

URBAN DESIGN FRAMEWORK

BEECHVIEW/BROOKLINE REDEVELOPMENT PLAN



**CARNEGIE MELLON UNIVERSITY
SCHOOL OF ARCHITECTURE
URBAN LABORATORY**

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**CARNEGIE MELLON UNIVERSITY
SCHOOL OF ARCHITECTURE
URBAN LAB STUDIO B
DECEMBER 2012**

FRAMEWORK GROUP

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ACKNOWLEDGEMENTS

This book is made possible through Carnegie Mellon School of Architecture's Urban Lab program. The book represents the culmination of work produced by twenty two students, and was produced under the direction of Professor Rami el Samahy and Professor Eve Picker. We would like to give a special thanks to the community leaders of Beechview and Brookline as well as the urban design professionals who attended our community meetings and provided us with invaluable feedback for our projects.

AREAS OF FOCUS

WALK THE LINE

Jake Douenias
Scott Harrison

CULTURE SHOCK

Colin Haentjens
Liam Lowe

LIVE.WORKOUT

Medha Singh
Jessica Want

FALLOWFIELD SQUARE

Thomas Groner
Sarah Harkins

CANNON PLAZA

Joe Chang
John Soh

WATERSCAPE

Christina Chen
Aswin Widjaja

FRAME YOUR PLACE!

Rebecca Cole
Talia Perry

DRIVE

Ibrahim Garcia-Bengochea
Phyllis Kim

AUTOscape

Joy Kang

WENZELL STATION

Henry Glennon

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BIG PICTURE

chapter



DEFINING THE MISSION

URBAN DESIGN FRAMEWORK AND INTERVENTIONS

1. Studio A work (Professors: Jonathan Kline & Christine Graziano) is documented in a supplementary book.

2. There are eight groups of two students each, and one group consisting of a single student from both fourth and fifth year studios.

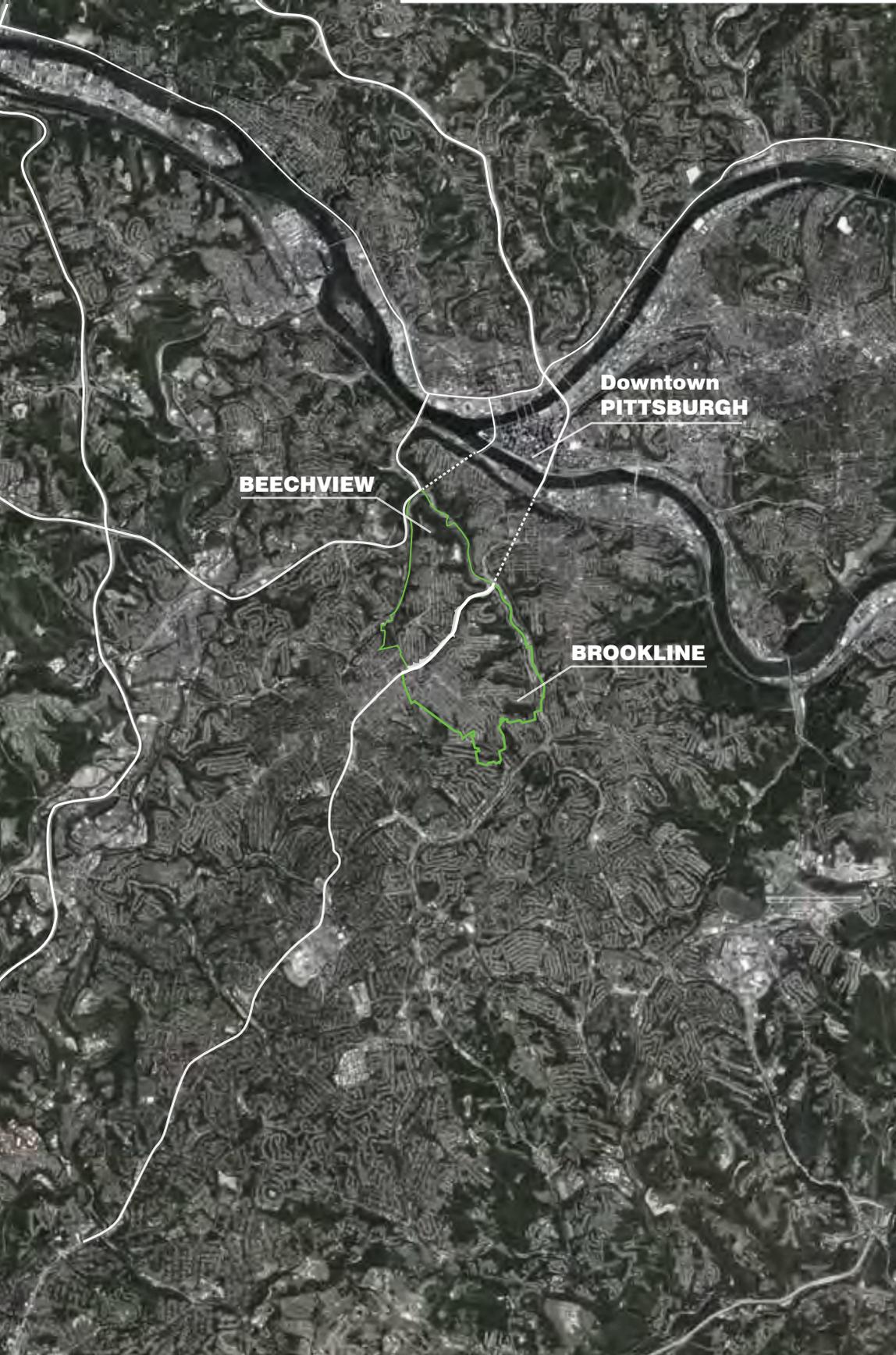
3. Three community meetings were held through the course of the semester, including invited professionals who work in fields related to urban design, as well as community leaders. Two of these meetings were held early enough on in the semester to influence the design of the projects and the framework; one was held in December to present the final work of the studio.

This book documents the work completed by Studio B of the Urban Lab under professors Rami el Samahy and Eve Picker, as a part of Carnegie Mellon University's Architecture School, in the Fall of 2012.¹ The first portion of the book describes the work of the Urban Design Framework team, while the second portion presents the proposals of nine student teams for the neighborhoods of Beechview and Brookline.²

The purpose of the Framework team is to integrate the various design projects into a cohesive urban design framework for the studio. This framework has not only been formed based on the various design interventions, but is to also act as guidelines for the various projects.

The framework seeks to understand the needs of the client group (community members of Beechview and Brookline) in order to realize a single cohesive urban design framework proposal that meets both the needs and wants of the community.

The generation of this framework was informed by historical and demographic analysis, current businesses and services, as well as recreational opportunities. Additionally, the framework has been influenced by feedback from professionals in the urban design field and beyond and by interacting with and receiving guidance from community leaders at many meetings.³



**Downtown
PITTSBURGH**

BEECHVIEW

BROOKLINE

FRAMEWORK OVERVIEW

WHO ARE WE?

The framework group consists of five students from the Urban Lab. These students work in collaboration with the rest of the student body group and under the guidance of Professor Rami el Samahy and Professor Eve Picker.

WHAT ARE WE?

The purpose of the framework group is to understand the needs of the client group and stakeholders and to realize a single cohesive urban (re)design proposal that will meet those needs.

WHERE ARE WE?

The Urban Design Proposal has been developed for the two neighborhoods of Brookline and Beechview. These two neighborhoods are located South West of Downtown Pittsburgh and meet along Liberty Avenue.

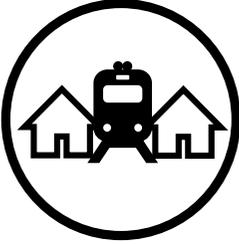
FRAMEWORK PROPOSAL

The ultimate goal of the Urban Design Framework proposal is to improve the quality of life for current and future residents of the Beechview and Brookline neighborhoods. The Framework proposes to do this by establishing a more cohesive identity for each neighborhood through the cultivation of a dense and diverse community. It will accomplish this by increasing access to the neighborhoods and community amenities. The hillsides will be used to reimagine Brookline and Beechview, while reconnecting both visitors and residents to their green amenities. Greater continuity between the two neighborhoods will be sought and West Liberty Avenue will be integrated back into Beechview and Brookline.

These strategies are proposed with the intention of achieving greater density in both neighborhoods, which in turn will help to foster more businesses and services. West Liberty Avenue will be revitalized and will benefit Beechview and Brookline, and an eco-tourism infrastructure will be introduced for the benefit of residents and visitors alike.

The Framework proposal consists of three sets of strategies, which are Access, Ecology, and Continuity. These strategies will be described in more depth in "Key Ideas."

FRAMEWORK STRATEGIES



ACCESS

Access looks at increasing accessibility to and from Brookline and Beechview as well as establishing better access between the neighborhoods and the community amenities that exist within them.



ECOLOGY

Ecology explores the potential inherent to the hillsides of Brookline and Beechview to connect residents to more green spaces as well as to attract new visitors to these neighborhoods.



CONTINUITY

Continuity centers on the interconnectivity between the two neighborhoods as well as integrating West Liberty back into Beechview and Brookline.

INTRODUCTION



chapter

HISTORY

The Streetcar Suburbs of Pittsburgh

1. Audrey Iacone, Beechview, (Charleston, SC: Arcadia, 2005).

2. South Pittsburgh Development Corporation, Brookline, (Charleston, SC: Arcadia, 2005).

3. Society for the History of Technology, Pittsburgh: A Brief History.

4. Pittsburgh City Planning, PGH SNAP. "Neighborhoods: All Raw Data."

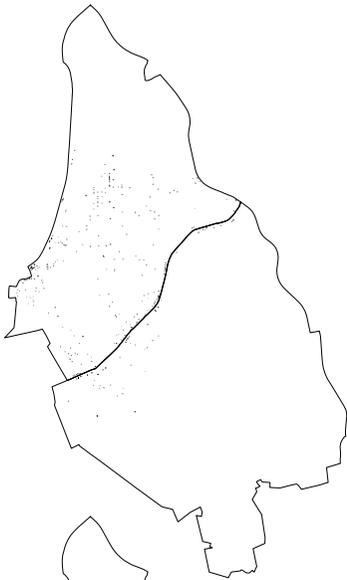
HISTORY INFLUENCING THE FUTURE

In order to understand the current condition of Beechview and Brookline, first we must look to the history of these neighborhoods to learn why certain patterns have developed over time. Learning about and understanding how these neighborhoods became the way that they are today will help to inform our strategies and insure that community values and customs are respected.

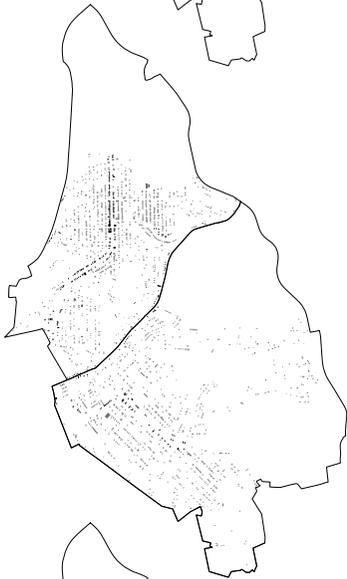
THE FIRST STREETCAR LINES

Like most cities and neighborhoods, Beechview and Brookline developed around key access corridors. The first streetcar lines were established in 1890 along Broadway Avenue and Brookline Boulevard, which opened up the area for residential development catering to those seeking to leave the more dense and polluted city center.¹

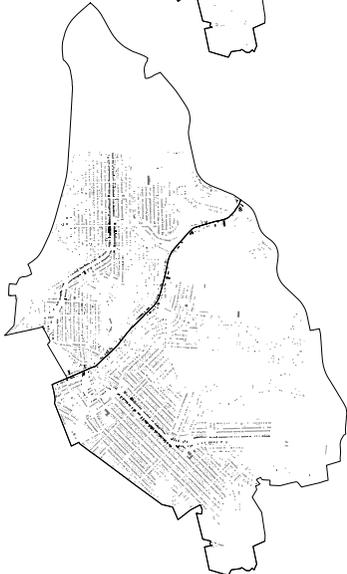
Soon after, in 1905, additional trolley infrastructure, including three bridges and a tunnel, was constructed to support the tracks into Beechview and Brookline.² With the development of this highly efficient and accessible transportation system that linked to Downtown, residential development began to spread from Broadway Avenue and Brookline Boulevard outward into the two neighborhoods.^{3,4}



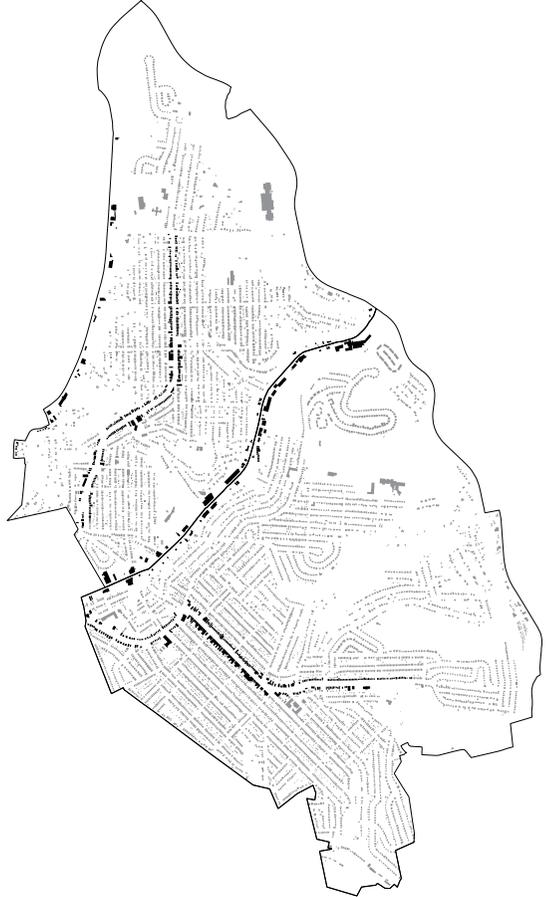
a. 1905
As Beechview & Brookline's trolley infrastructure began to develop, so did Broadway Avenue and Brookline Boulevard.



b. 1916
As access into Downtown became easier, more housing began to spread from the trolley lines into the neighborhoods.



c. 1934
After the opening of the Liberty Tunnels, Beechview and Brookline developed rapidly, offering a place that was "like living in the suburbs, but is only 6 minutes away from the city".



d. 2010
While Broadway Avenue and Brookline Boulevard, still exist as the main streets of Beechview and Brookline, the streetcar suburb culture that once supported them no longer does.

5. Audrey Iacone, Beechview.

6. South Pittsburgh Development Corporation, Brookline.

STREETCAR SUBURB CULTURE

In 1924, after five years of work and an investment of six million dollars, the Liberty Tunnels were opened, providing automobile access through Mt. Washington. This 5,800 foot long tunnel transformed what used to be a one to two hour commute to Downtown into an easy six minute trip.⁵ This rapid decrease in commute time encouraged more people to move to Beechview and Brookline resulting in a rapid rate of development. Many new developments that arose at this time were advertised as “like living in the suburbs, but only six minutes away from the city.”⁶

As more and more people moved into Beechview and Brookline, a streetcar suburb culture began to flourish. These predominantly residential neighborhoods centered around their two main streets, which contained many smaller family-owned businesses in addition to community amenities such as schools, parks, playgrounds, pools, libraries, churches, and more.

The streetcar suburbs operated as a collection of small towns within the city limits. A great sense of community pride and identity surrounded this streetcar suburb culture as residents were able to connect around all that the neighborhoods had to offer. Beechview and Brookline reached their heydays in the 1960s, when population peaked at around 15,000 and 20,000 people respectively. However, the streetcar suburb culture began to decline in the early 1970's.⁷

STREETCAR SUBURB DECLINE

In Pittsburgh, as in many cities across the country, the decades immediately after World War II saw the rise of the interstate highway system and the beginnings of suburban sprawl. City residents moved further out into the South Hills because they no longer needed to rely upon the streetcars and public transit for access to Downtown.⁸ It was during this period that the Pittsburgh Port Authority was created, buying up thirty two bus and incline companies and the Pittsburgh Railways Company and phasing out Brookline's streetcar service.⁹

In the 1970s, with the decline of the steel industry, many Pittsburghers found themselves without work, which resulted in a significant population decrease all across the city. At the same time, newly constructed suburban malls put pressure on many smaller family-owned businesses along Broadway and Brookline Boulevard, causing many of them to close their doors.¹⁰ As a result of these changes, the close-knit neighborhoods that were once united by their streetcars have lost much of their original population and are now without a strong sense of community identity.

7. Pittsburgh City Planning, PGHSNAP. "Neighborhoods: All Raw Data."

8. Audrey Iacone, Beechview.

9. South Pittsburgh Development Corporation, Brookline.

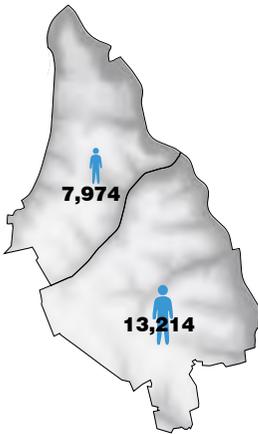
10. Society for the History of Technology, Pittsburgh: A Brief History.



PEOPLE

The Current Residents of Beechview & Brookline

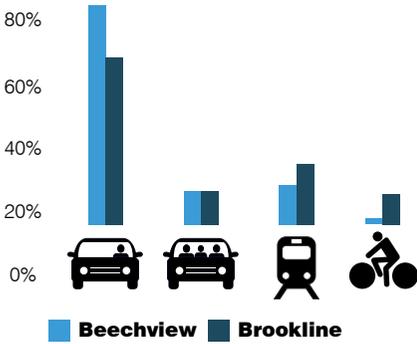
CHANGING PEOPLE & LIFESTYLES



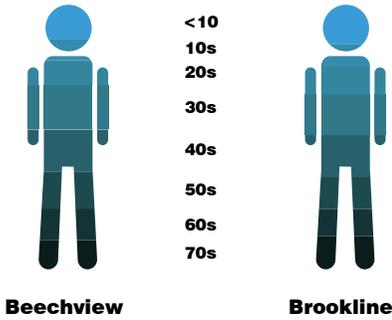
a. Population Compared to the peak population of each neighborhood, Beechview has declined from approximately 15,000 people in 1960 to 7,974 people, and Brookline from approximately 20,000 to 13,214 people.

At their peaks, Beechview and Brookline were favored by many for their suburban qualities and close proximity to the Downtown area. This attracted different types of residents, especially families who found this type of living desirable compared to the smog-ridden inner-city. After the decline of the streetcar suburb culture in Beechview and Brookline in the 1970s, the population of both communities continued to decline at a consistent rate. This population decline has led to a reduction in public transportation service and has been a challenge to local businesses, diminishing the attractiveness of Beechview and Brookline to potential incomers.

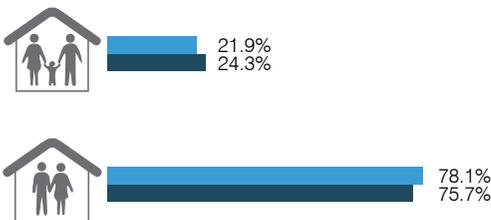
Presently, the lifestyles and demographics of Beechview and Brookline residents have shifted greatly over the last few decades. Beechview's current population is now only fifty five percent of its peak population in 1960, while Brookline's population is at sixty five percent. While there are still a number of families in the area, the population has aged significantly and many more retirees now reside in the area than previously. However, the majority of residents in both neighborhoods are in their late twenties to mid forties. Residents increasingly spend more time in the private sphere as opposed to interacting with their neighbors - a fact which is both reflective of both wider national trends and perhaps due in part to a lack in community amenities. Though some residents utilize public transportation, a large majority of residents spend their morning commutes in their cars, typically taking West Liberty Avenue or Banksville Road into the city for work. With this change in demographics comes a change in needs.



b. Means of Transportation
 In both neighborhoods, driving is the dominant means of transportation. While some do take public transit, this mode of transportation is more dominant in Beechview due to the presence of the T.



c. Age Distribution
 In both neighborhoods, most residents are in their late twenties to mid forties.



d. Family Demographics
 More than 3/4 of the residents in both neighborhoods do not have children.

PARKS & GREENWAY

Existing Greenspaces & Uses

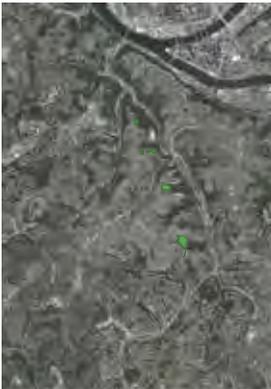


**a. Existing greenway
in Beechview and
Brookline**

GREENWAY

The Seldom Seen Greenway in Beechview consists of ninety acres of undeveloped land that stretches from the northern-most tip of the neighborhood, along its boundary, hugging Saw Mill Run Boulevard and Route 51. This forest has been left virtually untouched since the mid-1920s. It is now maintained by the Friends of the Greenway organization and run by community leader Kathy Murphy.

While there are trails that run through these greenway spaces, there is little to no formal infrastructure that creates destination places for visitors and locals alike.



**b. Existing parks
in Beechview and
Brookline**

PARKS

The neighborhoods of Brookline and Beechview contain six different parks with varying uses at different scales: Tropical Park, Alton Playground, Vannucci Field, Able Long Playground, Pauline Parklet, and Moore Park. In many cases, these parks already have trails that extend into the greenway - though not formally. These physical manifestations of people's choices offer clues for a new circulation network.



c. Moore Park: Located in Brookline, this park and community center site contains tennis courts, a playground, basketball courts, a baseball field, a splash fountain, and much more.



d. Existing Greenway Trails: There is an existing trail that runs through the Greenway, which can be entered from behind Brashear High School or from Tropical Park. This path is a 1.5 miles long, and leads hikers through forests and meadows.



e. Seldom Seen Greenway: An outdoor oasis consisting of woodlands, meadows, and wildlife. Dedicated as an official greenway in 1984.

BUSINESS & AMENITIES

Broadway Avenue & Brookline Boulevard



a. Las Palmas Tacos, located on Brookline Boulevard

While Broadway Avenue and Brookline Boulevard were once thriving commercial districts filled with smaller and family owned businesses, the rising competition with suburban malls in the 1960's forced many of them to close their doors.

Today, there remain on Broadway a handful of businesses and community amenities to serve current residents, but the street lacks businesses that draw in visitors from outside the neighborhood. Residents must leave the community to obtain many of their most basic necessities.

Conversely, on Brookline Boulevard there are a number of successful existing businesses, and the demand for additional commercial investment is attractive to businesses owners. While the area contains some businesses that have appeal to visitors in addition to serving residents, there is an opportunity to strengthen this commercial district.

FOOD & BEVERAGE STORES

1. URA, CityLiving, Market Profile: Broadway Avenue Commercial District.

2. URA, Pittsburgh CityLiving, Market Profile: Brookline Boulevard Commercial District.

3. Ibid.

4. Ibid.

5. Ibid.

Broadway Avenue currently contains four food and beverage stores, including the Crested Duck Charcuterie Meat Market, and the Maya Restaurante y Taqueria Mexican Grocery. There is also an IGA grocery store in Beechview but it is currently struggling to remain open due to a lack of business. According to 2011 URA Market Research, based on demand, there is a \$1.08 million deficit in food stores.¹

Brookline Boulevard also contains only four food and beverage stores, including a deli, a bakery, and ethnic food markets. While there is more commercial activity in Brookline, there is still room for growth in the food and beverage sector.²

FOOD SERVICE & DRINKING PLACES

Of all service and amenity markets, food services and drinking places are currently best addressing market demand in Beechview. The neighborhood has five such businesses: The Huddle, Slice on Broadway, Lunardi's, and others.

Brookline has fourteen food service and drinking establishments. Several of these businesses have begun to attract visitors from outside the neighborhood (including Las Palmas and their now city-renowned tacos). However, according to market research, there is still a \$4.2 million gap in demand for food service and drinking businesses industries in this neighborhood.^c

RETAIL

West Liberty Avenue is well known across the city for its numerous car dealerships which stretch along the valley. However, the number of retail establishments within the neighborhoods of Beechview and Brookline are limited. Each contain only a few stores. While these types of business would find most competitors to be local suburban malls, there is still an opportunity for the re-establishment of smaller retail businesses along these two main commercial corridors.^b

OTHER COMMUNITY AMENITIES

In addition to the previously mentioned amenities, these two neighborhoods contain numerous churches, two libraries, a couple of coffee shops, and service providers (such as hair salons and tailors), but there is enormous room for growth. When considering the needs of current residents, in addition to attracting newcomers, Broadway Avenue and Brookline Boulevard need to grow with the establishment of a variety of different community services and amenities.^d



b. The IGA on Broadway Avenue in Beechview.



c. Slice on Broadway Pizza Shop in Beechview.



d. Carnegie Library of Pittsburgh in Brookline.



e. Scoops on the Boulevard in Brookline.

CONNECTIVITY

West Liberty Commercial Corridor

1. Eg. Mt. Lebanon, Bethel Park, Upper St. Clair, and other home rule municipalities in southern Allegheny County.

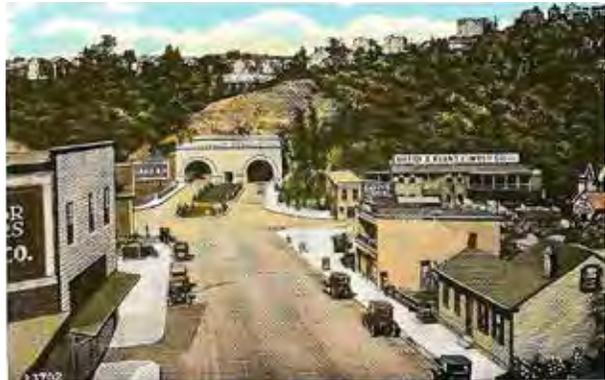
2. In his *Recombinant Urbanism: Conceptual Modeling in Architecture*, David Grahame Shane defines an armature as a “linear urban assemblage [which] bring[s] people together in an axial space to form relationships...” (198).

3. Though West Liberty appears derelict, the property upon which dealerships are located is some of the most valuable in the South Hills of Pittsburgh.

West Liberty Tunnel and Avenue are an essential link in a large transit system which supports U.S. Route 19 and connects Pittsburgh’s Central Business District to wealthy and highly populated suburbs in the South Hills¹ and other important satellite cities such as Washington, Pennsylvania. The various city neighborhoods, municipalities, boroughs and townships which make up the South Hills region are home to over 295,000 people or roughly thirteen percent of the population of the greater Pittsburgh region, and the corridor plays an important role in connecting people with their workplace by enabling a commuting culture.

In addition to acting as a major bridge between outlying suburbs and the inner rings of the cities, West Liberty Avenue currently functions as a transit-oriented commercial strip which has evolved spatially as a stretched armature² with big-box or other object-building stores organized along a main transit artery and utilizing signage to attract the high-speed commuter/consumer.

a. The Liberty Tunnel as seen from the South Hills shortly after opening in 1904.





b. West Liberty Corridor at the intersection of Wenzell Ave and Brookline Boulevard



c. Downtown Pittsburgh as seen from the Liberty Tunnels

Traffic typically moves rapidly except during rush hours and, because the landscape is scaled to the rapidly-moving automobile, little to no pedestrian-oriented space can be found and sidewalks often dead-end.

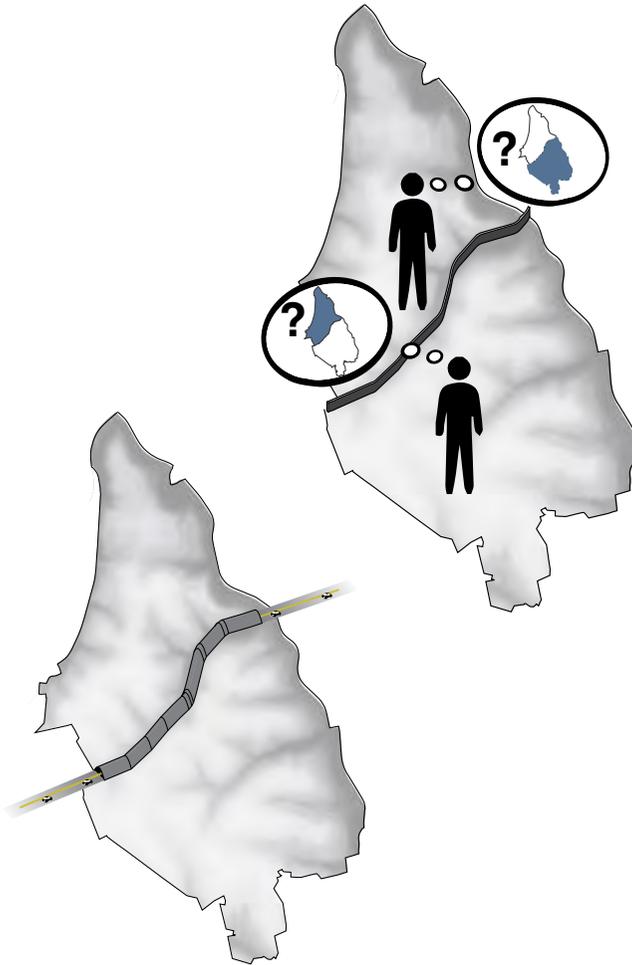
Currently, the corridor is dominated by automobile dealerships and occupies an important regional commercial niche for automobile sales. The dealerships are an economic driver, but because the corridor lies within a narrow valley, and in their current configuration dealerships utilize large areas of surface parking both for product storage and advertizing purposes, they contribute to the overall feeling of dereliction and abandonment which currently characterizes the avenue.³ The underutilized zones between dealerships and the abandoned sidewalks buffering between commercial and transit spaces are areas of potential intervention.



d. West Liberty Avenue Corridor and Beechview/Brookline neighborhood context.

e. See figures 5 & 6.

Because the West Liberty commercial corridor functions as a transit-oriented strip but is also the boundary between the communities of Brookline and Beechview, it acts as both an urban “wall” restricting the flow of people, goods and capital and as a “tunnel” to those who use the highway for transit through it, passing quickly by the neighborhoods without ever entering either.⁵ This contributes to an identity crisis for the neighborhoods – because they do not figure prominently in the cognitive maps of Pittsburghers from other neighborhoods, community members themselves feel marginalized and unimportant.



**f. Existing Corridor
West Liberty
as an urban
“wall” dividing
Beechview and
Brookline.**

**g. Existing Corridor
West Liberty
as a “tunnel”
seperating auto
traffic on U.S.
Route 19 from the
communities of
Beechview and
Brookline.**

This identity crisis presents both a problem and an opportunity. Many existing billboards and other commercial advertising devices offer a point of departure for a more carefully designed infrastructural system for exploitation by the communities of Beechview and Brookline.

Though the highway acts as a barrier between the two neighborhoods, because it occupies a valley and the communities themselves the hills above, it may be possible to stitch the two together above existing infrastructure.

USER PORTRAITS

Current Residents' Needs, Wants, & Opinions

1. User portraits were outlined based upon analysis of both neighborhoods, and were the results of the cumulative knowledge acquired about Beechview and Brookline from a series of analyses created by the Urban Lab Studios at Carnegie Mellon University, in addition to a series of community meetings and resident interactions in the Beechview and Brookline neighborhoods.

In order to truly understand the neighborhoods of Beechview and Brookline, it is important to explore the history of these two neighborhoods along with current demographics and lifestyle norms, existing businesses, services, and community amenities, as well as green space and recreational opportunities.

This analysis provides crucial feedback about current successes and future opportunities within these neighborhoods, and the needs and wants of current and potential residents, and visitors.

Based on these observations, a series of user portraits have been developed (three resident portraits and two visitor portraits) to better understand the needs and wants of both current and potential residents and visitors to the neighborhoods.¹ These portraits will be revisited later in order to better understand how the Framework Proposal should address current successes, neighborhood opportunities, and resident and visitor needs and wants in order to improve the quality of life for residents, increase population, and encourage a greater number of outside visitors into the neighborhoods.

RESIDENT & VISITOR PORTRAITS



SINGLE RESIDENT

A fairly recent resident of Beechview or Brookline, the Single Resident is typically in their mid-20s to early 30s. They often live alone or with a roommate and have a need for social public space. Some have access to a car, while others rely on public transportation.



FAMILY

The Family is comprised of one or more parents and children. Parents are often in their early 30s to mid-50s, with children of varying ages. They range from recent to long-term residents, who most often own a car but sometimes rely on public transportation. Families desire community amenities that will benefit their children, in addition to outdoor recreational space.



THE RETIREE

The Retiree is a long time resident of Beechview or Brookline and either lives alone or with a spouse. Most often, they rely on public transportation and prefer to have amenities close by. They desire access to public transportation and walkable neighborhoods.



COMMERCIAL VISITOR

The Commercial Visitor could be of any age and comes to Beechview and/or Brookline for the purpose of shopping, dining, or entertainment. They may drive or use public transit to access the neighborhoods.



RECREATIONAL VISITOR

Recreational Visitors are also of varying ages and are from different parts of Pittsburgh or the South Hills. They come to Beechview and/or Brookline seeking recreational opportunities and may arrive there by biking, driving, or taking public transit.

