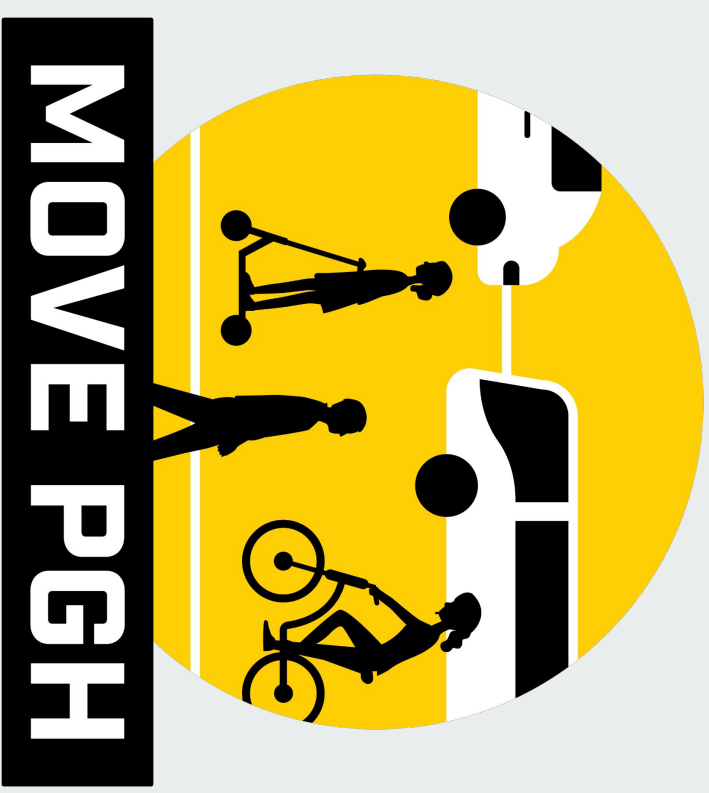




Mobility Hubs of Move PGH

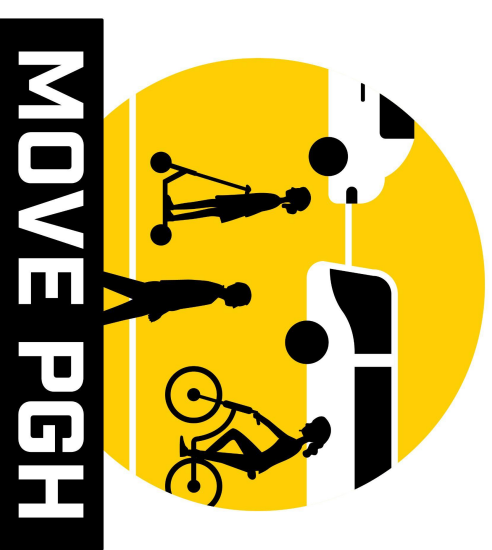
Tosh Chambers - Move PGH Program Director

(3/9/22)

