City Squiggle

PIVOT
ARCHITECTURE

Need

As it stands, Eugene is unwalkable and serves as an example of a larger issue in the United States and much more the West. Walking constitutes a large part of our lives, and is the choice of commute for numerous individuals whether it be for personal or economic reasons. Tied to walking is the concept of public habitation, of which has been hindered to such an extent that it has largely been redefined if not destroyed, affecting walkability in its wake.

How can we help improve walkability and habitation in the current pedestrian environment ?
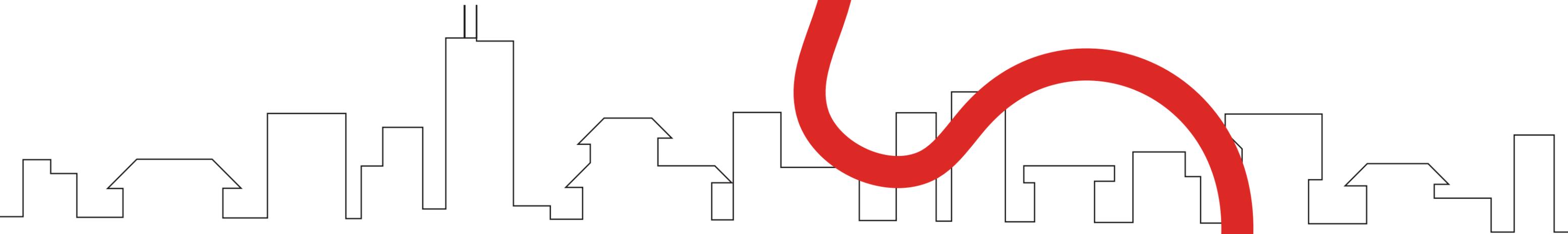
Problem

The sidewalk has been privatized in the way that it serves little as public property and has more over been associated to privatized business fronts and their value as the pedestrian realm slowly dis appears. This comes from the effects of decades of segregational urban planning that have created in hospitable spaces and urban disconnections that are designed to hinder walkablity and public inhabitance. The new perception of the sidewalk has changed it from a public space to an optional circulatory tool, second to the automobile.
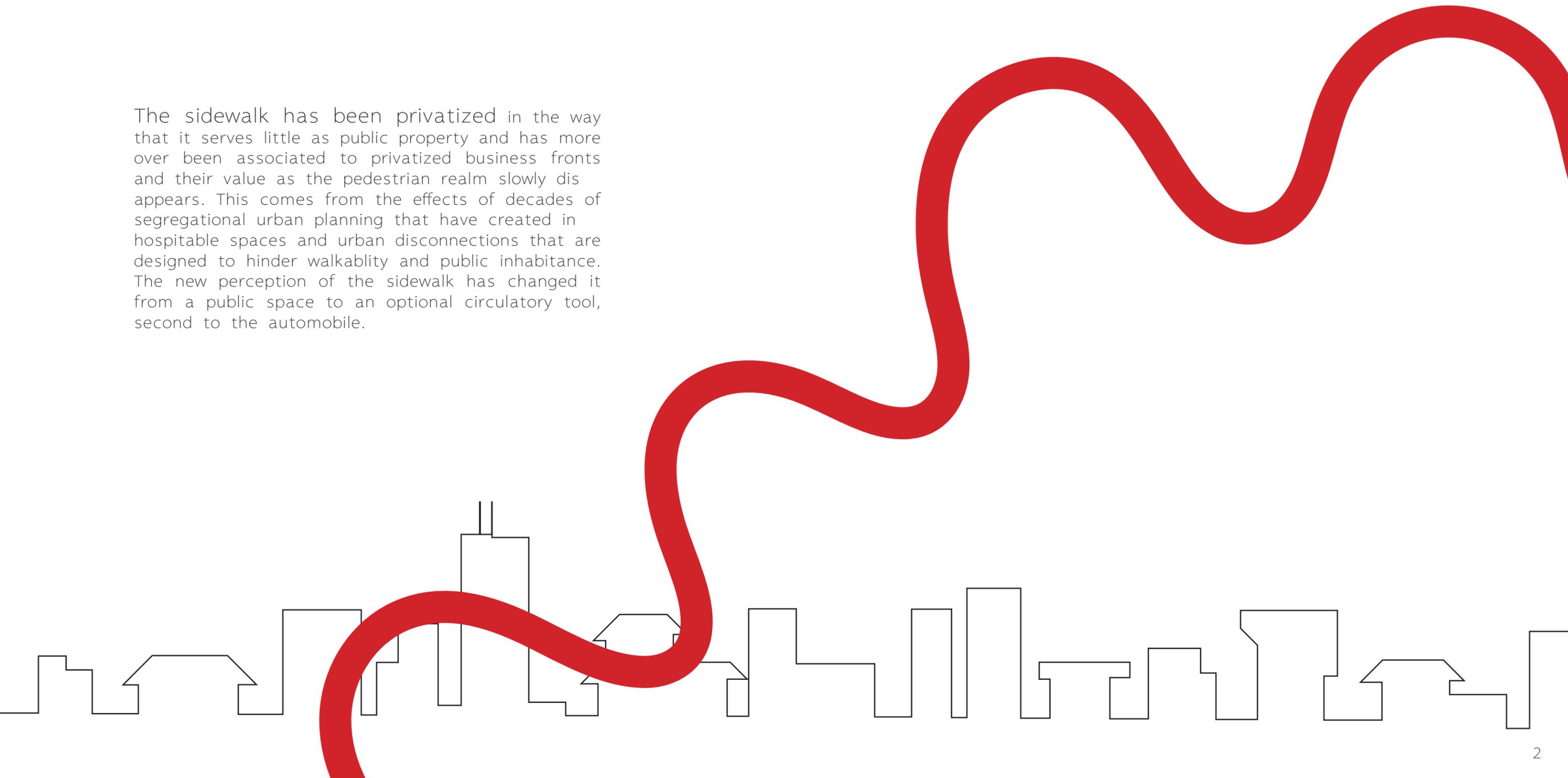
Research
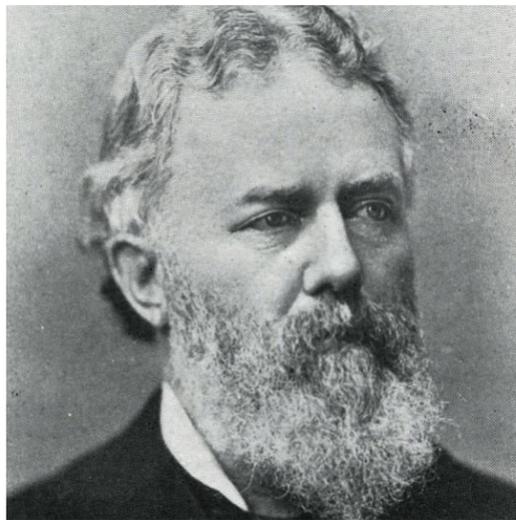
Oregon's history of racism is evident in the civic planning of Eugene. Black neighborhoods have been pushed and bullied into what is now some of the most economically disadvantaged neighborhoods, in addition to being the least connected and most physically segregated; West 11th, Glenwood, River Road, and the Whiteaker. Urban Renewal, Block Busting, Red-Lining, and many more tactics have been used across the country as strategies to fight integration and still affect land use to this day.