RESIDENT & VISITOR INTERVIEWS

I spend a lot of time in our own neighborhood and walk almost everywhere. We shop here, go to the coffee shop, bars and restaurants and support the local businesses as much as we possibly can. We also go for walks in the neighborhood for exercise and I am an avid cyclist as well.



**Keith Knect,
Brookline Resident &
South Pittsburgh
Development Corporation**

We have some green space that people use, but urban apiary and community gardens would be a great way to get our community involved with urban agriculture and would be an important educational tool for children and adults about the environment and our relationship to it.



I drive everywhere, but many people in Beechview rely on the T and it'd be great to see more activities surrounding the public transit system.



**Judy Gumash,
Friends of the
Beechview Library**

The greenway surrounding the two neighborhoods would be a great biking trail.



**Scott Bricker,
Bike PGH**

We have a large community garden site already (on the former swimming pool property on Rockland Ave), however more parks and more utilization/formalization of the surrounding green space would be wonderful. Make it a destination rather than a dumping ground.



More open public space is desirable and more green space along the road bicycle friendly lanes and shops will increase desire to stay within the neighborhood.



**Ron Baraff,
Beechview Resident &
Rivers of Steel
National Heritage Area**

Increased frequency of service at night and weekend would enhance my ability to visit Beechview.



At one time the T was our main means of transportation to get to school and work, but now that we are retired we tend to drive more. However, local transportation near to our house would be convenient.



A small park in vicinity to public transit stops would be a nice enhancement to attract people to use public transit more often.



**David Wohlwill,
Port Authority**



**Kathy and John Murphy,
Beechview Residents &
Friends of the Seldom
Seen Greenway**

GOALS

How Can Beechview and Brookline Be Better ?

IMPROVING QUALITY OF LIFE

1. See Chapter Three, page 38.

2. For more information on how goals are manifested and what constitutes success, see Defining Success, page 112.

All three portions of the Framework for Beechview and Brookline at their core seek to make the two neighborhoods better places to live. Both have many strengths which can be leveraged to help make them even more vital and healthy communities and to overcome problems which they face. The framework team has outlined three major goals which underpin design decisions within Access, Ecology and Continuity,¹ which are to increase density, re-establish community identity, and strengthen the bond between neighborhoods and the city.²



1

INCREASED DENSITY

Brookline and Beechview are currently healthy and functional neighborhoods with high quality housing stock, but the sharp decline in population over the past forty years, characteristic of Pittsburgh, means that they are much less dense now than in previously. Because of this, commerce is limited and the growth of the neighborhoods and for expansion remains compromised. A larger population base means more economic stability and a greater capacity for commercial and social diversity.

2

RE-ESTABLISH COMMUNITY IDENTITIES

As outlined previously, both Beechview and Brookline lack a clear sense of community identity, and as a result also lack a strong connection to other parts of the city. A more cohesive community identity means more pride for Beechview and Brookline residents and a more vested interest by them in the greater good.

3

STRENGTHEN BOND BETWEEN NEIGHBORHOODS AND THE CITY

Beechview and Brookline each have different strengths. By working together each neighborhood can grow stronger and provide more resources for residents.

KEY IDEAS

chapter

PART I



ACCESS

Access looks at increasing accessibility to and from Brookline and Beechview as well as establishing better access between the neighborhoods and the community amenities that exist within them.



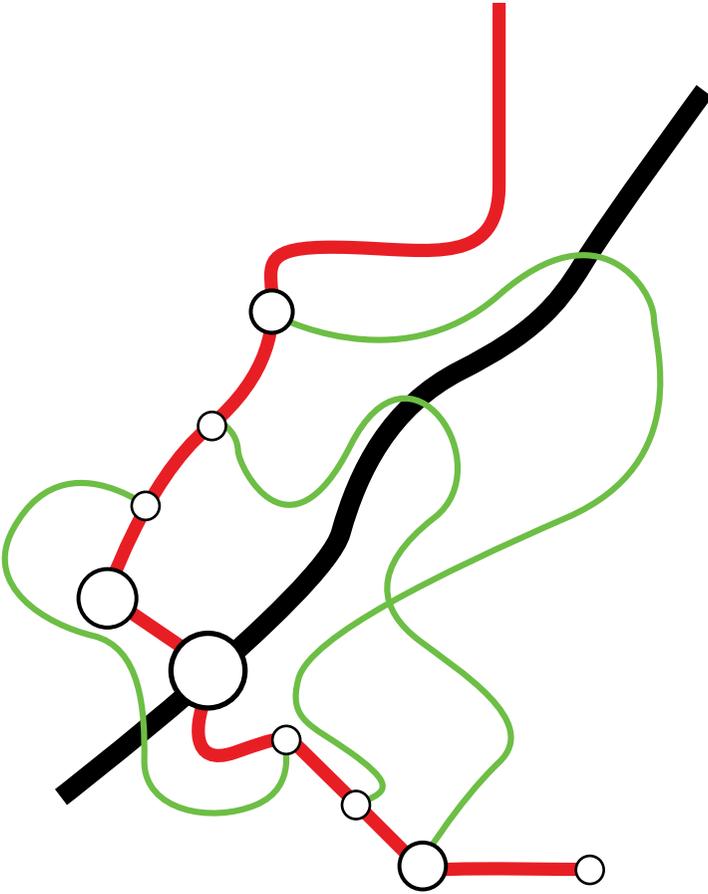
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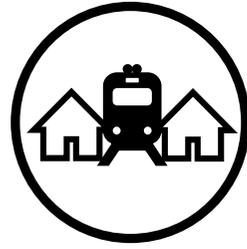


CONTINUITY

Continuity centers on the interconnectivity between the two neighborhoods as well as integrating West Liberty back into Beechview and Brookline.

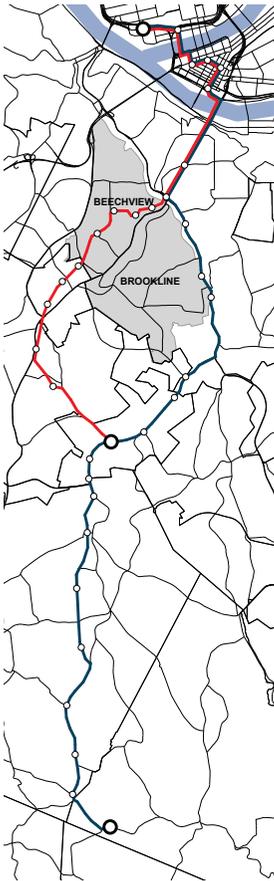


ACCESS



Transit Oriented Development

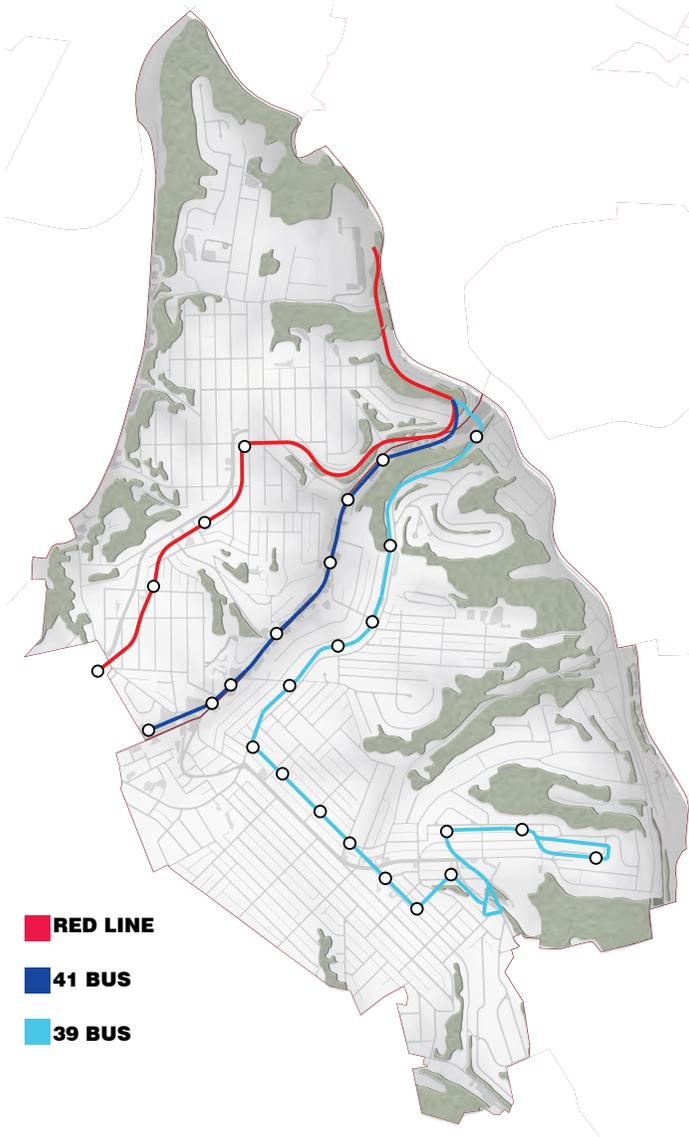
EXISTING CONDITIONS



The current T-Line runs between the North Side and South Park on the border of Allegheny County.

Currently, the T line, which is a much faster and more marketable mass transit option than the standard city bus, completely bypasses Brookline and many other major population concentrations in southern Pittsburgh neighborhoods. The existing 39 Bus, which runs through Brookline, bears the name of the rail line which used to run through it before the car supplanted it as the dominant form of local transit. At a greater level the Pittsburgh Port Authority continues to face monetary cutbacks which affect the service it can provide, despite the fact that Pittsburgh's public transit ridership is well above the national average, at eighteen percent.

The immediate goal of the Access section of the Framework is the re-establishment of the streetcar type of bus transit, which has the potential to create denser, more vibrant neighborhoods than the low density sprawl created by the car. By creating a local transit line which plugs into the T line in Beechview, the larger population of Brookline is encouraged to travel through Beechview to access Downtown via public transport, which gives Beechview's businesses increased visibility and creates a faster link to Downtown for Brookline.



RED LINE
 Current train arrives at the Fallowfield stop between 10 and 15 minutes on weekdays. From Fallowfield, the time to Downtown is 10 minutes.

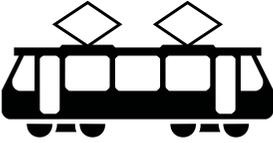
41 BUS
 The 41 Bus runs between Downtown and Bridgeville. The bus arrives every twenty minutes. Total run time is slightly over fifty minutes.

39 BUS
 The 39 Bus runs between Downtown and the end of Brookline Avenue. It arrives every fifteen minutes and total run time is slightly over thirty minutes.

- RED LINE
- 41 BUS
- 39 BUS

As the transit system exists, there are three mass transit routes which run through the two neighborhoods, all three of which connect Beechview and Brookline ultimately to Downtown.

A Transit and Commercial Corridor STRATEGIES FOR DEVELOPMENT



FAST, FLEXIBLE TRANSIT

The introduction of rapid transit will be a welcome return to the commuter culture which was formerly at the heart of each neighborhood. A local transit line connected to the T line in Beechview will allow a larger population in Brookline to travel through Beechview to access Downtown, giving Beechview's businesses increased visibility and a faster link to Downtown for Brookline.

DENSIFICATION/WALKABILITY



An increased reliance on public transit for travel will necessitate more diverse building types and programs in much closer proximity. Residential and commercial buildings will again be required to consider each other. Densification will take the form of residential, institutional, and commercial buildings which look inward towards the central commercial corridors of Broadway and Brookline.

TARGETED DEVELOPMENT



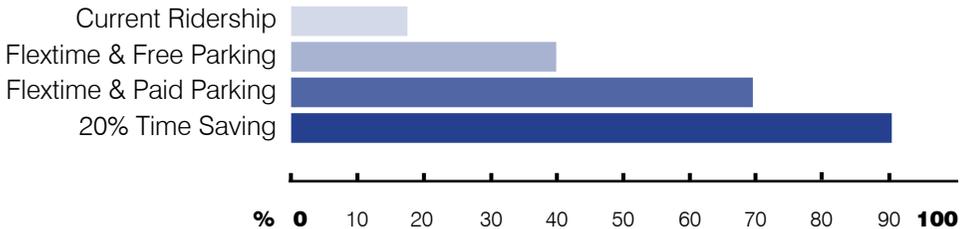
The number of shared amenities and the proximity of different types of buildings and people necessitates strategic development and careful consideration to context and scale, and the role of buildings in serving the larger community. The future redevelopment of Brookline and Beechview must be based on intelligently placed, specific interventions, the successes of which build on each other and encourage more growth.

As it become less affordable for the majority of the urban middle class to maintain and fuel private vehicles, the potential for a neighborhood to attract development will hinge on the efficiency of its public transport system. Rapid public transit, which reduces the amount of time between passenger boarding and arrival at destination will fundamentally change the way that people experience the city. Developing cities which have adapted existing road systems to accommodate high speed transit see noticeable decreases in housing vacancy, increased rates of investment, and higher satisfaction among passengers regardless of social class.

1. Cervero, Robert, "Transit Oriented Development's Ridership Bonus," (University of California Berkeley, Web. 25 Nov. 2012).

2. Ibid.

RIDERSHIP INCREASES BASED ON POLICY



RIDERSHIP INCREASES BASED ON PROXIMITY

52.3% [of those who drive to work] switched to transit commuting upon moving within a half mile walking distance of a rail station.¹

RIDERSHIP INCREASES BASED ON BUSINESS

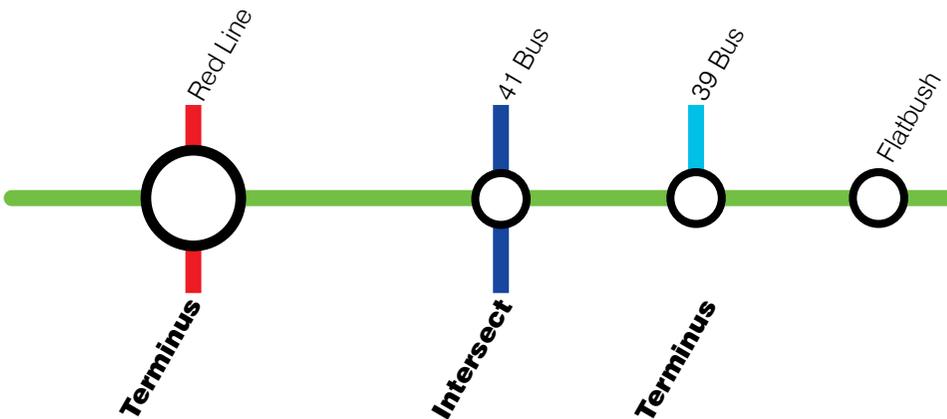
TOD yields benefit only if workplaces, retail shops, and educational facilities are organized around transit stops.²

Expanding Transit Lines

LOCAL REDEVELOPMENT

The early phasing of this interventions reduces the number of stops currently used by the 39 bus, replacing its route along Brookline entirely. A reduction in stops needs to be made as a trade off for a rapid transit system. This single bus completes a loop once every fifteen minutes, allowing for a higher rate of usage and shorter waits at each stop. This line combined with direct terminal access to the Red Line at a new stop on Wenzell Avenue would cut around ten minutes off of the commute to Downtown.

Brookline Boulevard would be reconfigured to accomodate this new line. The current number of traffic lanes would be reduced from four to two, with two designated mass transit lanes in the center of the road. Bus stops in the middle of the road would act as micro-stations, at which commuters could buy a ticket for the Green/Red line and be picked up and dropped off rapidly. On the south side of the street, a seven foot wide bike lane would allow for a third transit option which is currently not possible in Brookline.





REDUCED 39 BUS

The new 39 bus runs between Downtown and the end of Pioneer Avenue. The new circuit would arrive every fifteen minutes. The total travel time would be slightly under thirty minutes.

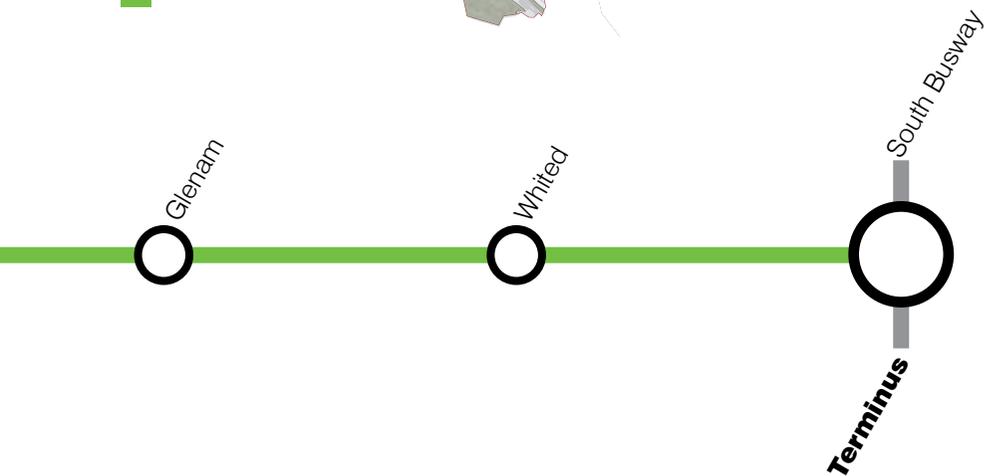
GREEN LINE

The proposed phase one Green Line would make one complete loop every ten minutes.

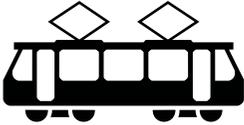
TOTAL TIME

The combined time from the end of Brookline Boulevard would be slightly more than twenty minutes. With a single ticket purchase the route should be competitively priced.

- REDUCED 39 BUS
- GREEN LINE



Expanding Transit Lines

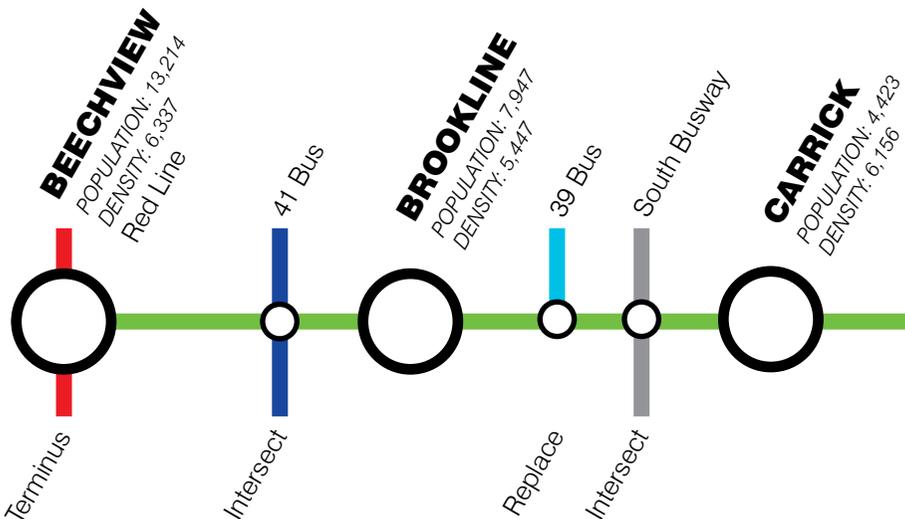


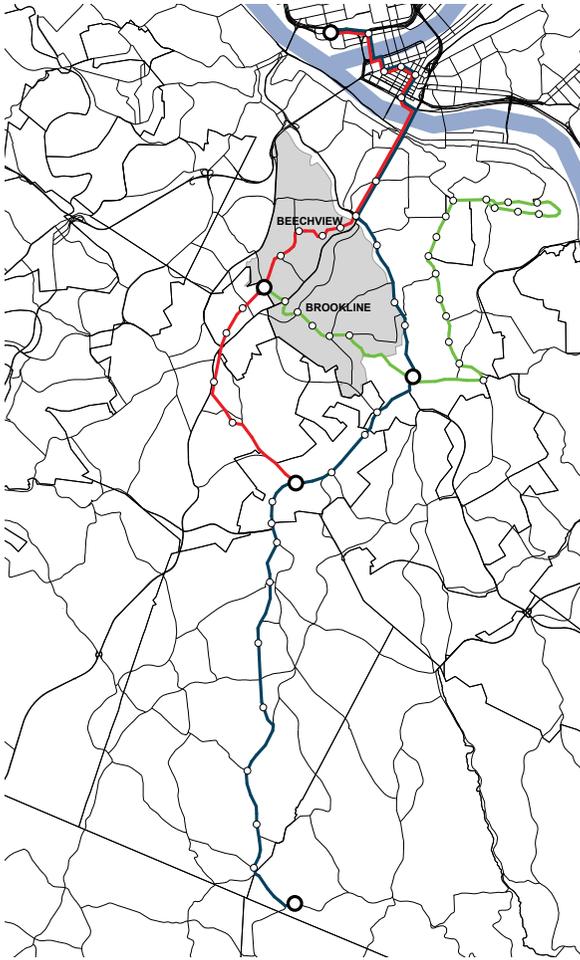
REGIONAL REDEVELOPMENT

Eventually the plan is to extend the transit line with an actual light rail system, like the Red Line in Beechview, which will connect multiple neighborhoods south of Mount Washington. This plan would be critical to the vitality of these communities one fuel prices make automobile commuting infeasible to the lower middle class. At the same time it will bring together the communities of the South Hills to make each neighborhood more attractive to development. Ultimately the success of one neighborhood along the line would feed the demand in the next, resulting in a chain reaction which would strengthen Beechview and Brookline as the catalyst of the change and the anchor points for the entire system.

TOTAL CURRENT POPULATION: 36,206

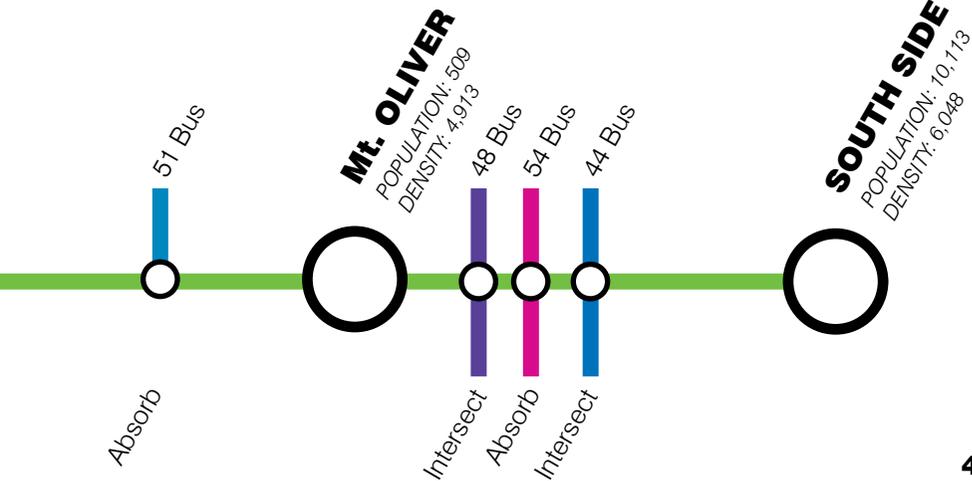
PROJECTED 40% RIDERSHIP: 14,482





a. This line runs through the most densely populated neighborhoods in the South Hills, and would encourage the future growth of transit oriented development.

b. The eventual Green Rail Line would serve over 36,000 commuters each day at the current percentage of ridership, which would increase drastically as gas prices rise.

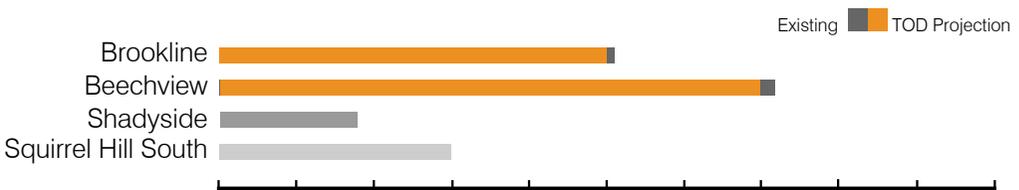


TOD ADJUSTED DEMOGRAPHICS

POPULATION GROWTH PER YEAR

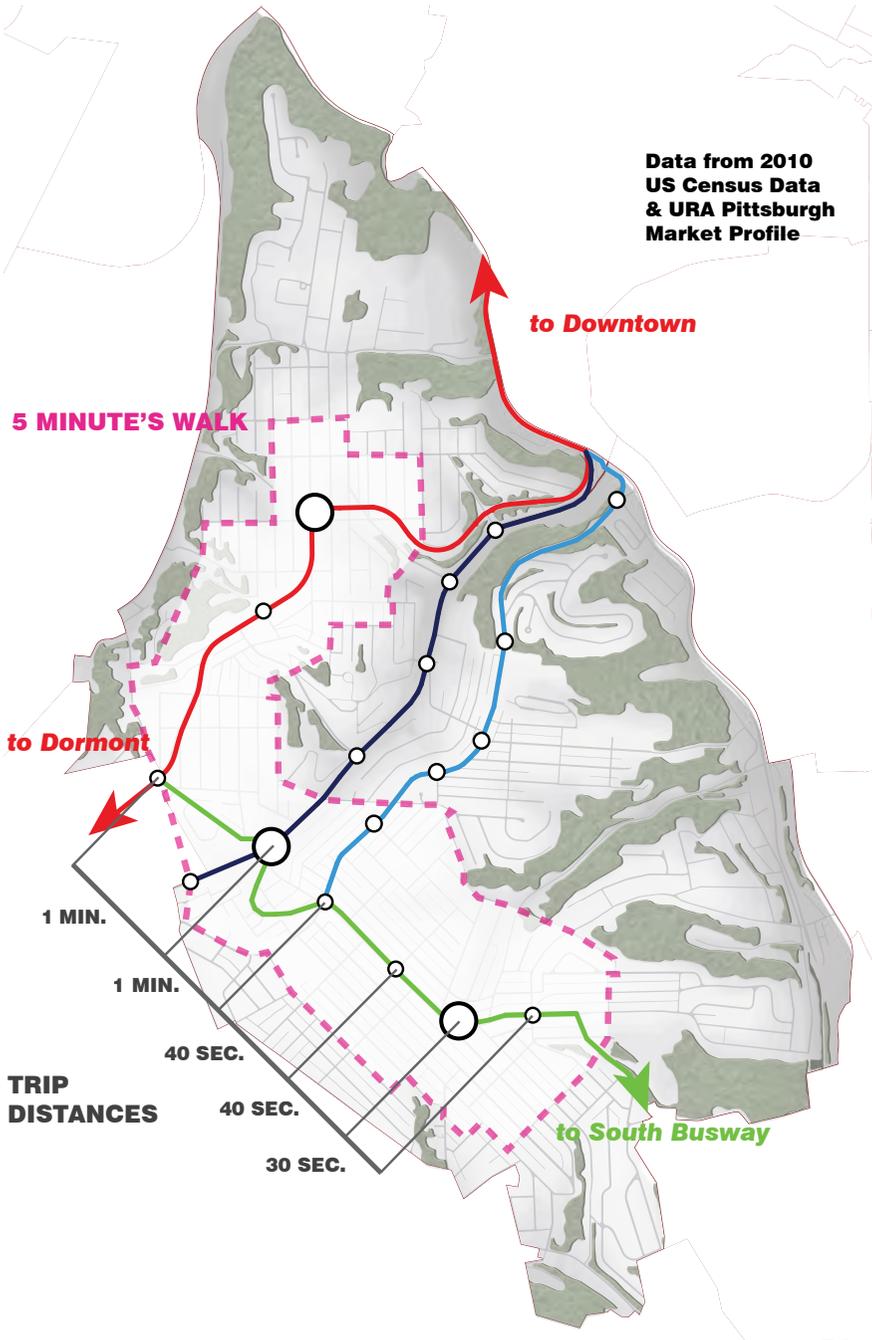


POPULATION PER SINGLE BUSINESS



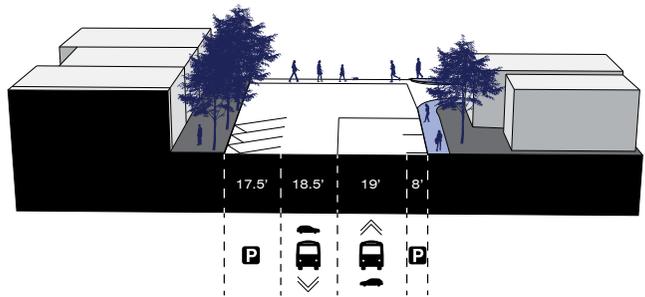
When compared with population data from more the developed neighborhoods of Shadyside and Squirrel Hill South, the advantages of Transit Oriented Development become apparent. The value of property nearby a direct link to Downtown will allow for higher rate of population growth as the Green Line through Brookline and Beechview attracts growing demographics such as young professionals and the retired, who do not tend to own private vehicles. The effect on business will be positive as well, because higher population and faster growth lead to increased retail demand, indicating that eventually, Brookline and Broadway may become competative business corridors inn Pittsburgh as a whole.

TOD ADJUSTED TRAVEL TIME

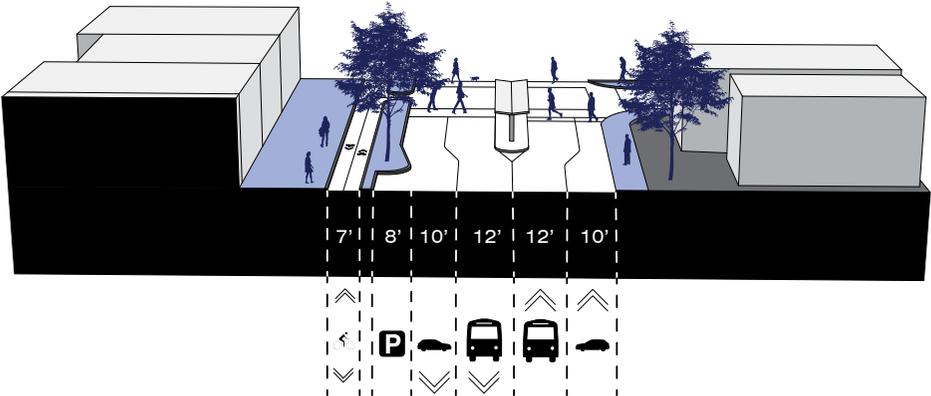


**ACCESS
CHANGES TO THE STREETScape**

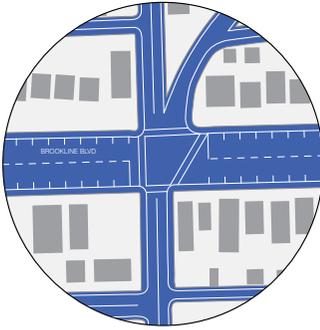
Existing Brookline Section



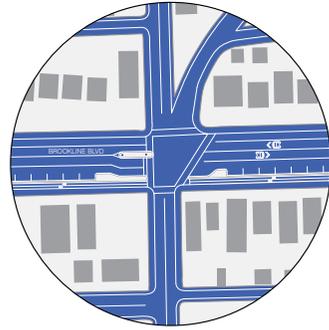
Redesigned Brookline Section



Whited Intersection



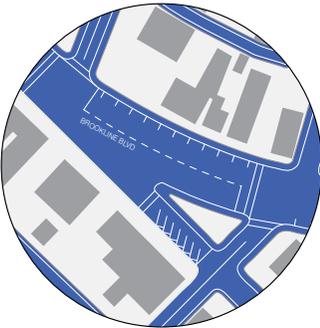
Existing



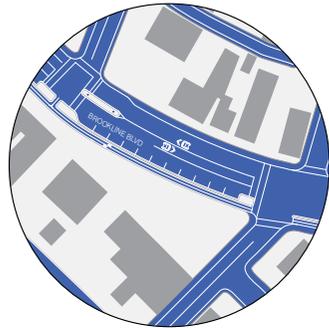
Adapted

Whited at Brookline is the last transit stop along the densely residential portion of Brookline and would attract denser development at the east end of Brookline in the future.

Glenam Intersection

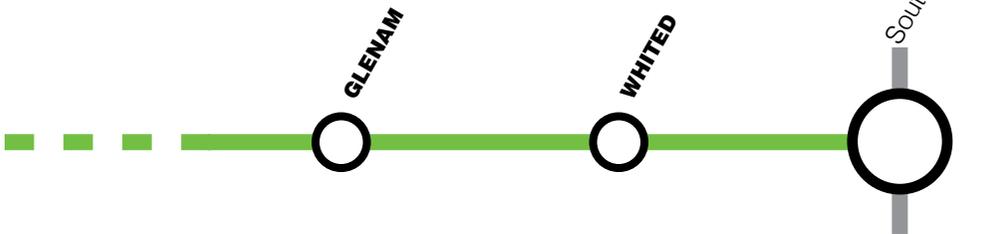


Existing



Adapted

This intersection is at the end of Brookline and serves the southwestern end of the existing commercial strip as well as new developments to revitalize the far end of the retail corridor. It is because of this projected growth that the intersection around the cannon has been redesigned to cut off vehicular access from Chelton, to provide a larger public square.