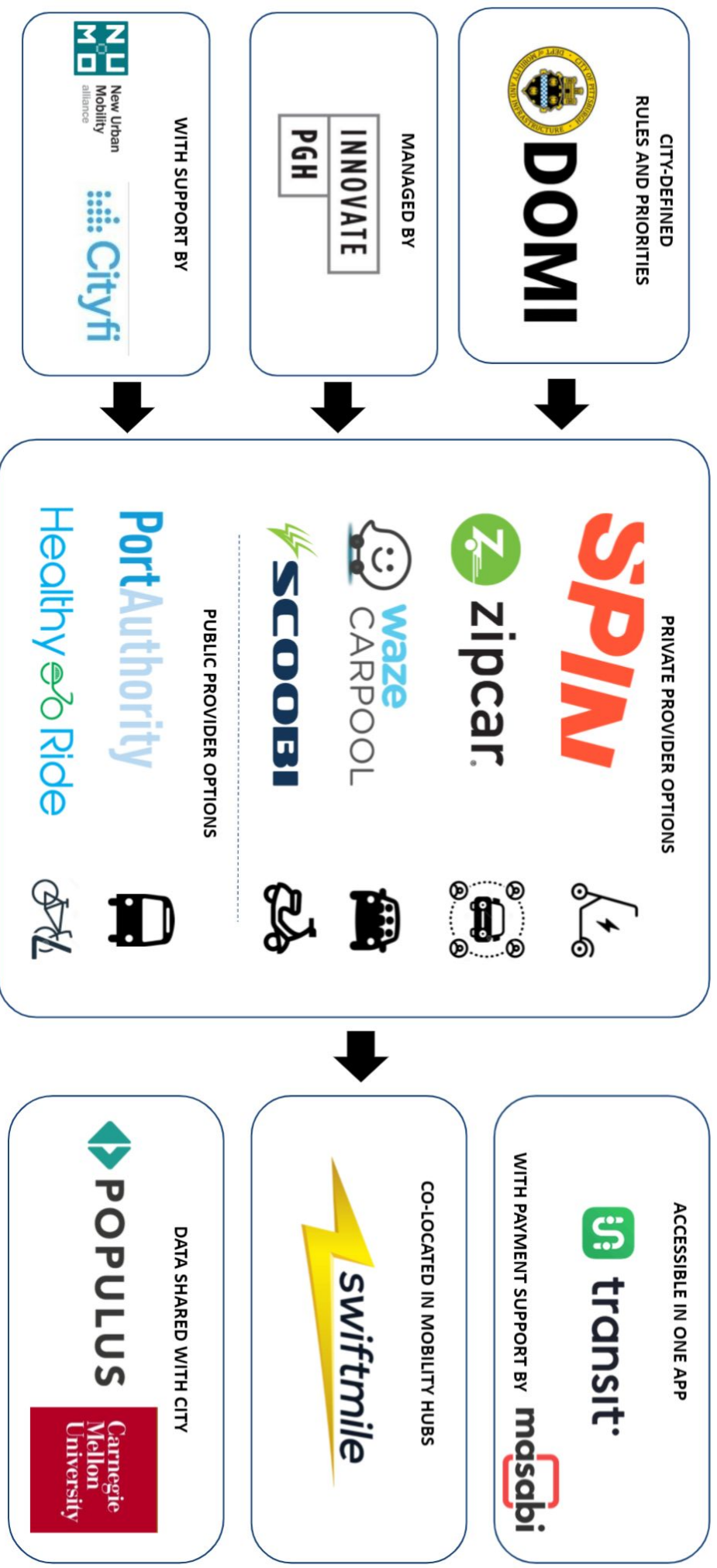


Introducing: **Move PGH**

- Pittsburgh's Department of Mobility & Infrastructure (DOMI) sought a coalition of shared mobility services to coordinate a unified mobility offering.
- The **Pittsburgh Mobility Collective** was thus formed, combining existing transportation entities with others selected via RFP.
- **Move PGH launched in July 2021**, providing Pittsburghers with access to more transportation choices in a holistic fashion.
- Coordinates options **both digitally and physically**:
 - **Transit App** shows info on transit and other modes, now facilitates booking/fare purchase
 - **Mobility hubs** supports multimodality, combining at least 3 transportation nodes
- Funded by **RK Mellon Foundation** and **World Resources Institute** - NUMO
 - Grant of \$300,000 funds staff and program pilots



Pittsburgh Mobility Collective



Mobility Hubs: Initial Ideations

- Spin's RFP response offered 50 mobility hubs supported by Swiftmile charging stations
- Initially discussed purpose and form behind hubs in PMC's first "**Ambition Workshop**"
- Formed a **PMC working group** to answer key questions regarding hub purpose and form:
 - What purpose does a hub serve?
 - What constitutes a hub?
 - Where should hubs be placed?
 - How are communities involved?



What is a Mobility Hub (exactly)?

What purpose does a hub serve?

- Expand transit-shed with first & last mile connections
- Serve as a reliable node for multi-modal transfers
- Provide info and resources for improved mobility use

Where should hubs be placed?

- In centrally-located neighborhood spaces with existing high-utilization nodes
- Aligned with transportation infrastructure such as transit stations/shelters or bike lanes

What constitutes a hub?

- Includes 3 or more transportation nodes co-located as a cohesive place
- Node may include transportation information (i.e. real-time transit updates, mode-finding, etc.)

How are communities involved?

