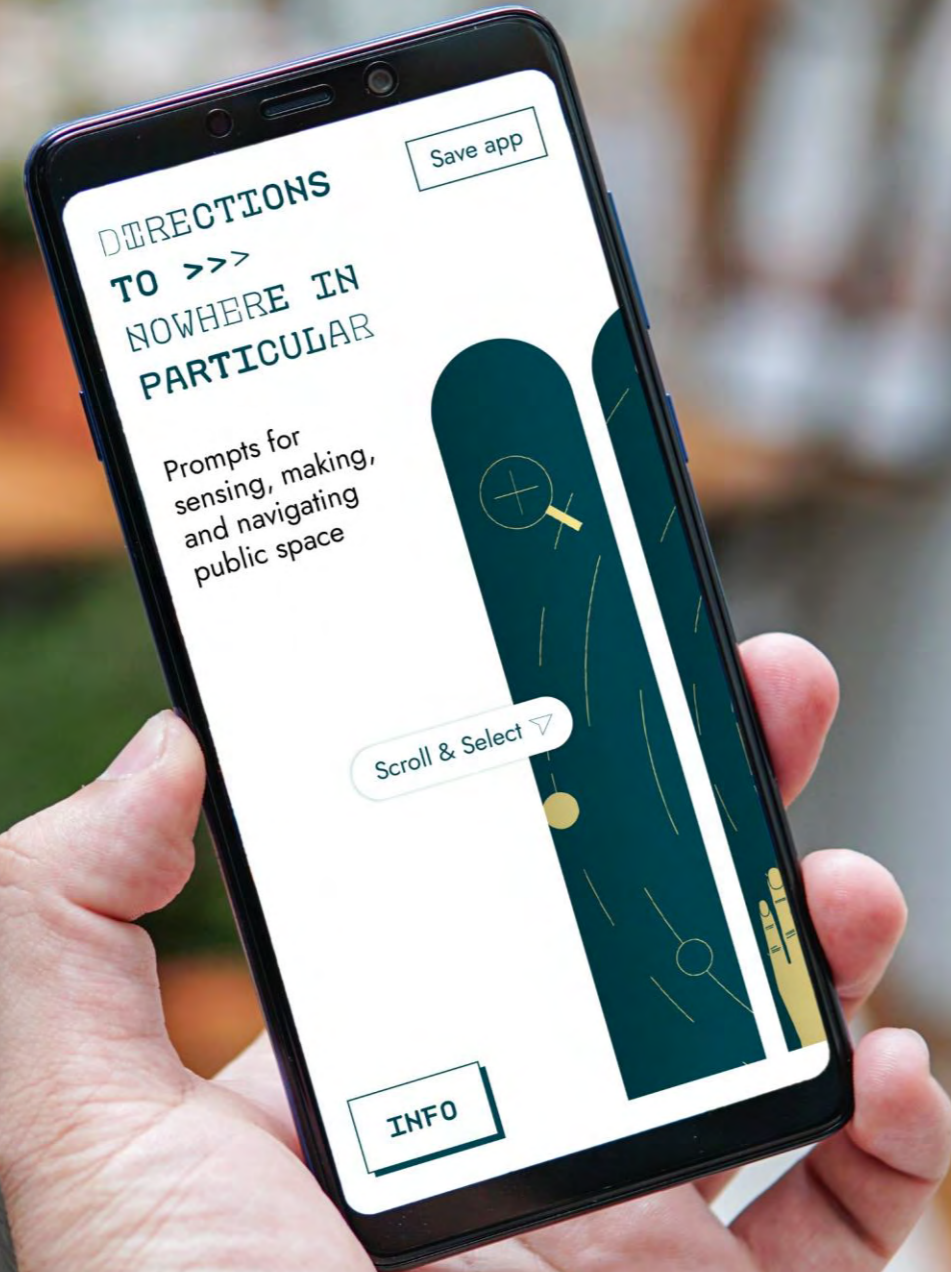
Look we have  
all these  
number we  
have been  
collecting