Pioneer Intersection

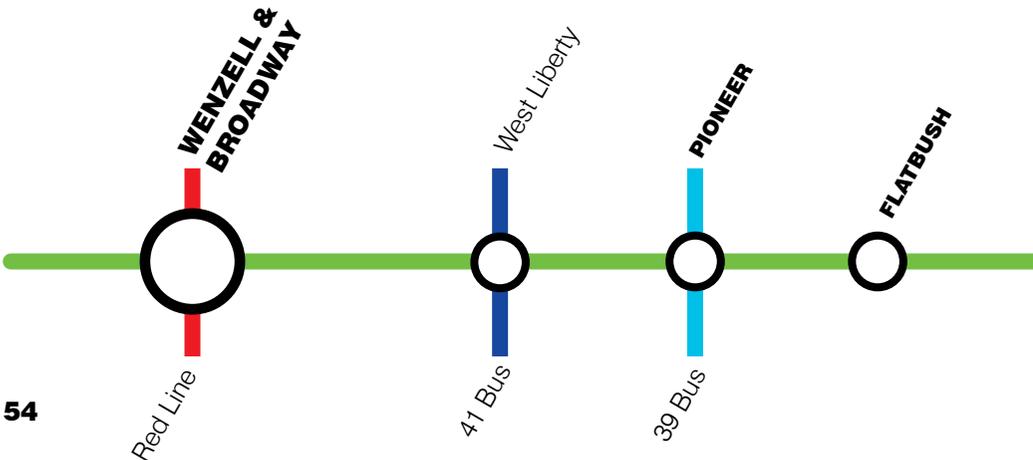


Existing

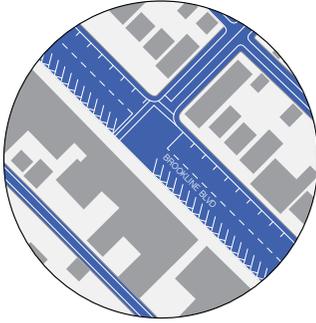


Adapted

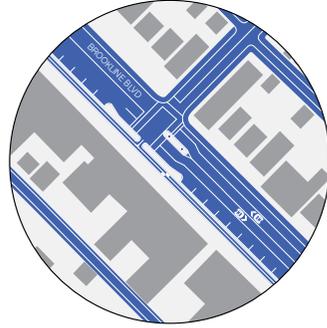
The intersection with Pioneer marks the point at which the Green Line adopts the route of the 39 Bus as it exists now. The stop will provide rapid transit service access for the entire northwestern end of Brookline, especially existing community staples such as the CVS Pharmacy, Daisies Daycare, and the American Legion.



Flatbush Intersection



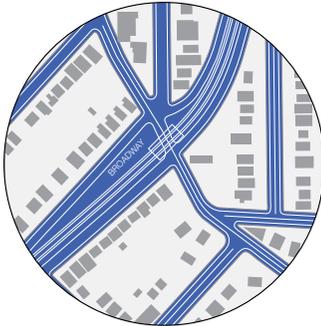
Existing



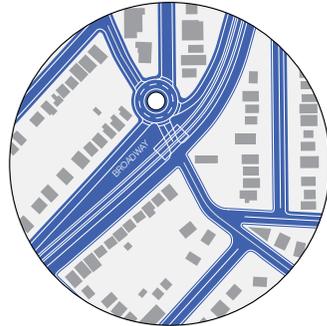
Adapted

The stop at Flatbush serves the entire middle section of the existing Brookline commercial corridor, including local fixtures like the Carnegie Public Library, the Community Bank, and the Brookline Pub.

Wenzell Intersection



Existing



Adapted

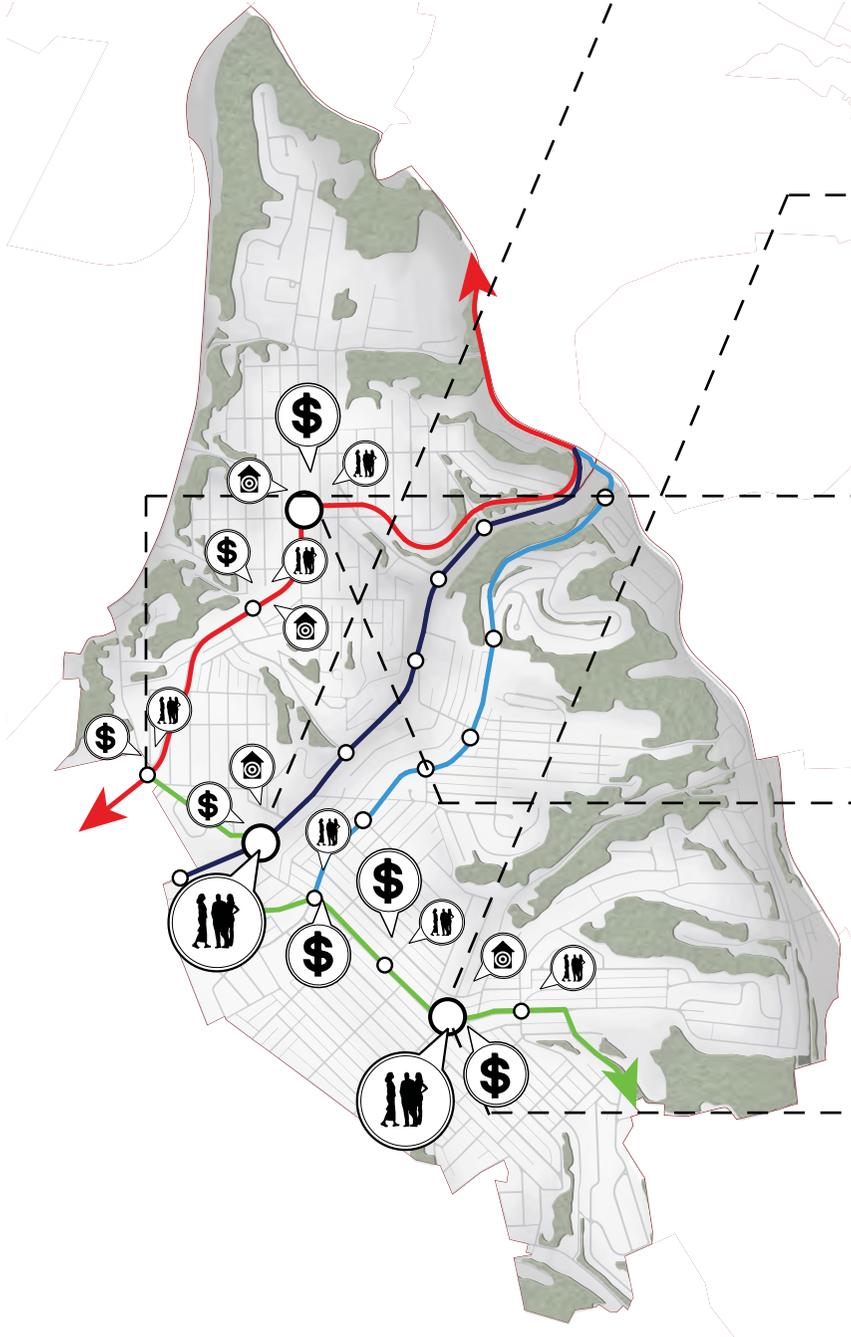
Wenzell is the the terminus for the new Green Line, which will replace stations at Shiras in Beechview and Stevenson in Dormont. The terminus will serve more than two thousand residents of Beechview and Brookline a day.





DEVELOPING TRANSIT NODES

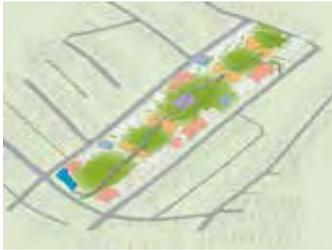
MIXED USE PROJECTS



— — — — — **WALK THE LINE** *Jake Douenias & Scott Harrison*



— — — — — **CULTURE SHOCK** *Liam Lowe & Colin Haentjens*



— — — — — **LIVE . WORKOUT** *Medha Sing & Jessica Wang*



— — — — — **FALLOWFIELD SQUARE** *Thomas Groner & Sarah Harkins*



— — — — — **Cannon PLAZA** *John Soh & Joe Chang*



RESIDENT & VISITOR PORTRAITS

I live in one of the new apartment buildings near a T stop in Beechview. Living here is very convenient for me. I take the T into work every morning, and I can do most of my shopping in the neighborhood. The close proximity to community amenities and other young residents is what attracted me to the neighborhood.



Single Resident

The dense development that has occurred in the area recently has been enormously helpful for us. We no longer need to leave the neighborhood in order to access the goods and services that we need. It is wonderful to finally be putting our money back into the neighborhood again. Additionally, greater access to the T has allowed us to limit our driving.



Retiree Resident



Family Resident

The convenience of the T has allowed us to become a one-car family again! Also, having shops and restaurants nearby that we can walk to is great for us, but the community amenities are especially great for our children.

The new transit line makes Beechview and Brookline more accessible to me. Sometimes after a bike ride I stop in one of the cafes for a coffee and a bite to eat.



Recreational Visitor



I live nearby in the South Hills and I had never thought to do my shopping in either Brookline or Beechview before. In recent years, many new stores and restaurants have popped up in the areas. With the new transit line, it is a lot easier for me to access these two neighborhoods. I come to the area often in order to do my shopping, or stop in one of the new restaurants or amenities that these neighborhoods have to offer.

Commercial Visitor

ACCESS GOALS

INCREASED DENSITY

The Expanded T line and new T.O.D. nodes play an essential role in attracting new residents to the neighborhoods by providing new and unique amenities.

RE-ESTABLISH COMMUNITY IDENTITIES

Greater density and more amenities draw new people into neighborhoods, which will help to reinvent Beechview and Brookline for residents and Pittsburghers.

STRENGTHEN BOND BETWEEN NEIGHBORHOODS AND THE CITY

In its new and expanded role, the T will play a much greater role in connecting Brookline, Beechview, and South Hills residents with other parts of Pittsburgh.

ECOLOGY



CONNECTING THE GREENWAY

INTRODUCTION

1. The Beechview and Brookline Greenway wraps around both of these neighborhoods along its periphery and weaves in and out of the commercial and residential districts.

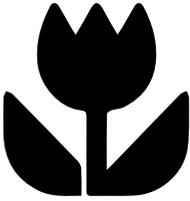
A community without access to a clean, safe and vibrant greenspace cannot be deemed successful. It is an essential component to a healthy city and a healthy lifestyle and an amenity that benefits every dimension of the urban fabric.

While access is important, it is not the only factor that creates a viable neighborhood. Unfortunately, the commercial district of Brookline and Beechview cannot compete with local shopping malls that originally put them out of business.

To remedy the weakness in the commercial district, the hillsides can be considered as a potential amenity. The hillsides surround and run through both Brookline and Beechview. By creating a green network that weaves through these two neighborhoods, while weaving in and out of both the residential districts and the commercial districts, an incredibly dynamic green space might be developed that connects and reintegrates these two neighborhoods within the greater context.

WHAT ARE THE BENEFITS?

ENVIRONMENTAL BENEFIT | ECONOMIC BENEFIT | SOCIAL BENEFIT



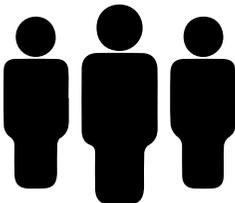
ENVIRONMENTAL

A greenway system protects the existing environment while also encouraging new ones. A healthy greenway network can also encourage awareness of the value of the area's resources and the need to preserve them.



ECONOMIC

Access to trails and greenways is a sure way to increase the property value of an area. This not only cultivates new wealth, but a strong greenway system strengthens local economies by stimulating new visitors to the area. New opportunities for outdoor activities and venues appear as well.



SOCIAL

Establishing trails and greenways improves the quality of life for residents while also encouraging physical fitness and healthy lifestyles. While adding economic value, they can also add a tremendous amount of social value by connecting neighborhoods and strengthening local communities.

EXISTING GREEN SPACES IN PITTSBURGH

A COMPARATIVE ANALYSIS

HIGHLAND PARK

Highland Park contains two of the city's largest water reservoirs, various athletic courts, trails and the Pittsburgh Zoo and PPG Aquarium. The Park is approximately 380 acres and is used by many people from neighborhoods around it.



FRICK PARK

The largest municipal park in Pittsburgh, Frick Park covers approximately 560 acres. The eastern park boundary is the Nine Mile Run, a stream that runs through the park.



SCHENLEY PARK

Adjacent to the neighborhoods of Oakland, Greenfield and Squirrel Hill, Schenley Park is the second largest municipal park in Pittsburgh. The park is approximately 456 acres and has several trails, a swimming pool, an ice rink, and hosts many seasonal events throughout the year.



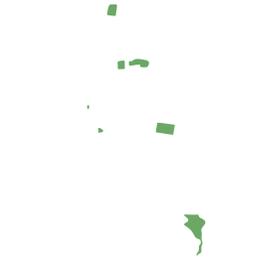


BROOKLINE & BEECHVIEW'S GREENS

PAST, PRESENT, FUTURE

a. PAST

Between Beechview there are a number of scattered and disconnected parks, approximately 75 acres and are not widely used at the neighborhood scale.



b. PRESENT

Beechview and Brookline have a fantastic greenway that circles the two neighborhoods along it's periphery. It is currently underused with little to no formal infrastructure to capitalize on it.



3. FUTURE

By connecting the existing parks and recreational spaces with and into the greenway, Beechview and Brookline can acquire a greenway that connects one to another thereby amplifying the benefits socially, economically, and environmentally.



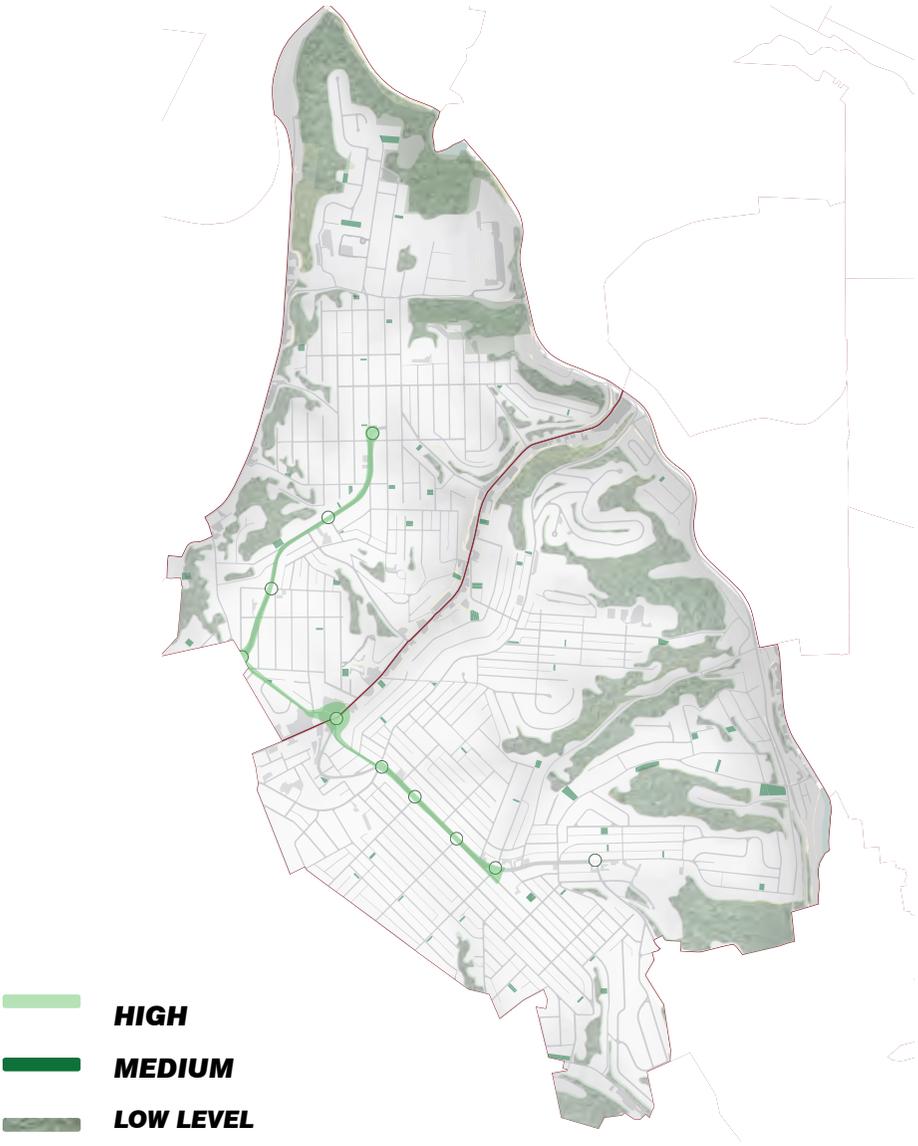


Google



LEVELS OF GREENWAY

LOW | MEDIUM | HIGH



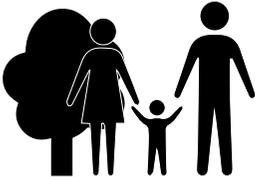
HOW IS THE GREENWAY ACTIVATED?

LEVELS OF ACTIVATION



LOW ACTIVATION

A linear park follows the commercial corridors of Brookline and Beechview. It will help to revitalize the streets and vendors along it by providing community gathering spaces while reinforcing the neighborhoods' green identity.



MEDIUM ACTIVATION

A series of pocket parks provide for gathering and recreational spaces for each neighborhood, creating a transition into the hillsides from the linear commercial park described above.



HIGH ACTIVATION

An interconnected set of trails and paths weave through the two neighborhoods and around their edges. The paths are anchored at a variety of points, or nodes of concentrated activity. Residents of Beechview and Brookline will take ownership of parts of the trails and maintain and personalize them, adding a pinch of character of these two neighborhoods.

PARKS & TRAILS

MEETING RESIDENTIAL, COMMERCIAL, AND EACH OTHER

PARKS

a. Park is integrated into residents' backyards. Resident takes partial ownership.

b. Community gathering space is created for more formal gathering.

c. Formal entry into the greenway network is created.

d. Residents take partial ownership of the pocket park, enjoying picnics and BBQ's.

e. Creates more private/public gathering spaces with areas to relax for a brief moment.

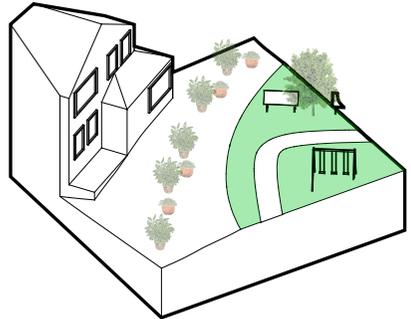
f. Activates small community gathering spaces with areas for picnicking.

g. Activates at the capillary level of the greenway network by connecting into private residential areas.

h. Entryway into the greenway network for visitors to Beechview and Brookline.

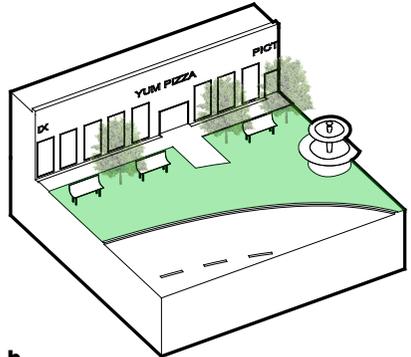
i. User is presented with the opportunity to continue exploring the network.

RESIDENTIAL



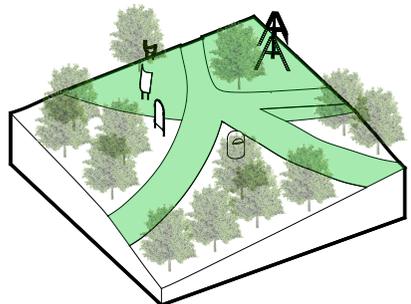
a.

COMMERCIAL



b.

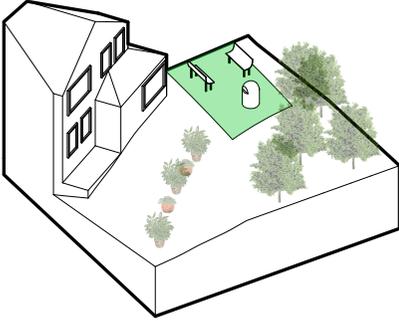
TRAILS



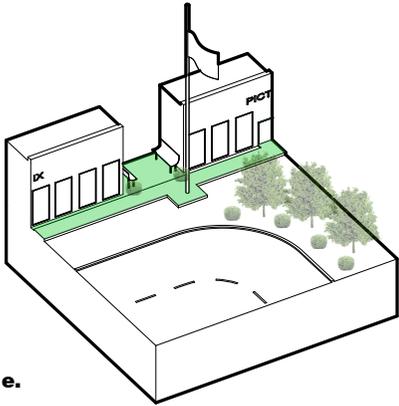
c.

Captions listed from top to bottom.

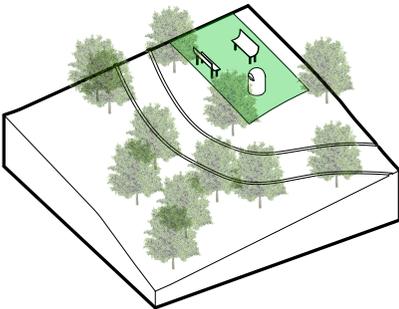
POCKET PARKS



d.

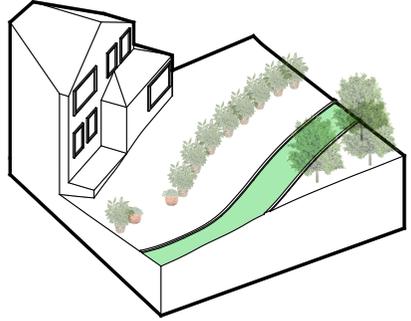


e.

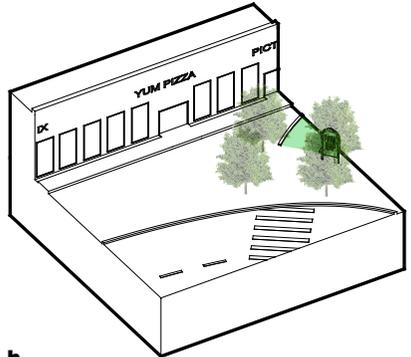


f.

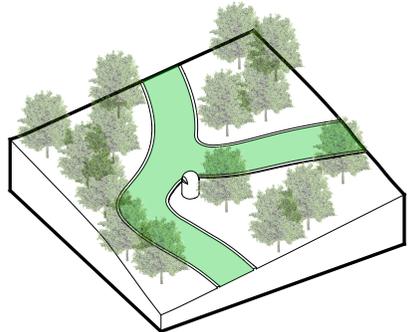
TRAILS



g.



h.



i.

GREENWAY NETWORK

HIGH | *MEDIUM* | *LOW*

a. The letters represent selected examples from Beechview and Brookline of conditions outlined in the PARKS & TRAILS. See page 68.

EXISTING TRAILS

The hillsides of Beechview and Brookline have existing paths and trails. Many of these paths are cow paths created by the community. The proposed trails seek to create an active network by connecting the existing trails with each other to form a greater network.

PROPOSED PRIMARY TRAILS

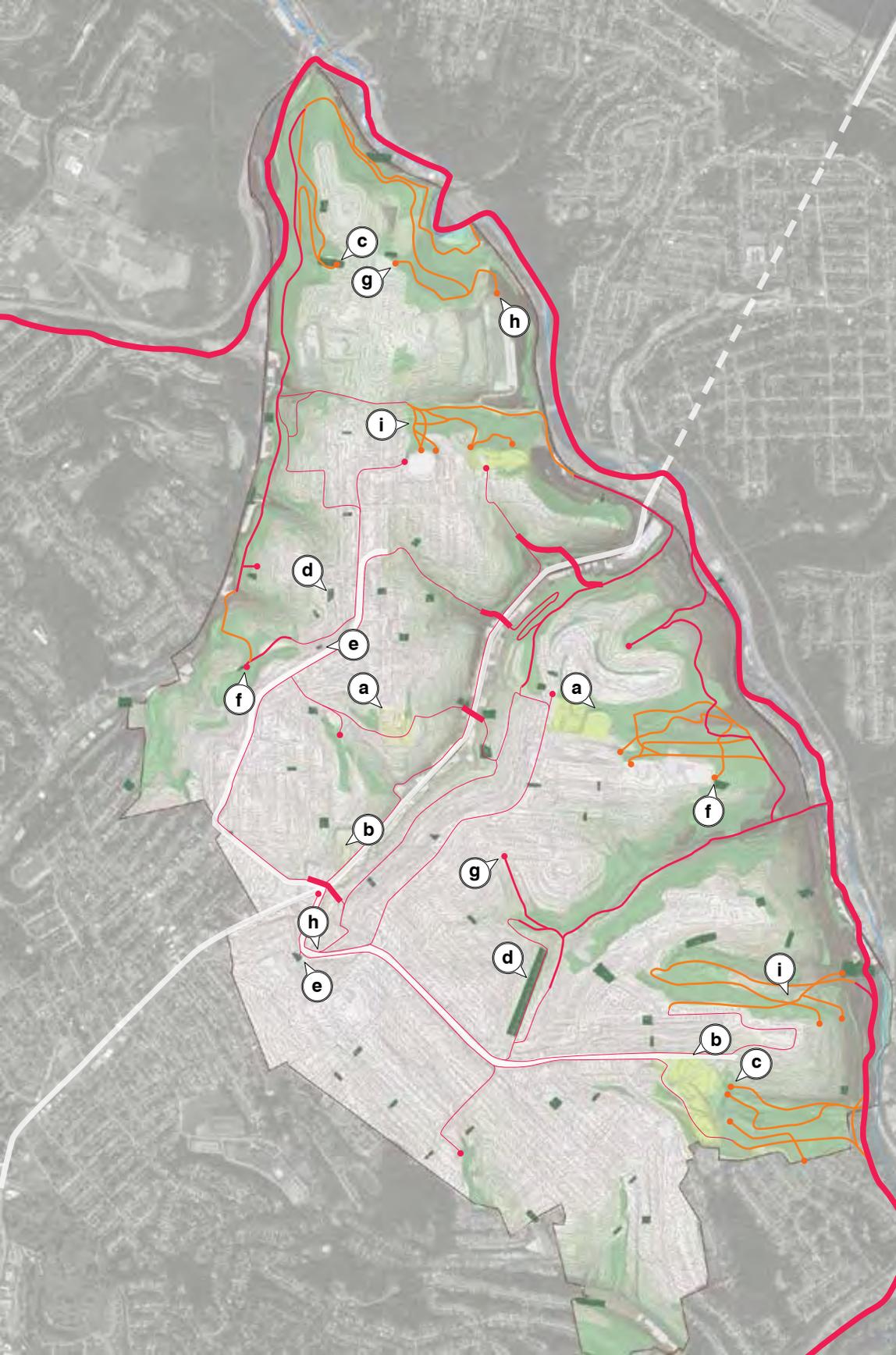
Primary trails are areas of heavy use that most directly connect Beechview and Brookline to each other. These trails target multiple users, visitors and residents alike. The Primary trails act as arteries to the network.

PROPOSED SECONDARY TRAILS

Secondary trails are areas that connect the primary trails with each other, and consists of a diverse family of targets, uses, and conditions. Secondary trails connect residential corridors to the commercial corridors. The Secondary trails act as veins to the network.

PROPOSED TERTIARY TRAILS

Tertiary trails connect the secondary trails and complete the greenway network. These trails run through both the commercial and residential corridors and targets both visitors and residents. The Tertiary trails act as capillary veins to the network.



LEVELS OF GREENWAY

LOW | **MEDIUM** | HIGH

POCKET PARKS

1. In his *The Great Good Place*, urban sociologist Ray Oldenburg defines a third place as a social surrounding separate from the home or workplace.

2. Approximately 3/4 of each neighborhood's households do not have children.

Open spaces, such as the small vest pocket parks, are of key importance for the aesthetic and recreational value they bring to the community, and for the sense of identity they lend to streets. Public space should be where social recreation happens - where people can interact and come together to form a sense of community spirit and connect to nature. With only a few scattered existing parks, Beechview and Brookline currently lack a kind of open space that is easily accessible to residents without time investment in travel. Open space with added aesthetic value will promote more social interaction and further help to unite the neighborhoods and form a stronger sense of community.

With a growing number of families without children, there is an increased need for third places¹. Because there are few parks in the neighborhoods and they are not dispersed very evenly, there is also a need for green spaces.²

In many other cities such as Manhattan and even in Pittsburgh, public pocket parks serve as an important gathering and recreation space for residents. Pocket parks can also function as community gardens, and small organizations can hold events to educate the children of the environmental principles.



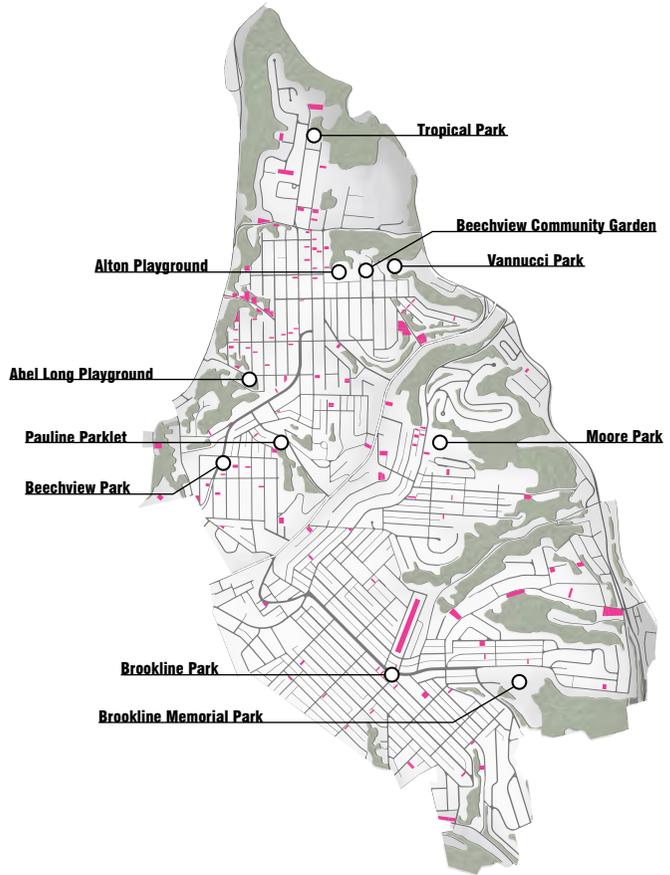
a. Paley Park, NYC



b. Community Garden, NYC



c. Katz Plaza, Pittsburgh



3. There is a sufficient number of open lots owned either privately or by the government throughout the two neighborhoods.

LOCAL REDEVELOPMENT

Extreme topographies sometimes make high engagement green spaces inconvenient for some residents.

A system of pocket parks will fill this gap in easily accessible third places in the extensive residential areas.³ Although they might be too small for physical activities, they can provide greenery, a place that invites people to sit in and also a playground for children or a dog park. Small organizations will also be able to hold events in these spaces.



d.

d. Goldstrom Ave & Rutherford Ave



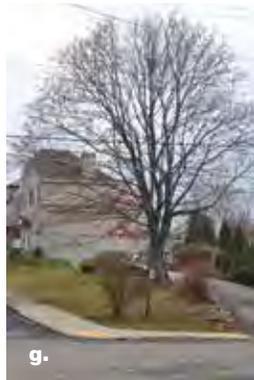
e.

e. Broadway Ave & Boustead St



f.

f. 1539 Broadway Ave

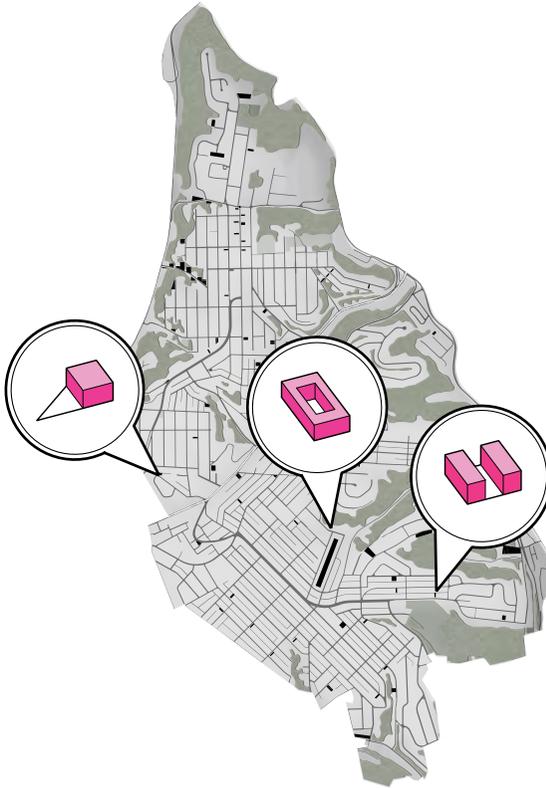


g.

g. Tonopah Ave & Belasco Ave

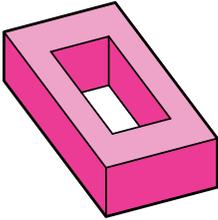
INTERVENTION TYPOLOGIES

LOW | **MEDIUM** | HIGH



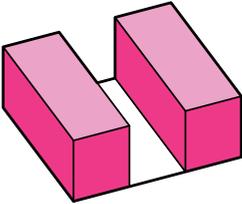
SYSTEMATIC DEVELOPMENT

Pocket parks are frequently created on a single vacant building lot or on a small irregular piece of land. The above image illustrates four different types of pocket parks that can be developed in Beechview and Brookline. Often they abut an occupied residence which provides proximity.