Many initiatives are taking action to undo these effects across the nation such as amenity installations, road reconstruction, public transportation, and most dominantly re-zoning.

Main Issue

Walkability and public inhabitance are **disregarded** as those with legislative power find privatized spaces and automobiles more favourable, seeing as the public infrastructure has prioritized them for the better part of a century. In a para-doxical fashion, public inhabitance and walkability is also unpopular for the reason that the spaces they regard are unwalkable and uninhabitable.

How can public spaces be improved to promote walkability and public inhabitance?

Target Market

The target market are local municipal governments as well as neighborhood coalitions who can install these devices to help bring communities closer together and improve the quality of life drastically.

The target user is Eugene's underprivileged. While these shelters can promote current drivers to walk, they serve largely those who already do. The intention is to break segregational barriers to travel that exist in cities and towns, rather than amplify the disparity between privileged and under-privileged neighborhoods.

The demographics that comprise the underprivileged are Native Americans, Latine individuals, teenagers, lower income families, and for the most part— West Eugene.
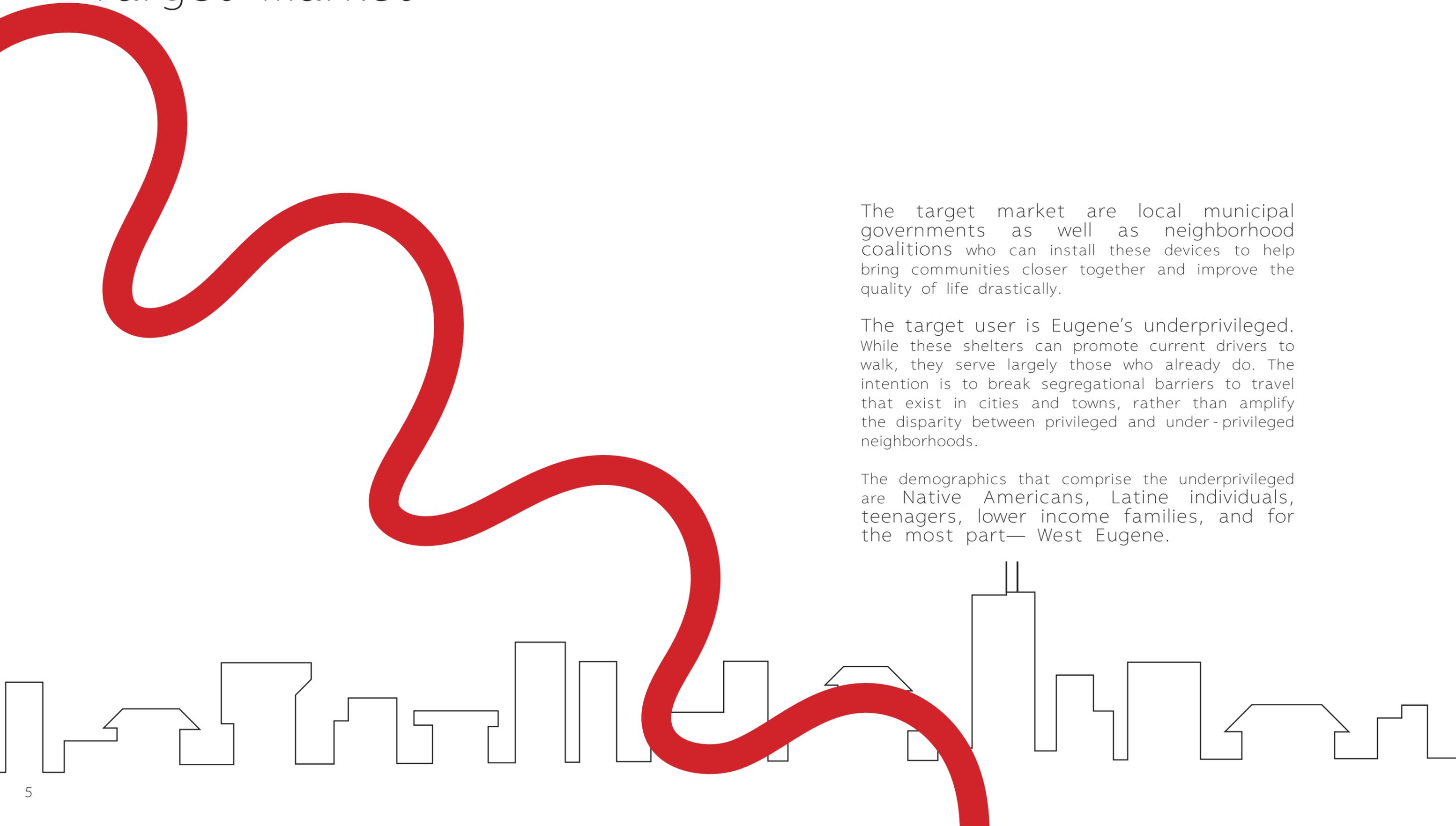
Competitors

Both direct and indirect competition abound in Eugene. Lane Transit District is an indirect competitor, and one that should not be competed with and instead be developed in congruence with as these two systems can operate extremely effective with one another. Competition can be found in their stations however as they serve as shelter and resting areas, although privatized.