Margaret Pearce





# public space on and offline

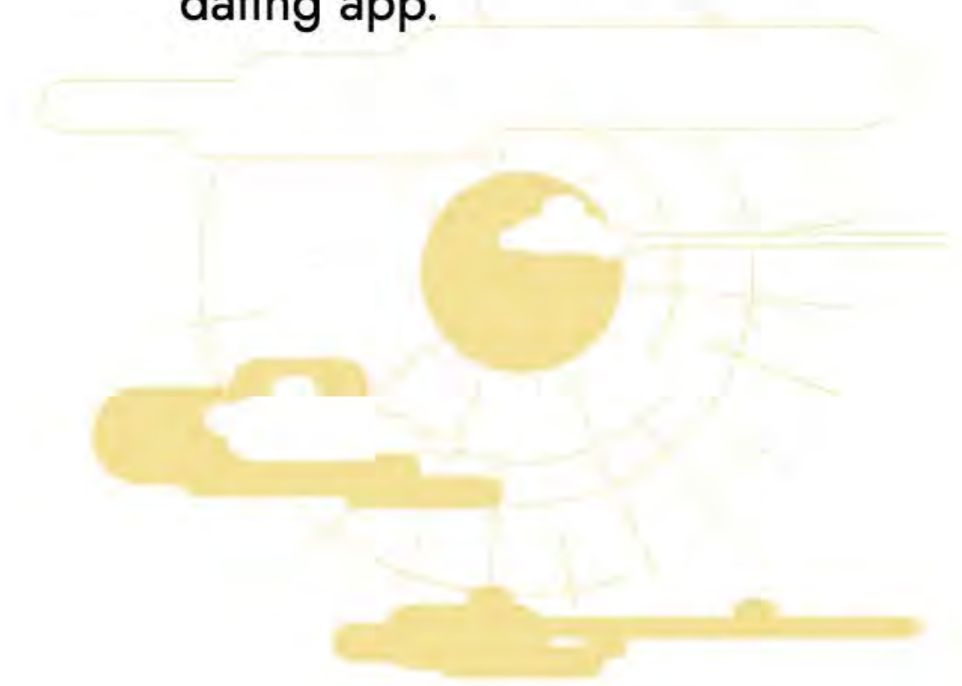


Directions to Nowhere in Particular,  
developed with From Later & Nomadic Labs

## 1 Seeking

Notice a lonely piece of public infrastructure such as a mailbox or fire hydrant.

Create a profile for it on a dating app.