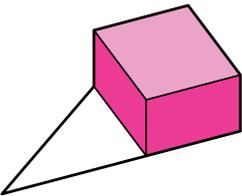
ENCLOSING

A larger scale community greenspace is created by a series of houses enclosing a unified backyard space. This type of configuration allows use for mostly the residents of these houses.



INSERTING

A vest pocket park is created when a greenspace is inserted into a single or multiple consecutive open lots in between two existing buildings. This type of configuration is for the use of the those in proximity but also for by passers.



ISLANDING

Parklets are created on an irregular piece of empty land, such as at an intersection of two streets. This type of configuration is for both residents and bypassers but is the most public of all configurations due to its visual openness.

PARK ELEMENTS

These parks are not only green space but also a part of the community. In each pocket park there are necessary elements for the social space to function at its full potential.

At its full potential these spaces provide walkability, social gathering space and green space to strengthen community identity. Simple, relatively low maintenance landscape design will mean less energy is required for upkeep.



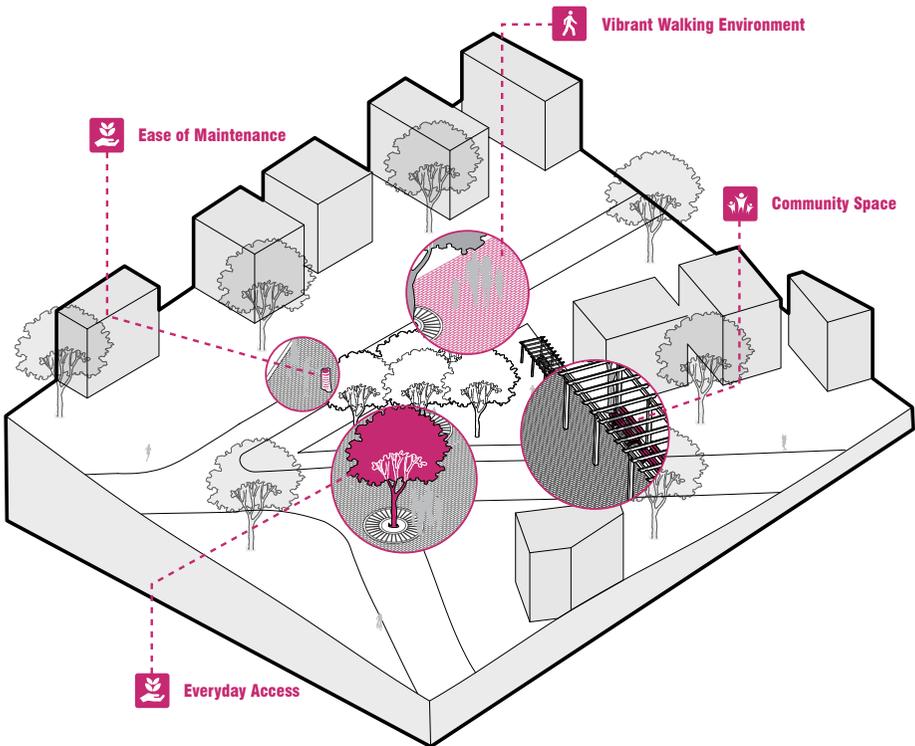
Walk



Community



Green





LEVELS OF GREENWAY

HIGH | *MEDIUM* | **LOW**

LINEAR PARK

A linear park created along the main streets of Brookline and Beechview will reactivate the streets by encouraging community interaction, clarifying traffic, and acting as a recreational opportunity for residents and visitors alike.

Currently, the main streets of Brookline and Beechview perform their duties on a functional level; they adequately accommodate traffic and are the commercial centers of each neighborhood (although Brookline Blvd. is more successful as such than Broadway Ave.). However, these main streets do not contribute to the community identity or bonding that each neighborhood so desperately needs.

There are three different road conditions along Broadway Ave. and Brookline Blvd. Two of these conditions cut through commercial areas. These conditions are confusing for cars driving along them. Drivers create impromptu lanes, and T infrastructure confuses drivers as they travel along the main streets.

The third road condition exists in Beechview, and the context consists of residences and community amenities (such as churches and libraries). This condition is less active with traffic, and is not a destination for those who do not live in the neighborhood, they simply pass through.

In addition to the confusing experience for drivers, these streets are also unenjoyable for pedestrians. As they exist now, Broadway Ave. and Brookline Blvd. are not places. Residents do not spend time in the so called “hearts” of their neighborhoods, and most of the activity and interaction in these areas occurs indoors, not in public outdoor spaces.



a. Intersection of Brookline Blvd. and Flatbush St. (existing condition)



b. Intersection of Broadway Ave. and Hampshire St. (existing condition)



c. Intersection of Broadway Ave. and Belasco St. (existing condition)

In order to address these issues, a linear park will be created in the neighborhoods of Beechview and Brookline. The park will stretch from the Glenam St. and Brookline Blvd. intersection, across the housing bridge, up to the intersection of Hampshire St. and Broadway Ave. The park will include built elements that act as seating as well as planters, street reorganization with the clarification of car versus public transit lanes, bike lanes, and a vegetated bioswale for stormwater management.

COMMUNITY GATHERING DEVICE

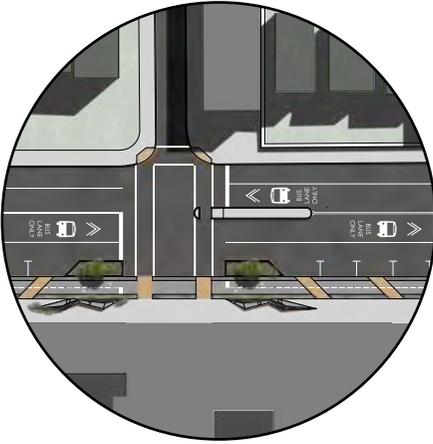
The streetscape currently is used for cars and people just for passing by. The proposed streetscape includes places for residents or visitors to sit and chat, especially near to community amenities. Others may like to sit and people-watch instead. The linear park aims to create a place where people would like to spend time.

CLARIFY TRAFFIC

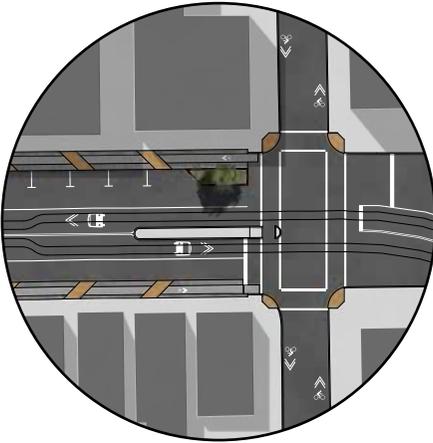
Due to their widths and need to accommodate multiple modes of transportation, Brookline Blvd. and Broadway Ave. are difficult to navigate for drivers. The linear park has designated specific car and public transit lanes, as well as zones for bikes and pedestrians.

ACT AS RECREATIONAL OPPORTUNITY

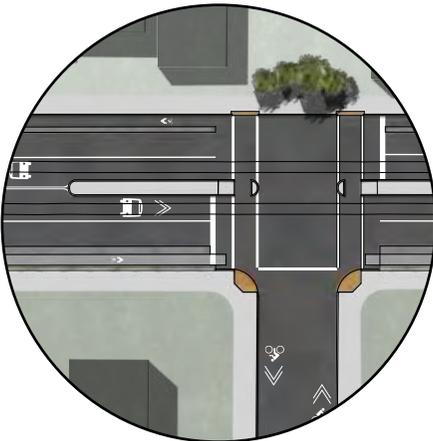
Beechview and Brookline now contain a series of hillside trails and pocket parks, which all link back to the main commercial corridors (the linear park). The linear park (including bike trails) is a great recreational opportunity for young and old alike, especially when traveling to a pocket park or the hillside trail network.



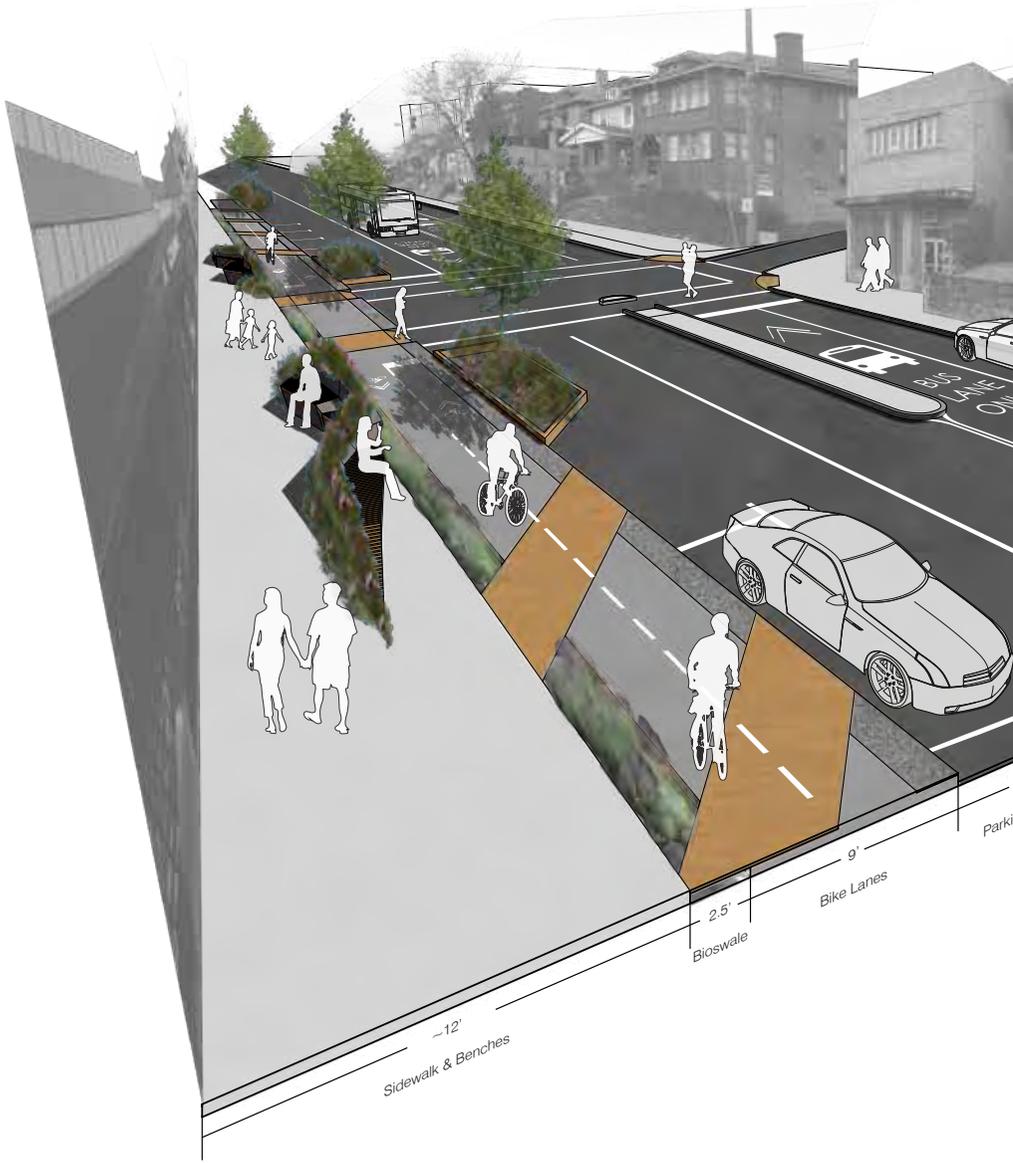
d. Proposed improvements to Brookline Blvd.

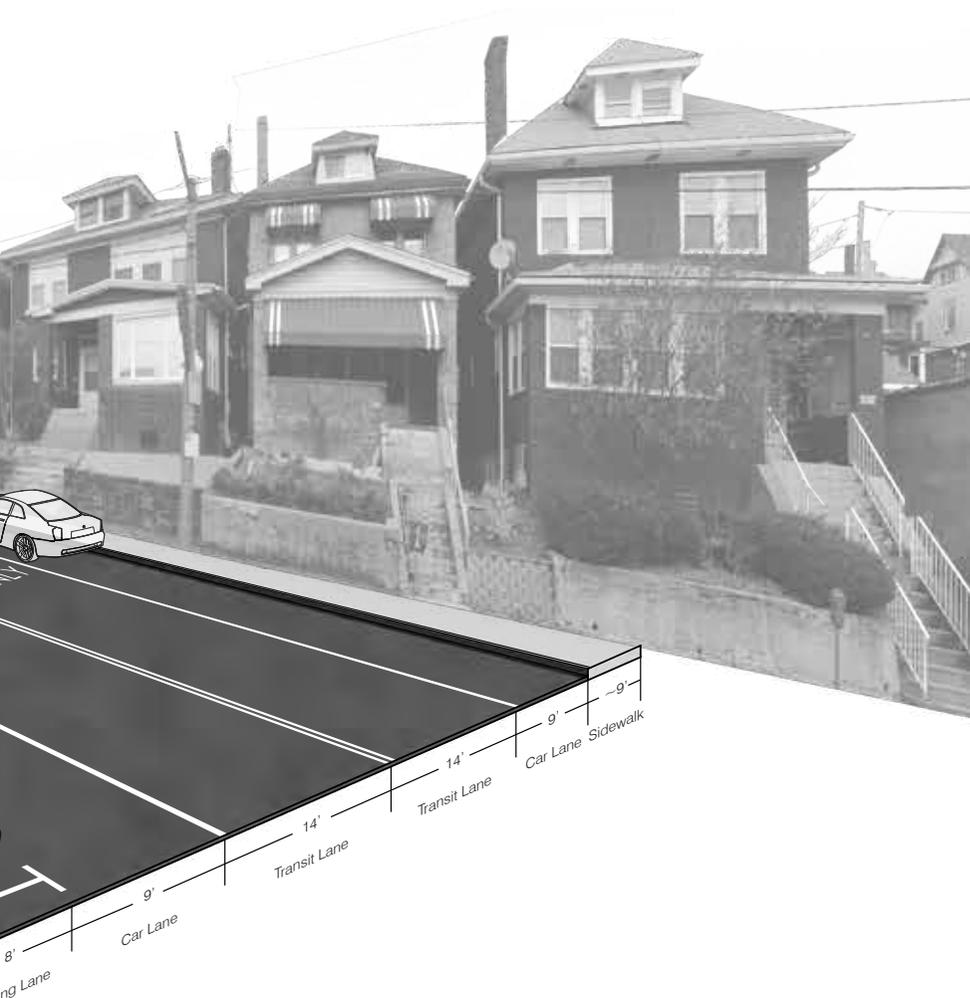


e. Proposed improvements to Broadway Ave. (commercial zone)

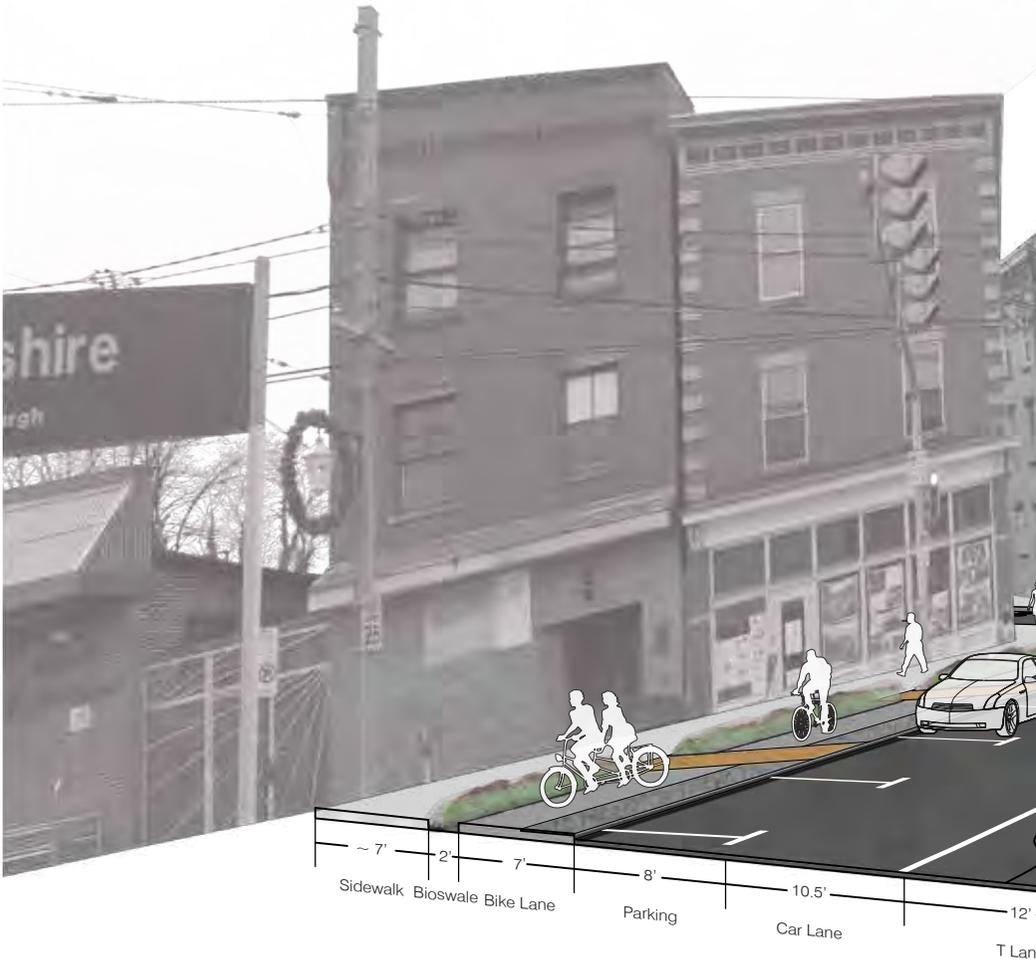


f. Proposed improvements to Broadway Ave. (residential zone)





Brookline Boulevard has a unique commercial condition. The southern side of the street is entirely commercial, whereas the northern half of the street is a mix of residential and commercial. As a reaction to the businesses and community amenities of the corridor, the street has been redesigned to include benches that also act as planters. The benches are designed and positioned strategically in order to accommodate for individual or group activity, depending on the adjacent businesses and amenities. There is also seating positioned for viewing the activity of the linear park and the street.

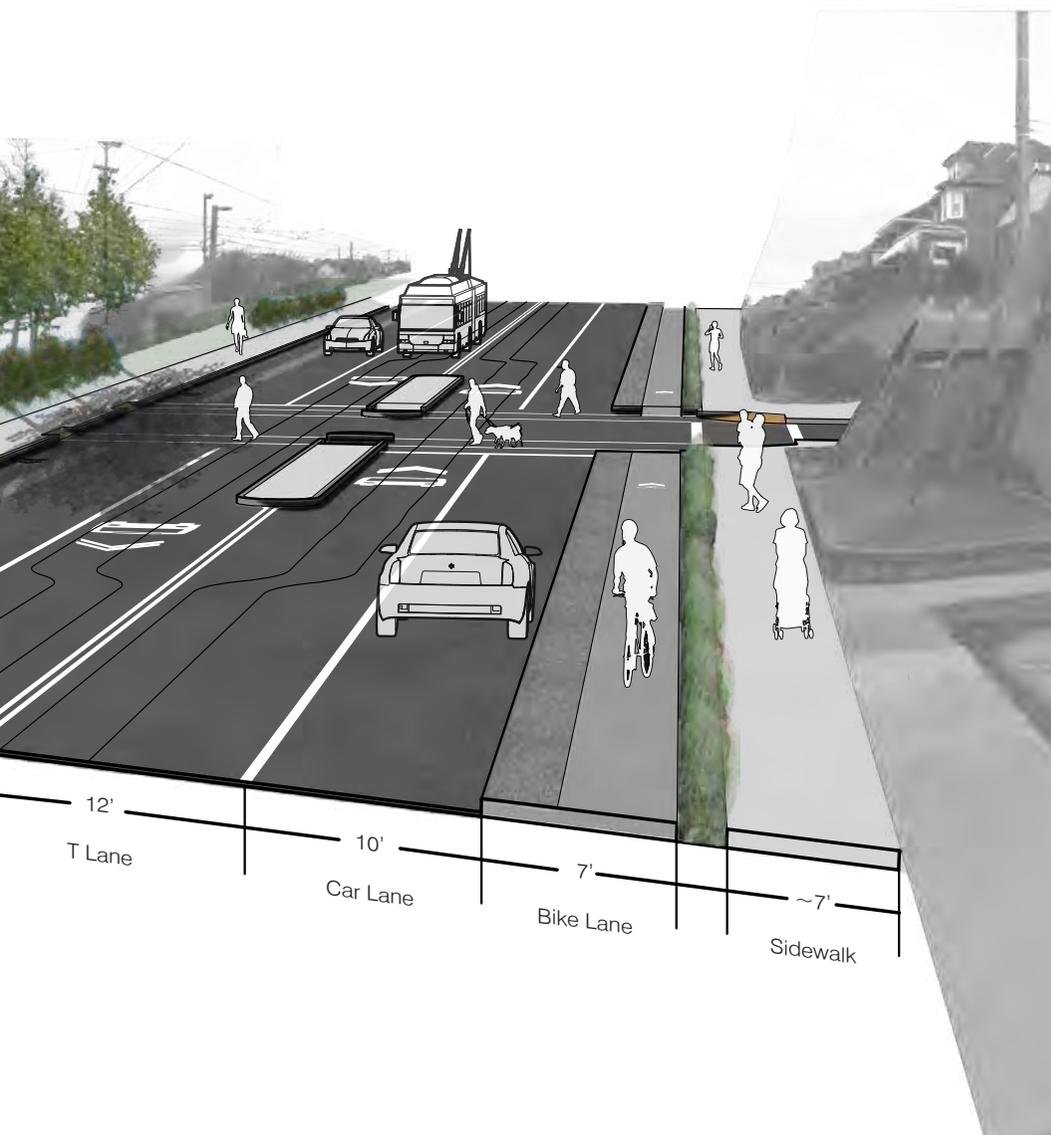


Broadway Avenue Commercial Zone has been reorganized to better clarify where cars should drive versus where the T tracks exist. The bike lanes passing through the area help to reactivate the street and bring life to an area that currently lacks vibrancy. The proposed improvements will not only link the Broadway Ave. commercial zone to the neighborhood parks and trail network, but will also encourage additional development to occur.





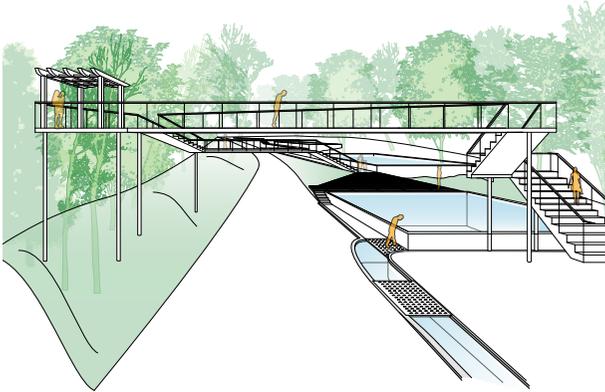
Broadway Avenue Residential Zone has been redesigned to include more vegetation and bike lanes, while limiting disturbance to existing sidewalks and private property. This area is now linked to the other ecological assets of the neighborhood, while limiting interruptions to current residents.



STUDIO INTERVENTIONS
ECOLOGY RELATED INTERVENTIONS



— — — **WATERSCAPE** *Aswin Widjaja & Christina Chen*



— — — **FRAME YOUR PLACE!** *Talia Pery & Rebecca Cole*



RESIDENT & VISITOR PORTRAITS

Living in an apartment building means that I do not have immediate access to green space like many homes in the area do. On nice days I like to visit the pocket park close to my building to read a book or just enjoy the outdoors.



Single Resident

While the trails in the neighborhood are great for when the grandchildren come to visit, due to our physical restrictions, they are more difficult for us to enjoy. Instead, we love to stroll along the linear park on the main commercial corridor. Often times we will sit along the linear park and people-watch, commenting on the bicycles as they ride past.



Retiree Resident

The linear park and pocket parks are what the children look most forward to during the week! We love to take family bike rides along the linear park, taking detours to different pocket parks in the neighborhood. Afterwards, we often ride to our favorite restaurant to finish off the day!



Family Resident

I love taking advantage of Beechview and Brookline's trail network on the weekends. It is a great change from Schenley or Frick Parks because the neighborhoods have such a unique character. Sometimes I ride my bike over, and other times I take the T because it is so convenient!



**Recreational
Visitor**

While I don't come to Beechview and Brookline specifically to enjoy its trail/park network, walking down the commercial corridors is much more enjoyable now than it once was. You can tell that these neighborhoods have been given new life because the streets are much more activated than they were previously.



**Commercial
Visitor**

ECOLOGY GOALS

INCREASED DENSITY

Providing an new and unique amenity will help to draw more people - both visitors and residents - to Beechview and Brookline.

RE-ESTABLISH COMMUNITY IDENTITIES

Expanded greenways and an intricate network of hiking and biking paths will help to re-image the neighborhoods as an eco-tourism hotbed.

STRENGTHEN BOND BETWEEN NEIGHBORHOODS AND THE CITY

Ecological amenities will be a regional draw and will become an important asset to both South Hills residents and Pittsburghers.

CONTINUITY



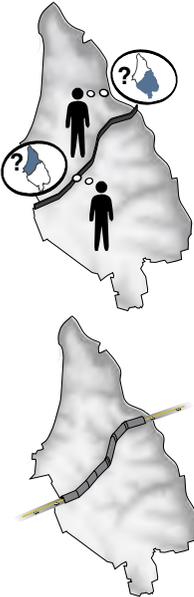
West Liberty Commercial Corridor

- 1. As a commercial and auto/transit armature.**
- 2. Outlined in the guidelines for improving Access. See page 44.**
- 3. Outlined in the guidelines for improving Ecology. See page 61.**

A community disconnected from the neighborhoods around it cannot thrive. When major transit routes are well-integrated into the urban fabric, quality of living is higher and residents can take advantage of the resources that such a system provides.

Along the West Liberty Corridor, a once dense streetscape has gradually transitioned to a much more sprawling urban form with object buildings in the middle of large swaths of asphalt. Large commercial signage, new, available-for-purchase Toyotas, and vacant space occupies these otherwise wide and empty spaces.

A framework for the improvement of the West Liberty corridor has three overarching goals. It seeks to improve the quality of West Liberty as an extended urban transit space for the driver/commuter by creating a more unified, designed environment. It seeks to rebrand West Liberty, establishing it as a place with an identity that is distinct from that of both Beechview and Brookline because of its program¹ but also as a gateway to the neighborhoods. Finally, it seeks to create new connections between the neighborhoods for pedestrians moving between commercial cores,² hikers and bikers using new paths through the hillside parks.³



DOWNTOWN

PN LKN PARKWAY

BEECHVIEW

WEST LIBERTY CORRIDOR

US ROUTE 19

BROOKLINE



STRATEGIES FOR IMPROVING WEST LIBERTY LEVELS OF ACTIVATION



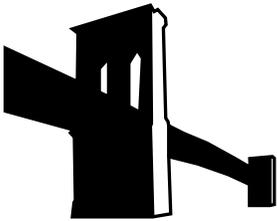
REBRANDING

Commercial signage contributes to the disjointed and incoherent nature of West Liberty as it is today, but can be reappropriated along the strip to create a more unified environment.



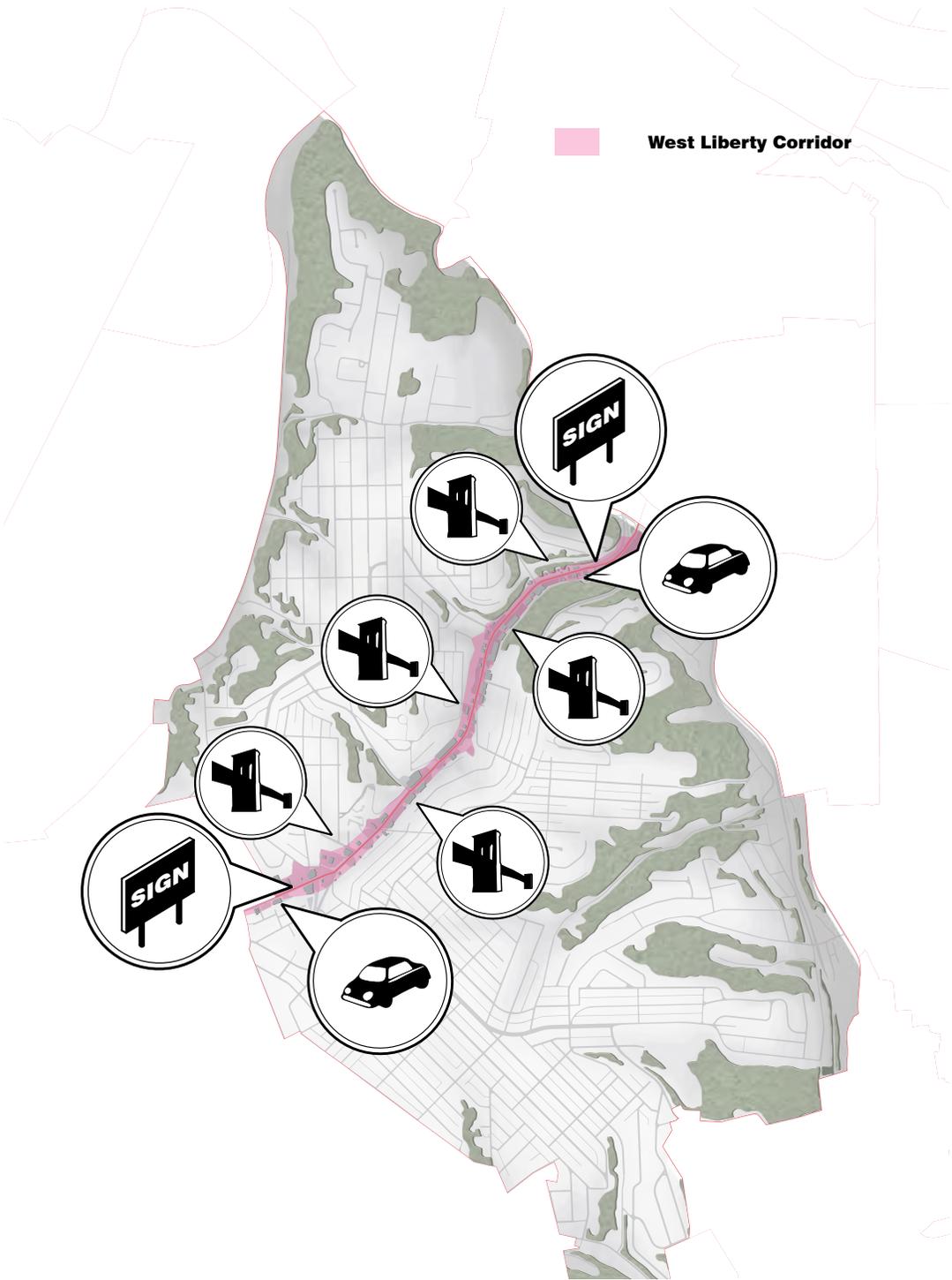
UNIFIED AUTOSPACE

Disused open space such as sidewalks and the interstitial space between car dealerships and big box stores can be unified through design moves which compress, expand, and otherwise manipulate the visual field of the auto commuter.



BRIDGING

Bridging plays an essential role in connecting residents in both neighborhoods to resources in the other and also helps to contribute to the coherency of the strip. Infrastructure is strategically located to tie into proposed eco paths and bridge vertically to new areas of development on West Liberty Avenue.



West Liberty Corridor

AUTOSPACE AND REBRANDING
CONTINUITY RELATED INTERVENTIONS



— — — **DRIVE** *Phyllis Kim & Ibrahim Garcia-Bengochea*



— — — **AUTOscape** *Joy Kang*



A City of Bridges

1. Bruce Criddlebaugh, "Introduction," *Bridges & Tunnels of Allegheny County and Pittsburgh, PA* (1999).

PITTSBURGH'S LEGACY

Situated in the Allegheny Mountains of Western Pennsylvania at the confluence of the Allegheny and Monongahela Rivers, the city of Pittsburgh is geographically unique, stretching out over three river valleys, across a plateau which has over time eroded into many hills both steep and gentle, and the slopes between. The city was the hub of industrial production for the nation for a century, experiencing massive growth during that time. To allow for that expansion, the city government undertook massive efforts throughout the period to construct a circulation infrastructure network that included highways and bridges.