The Riverfront path is a major point of competition, as it is a path that connects a majority of Eugene, albeit with several caveats.

Private Businesses also serve as competition, as a public habitable space threatens the commodification of interiors and amenity space.

Automobility is an immense competitor, as existing infrastructure largely caters to the majority method of commute.

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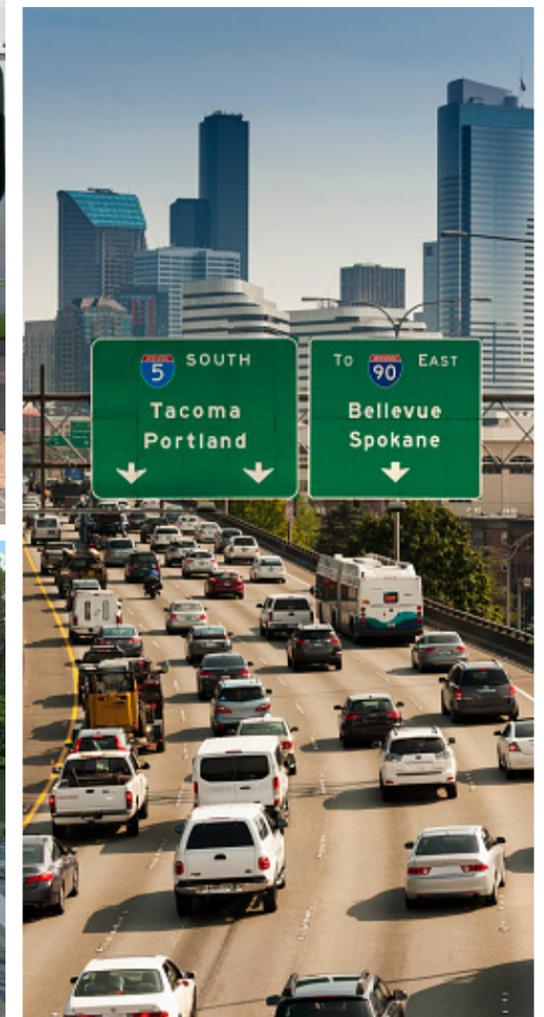
Constraints, Objectives, Directives

Constraints— Must/Mustn't
Must NOT be hostile
Must be safe
Must have sight lines
Must meet size requirements
Must be easily installable
Must be easily manufacturable
Must be affordable in volume

Objectives— Should/Shouldn't
Should promote walkability
Should create visually pathable routes
Should create vibrant inhabited public spaces
Should dismantle civic segregation
Should NOT be a luxury amenity
Should NOT be exclusive
Should be in high quantity
Should be part of a larger system

Directives— Could/Couldn't
Could be a community owned asset
Could be an advertising space
Could be an artistic canvas
Could be an event space
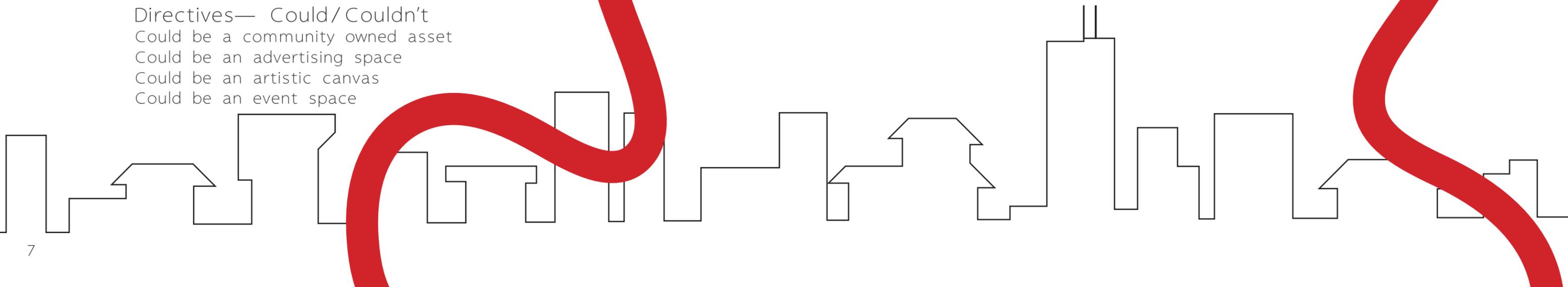
Inspiration

Much inspiration comes from the 20th century, a time in which public utility was more commonly found and supported in certain areas of the world with the emergence and implementation of new technologies that changed the function of society such as the telephone and modern public transit.

Due to the volume and public nature of amenities such as bus stops, phone booths, and benches, much of the materials and aesthetics center around utility, rawness, and brutalism. There is an evident idea that the efficiency of the object should not be something to be ashamed of and should be boasted in the way of unpainted concrete and metal. The designs are honest and come from fundamental early 20th century ideals of communalism, duty, and socialism, prior to the design and marketing reannaissance of the post war era.

Main design considerations taken from the inspiration research are honesty, efficiency, duty, and pride.