EXIT

#DirectionsToNowhere



# #DirectionsToNowhere



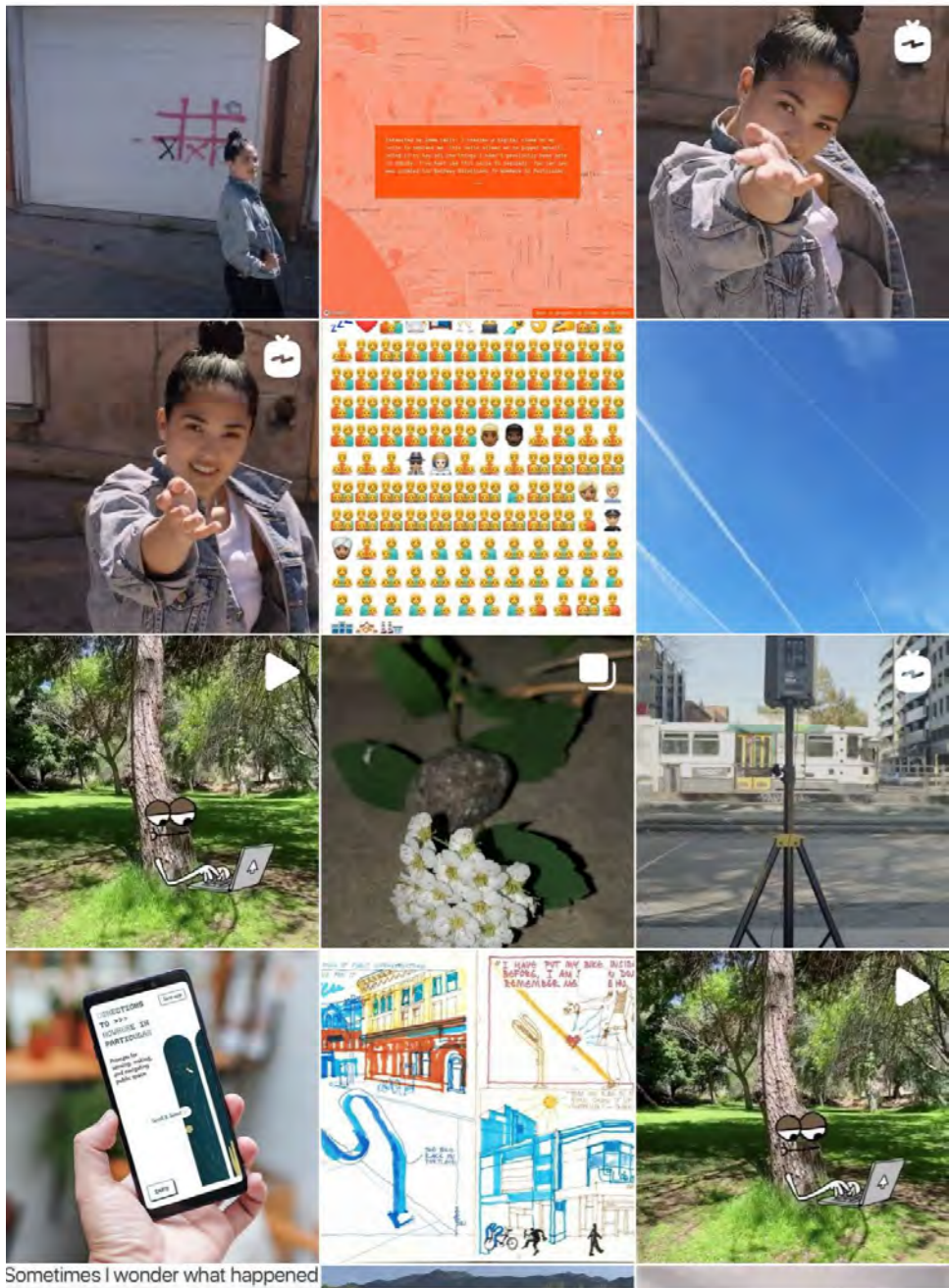
Fewer than 100 posts

Following

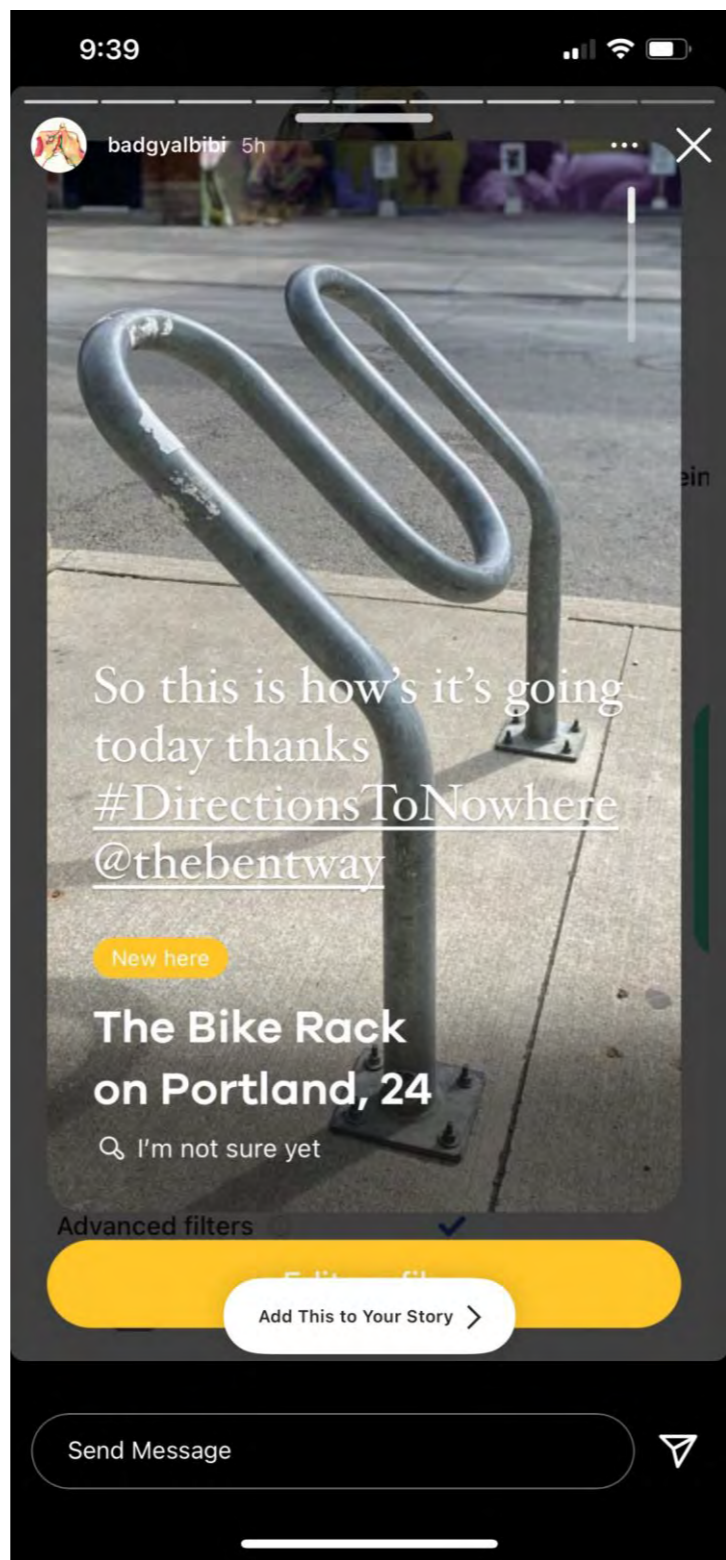
Followed by [\\_sweetsage\\_](#)

Top

Recent



Sometimes I wonder what happened



So this is how's it's going today thanks [#DirectionsToNowhere](#) [@thebentway](#)