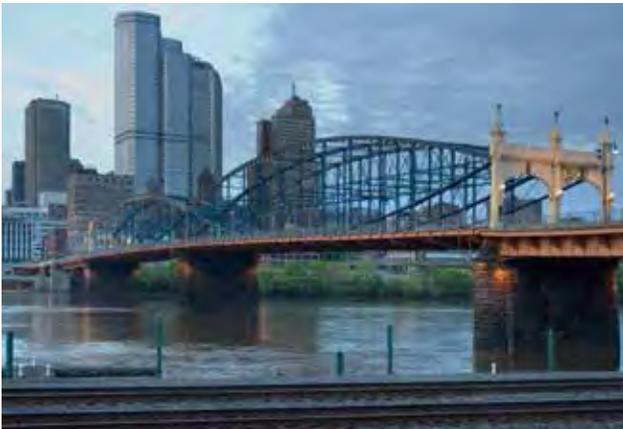
Today, with 446 bridges, the city of Pittsburgh holds the world record for bridges with pier, beating out cities like Venice and London.¹ They operate as an essential part of the larger regional transportation system and contribute in an important way to the image of the city the quality of its environment. Many are unique designs and are well-liked by residents, contributing to their own mental image of the city and their sense of regional identity. Residents of the city and visitors alike know the city by the many iconic images of Downtown with the Fort Pitt, Fort Duquense, Roberto Clemente and Smithfield Street Bridges Images prominent in the foreground. For Pittsburghers, the hillsides that give form to their city and the bridges that connect them together are inseparable - they are of the city.



**a. Glenwood B&O
Railroad Bridge**



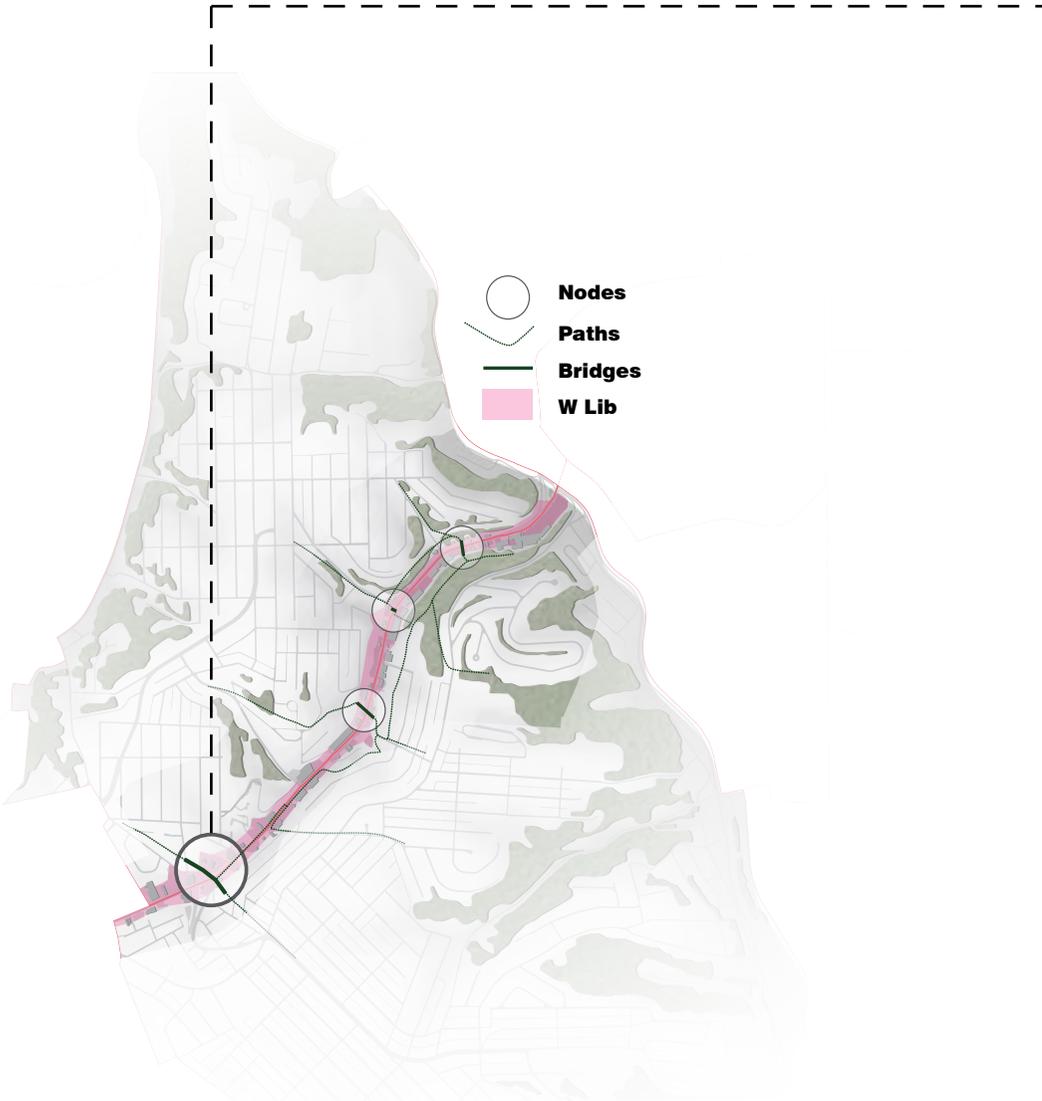
**b. South Tenth
Street Bridge**



**c. Smithfield
Street Bridge**

BRIDGING WEST LIBERTY

BRIDGING NETWORKS

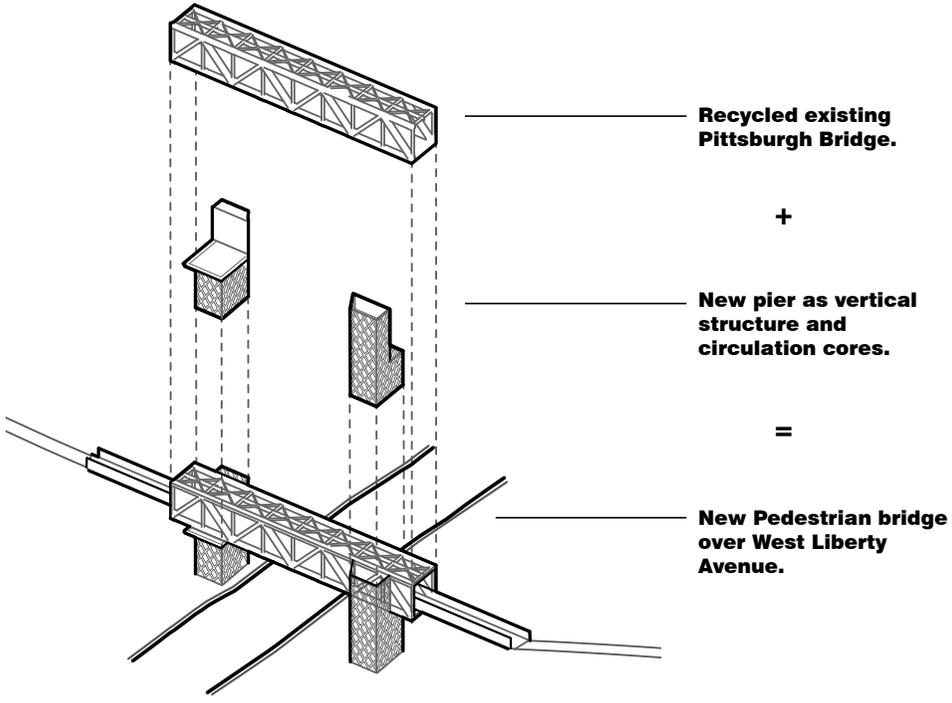




LINKING RESOURCES

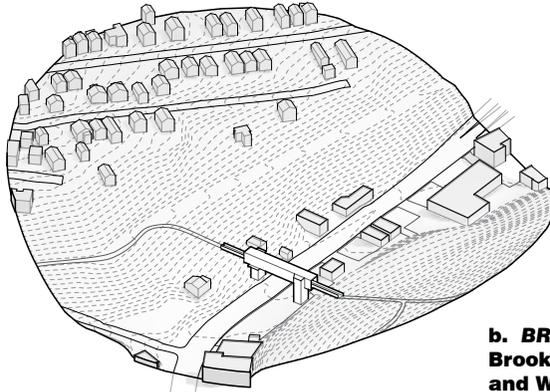
If Beechview and Brookline are to successfully redensify and share resources, they must be connected by a series of bridges which are practical and usable by both residents and visitors and enable biking and walking. Three pedestrian bridges and one much larger structure supporting both pedestrian use and the new rapid transit system outlined in Access will connect the two neighborhoods and allow for a sharing of resources.

BRIDGING WEST LIBERTY

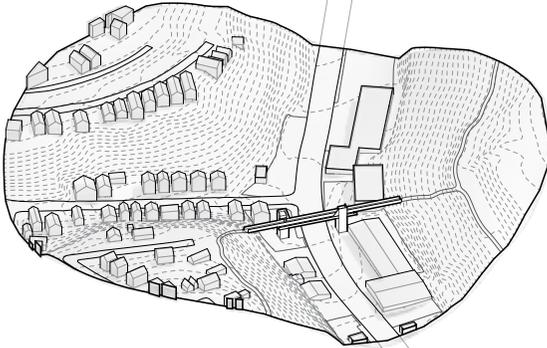


BRIDGING SYSTEMS

The three pedestrian bridges over West Liberty connecting Beechview and Brookline are comprised of a system of three parts. Historic bridges are an important component of Pittsburgh's industrial legacy, but many are now disused and going to waste. These bridges are recycled and put to good use providing the horizontal structure to span the West Liberty valley. New steel diaphragm piers support the historic structures and contain within them stair cores which connect the streetscape of West Liberty to the path network.

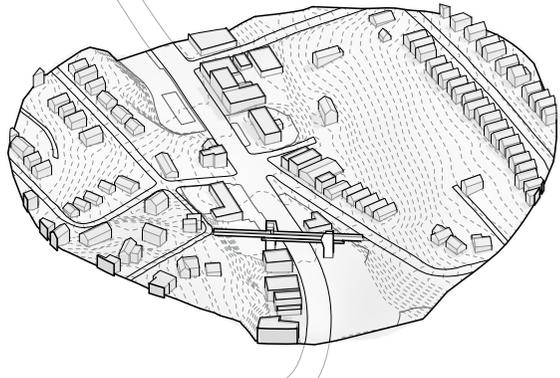


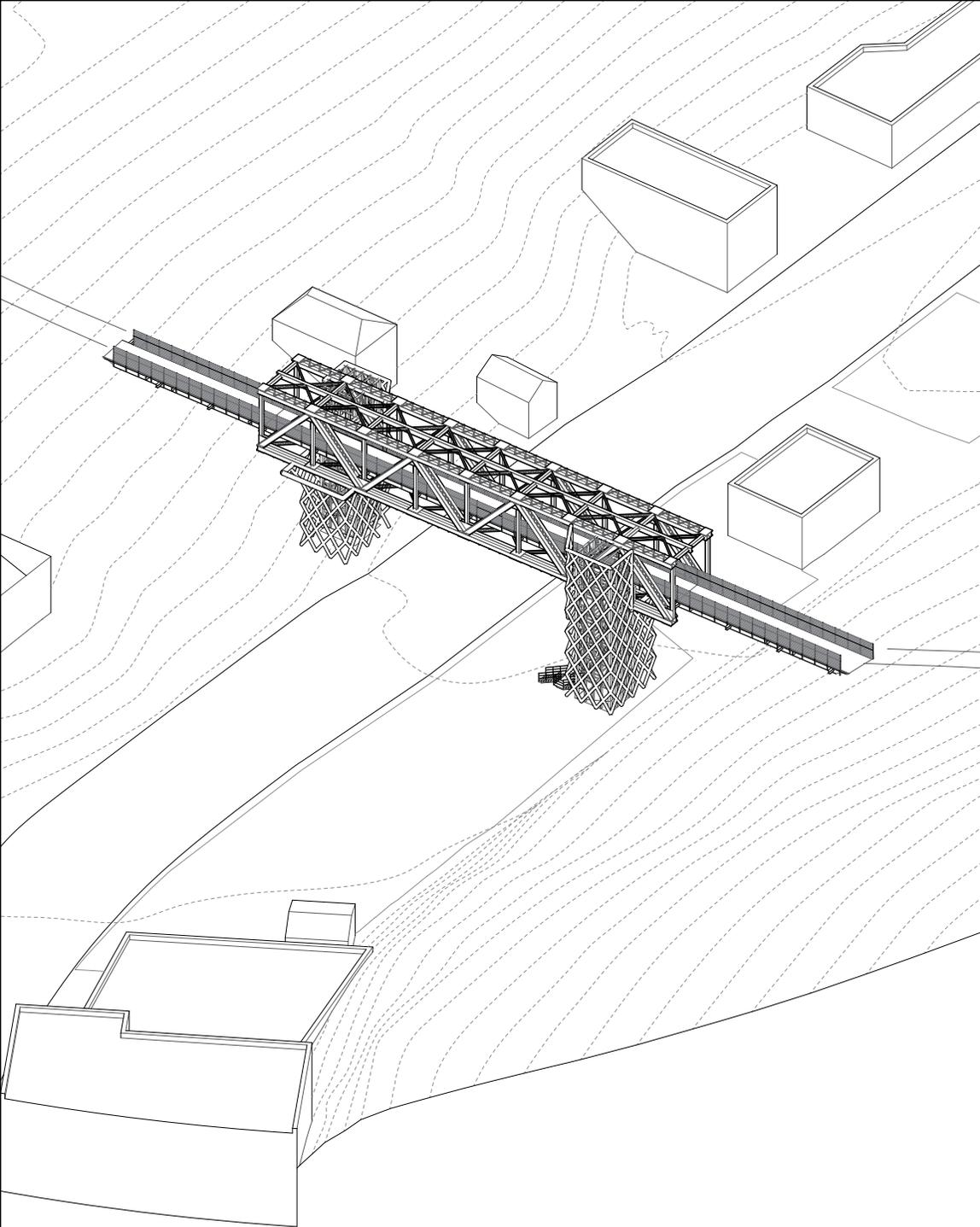
**b. BRIDGE ONE:
Brookside Avenue
and W. Liberty**

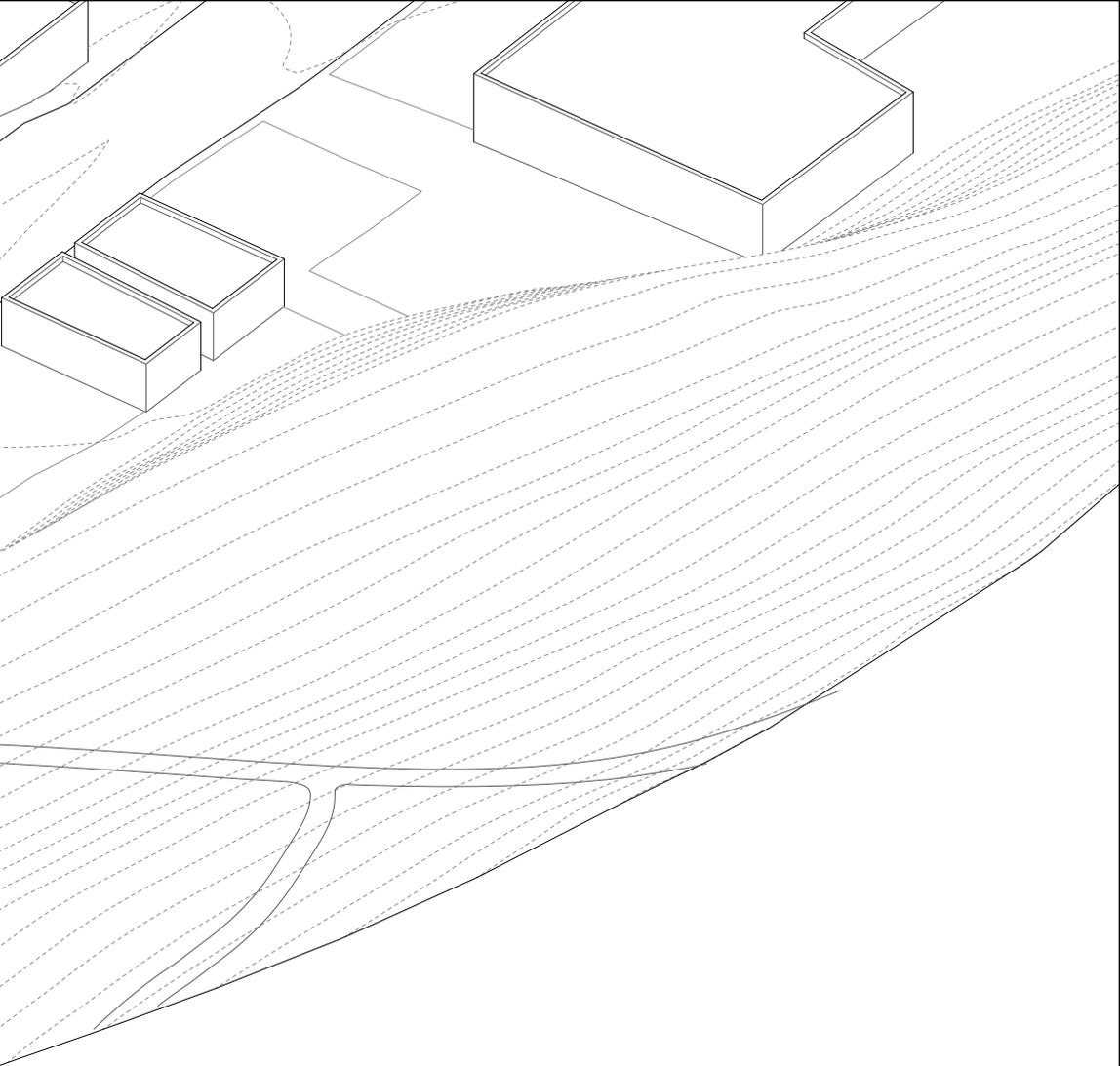


**b. BRIDGE TWO:
Cape May Avenue
and W. Liberty**

**b. West Liberty
Corridor at the
intersection
of Wenzell Ave
and Brookline
Boulevard**







Bridges link hiking and biking paths outlined in Ecology, essentially stretching the two neighborhoods over the highway and also creating sectional connections between them and the much lower streetscape.



FAST SERVICE

LEAN TECH

LANE



RESIDENT & VISITOR PORTRAITS (CONTINUITY)

When I moved in my friends and family from the suburbs didn't know very much about my new neighborhood, but all the bright colors, signs and new amenities on West Liberty have Brookline back on the map.



Single Resident

People from the suburbs and other parts of the city never used to give our neighborhood much thought except to complain about how ugly West Liberty was as they drove past. Now when my family comes to visit they know they're arriving in Beechview! It's made everyone in the neighborhood feel like an important part of the city again.



Retiree Resident



Family Resident

The new pedestrian bridge near the house means that I can take the kids out for tacos or walk to the bakery in Brookline without having to jump in the car and waste money on gas. We don't have to drive the kids everywhere anymore - they can walk to their friends' houses much more easily now.

It's awesome to be able to ride for so long on new trails in Beechview and Brookline. When I can get out, I always choose to bike there instead of in Frick because I love all the incredible views you get when you ride over the bridges that cross West Liberty Avenue, and the hills are always a fun challenge.



Recreational Visitor

I try not to shop in malls and big chain stores so much, I really enjoy discovering new mom-and-pop venues. I had no idea Brookline and Beechview were so up-and-coming and had so many small shops until all the changes on West Liberty Avenue caught my attention. Now I make the trip out all the time and never have trouble finding my way around!



Commercial Visitor

CONTINUITY GOALS

INCREASED DENSITY

Re-branded West Liberty will help to advertise both communities as exciting and upcoming places to live. Better connectivity will provide an additional incentive for people considering moving to the area.

RE-ESTABLISH COMMUNITY IDENTITIES

In its new and expanded role, West Liberty will act as a kind of chalk board for residents of both neighborhoods to reassert their ownership.

STRENGTHEN BOND BETWEEN NEIGHBORHOODS AND THE CITY

Changes on West Liberty will help to strengthen the mental image of Beechview and Brookline for non-neighborhood Beechview and Brookline residents.

DEFINING SUCCESS

1. It is important to note that success is not measured by the outputs of the interventions- it is measured through the outcomes.

Output: Describes the “WHAT WE DID”

Outcome: Describes the “WHAT DIFFERENCE WAS MADE”

2. URA

3. 2010 US Census Data

FRAMEWORK OBJECTIVE

The objective of the framework is to establish a more cohesive identity for the neighborhoods of Beechview and Brookline through the cultivation of a more dense and diverse community. This objective will primarily be met by increasing access into these neighborhoods while also creating continuity within the neighborhoods.

KEY ELEMENTS

1. Increase Density
2. Re-Establish Community Identities
3. Strengthen the bond between Beechview and Brookline as well as to the City.

FRAMEWORK STRATEGY

The success of the Framework will require the three elements of the objective to address Access, Ecology and Continuity.



MEASURING SUCCESS

1. Hard outputs¹ measure quantifiable characteristics to success.
2. Soft outputs¹ measure qualifiable characteristics to success.

A CAVEAT

The numbers projected in this section are *projections* of what the framework believes is achievable under ideal conditions. Coming up short of these numbers does not indicate failure, but rather progress.

INCREASED DENSITY

The Framework Proposal seeks to increase residential density by creating walkable, transit-oriented, and livable neighborhoods.



The proposed transit extension will encourage future residents to live in Beechview or Brookline due to the ease in access to Downtown Pittsburgh. Additionally, the increase in community amenities will make Beechview and Brookline a more desirable places to live, and much more walkable².



Reimagining Beechview and Brookline using their hillsides will help to make them more livable and attractive neighborhoods to current and prospective residents. The newly formed greenspaces and trails will benefit residents in addition to attracting recreational visitors into these areas.



Reclaiming West Liberty Avenue by the neighborhoods of Beechview and Brookline will not only help to advertise these places to those traveling along West Liberty, but will also allow the two neighborhood to share resources and amenities.

2. Residents can invest their dollars back into the local businesses while not being forced to drive out for basic goods and services. This benefits both the resident and the community.

MEASURABLES by 2020

HARD OUTCOME

1. 14% Increase in population^{2,3}
2. 10% Increase in new businesses^{2,3}
3. 40% Increase in public transit use^{2,3}

SOFT OUTCOME

1. Promote new local businesses
2. Greater sense of community pride and awareness.
3. Influx of a more diverse population leading to a more rich cultural community.

RE-ESTABLISH COMMUNITY IDENTITIES

1. The new transit service as well as the added community amenities will foster a greater community relationships.

2. To be surveyed by business owners, and public facilities (libraries, offices, etc.).



The Framework Proposal seeks to re-establish community identities and culture in part by the new transit service, the addition of community amenities, and by the reimagining of the greenway¹.

The addition of the added community amenities will give residents a tool to foster relationships with other members of the neighborhood. The extended transit will also revitalize the commercial districts. This will allow a culture similar to that of the streetcar suburbs in the mid-20th century to occur, bringing residents closer to their neighborhood and each other.



The new expansive greenway system will allow Beechview and Brookline to be physically connected and allow the residents to develop pride over their new public amenity. It will attract outside visitors and awareness.



Rebranding West Liberty Avenue will help to give Beechview and Brookline the increased sense of identity and exposure to the general public.

MEASURABLES by 2020

HARD OUTCOME

1. 20% Increase in neighborhood events.
2. 25% Increase in new visitors to the neighborhood.²

SOFT OUTCOME

1. Greater awareness for the two neighborhoods as well as their commercial core and HillSides.
2. Improved standards of living for the residents.
3. Increase housing value and retail value for the commercial corridors.

STRENGTHEN BOND BETWEEN NEIGHBORHOODS AND THE CITY

The Framework Proposal seeks to strengthen the bond between these two neighborhoods and the city of Pittsburgh by increasing awareness and housing value³.



The transit extension will give greater accessibility between the two neighborhoods, thereby providing new services to the businesses on Broadway Ave and Brookline Blvd. This new transit will also be attractive to the visiting population.



The unique hillsides network provided by the Greenway will not only physically connect these two neighborhoods, but will allow for these two populations to blend and integrate. It will also entice new visitors to the area, and create these two neighborhoods as a destination to the greater Pittsburgh area.



Physically bridging between Beechview and Brookline will allow greater pedestrian access to both of these neighborhoods. This bridging will also facilitate the greenway connective tissue in the urban fabric.

3. Strengthening unity between Beechview and Brookline is dependent on re-establishing the community identity as well as in increase in density.

MEASURABLES by 2020

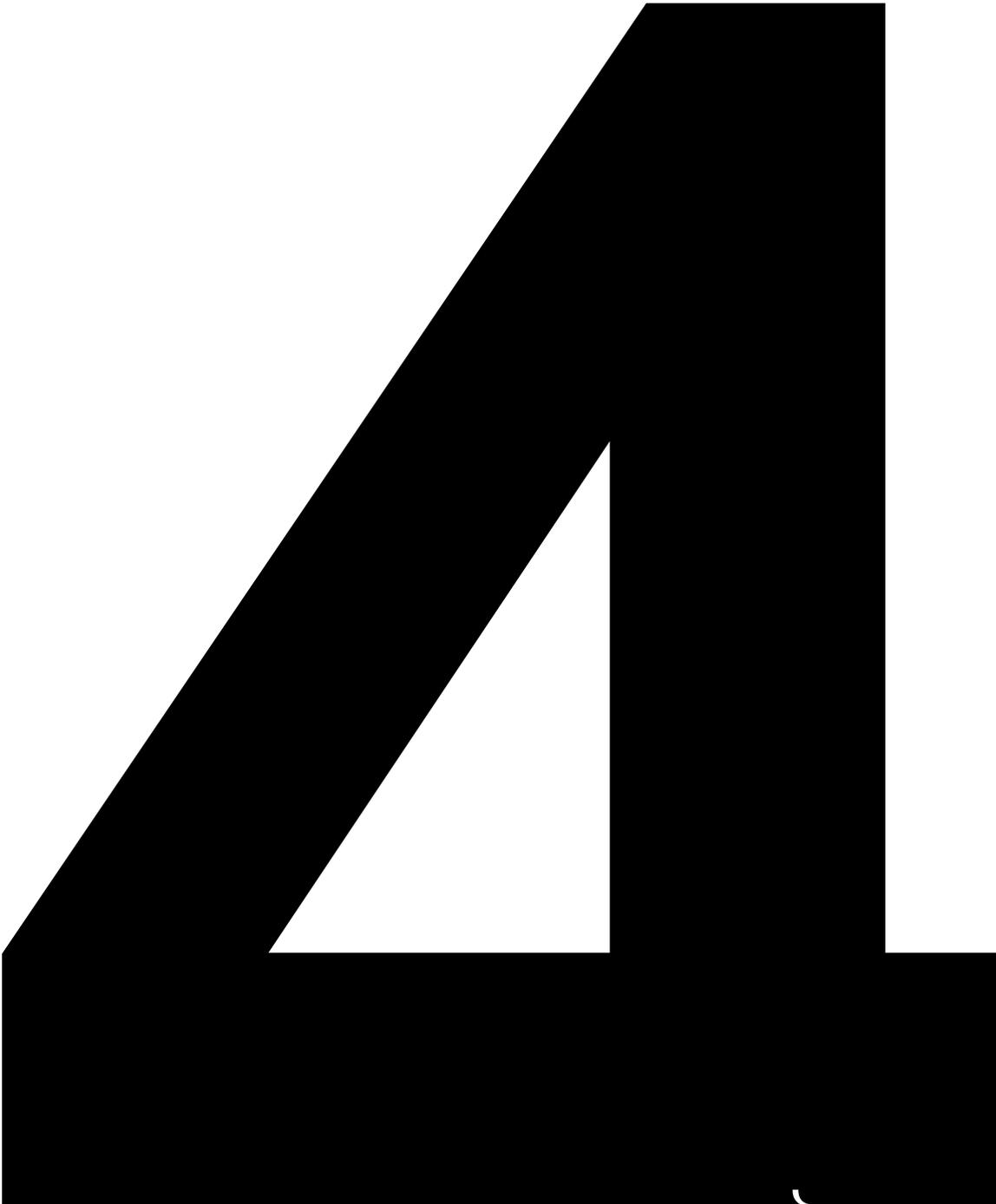
HARD OUTCOME

1. 50% Increase inter neighborhood transit flow.
2. 25% Increase inter neighborhood programs.
3. 40% Increase in public transit use

SOFT OUTCOME

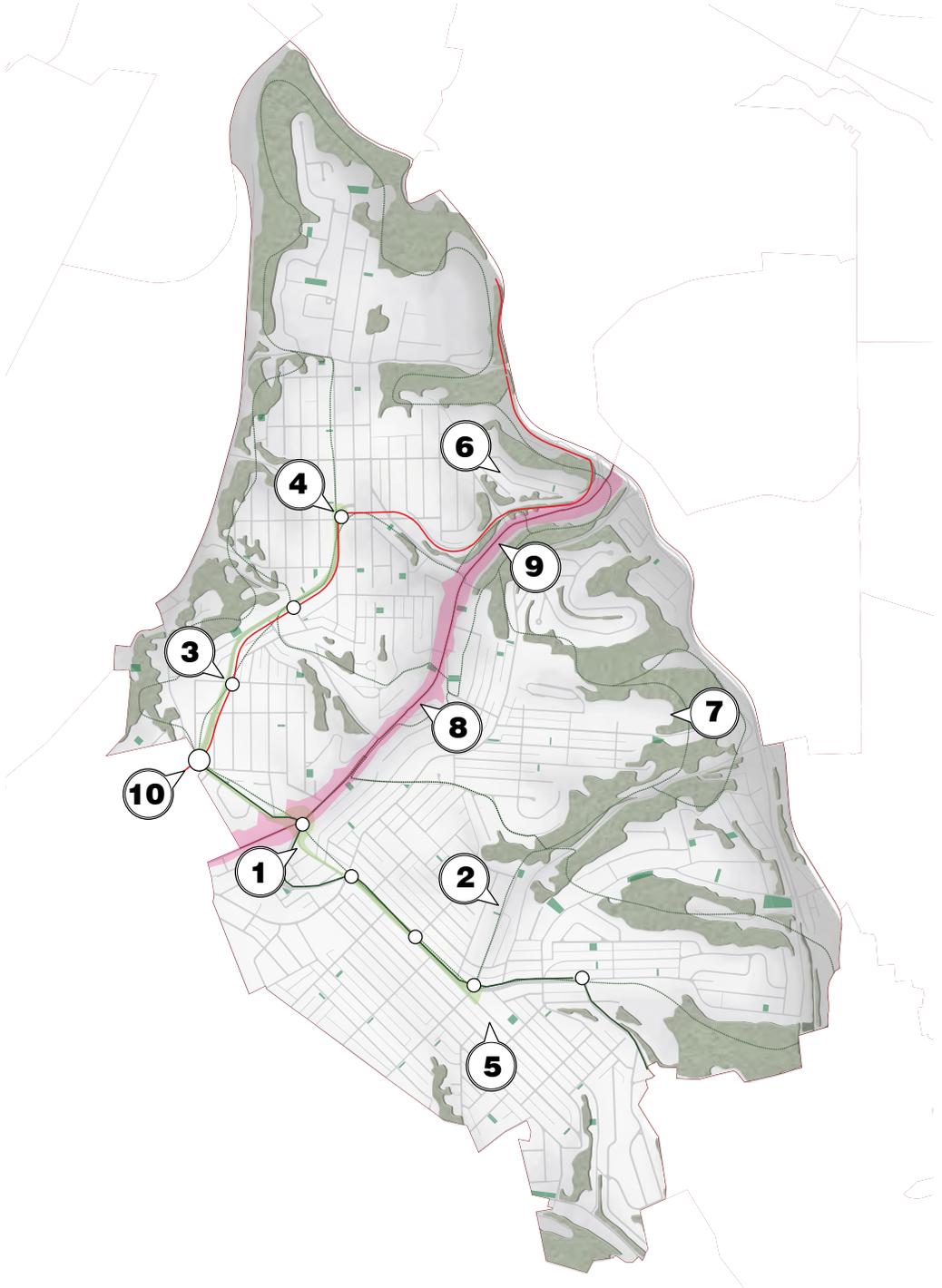
1. Beechview and Brookline as a household name to Pittsburgh.
2. Mutual interest in connecting to neighboring cities

AREAS OF FOCUS



chapter

STUDIO INTERVENTIONS



- 1 **WALK THE LINE** *Jake Douenias & Scott Harrison*
- 2 **CULTURE SHOCK** *Colin Haentjens & Liam Lowe*
- 3 **LIVE . WORKOUT** *Medha Sing & Jessica Wang*
- 4 **FALLOWFIELD SQUARE** *Thomas Groner & Sarah Harkins*
- 5 **CANNON PLAZA** *Joe Chang & John Soh*
- 6 **WATERSCAPE** *Christina Chen & Aswin Widjaja*
- 7 **FRAME YOUR PLACE!** *Rebecca Cole & Talia Perry*
- 8 **DRIVE** *Ibrahim Garcia-Bengochea & Phyllis Kim*
- 9 **AUTOscape** *Joy Kang*
- 10 **WENZELL STATION** *Henry Glennon*

WALK THE LINE





SCOTT HARRISON
JACOB DOUENIAS

WALK THE LINE

PROJECT INTRODUCTION

a. Neighborhoods of Brookline and Beechview

b. Strengths and weaknesses of the neighborhoods. The weakness lie along West Liberty, creating a divide between the two neighborhoods.

c. Need to bridge the the strengths of the two neighborhoods across West Liberty.