Design
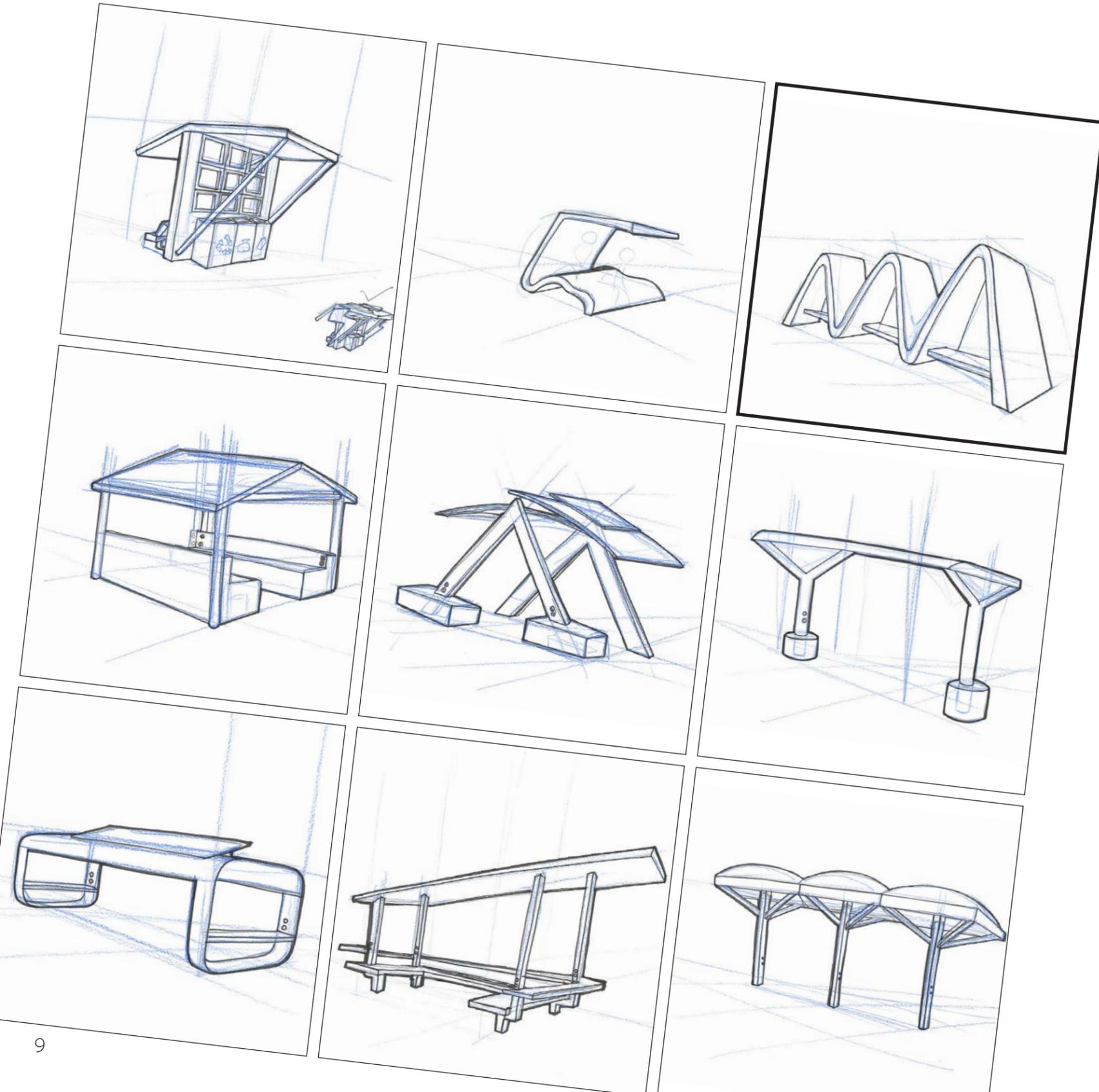
The needs of different stakeholders constantly conflict with one another in which certain values are amplified and minimized. The prior constraints, objectives, and directives guided the design decisions of each concept. Non‑hostile shelter and seating were priorities throughout the design process, heavily concerning safety and dignity from the elements.

Both privacy and communion space were consideration in design, with designs either specializing in one or the other, or featuring the mo‑dality of both.

Dignity and inclusion of the diversity of the public and their habits was a key highlight in design consideration, with features aiming to seamlessly integrate every member of the community without conspicuously singling them out.

User Evaluation

Feedback was a key factor in design and refinement, helping synthesize and expand the efficiency of the design itself, but also the grander mission of the product.

The wave design garnered a lot of positive feedback, and proved the most prospective in its ability to be multi-modally inclusive and multiplied.

"I think the importance of scalability, uniqueness, beacon, not a transit station are all met by this design." "I think this one was the one with the a shaped bench and a simple cover and the walls looked like bike spokes. I would stay away from huge walls with space for people to draw on." "15 does a wonderful job integrating access" "I like the simple footprint. Parasol cover could be more sculptural and translucent with color" "I like all the ideations that have Complete visibility while sitting or walking by. My concern is that someone could hide behind parts and then jump out to attack, rob, startle, etc. someone. Also if someone needs help they may not be easily seen by passerbys. I don't like to walk by or in areas that don't have good visibility. Also, the garbage can idea may be the practical push needed to get the City to invest in something like this." "I love the overhang and the structure, my feedback would be to rethink the trash idea so its not sitting behind people when they sit, or being the sole thing covered by the shade. Second I would also dive into a rain study. It rains a bit in Eugene sometimes and it should be seen in design. Right now I see this as kind of like a leaf, reminding me of bug life the pixar movie. There is a scene where water drips off of the leaf. It can be turned into a cool effect these shelters do with like a