New here

**The Bike Rack on Portland, 24**

I'm not sure yet

Add This to Your Story >

Send Message



## Tweet

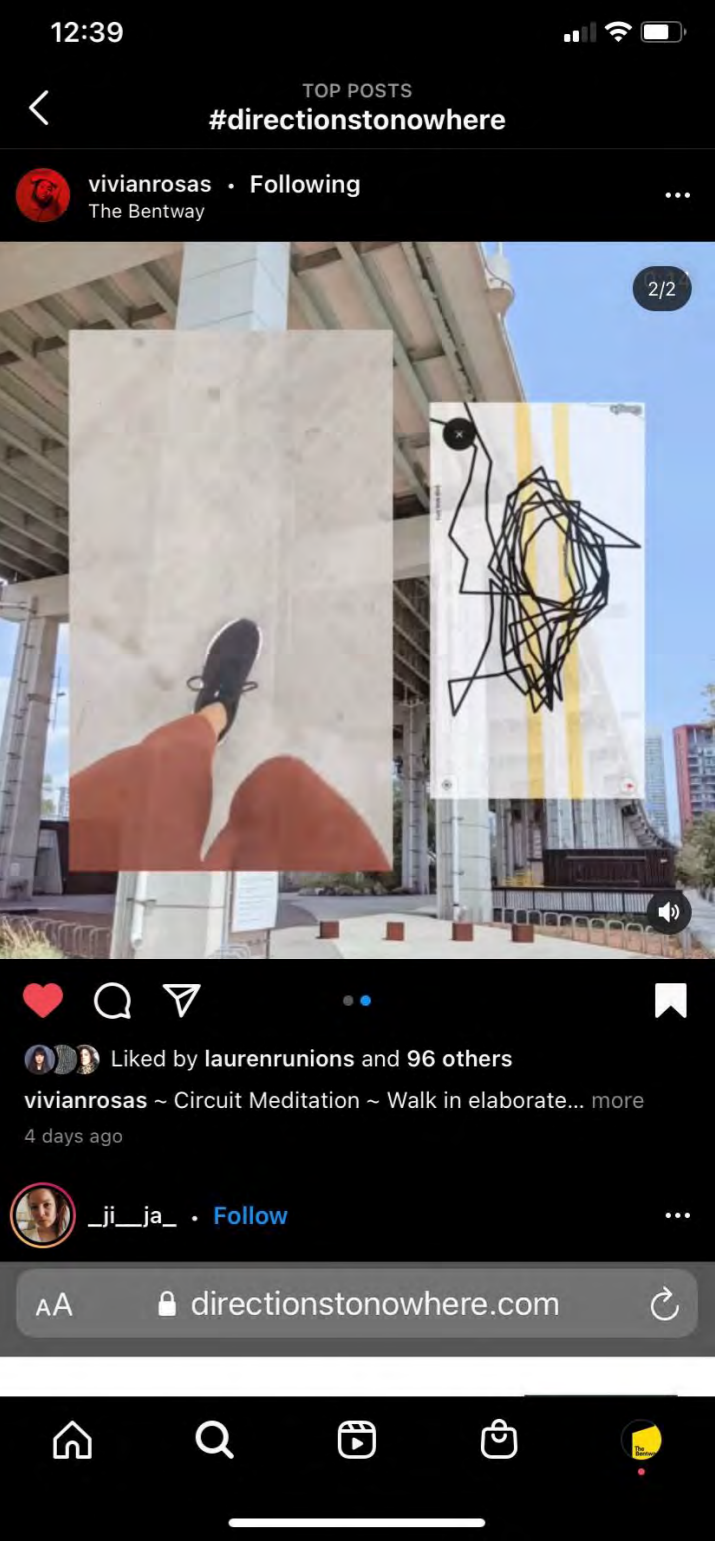


Treemail. Inspired by a [#DirectionsToNowhere](#) prompt and the creative people at [@thebentway](#) in Toronto! Check out the project at [directionstonowhere.com](#)

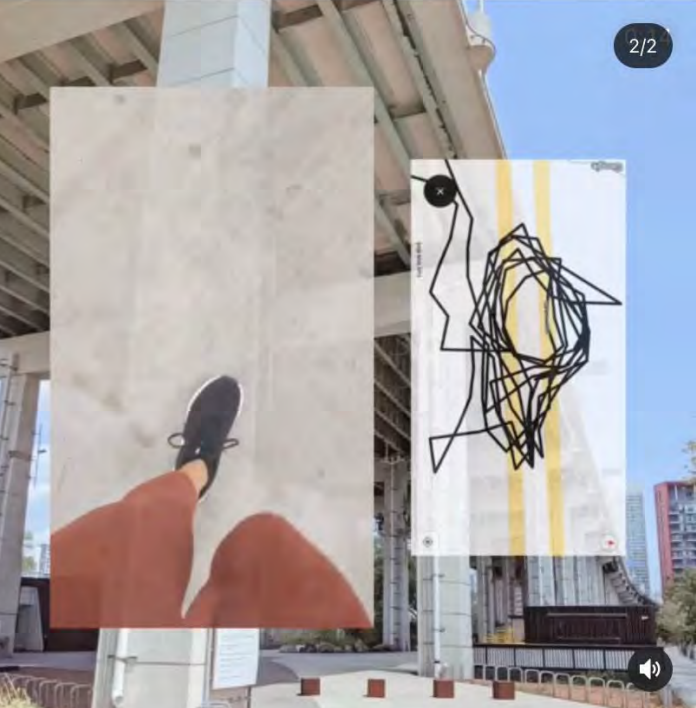
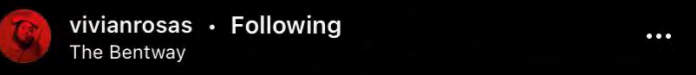


95 views

Tweet your reply



## #directionstonowhere



Liked by [laurenrunions](#) and 96 others

[vivanrosas](#) ~ Circuit Meditation ~ Walk in elaborate... more

4 days ago

[\\_ji\\_ja\\_](#) · Follow

directionstonowhere.com



**thank you!**

**the bentway**

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+1 416 304 0222