In a word our proposal is a bridge.

This bridge creates a traversable connection between Brookline and Beechview that vaults over the chasm that is West Liberty Avenue. On either side of this proposed coupling each neighborhood has commercial corridors that are poised for growth; a diverse housing stock; rich greenways; and in Beechview, a regional mass transit connection to greater Pittsburgh. We believe that joining these communities can have exciting implications enabling these neighborhoods to thrive.

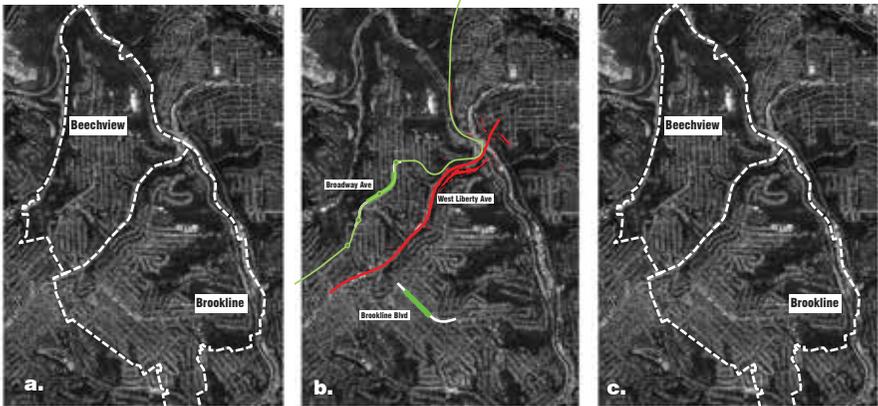
As this new elevated path weaves through the path of least resistance it amplifies the character of its context. When the bridge passes through existing residential neighborhoods a network of apartments rises to fill the void below. These homes could bring newcomers to the area whilst providing comfortable, connected housing for the area's aging population. These dwellings could be connected by weaving patios between each unit. Small urban spaces might be created within neighborhoods such as vertical farms that take advantage of the structure required for the bridge that passes above.

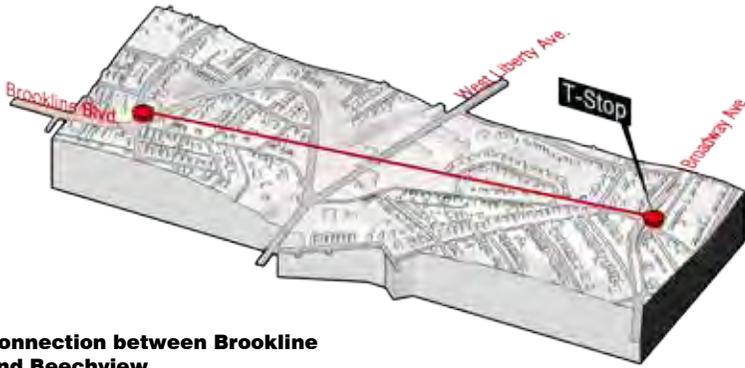
When the bridge passes over West Liberty Avenue and the adjacent sprawling paved lots and car dealerships it takes on both an antagonistic and sympathetic character. West Liberty Avenue is the automobile's domain. This has created a unique mechanistic community. The people of Brookline and Beechview find this critical junction uncomfortable whilst not in a car. By soaring over West Liberty Avenue our bridge allows pedestrians, bicyclists, and a new dedicated electric bus line to cross this thoroughfare unimpeded by the traffic below while also negotiating the steep valley on either side of West Liberty Avenue. The large lots that would need to be acquired to create this overpass create several rich opportunities to turn this under-appreciated four-way intersection into a lively portal into each neighborhood.

On one side a parking garage, electric bus terminal, and small retail vendors create a transit hub for commuters travelling from Brookline to Beechview and beyond. On the other side the surface parking is wiped clean and the Earth's surface is pulled upwards toward the bridge creating both a large public park and a car dealership (a nod to the local automotive community) below this earthen surface.

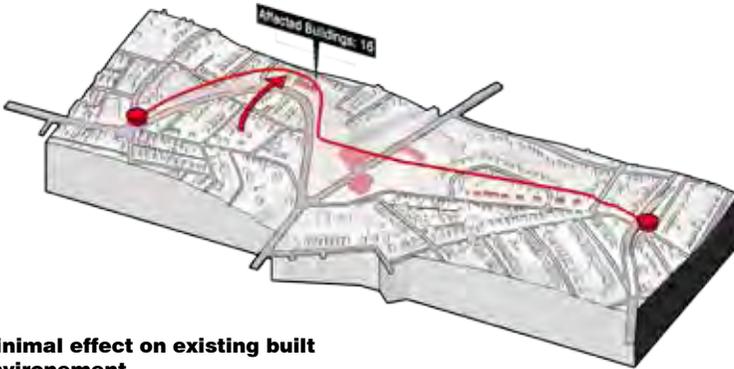
We propose a new relationship to urban motorized infrastructure. Instead of being regarded as a blight or a rupture in the urban fabric we believe that infrastructure can be inhabitable, exciting, and integrated into the community.

LOCATION: Brookline Beechview

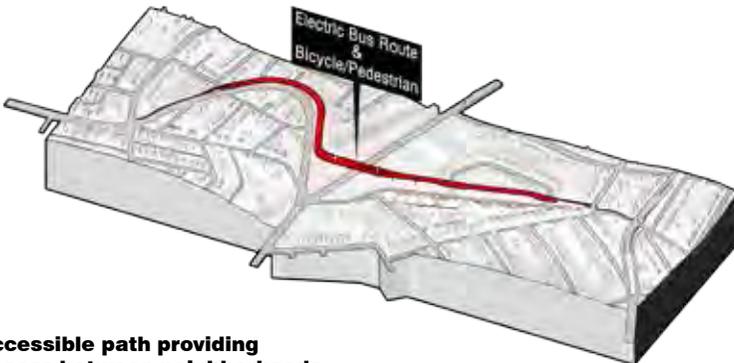




Connection between Brookline and Beechview



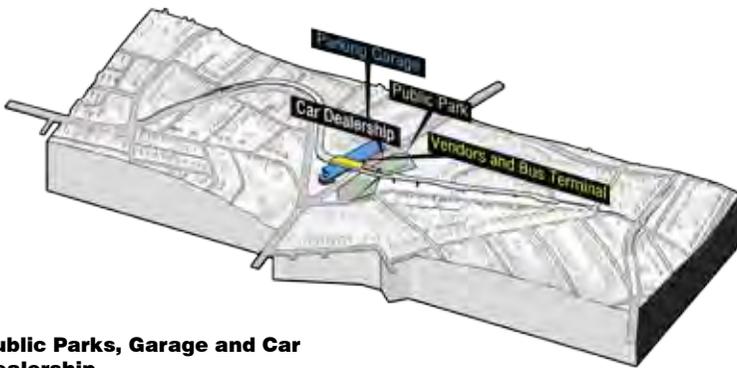
Minimal effect on existing built environment



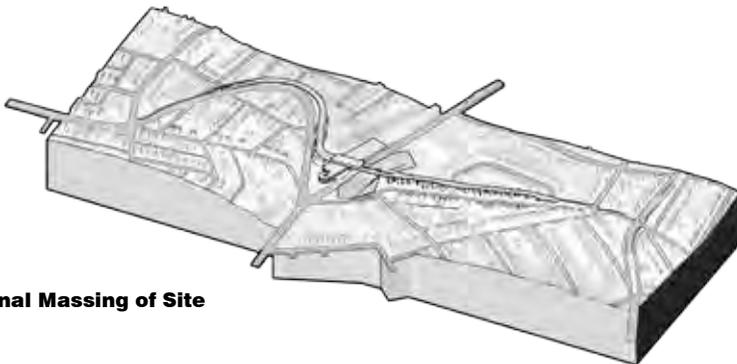
Accessible path providing access between neighborhoods



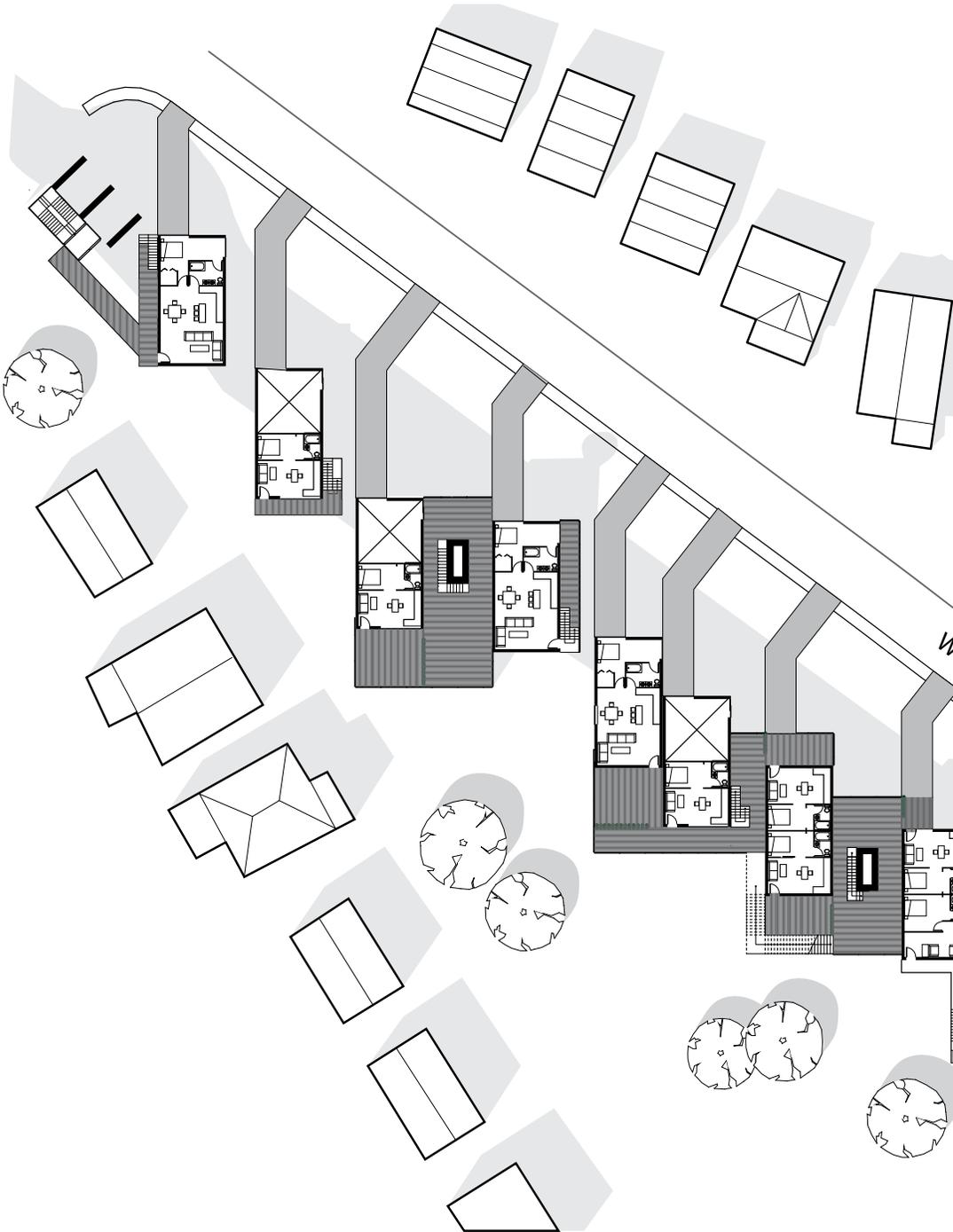
Introduction of New Housing



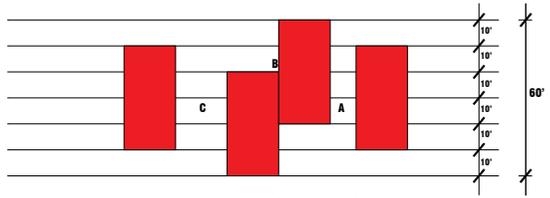
Public Parks, Garage and Car Dealership



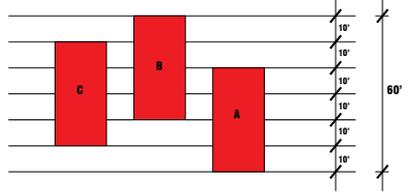
Final Massing of Site



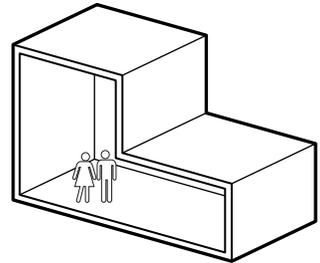
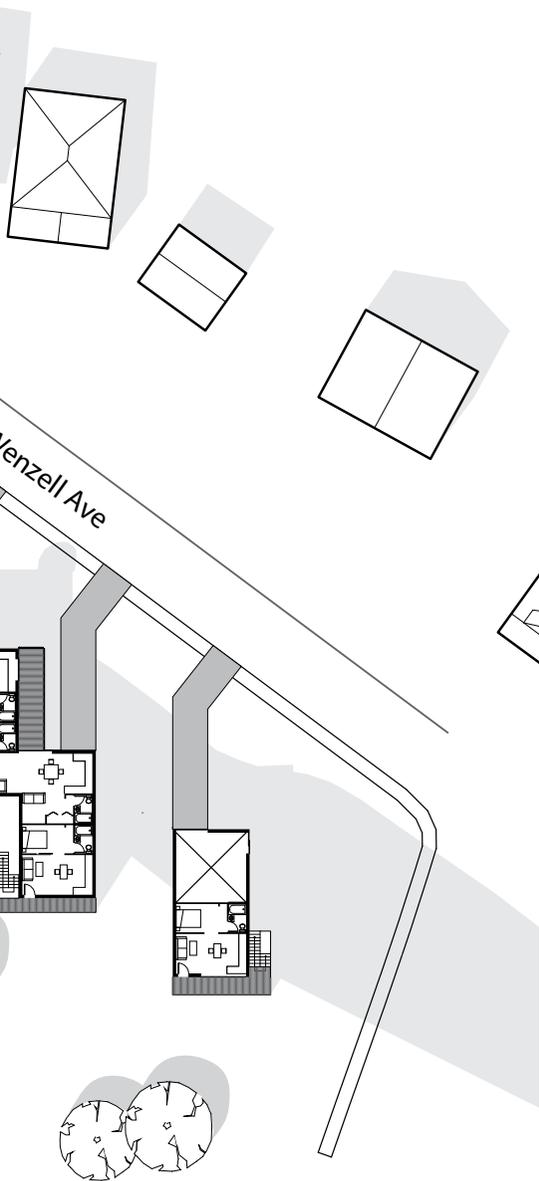
Plan of Housing on Wenzell Ave and Wenzell Place.



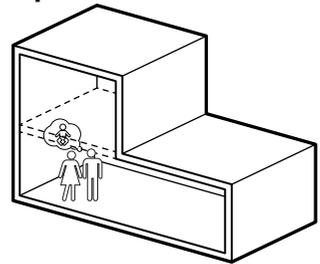
Unit movement along 'X' axis



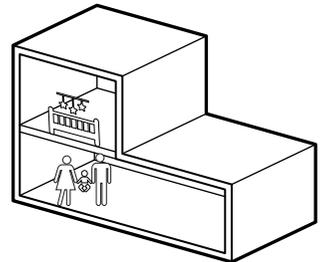
Unit movement along 'Y' axis



1 Bedroom with Double Height Space



Ability to Expand into Double Height Space

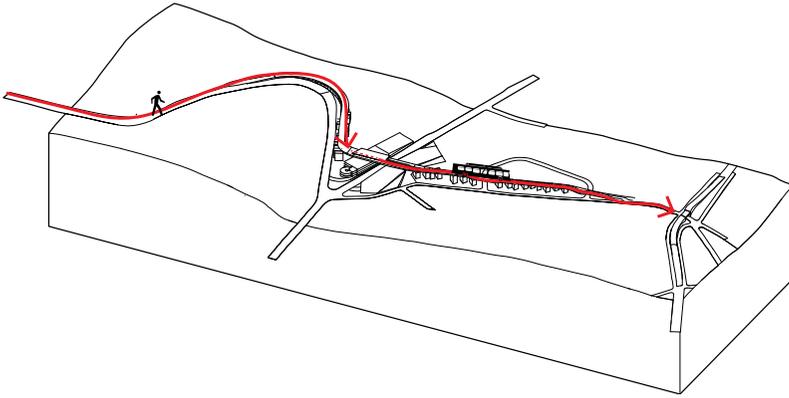


Conversion from 1 bedroom to a 2 bedroom

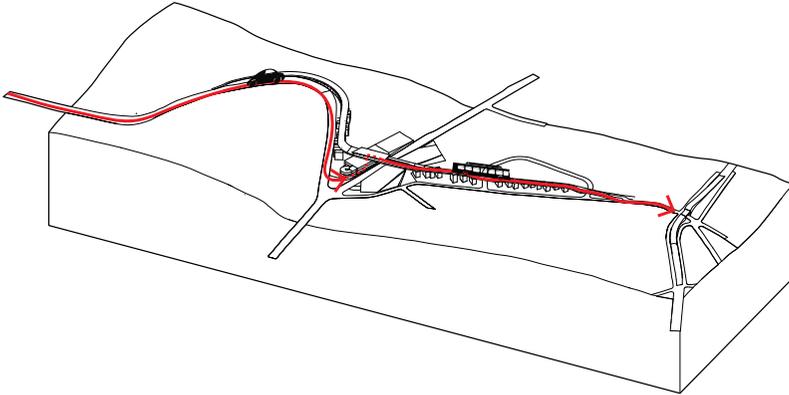


Perspective Down Wenzell Ave

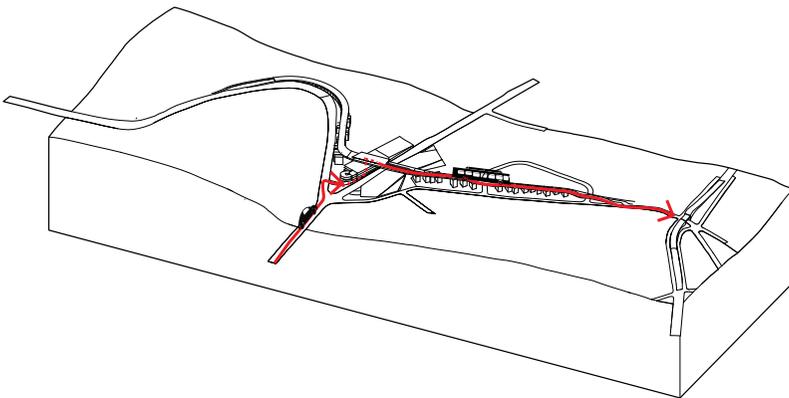




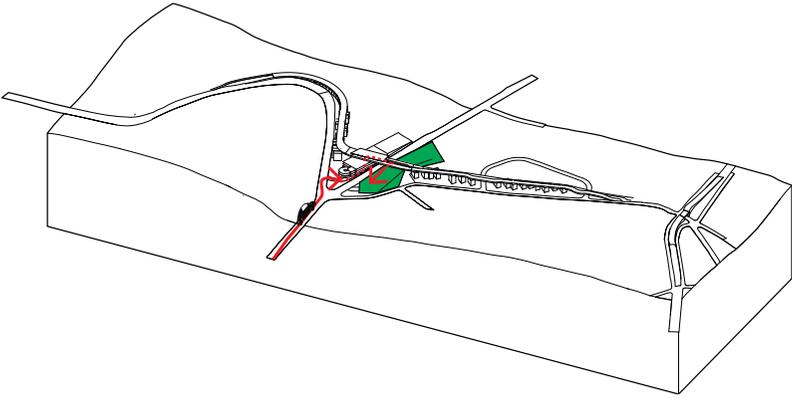
Pedestrian Commuter from Brookline



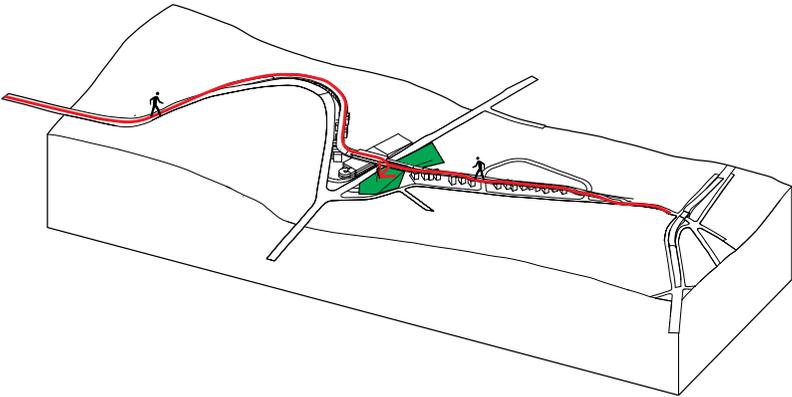
Driving Commuter from Brookline



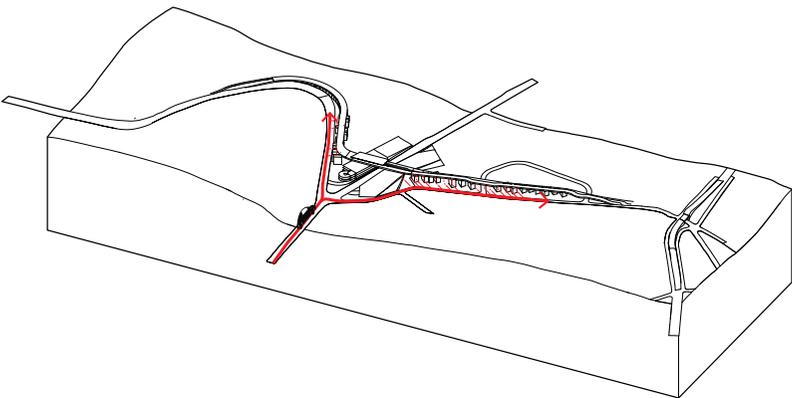
Driving Commuter from West Liberty



Driving Route to Park



Public Route to Park



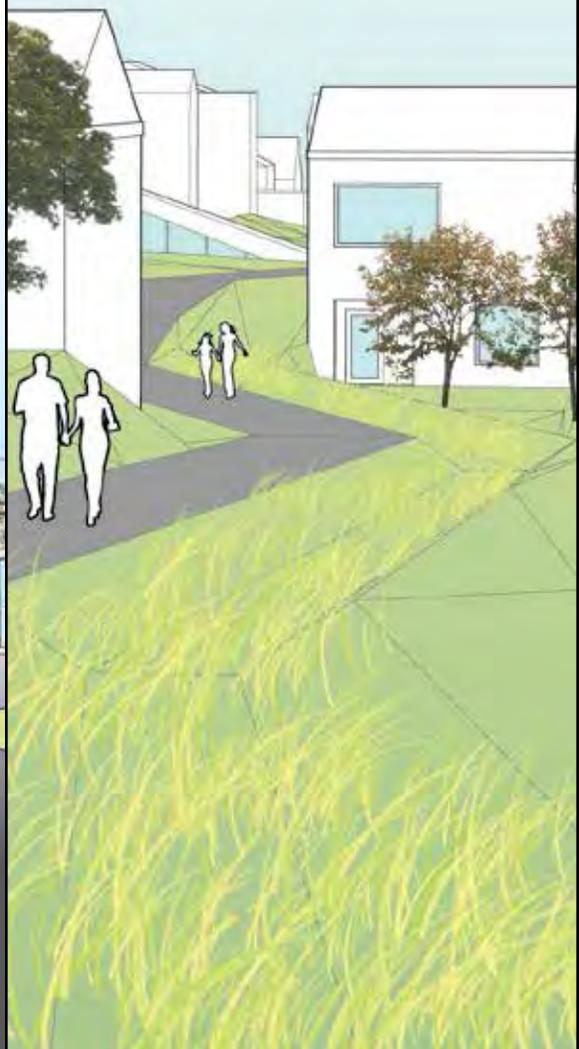
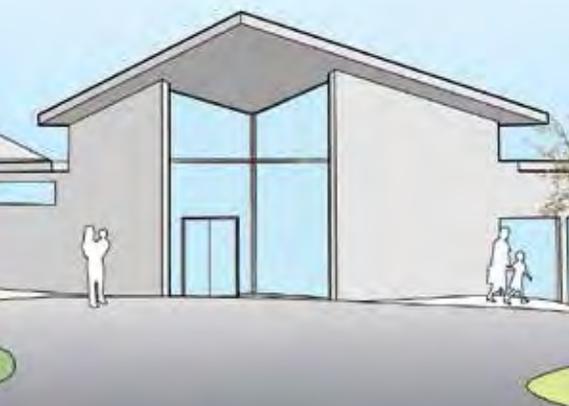
Access to Housing



Perspective On Bridge



CULTURE SHOCK



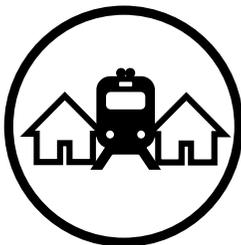


COLIN HAENTJENS
LIAM LOWE

CULTURE SHOCK

INTRODUCTION

Culture Shock offers a new type of housing community in Brookline at the same time linking Brookline Boulevard to the neighborhood's extensive network of wooded hillsides. Currently, the neighborhood primarily offers a suburban monoculture of single-family, detached housing. However, the site provides easy access to Downtown and offers an opportunity to live in a more natural environment with urban conveniences. The landscape and architecture of the long block between Glenarm Ave and Starkamp Street will be modified to support new programs, shared outdoor spaces, and path connections for both residents of the block and the wider community of Brookline. The creation of this hybrid public space on the interior of the block serves to bring people together and offers amenities everyone will enjoy. New construction on the block includes small residential townhouses as well as a daycare facility and a multipurpose building designed to accommodate gatherings and events. The daycare center provides an important amenity that will make Brookline more desirable to young families moving to the area. In addition, existing buildings will be modified to become duplexes which will include smaller units designed to suit retirees or to support other types of activity such as an artist's studio or play structure. The landscape is altered to provide better access through the long block as well as between homes, building a stronger sense of community. The shared landscape of the block, new residential options, and amenities set the stage for a community made up of a diverse range of ages and family structures: a new model for community in Brookline.



LOCATION BROOKLINE: GLENARM AVE & STARKAMP ST

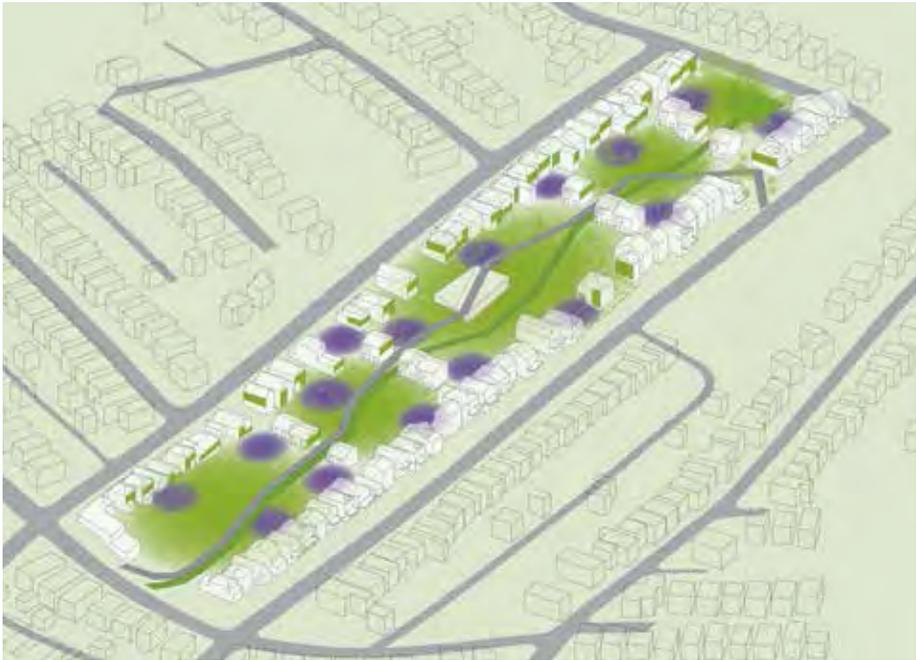


The long block between Glenarm Avenue and Starkamp Street is an ideal site for a new housing community because of its unique access to both the commercial center of Brookline and the neighborhood hillside park network. The project creates a direct pedestrian/bike connection and develops a new type of hybrid public/private space on the interior of the block.

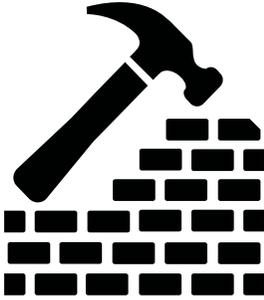
STRATEGIES



New Construction & Renovated Buildings



Courtyards, Clusters, and Path Connection



New Construction
includes buildings supporting new programs such as a daycare and a multipurpose common house.



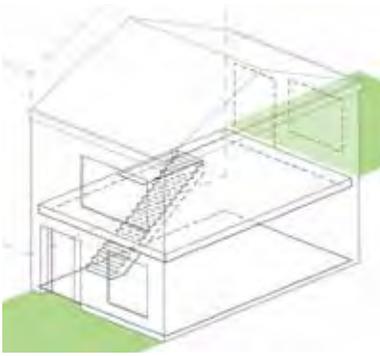
Renovated Buildings
includes existing houses divided into duplexes as well as buildings altered to support new programs (artist's live/work residence, gardener's residence, and play house).



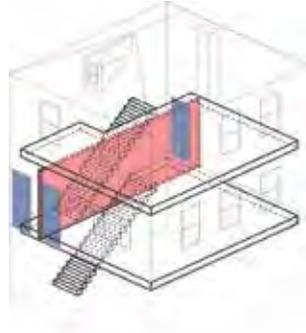
Corridor Connection
includes a bike/pedestrian path and bioswale running the length of the site as well as a landscape and playing strategy operating at a variety of scales from neighborhood urban space to more local community.

TACTICS

RESIDENTIAL

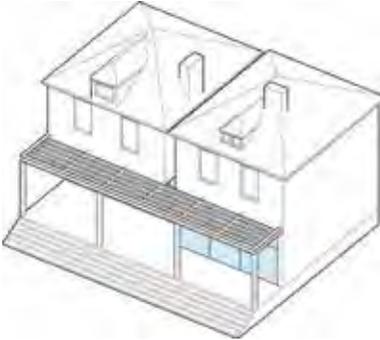


New Residential Construction



Modified Residential Duplexes

RENOVATIONS



Artist's Live/Work Studio

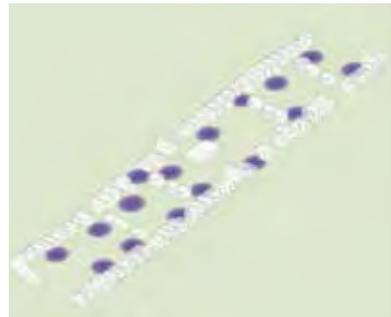


Gardener's Residence

LANDSCAPE



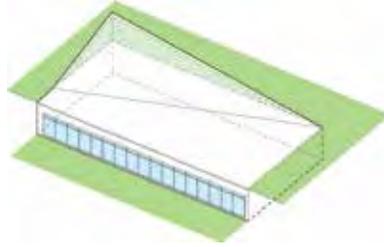
Courtyards



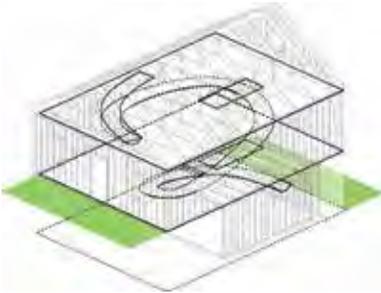
Terraced Clusters



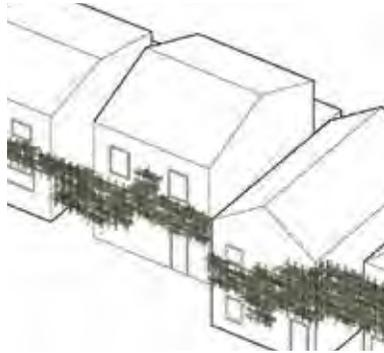
Daycare



Common House



Play House



Green Wall



Path and Bioswale



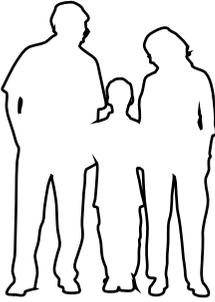
Planting

NEW PROGRAMS

RENOVATIONS

LANDSCAPE

USER EXPERIENCE



Young Family

This young family recently moved to Brookline from Pittsburgh's suburbs to be closer to employment opportunities as well as the public school system. The family's daughter attends daycare on the block and her parents enjoy the convenience of having this amenity so close to home. They drop her off on their way to work in the morning and often meet her at home at the end of the workday. During the day the children like to play on the unique playground structure built from a stripped-down house on the block, developing a network of friends in the neighborhood. After dinner, the whole family wanders down to the gardener's house to pick up some fresh produce and help with the gardening tasks.