- DOMI determines neighborhoods and corridors that receive hubs and identify possible placement locations based on suitable infrastructure
- Communities are consulted for a final location selection

Mobility Hub Hopes vs. Reality



The Dream:

A vibrant and joyful space
flush with amenities and
transportation options



Mobility Hub Hopes vs. Reality



The Reality:

- Limited budget
- COVID-19
- Partner constraints
- Space conflicts
- Difficult infrastructure

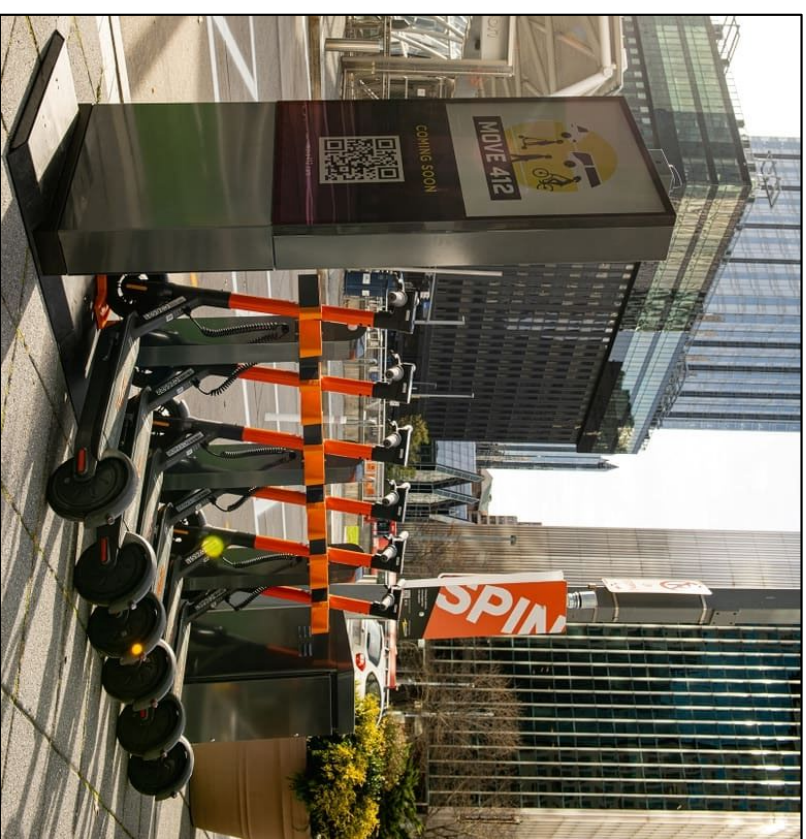
Leads to:

- A piecemeal approach
- Limited in-person engagement
- Certain locations untenable
- Not all services represented at each hub



Swiftmile Stations

- Purchased by Spin from Swiftmile to support operations in Pittsburgh
- Tested a hub-based system from the start
- Installing 50 over two years, currently 25
- Users are incentivized to park and plug-in
- Stations also display advertising and public information
- Could run on solar or batteries, but this requires frequently changing batteries
- Stations can be branded, or have unique displays
- Advertising helps finance the stations



Spin Hub Specifications

Dimensions:

- *Number Parking Bays:* 6
- *Length:* 149 in.
- *Width:* 50 in. (30 in. without scooters)
- *Height:* 75.4 in.

Electrical:

- 120 vac, 15 amps

Materials:

- Aluminum with stainless steel hardware
- Galvanized steel baseplate

Transit Information:

- Real-time transit information provided by TransitScreen

Parking Safety:

- All locations in the street will include striping and deflector poles



Connecting the stations

- It was determined that neither solar power or batteries would be viable, particularly to help power the screen
- **Trenching** for electrical conduit would drastically **increase the project cost** (est. 200-300%)
- The City opted to pilot a simple connection to **city-owned streetlights**
- Since this power is paid for with a **tariff**, Spin worked directly with the **local utility** to pay for fair use of power
- Allows Spin to **estimate the total use of power**, using Swiftmile's internal metrology, and then compare to a utility-grade meter
- Spin worked with a **contractor** to complete this work