Design Discussion 07-22 Peer Feedback Activity on Initial Ideations

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Concept
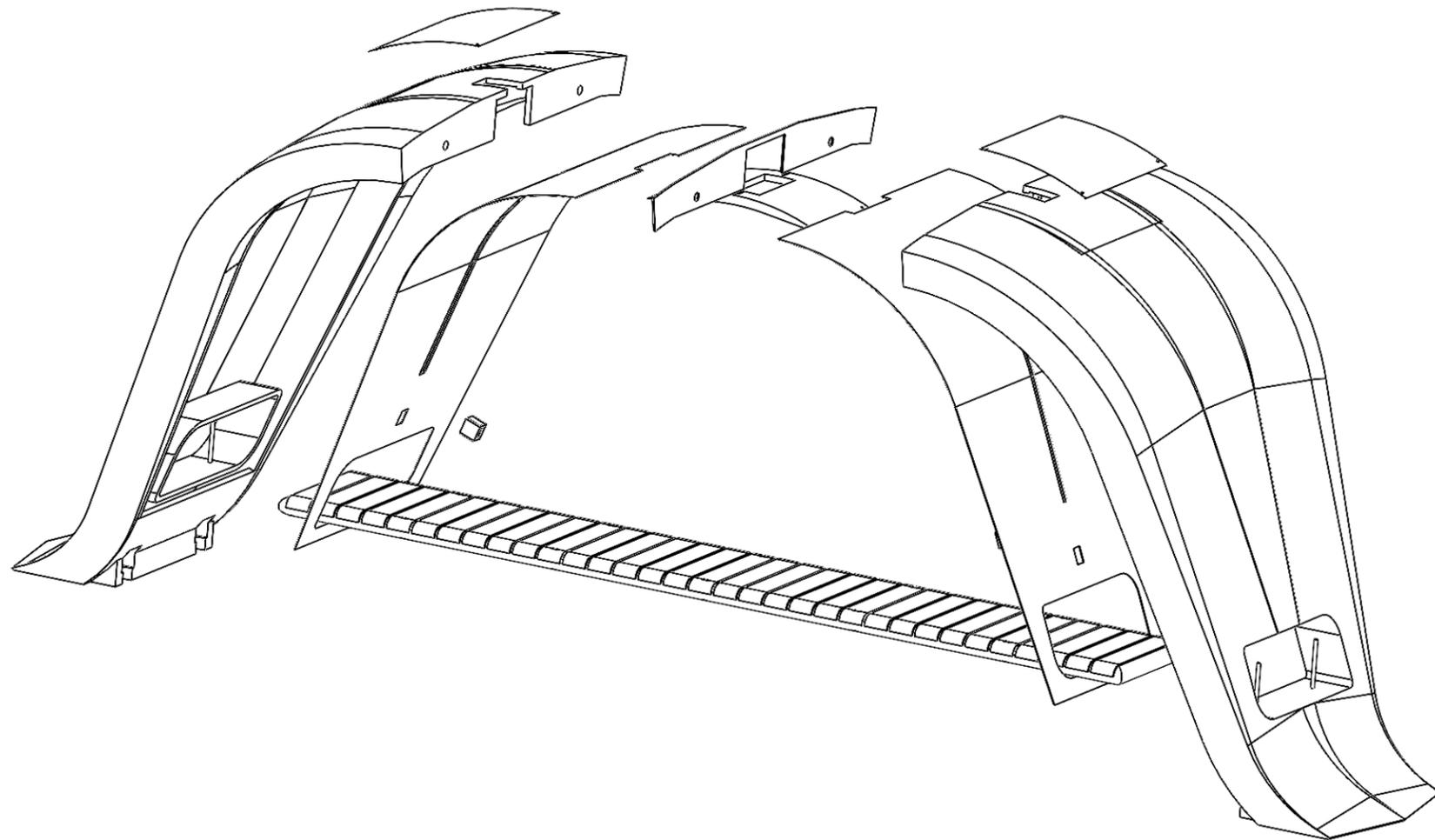
An easy to install solar - powered seating shelter is what the City Squiggle aspires to be. Utilizing two outer cast concrete arches anchored together at their peak on either side of a gasket that allows for subtle movement and angle change.

An interior burnished steel panel attaches to the un-derside of each arch, creating a housing for a curved LED light and two weather - proof outlets which op-erate on a closed loop separate from city amenities.

Curved arrays of solar cells sit at the top of the combined arches, feeding power to a concealed up-per component cavity which houses the main power storage and junctioning components.

A powder - coated steel bench rests in the lower through - ways of the arch, adjustable via bolts which help angle the bench to specific measurements as it rests on two threaded rods. Several slots on the bench allow for it to be moved and adjusted for multiple modes of use by the assembler which allow it to integrate with an array of units.