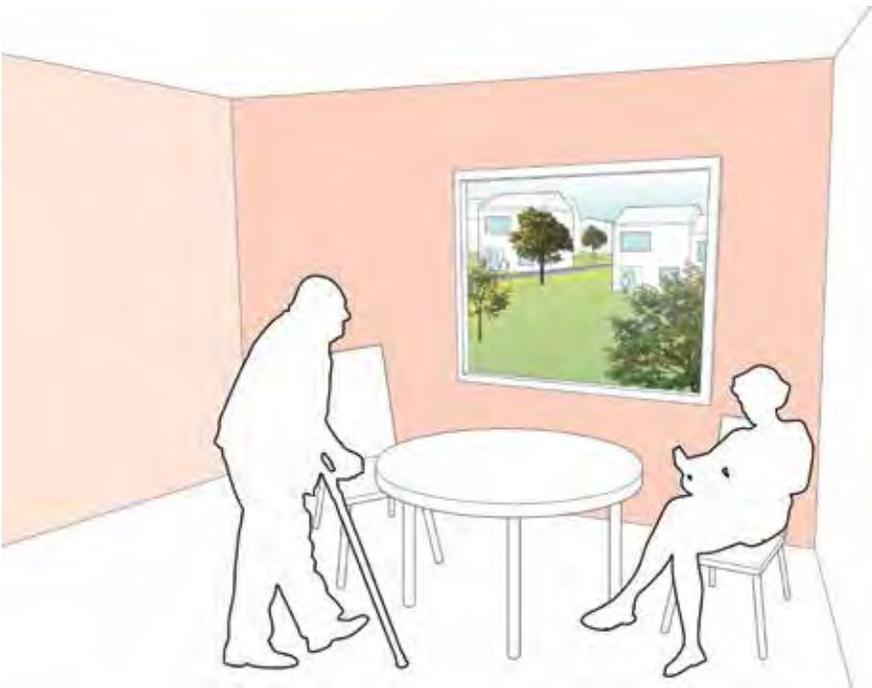


USER EXPERIENCE



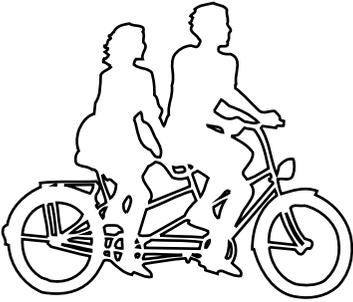
Empty Nesters

This couple have lived most of their lives in Brookline and love the neighborhood, but their children have long since moved out and began their own lives. This makes for difficult upkeep and an unnecessary amount of unused space. The couple moves to a new constructed residence in the block and now has increased social interaction due to the housing clusters, the common house, and the daycare. All age groups and household sizes can realize benefit from this diversity of age.





USER EXPERIENCE



Young Couple

A young couple from the East End heard about Brookline's new hillside park network and have decided to explore it for themselves. They ride their bikes out to Brookline (with the help of public transit) and follow signs from the commercial core to the hillside paths. Access to the hillsides is through the center of a distinctive new housing community, made up of existing houses as well as some new buildings.





SITE AXO



Artist's Live/Work Studio

Modified Residential Duplexes

Common House

New Residential Construction

Play House

Daycare



Green Wall

Courtyards

Gardener's Residence

Path and Bioswale

LIVE . WORKOUT





MEDHA SINGH
JESSICA WANG

LIVE . WORKOUT

PROJECT INTRODUCTION

Live Workout provides a new lifestyle for the residents of Beechview and the greater South Hills, creating an integrated apartment complex and fitness center that redefines the relationship between residents and their neighbors as well as the greater Beechview community. The proposal fills a currently unmet demand for health centers and sporting goods within Beechview and its adjacent neighborhoods. By integrating the gym and the apartments units, the idea of a healthy lifestyle permeates people's daily lives.

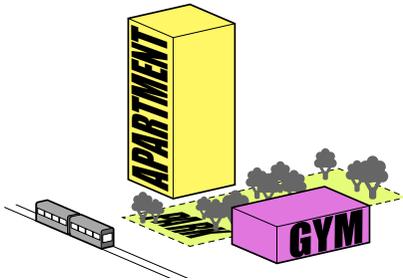
Located along a critical segment of Broadway Avenue, the project aims to reconnect the broken link along the commercial corridor through a denser housing option and community amenity. This central node fits into a larger network of fitness centers which tie into the framework's larger plan of landscape infrastructure. The central node forms a micro community on Broadway while fitting into the the greater neighborhood, offering a healthy environment to improve the quality of life in Beechview.



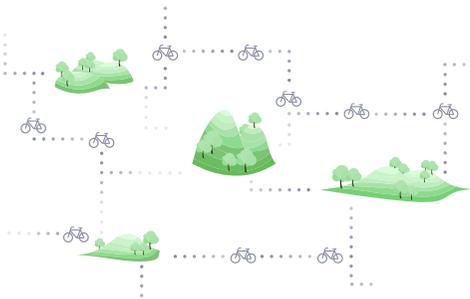
LOCATION: 2022 BROADWAY AVENUE



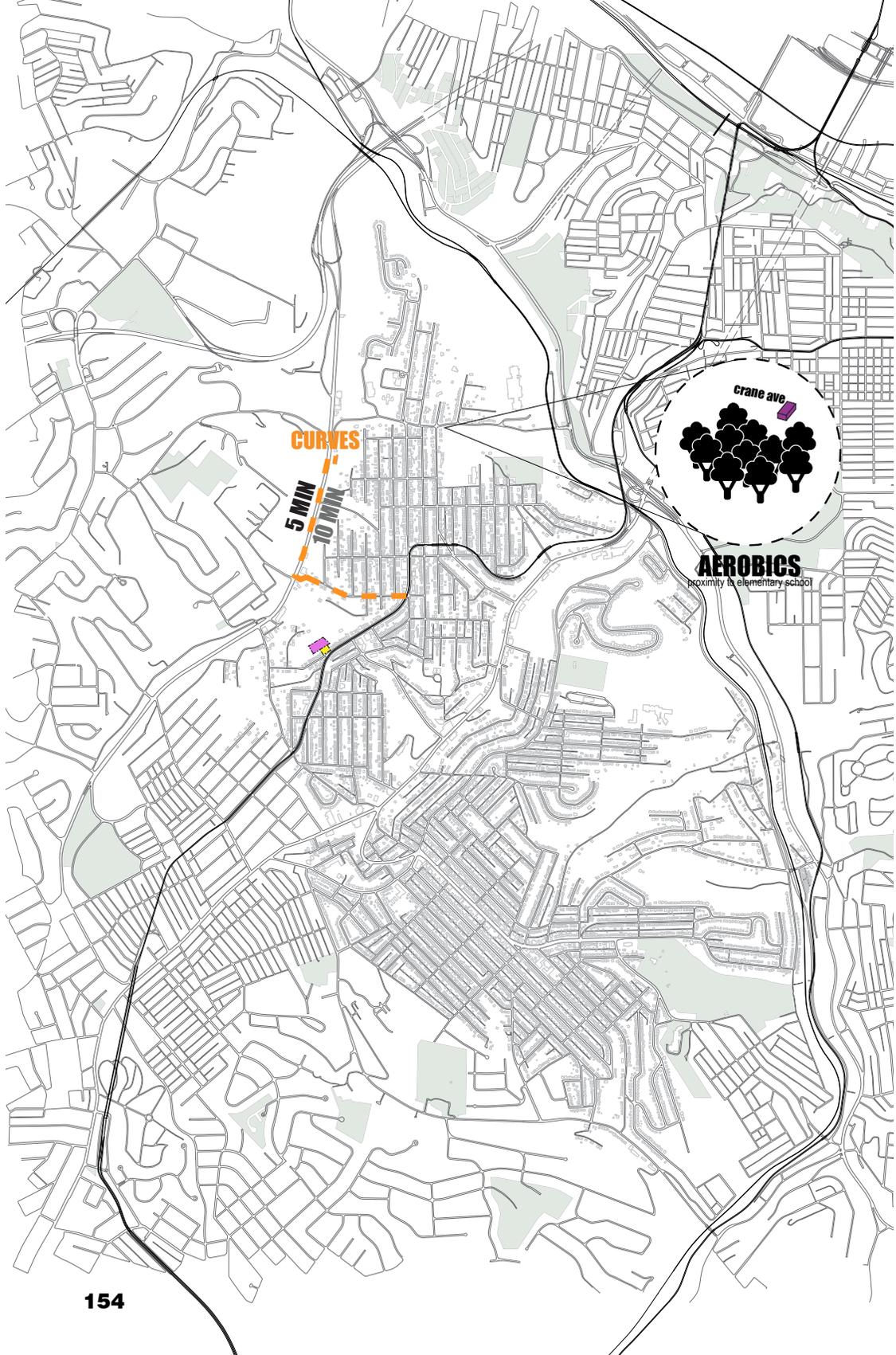
a. Site Map locating the central gym + apartment complex along Broadway Avenue, Beechview's main commercial corridor



b. Vignette Diagram illustrating the conceptual relationship between the apartments, the gym and the interstitial greenspace



c. Connections between the central gym + apartment complex and the satellite fitness nodes



CURVES

5 MIN

10 MIN



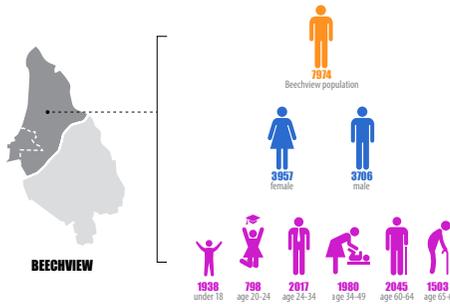
crane ave

AEROBICS
proximity to elementary school



a. Market Analysis diagram showing the demand for health centers and sporting goods and the current lack of supply

Data Source: URA Mainstreets Pittsburgh Market Profile



b. 2011 Beechview existing demographics

Data Source: 2011 Pittsburgh Census



c. 2011 Beechview existing demographics for Tract 1920, where the site is located

Data Source: 2011 Pittsburgh Census

A NEW HOUSING TYPOLOGY

Within Beechview, the current housing stock is predominantly single-family detached homes. This proposal introduces an apartment housing typology which aims to create efficient units with minimal square footages to increase the density of Beechview along Broadway Avenue.

There are three types of units within the apartment complex, each targeted for a specific demographic existing in Beechview. The studio apartments target recent college graduates looking for an inexpensive housing option. The 1-bedroom apartments are geared towards young up-and-coming professionals who can afford the slight raise in rental prices. The 2-bedrooms appeal to a broad spectrum of the population, but are especially convenient for empty nest families looking to downsize from their houses to a lower maintenance home.

The size of the apartment units range from 350 SF to 850 SF, with efficient layouts to optimize space. Each unit offers the resident an open living room/kitchen plan with large windows that prioritize views to the dynamic exterior spaces while extending the implied boundaries of their. The complex includes access to several private gyms as well as a plot on the rooftop community garden.

RECENT GRADUATE

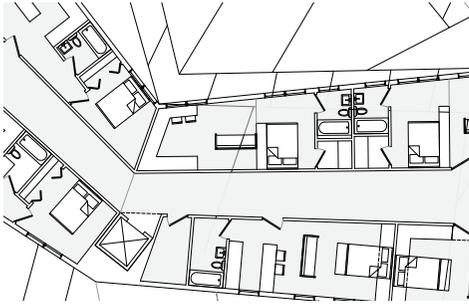
AGE: 20-24
SALARY: \$35,000
RENT CAP: \$875/mo

YOUNG UP+COMER

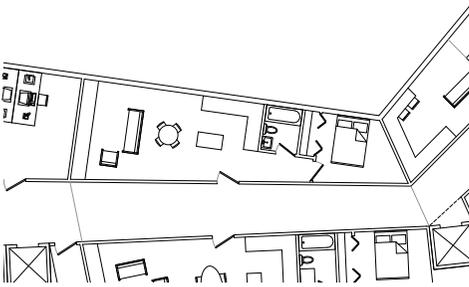
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SALARY: \$35,000
RENT CAP: \$875/mo

EMPTY NESTER

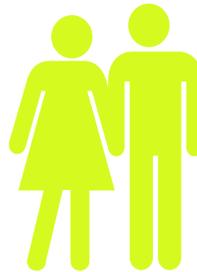
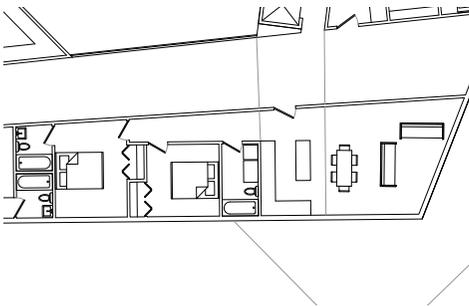
AGE: 20-24
SALARY: \$35,000
RENT CAP: \$875/mo



STUDIO

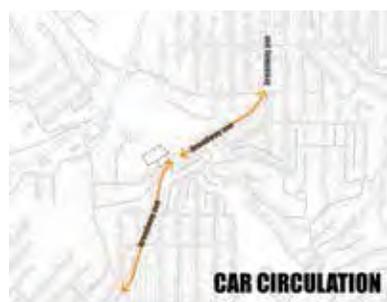


1 BEDROOM



2 BEDROOM

AROUND THE BEND



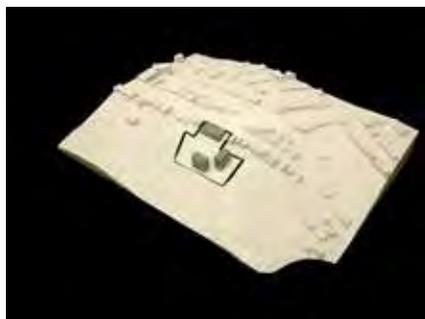


Broadway Avenue, the main commercial corridor within Beechview, provides an optimal location as the center of growth for the community. It is currently divided into two commercial strips that are loosely linked by institutional amenities such as a church and the library.

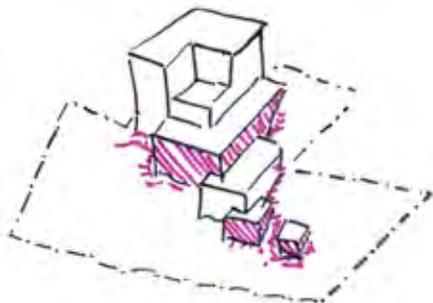
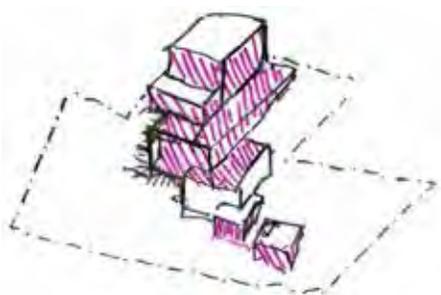
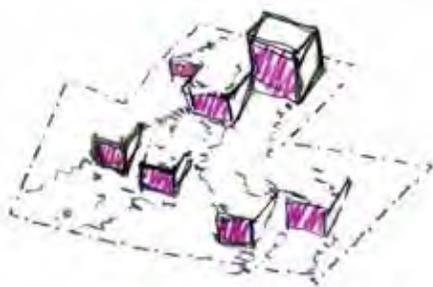
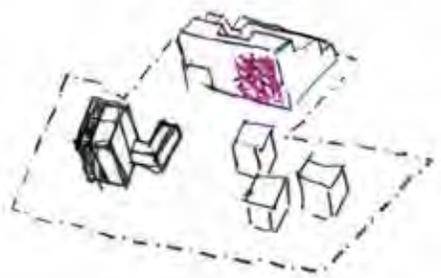
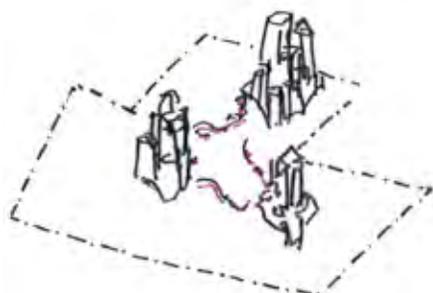
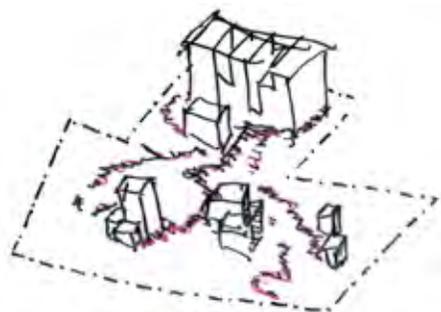
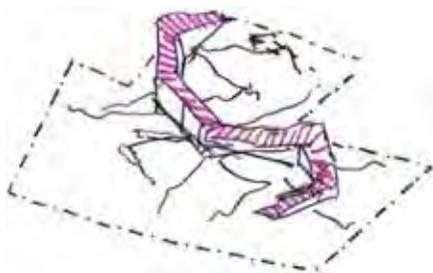
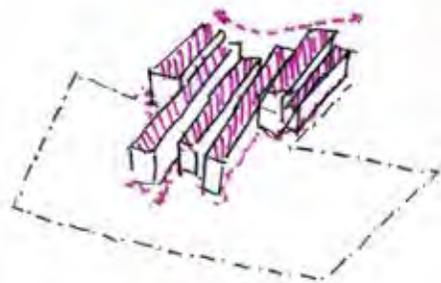


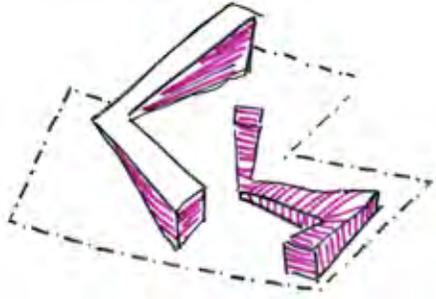
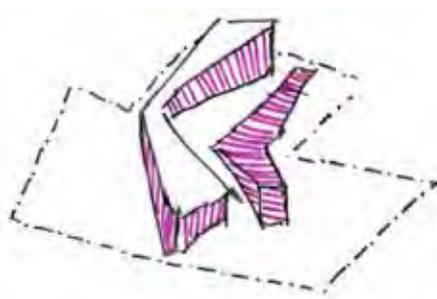
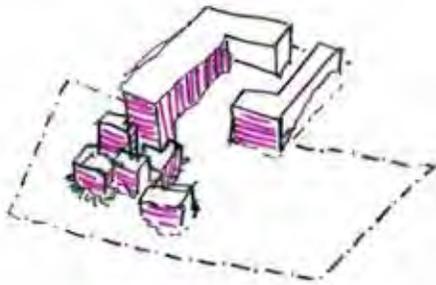
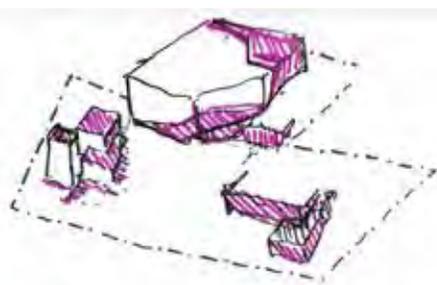
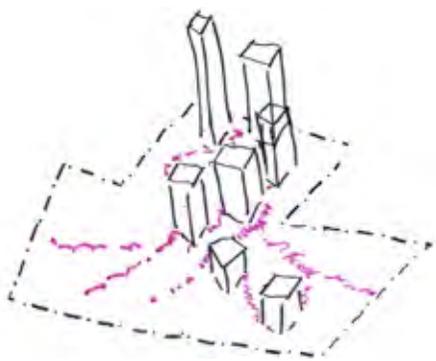
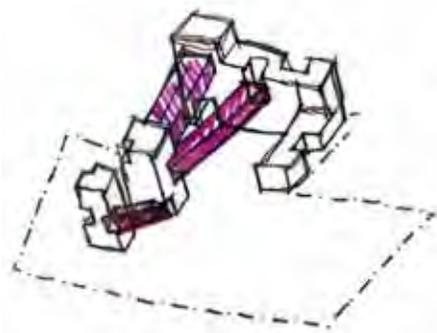
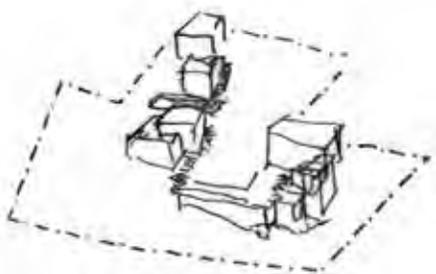
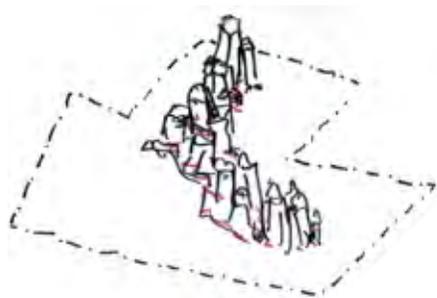
The central site of the project is located on an integral bend of the road, which provides an opportunity to emphasize the continuity of Broadway. The site offers views of the project while traveling both directions along the road, and is conveniently located within a 2.5 minute walking distance to two T-stops.





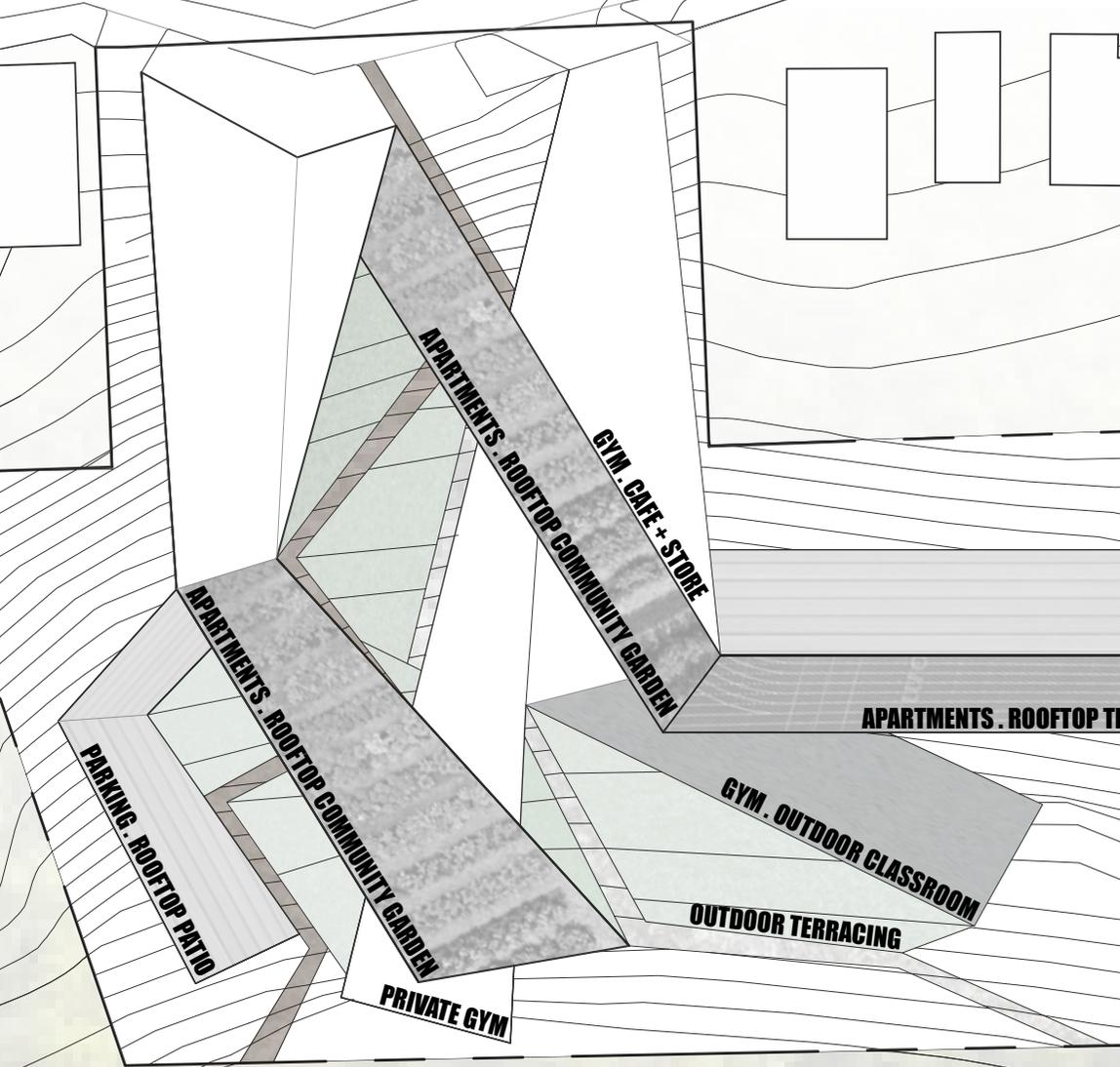




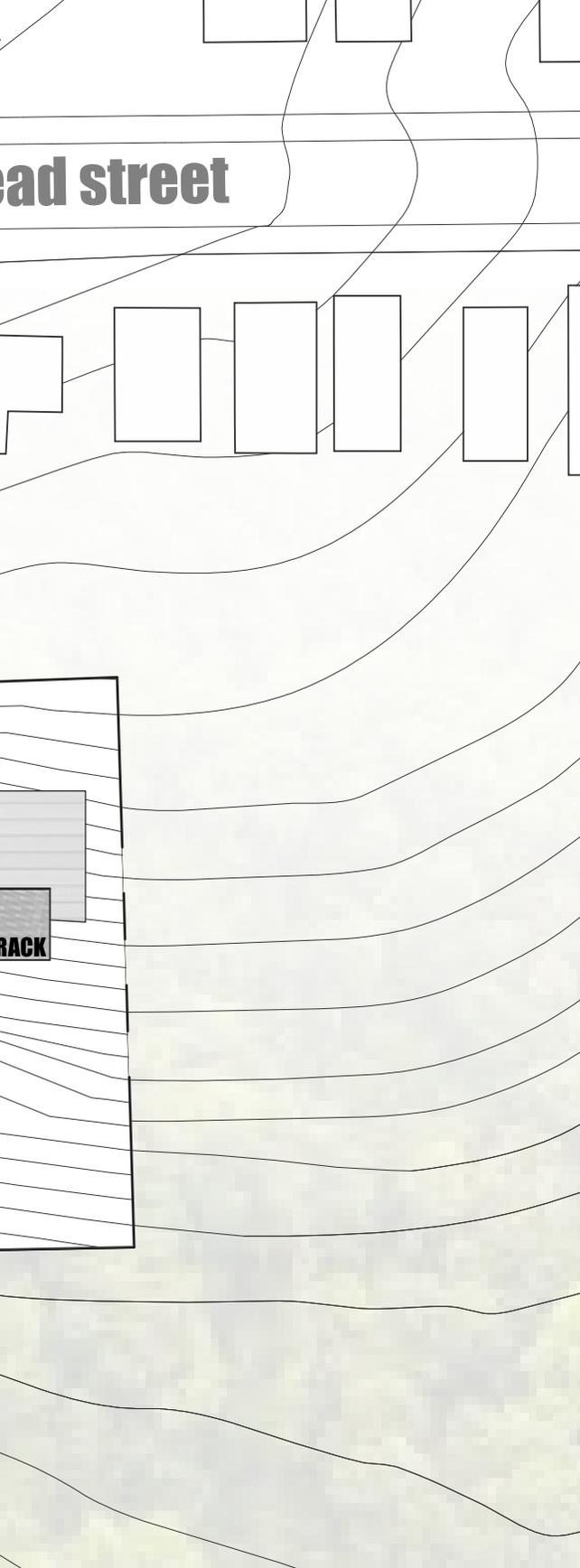


roadway ave

houste

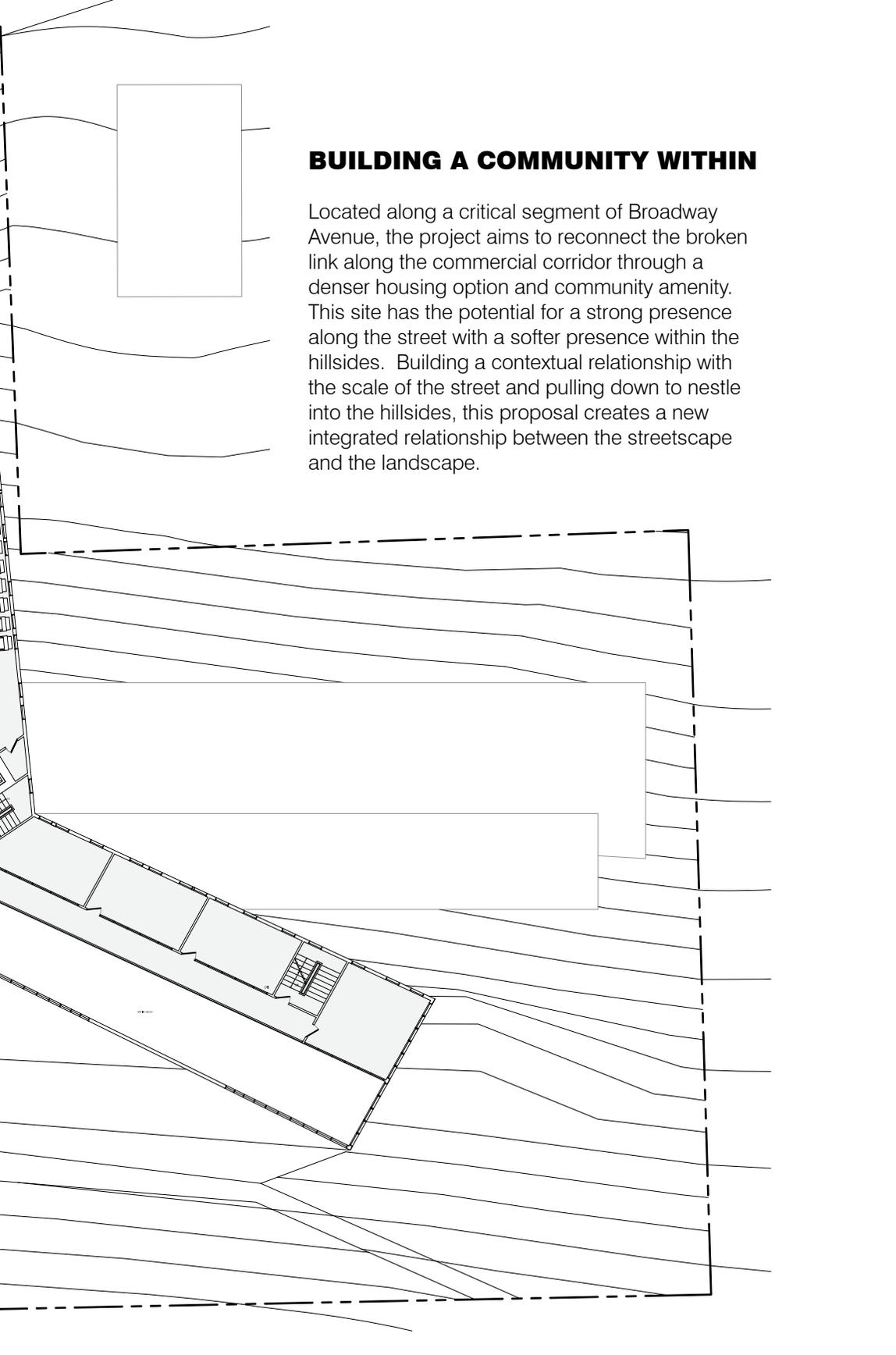


ad street



Site Plan + Roof Plan





BUILDING A COMMUNITY WITHIN

Located along a critical segment of Broadway Avenue, the project aims to reconnect the broken link along the commercial corridor through a denser housing option and community amenity. This site has the potential for a strong presence along the street with a softer presence within the hillsides. Building a contextual relationship with the scale of the street and pulling down to nestle into the hillsides, this proposal creates a new integrated relationship between the streetscape and the landscape.





a. Front Entrance



**b. Gym + Apartment
Intersection**



c. Hillside View

FALLOWFIELD SQUARE





**SARAH HARKINS
THOMAS GRONER**

FALLOWFIELD SQUARE

PROJECT INTRODUCTION

This project is a response to the conditions that currently characterize Broadway Avenue and the commercial center of Beechview. Issues such as vacancy, poor quality housing stock, and underutilization of the light rail have blighted the core of this community. Our project is rooted in a vision of a redeveloped town center that provides greater economic and housing opportunities, bolstered by the rapid transit link to the heart of downtown Pittsburgh.

Our proposal celebrates the T as the most significant asset in Beechview. The T is an infrastructural resource that is unique to the South Hills, provides a fast and easy connection to the city, and has the potential to bring life and activity back to Beechview's commercial corridor. Various other transit oriented developments around the country have showcased the success that these types of projects can achieve in attracting new residents, businesses, and vibrancy. In this way, Beechview has the potential to become Pittsburgh's next thriving, transit-oriented neighborhood that enjoys benefits of both the city and suburbia.