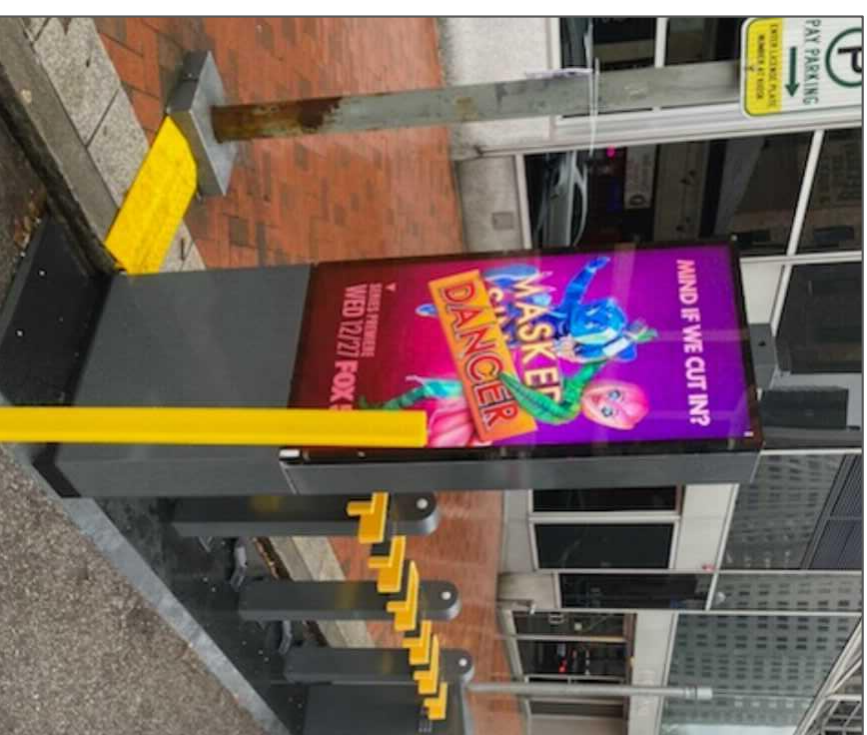
Connecting the stations



Connecting the stations

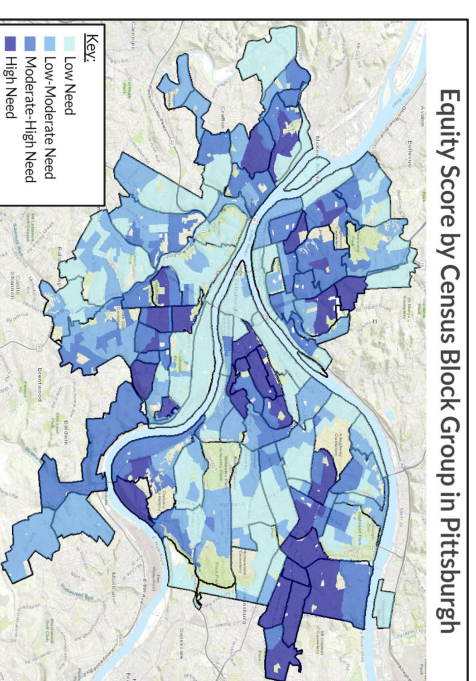
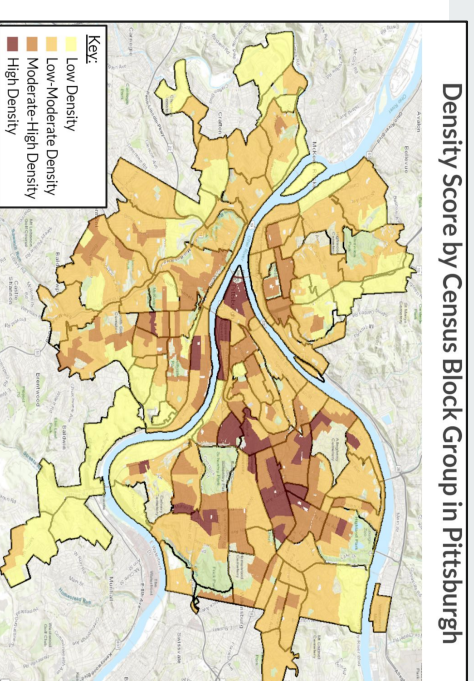


Connecting the stations



Site Identification

- DOMI analyzed each neighborhood and block group to assign scores based on its **Density, Transportation Access, and Equity Priority**
- **40% of stations (10) were located in areas of high or moderate/high density, 20% (5) in areas of low transportation access, and 20% (5) in areas of high equity priority.** Spin could place 20% (5) as they saw fit
- DOMI and Spin would then identify **multiple viable sites** for a mobility hub within each corridor, according to requirements
- Spin can also place stations on **private property**



Age Group	Male (%)	Female (%)
18-24	45	55
25-34	40	60
35-44	35	65
45-54	30	70
55-64	25	75
65-74	20	80
75+	15	85

- Must be adjacent to a power source

- Other:

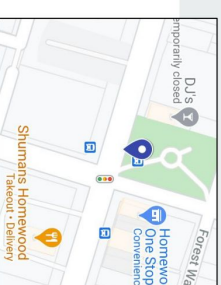
-
- The map displays the University City neighborhood in Pittsburgh, Pennsylvania. Key streets shown include M.L.K. Jr. East Freeway, Liberty Ave, and various local streets like S Millvale Ave and S Evaline St. Landmarks such as West Penn Hospital, Tessa's American Bar & Hardwood Grill, and the University City Jail are labeled. Points of interest are marked with icons and labels, including Starbucks, Bloomfield, Rohrich Honda, and the University City Police Station. The map also shows the University City Jail and the University City Police Station.