Covers for the threaded rods maintain safety without sacrificing sight - lines, serving as either simple two - piece covers, or as leverage bars.
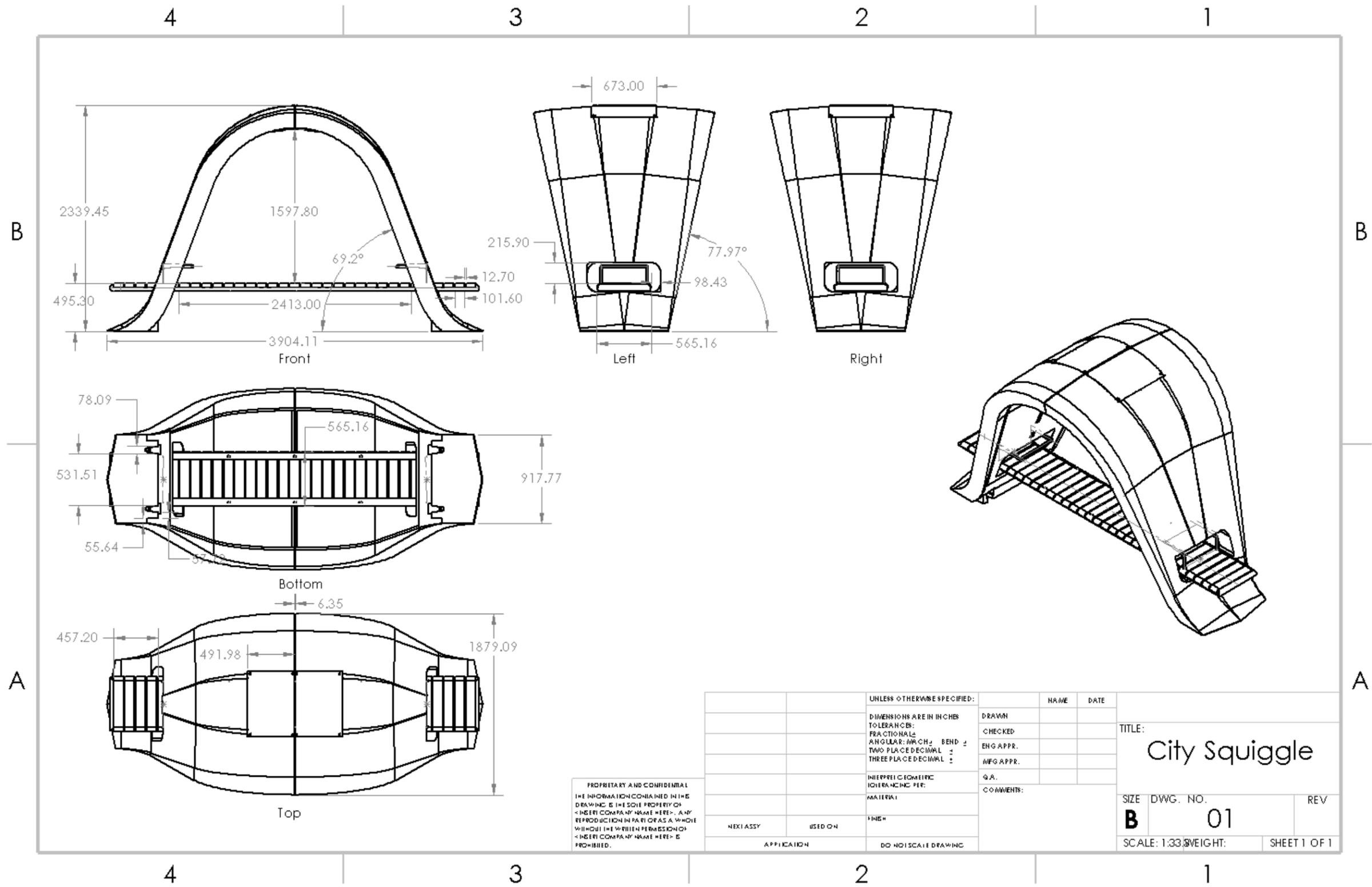
Front view dimensions:
- 2339.45
- 1597.80
- 69.2°
- 12.70
- 495.30
- 101.60
- 2413.00
- 3904.11
- Front

Left / Right views:
- 673.00
- 215.90
- 77.97°
- 98.43
- 565.16
- Left
- Right

Bottom view:
- 78.09
- 565.16
- 531.51
- 917.77
- 55.64
- Bottom

Top view:
- 6.35
- 457.20
- 491.98
- 1879.09
- Top

|		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	
		DIMENSIONS ARE IN INCHES	DRAWN			
		TOLERANCES: FRACTIONAL±	CHECKED			TITLE:
		ANGULAR: MACH± BEND ± TWO PLACE DECIMAL ±	ENG APPR.			**City Squiggle**
		THREE PLACE DECIMAL ±	MFG APPR.			
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			
		MATERIAL	COMMENTS:			
NEXT ASSY	USED ON	FINISH				SIZE **B**	DWG. NO. 01	REV
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:33 WEIGHT:		SHEET 1 OF 1

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Routing

Equity is key to minimizing redundancy as some neighborhoods and paths already have a level of inhabitable space. While much of said space is privatized, installation of the product would create unnecessary redundancy and can be better utilized elsewhere.

Information gathered indicates that West Eugene is one of the neighborhoods that requires pathing, inhabitable space, and walkable neighborhoods the most.

Several installations in key areas elsewhere are also crucial in promoting and connecting already existing inhabitable spaces, and creating more visually identifiable paths of which currently exist invisibly.

Routing noted takes advantage of the already present EmX system, of which has installed pathable station shelters. Working in tandem with this system most of the routes are perpendicular or parallel to the EmX system which runs bilaterally through Eugene creating a web like network.

In the proposed route, 125 locations are used.
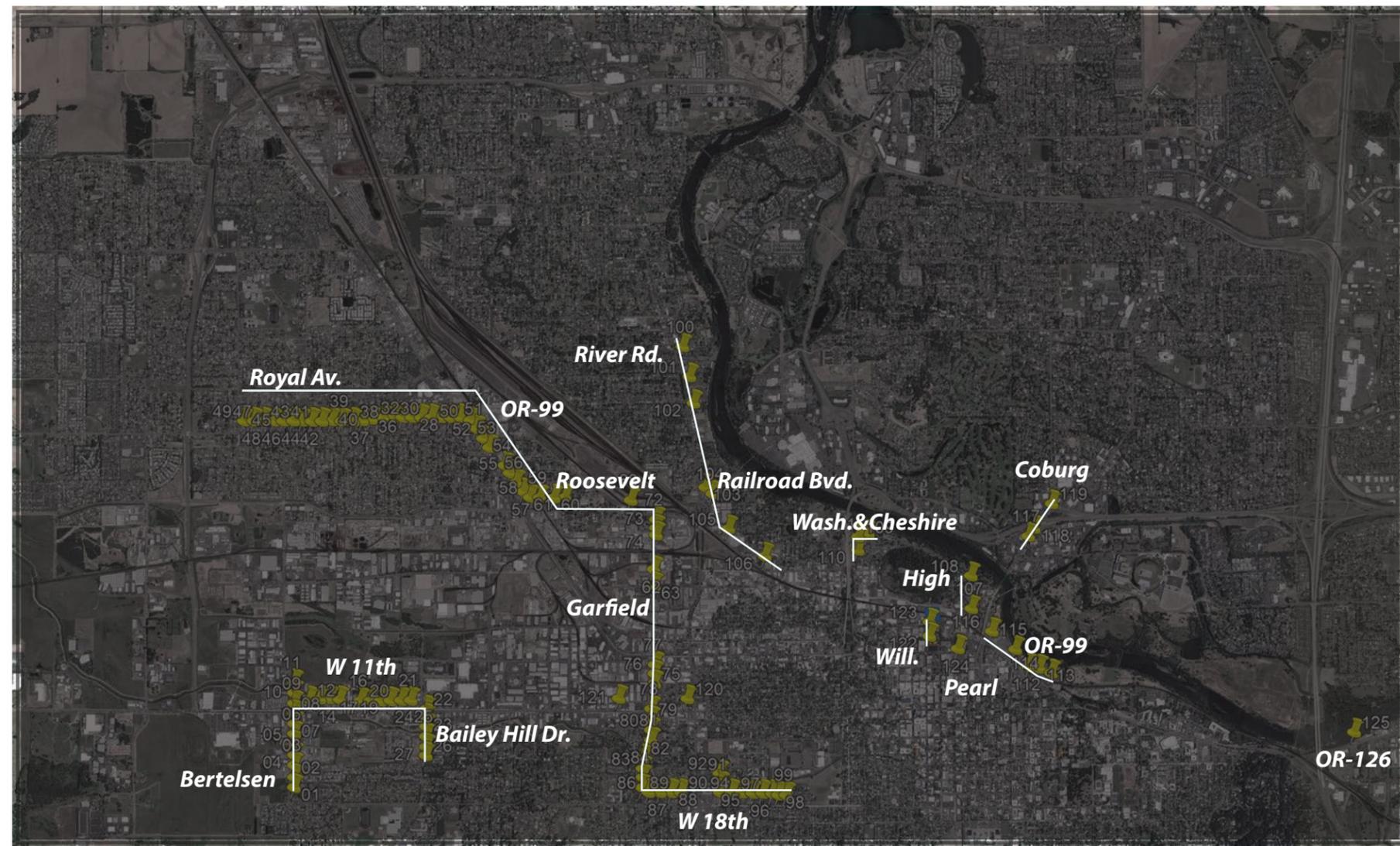
Unique Selling Point

What the Product and the Competition do:
- Connect Eugene's Commuter Network

What the Product does and the Consumer wants:
- Create a Public space to exist
- Provide Public Electrical Charging
- Wheel Access & Consideration

What the Competition does and the Consumer Wants:
- Connect with Busses
- Faster Commute
- Privatized Security

What the Product and Competition do that the Consumer Wants:
- Provide Shelter
- Illuminate the Space
- Provide Seating

What the Product Does
- Small Footprint
- Public Habitable Space
- Self Sufficient Circuit
- Electric Charging
- Wheel Access