Site Selection

- Considering all of the site requirements and preferred criteria, **optional sites were identified** for each corridor
- As long as each site meet all of the criteria, they are proposed to the **local community group for selection**
- The group weighs in on the site selection, and also determine if **broader community engagement** is warranted
- Utilized Pittsburgh's **EngagePGH** platform to issue surveys and determine the final location

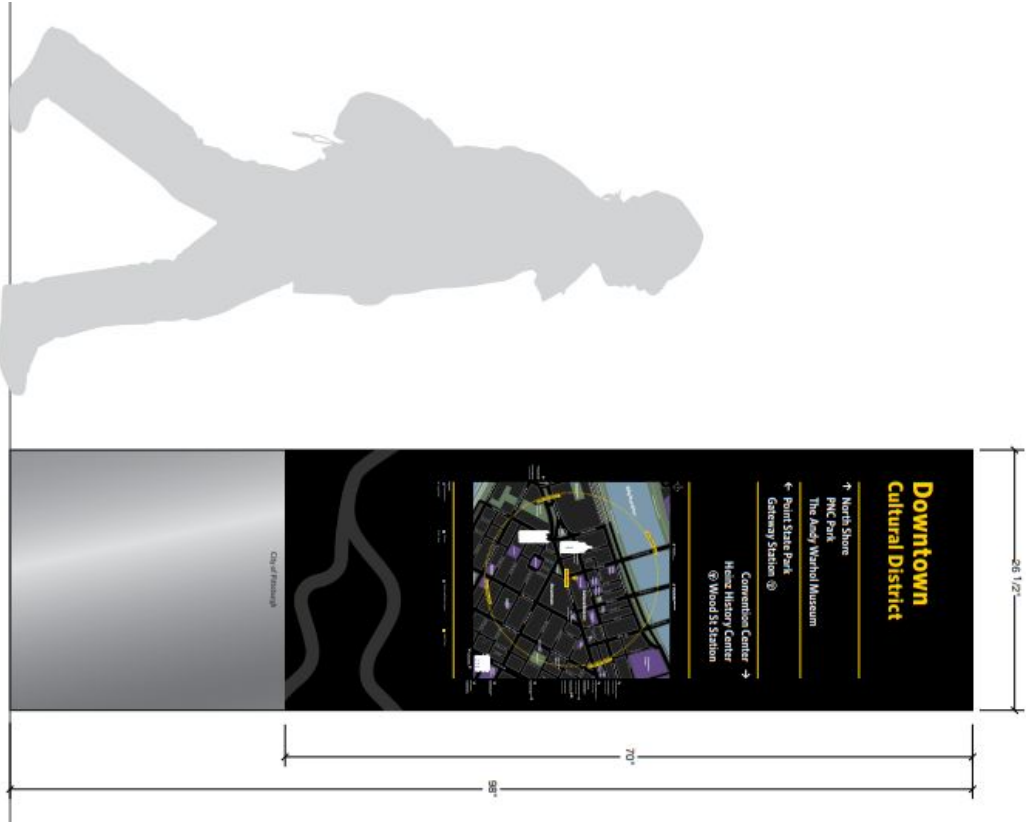
Site #3 (Frankstown @ Homewood)

- Next to a parklet, not removing parking from a business or residence
- Near 3 transit stops
- Close to convenience store, other businesses
- On a busier street



Additional elements

- Swiftmile stations are commonly **across the street or around the corner** from transit stops
- Other **transportation elements** are added in the surrounding area (whenever possible)
 - Zipcar space
 - Bikeshare station (unelectrified)
 - Moped parking corral
- **Way-finding/Mode-finding** planned for Summer 2022
- **Unlocking funding** to allow other elements: (smart benches, greenery, bike racks, etc.)



Final Take-aways

- **Dedicated funding** allows for electrification, coordinated infrastructure improvement
- **Electrification** can be done on the cheap, but this limits possibilities
- **Micromobility charging equipment** allows for financing and information displays, but is time and resource intensive
- May be difficult to have all elements present at a single corner or block face, instead think **intersection-scale**
- When engaging communities, a “**menu**” of options will be helpful



Thank you!

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