What the Competition Does
- Busses
- Privatized Security
- Automobiles

What the Consumer Wants
- Walkable Neighborhoods
- Electronic Support
- Illumination
- Safety
- Wheel Access
- Non-Hostile Design
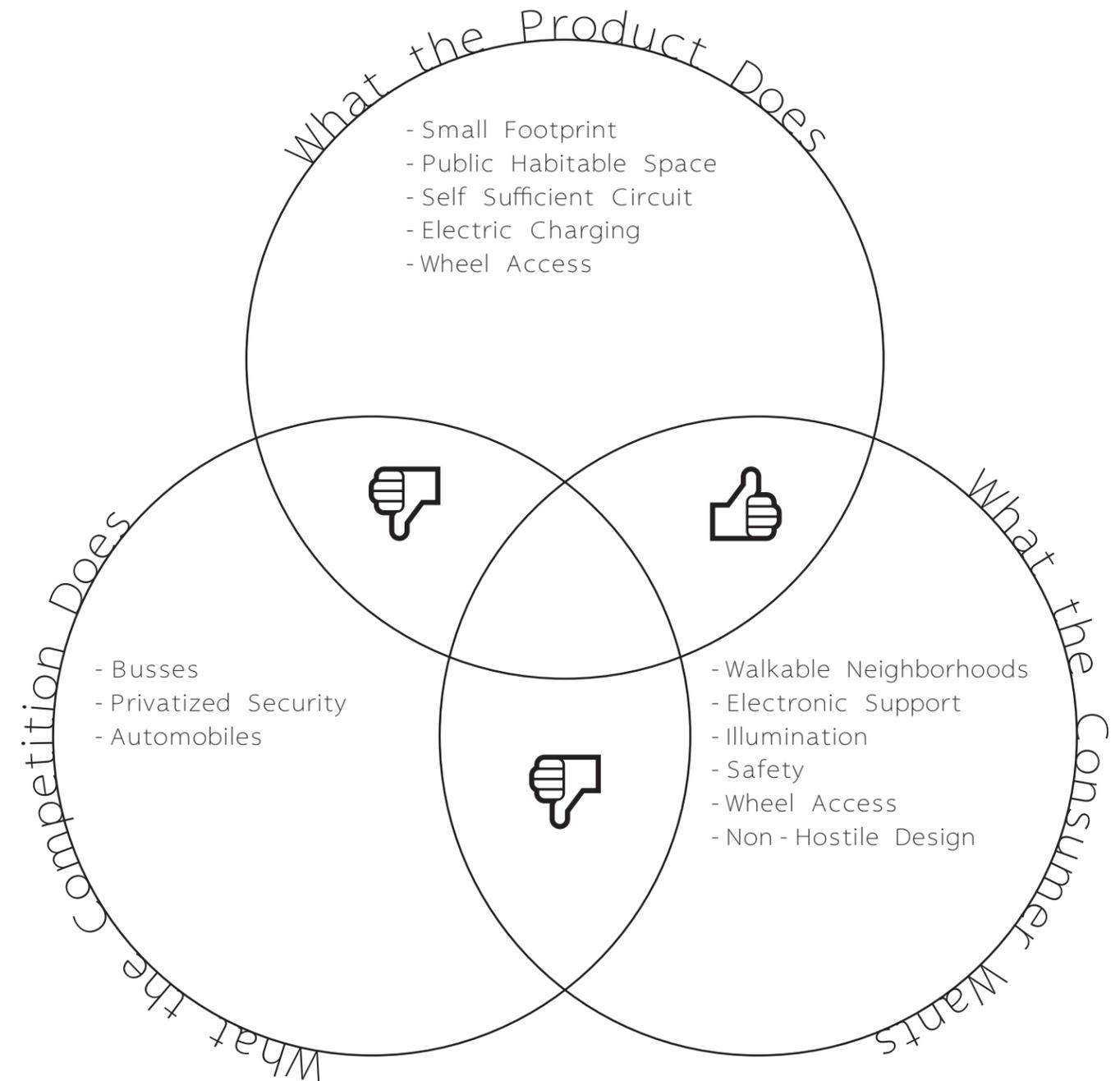
Scenario of Use
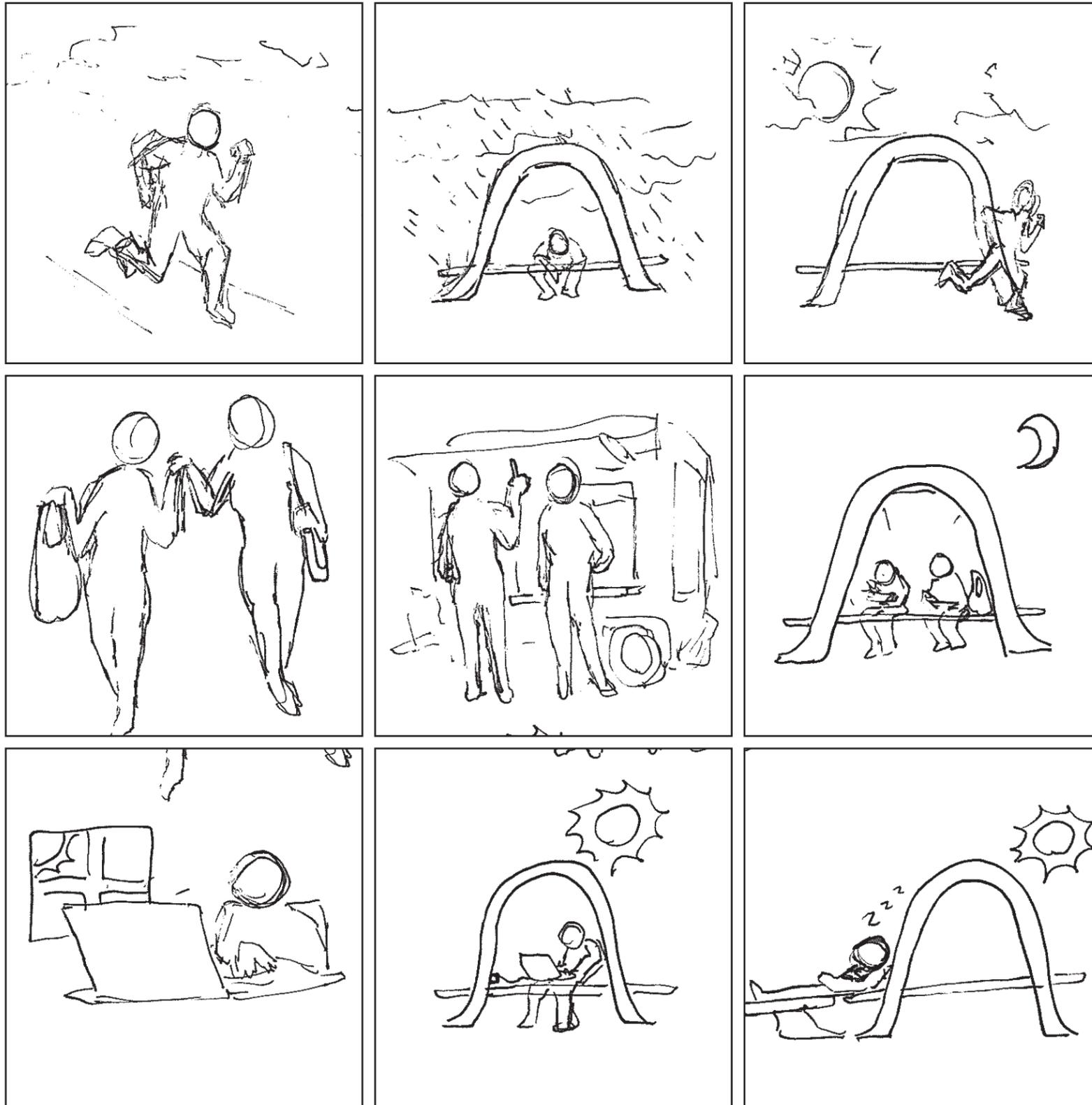
A Man goes for A Jog
- When he leaves his house, he doesn't realize it was going to rain
- It starts to rain, and he decides to take cover and rest
- The rain ends and he continues his run comfortably

Two Women go Out on the Town
- Two women enjoy a day of shopping
- They decide to get dinner at a foodcart
- As it gets dark, they safely enjoy their meal while waiting for their ride.

A Man Works from Home
- While working, the man sees how nice it is outside
- He decides to take his laptop outside and work in the shade of the shelter
- After getting his projects done early, he decides to take a well deserved nap