At the core of this project is a grand square designed to serve as the hub of a newly invigorated community. Large open spaces provide resources for local events and promote the role of the pedestrian in day-to-day life. A relocated transit stop helps to shift the pedestrian flow into the square, while the T periodically cuts through the plaza at grade, acting as a dynamic presence and further mingling different forms of transportation. Seven new buildings provide a total of XX residential units and XX square feet of retail and office space, all of which is connected by the square that serves as Beechview's new public living room.

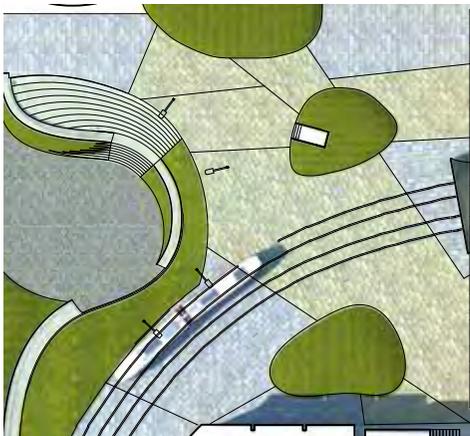


LOCATION: BETWEEN HAMPSHIRE T STOP AND FALLOWFIELD T



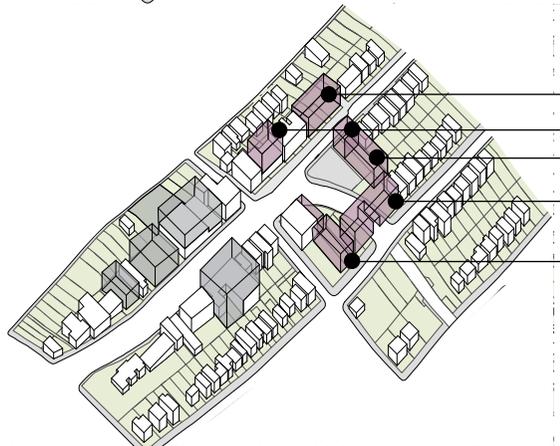
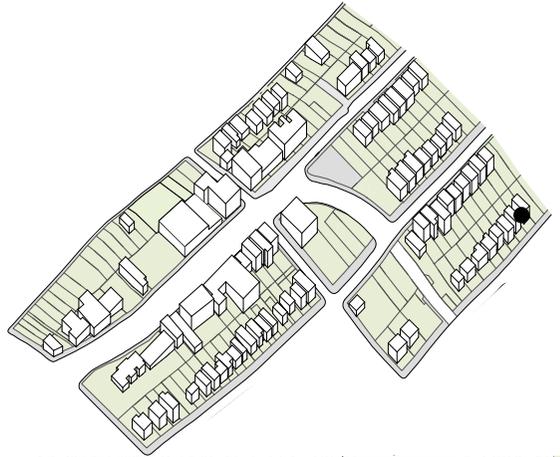
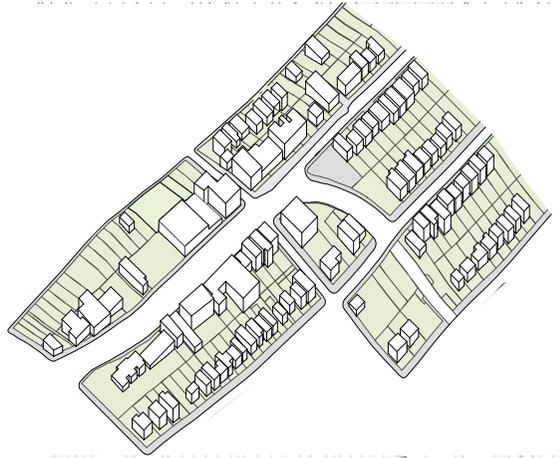
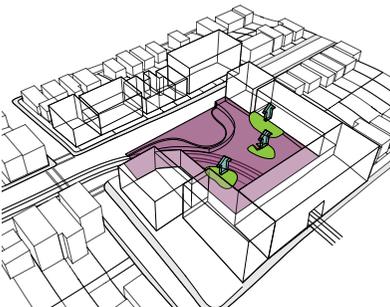
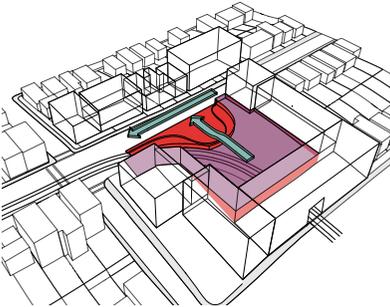
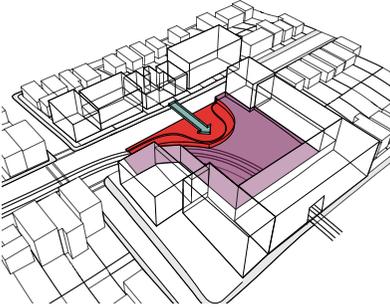
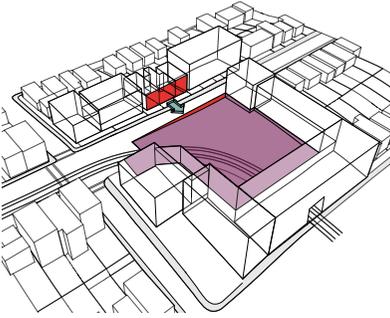
a. Site Map The site of our project is crucial to the role of the intervention within the current community. Here, Broadway Avenue terminates as the T leaves the ground plane and crosses a bridge over a large ravine. Broadway and Beechview Avenue form a triangular parking lot at this same spot.

a.



b. Proposed Rendered Site Plan The open space created by these conditions has the potential to act as a town center as well as a terminus for the commercial corridor. It becomes a logical hub and entry point for Beechview.

b.



a

b



a. Civic Plaza Design Series

The topography of the site required considerable re-grading in order to engage all structures around the plaza. These level changes have become an asset of the project, directing circulation and providing a greater variety of adaptable spaces.



Landscaped berms break the uniform surface of the plaza in response to pedestrian circulation. These also act as opportunities for areas of greenery and landscaping in the paved environment.



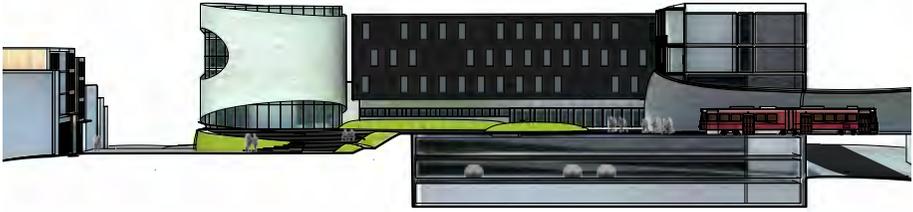
b. Residential Development Series

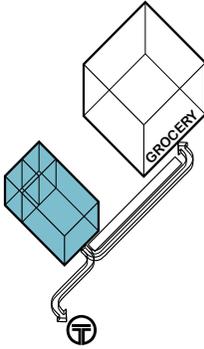
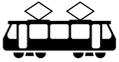
A central idea of the project is to develop higher density housing that is more appropriate for a transit oriented business corridor. To determine the sites for new structures a thorough analysis was carried out in order to evaluate the structural and architectural significance of the preexisting buildings. Our project recommends the demolition of several buildings in order to move forward with new structures that would provide a variety of housing options at higher densities.



c. New Construction Series

In total, our project consists of seven new buildings offering Beechview 60 new housing units and 33,000 square feet of retail and office space. This would provide the new residents as well as living and working space that the neighborhood needs to regain vibrancy and thrive as an active commuter community.

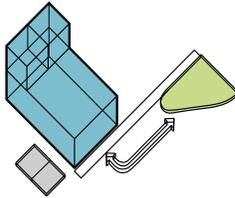




Single Mother + Child

Annual Income: \$35,000
Works in Downtown Pgh
Relies on public transit

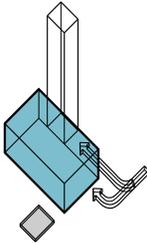
700 sqft



Young Family

Annual Income: \$90,000
Works in home office
Owns two cars

1300 sqft



Retired Couple

Annual Income: \$60,000
Works part-time locally
Prefer public transit

700 sqft



Cannon Plaza and Apartment





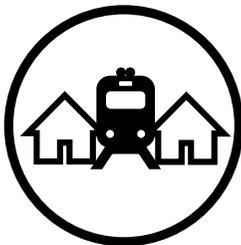
Joe Chang
John Soh

CANNON PLAZA

PROJECT INTRODUCTION

While the northern end of Brookline Blvd is seeing increased activity and new businesses, the southern end does not show such signs of revival. The southern end of Brookline Blvd is marked by the Brookline Cannon Park, which also serves as a veterans memorial. There are commercial stores surrounding the park but the occupancy rates of these stores are extremely low. Coupled with this, the high traffic volume and the speed, the Cannon Park is isolated as an island from the little pedestrian traffic. Our new plaza and apartment plan hopes to remedy this situation.

The project plans to create a new plaza and building to increase activity on the southern end of Brookline Blvd. Based from demographics statistics, we can see that there will be an increase in the senior population around Brookline. The current senior home around Brookline but does not seem to meet the demands of the new, more active group of retiring seniors. Therefore, we plan to create a three story senior apartments with community center and retail on 11 parcels to the south of the plaza.



LOCATION Brookline Blvd + Chelton Ave



a. The current Brookline Park suffers from isolation from pedestrian traffic due to traffic. With the framework masterplan for Brookline Blvd, our project plans to getting rid of a portion of Chelton Ave and make it accessible to pedestrian and increasing the plaza area.

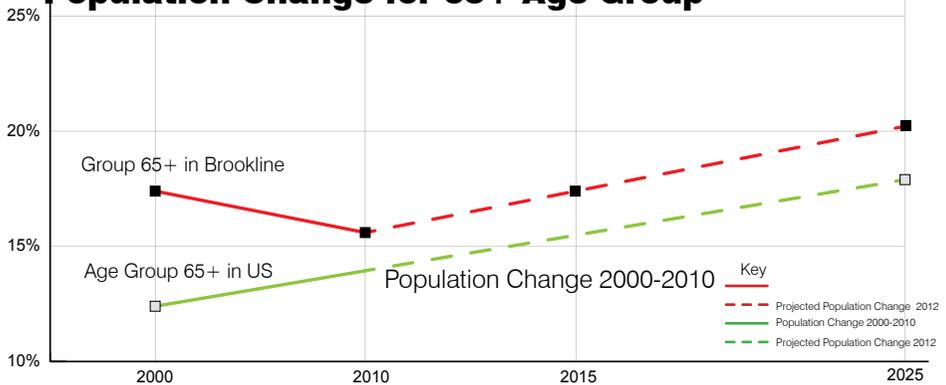


b. Currently the cars zoom past the park through Chelton Ave, creating a dangerous crossing situation for anyone wishing to go to the park.



c. While the closure of portion of Chelton Ave. will be a nuisance to some, it will allow the plaza to be a bigger and more pedestrian friendly.

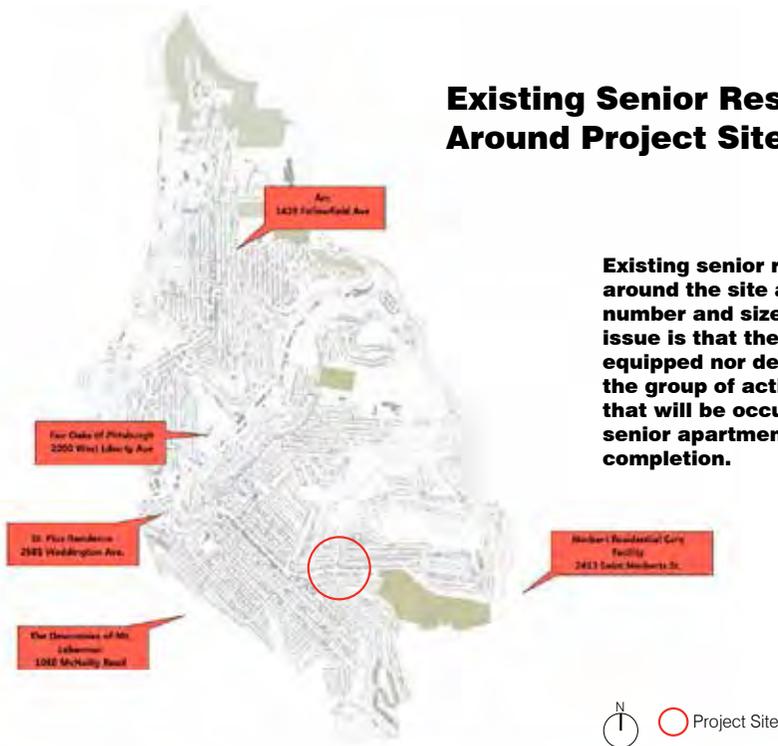
Population Change for 65+ Age Group

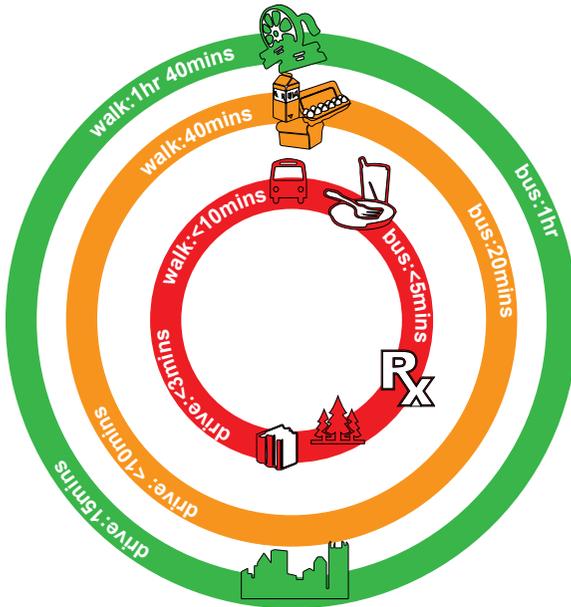


According to Urban Renewal Association's Demographics data based from census data, Brookline will see an annual increase of 2.31% for the age group above 65 years old. US Census data shows similar increase for the same age group in United States.

Existing Senior Residences Around Project Site

Existing senior residences around the site are limited in number and size. The bigger issue is that they are not equipped nor designed for the group of active seniors that will be occupying this senior apartments upon completion.





Travel Time to Nearest Amenities and Sites

Project site offers great accessibility to many amenities. Within a 10 minute walking distance there are restaurants, bars, library, druge store, convenience store, and a major public transportation stop. There is a grocery store within 10 minutes of driving distance and Downtown Pittsburgh is only 15 minutes away on car. As the framework group’s public transportation plan is put into effect, the travel time via bus will decrease significantly.



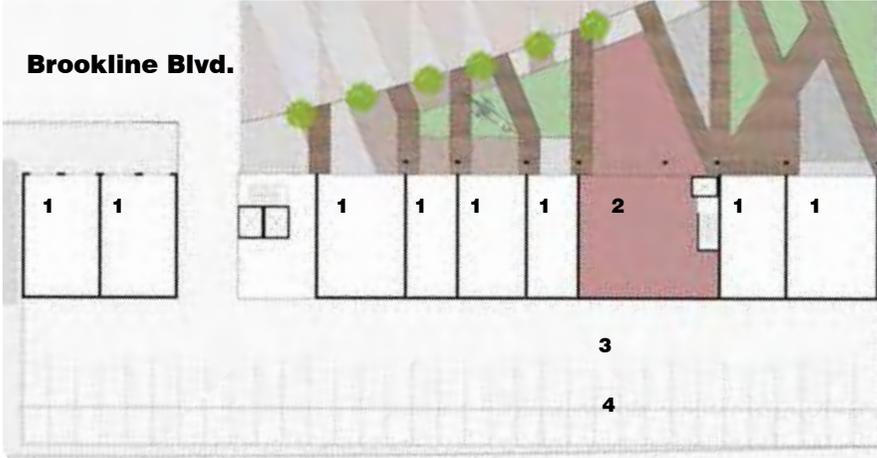
Panorama of Existing Condition



Site Plan

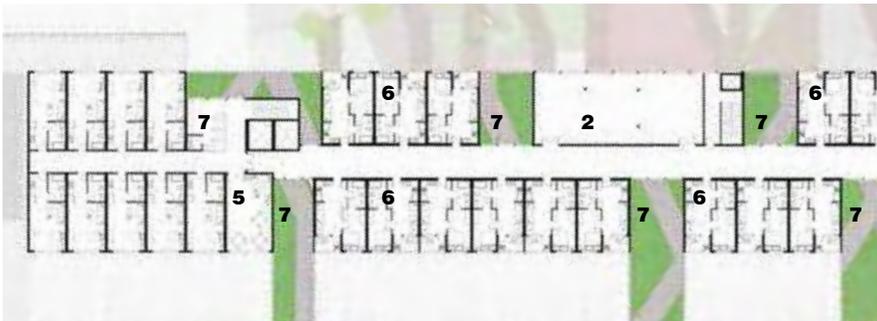
Apartments will have individual kitchens, bedrooms and a balcony. There will also be a nursing home at one end of the building for those who need more extensive care. Roof gardens will be available for residents. The first floor will house retail stores and a community space.

Cannon plaza in front of the building will connect visually through shared architectural elements and physically through the community center. The Plaza will provide an area where the residents of the apartments and neighbors can come to sit and picnic. A new playground will provide a place for local children to play. The Cannon that has become an icon of Brookline Boulevard will be moved to a more visible and prominent position on an elevated pedestal. The paving changes on Brookline will announce the entrance to drivers and will slow traffic to a more non-threatening speed.



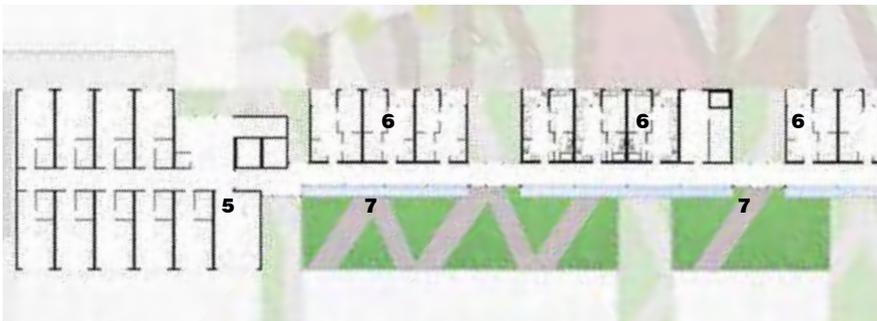
- 1. Retail
- 2. Community
- 3. Retail Parking
- 4. Resident Parking

1st Floor Plan



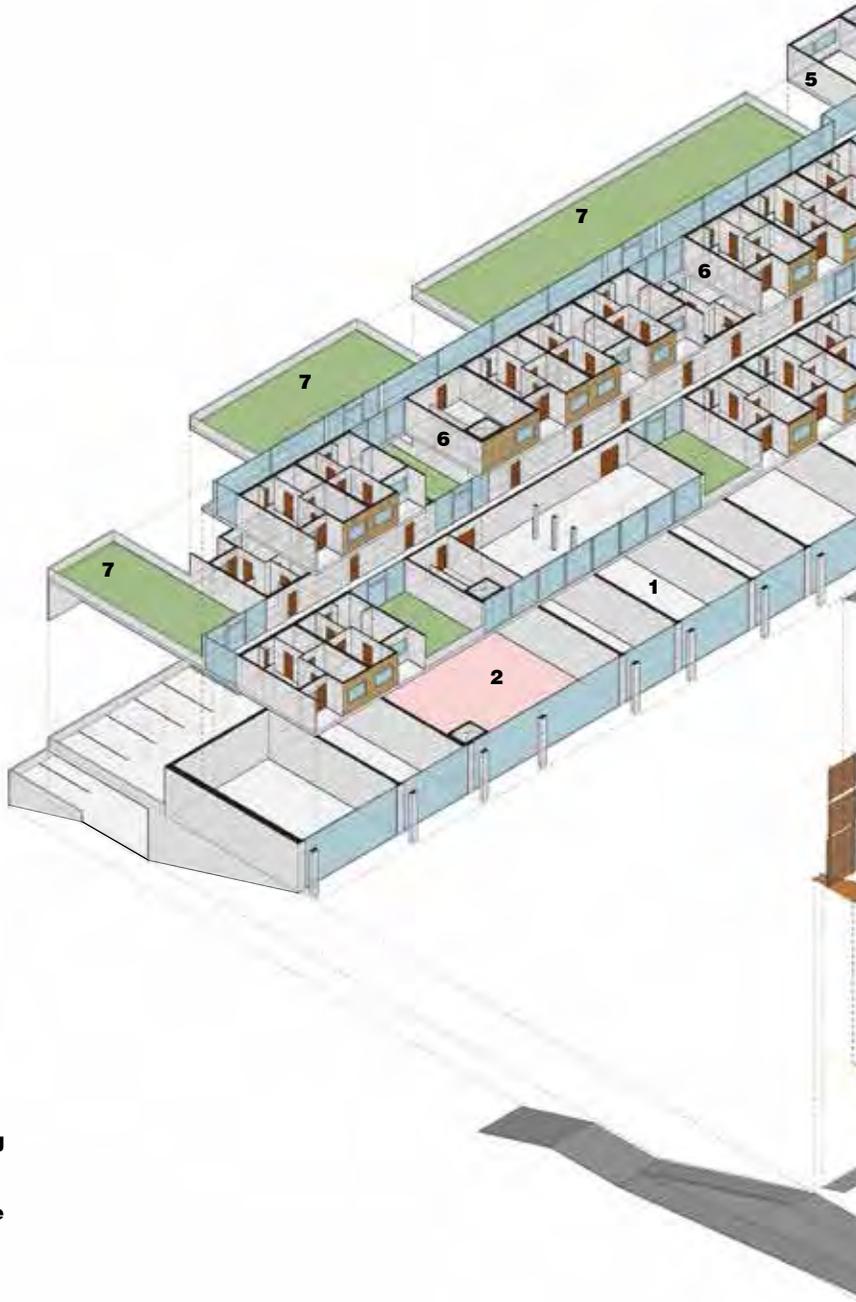
- 5. Nursing Home
- 6. Apt Suite
- 7. Roof Garden

2nd Floor Plan



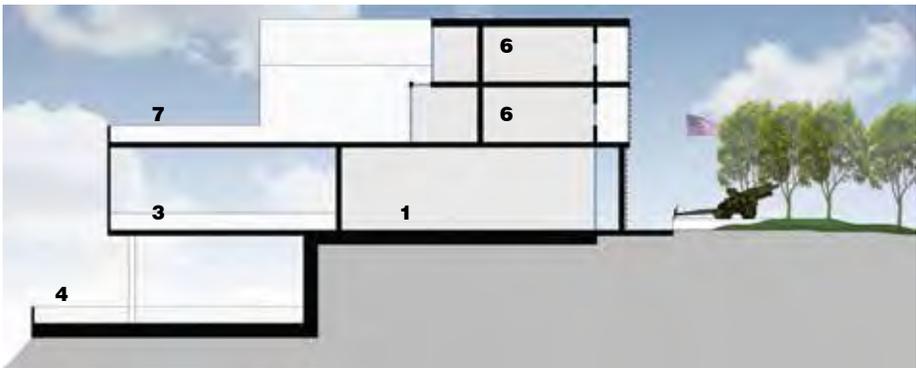
3rd Floor Plan

PLAZA & APARTMENT AXON

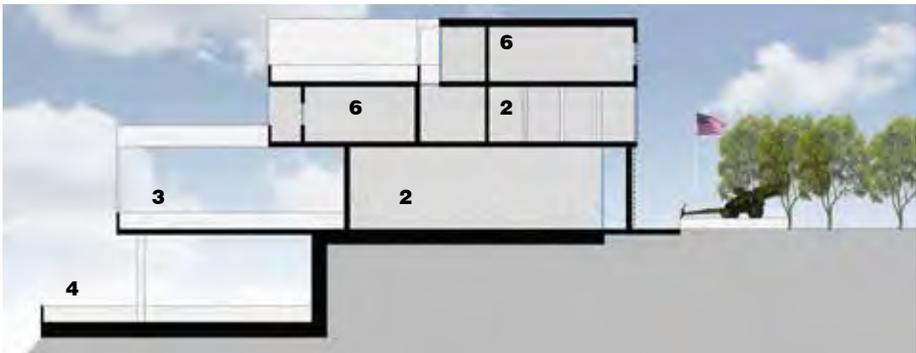


- 1. Retail
- 2. Community
- 3. Retail Parking
- 4. Resident Parking
- 5. Nursing Home
- 6. Apt Suite
- 7. Roof Garden





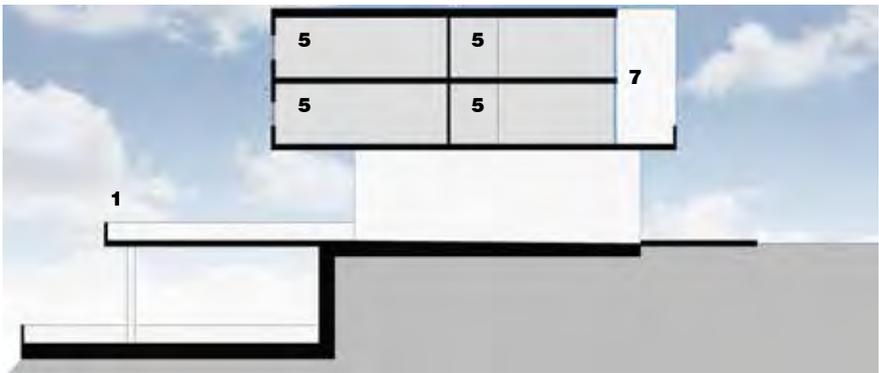
Section Through Apartment



Section Through Community Space



Section Through Plaza



Section Through Parkin Lot Entry

Cannon Plaza and Apartments hopes to create a destination spot in Brookline Blvd. It's location also would make it a strong end point to commercial Brookline Blvd, of which there is none to advertise the end of the commercial block. The program would also allow the plaza to become a playground to diverse group of people. Finally, coupled with the planned public transport plan and Brookline Blvd road adjustment plan of the framework group, the Cannon Plaza and Apartment further aid the development of not only Brookline Blvd, but Brookline and Beechview neighborhoods.

- 1. Retail**
- 2. Community**
- 3. Retail Parking**
- 4. Resident Parking**
- 5. Nursing Home**
- 6. Apt Suite**
- 7. Roof Garden**



Perspective from Starkamp Ave.



Perspective from Brookline Blvd.



Perspective From Chelton Ave.



Year 0

Current Condition
Begin building site
parcel purchase



Year 5

Complete
Repaving of Brookline Blvd.**Complete**
close down of Chelton Ave.
Continue
parcel purchase



Year 10

Complete
Cannon Plaza
construction
Begin
landscaping of plaza
Complete
parcel purchases
Begin
Canon Apartment site
preperation



Year 15

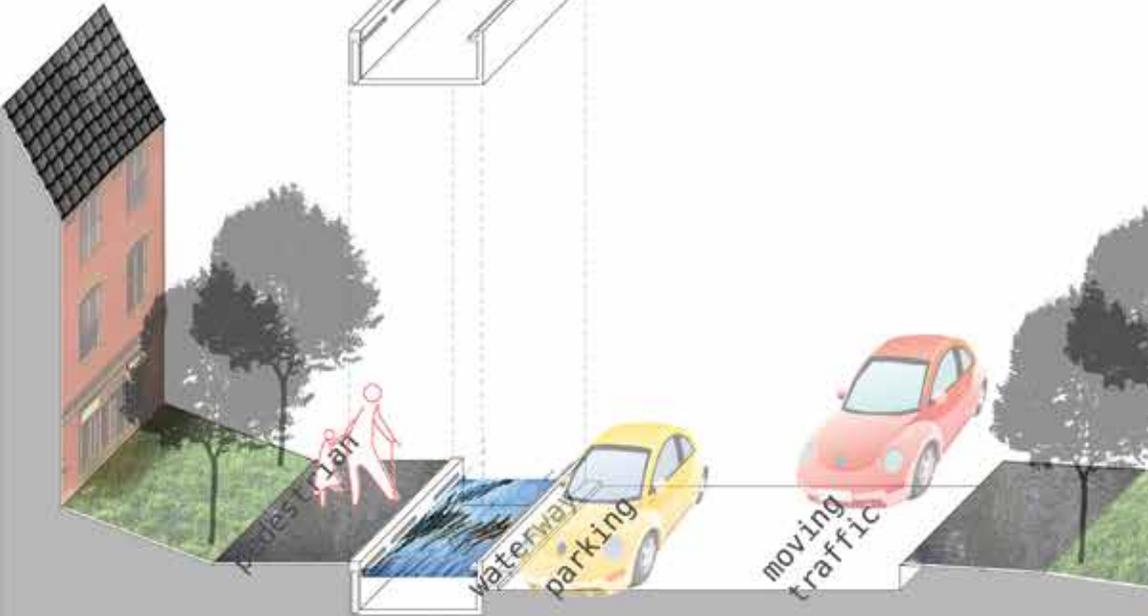
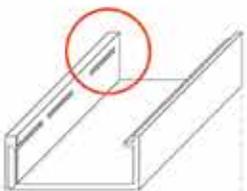
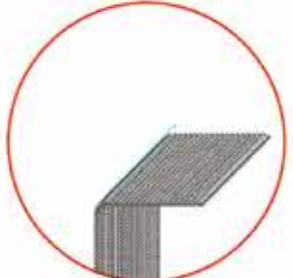
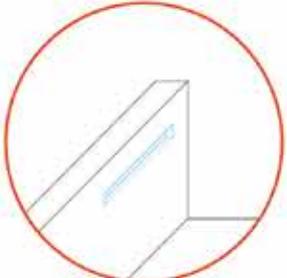
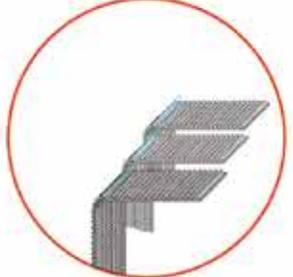
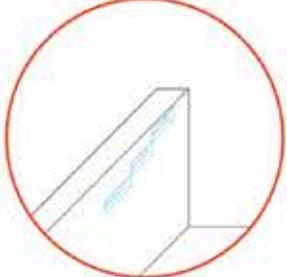
Construction
Continued
Complete
plaza landscaping

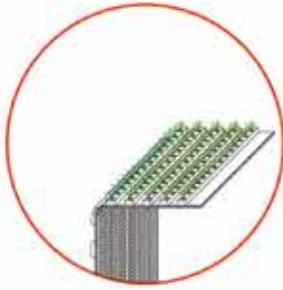
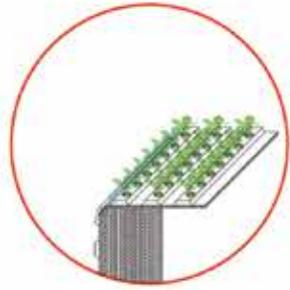
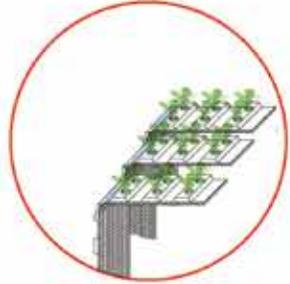


Year 20

Complete
construction
Begin
retail

WATERSCAPE





CHRISTINA CHEN
ASWIN WIDJAYA

WATERSCAPE

PROJECT INTRODUCTION

The goal of Waterscape is to increase pedestrian accessibility and a sense of community within the residential district of Beechview through a renewed relationship between streetscape and landscape. Analysis of the site shows that Beechview's residents predominantly use cars, with very few walking or biking. As a result there is little interaction between neighbors, and the neighborhood lacks the feeling of a community.

Waterscape will create a network of water channels that physically, visually, and interactively connect the streets of Beechview. Although the topography of the neighborhood makes walking energetic and at times difficult, this proposal utilizes the slopes of the hills as an asset, creating a pathway through them for water, that people may also follow and enjoy. Channels are systematically organized, starting with small water collection systems on vacant lots, allowing water to run along streets next to sidewalks and culminating at pools located in larger parks. At the same time as creating a community asset, the system collects rainwater to help drainage and prevent runoff, promotes the growth of green spaces, and provides a communal water supply for homeowners' front lawns.

In addition to the three systems described above, Waterscape embraces three programmatic elements - recreation, education, and entertainment. Each system, whether on a vacant lot, a channel or a larger pool, includes these programmatic elements, working together to create a more engaging environment and ultimately establish a stronger community.

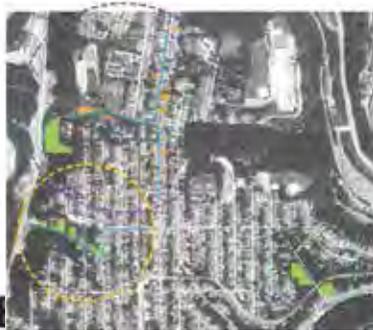


LOCATION BEECHVIEW!



a.

a. Proposed site is based on water flow, vacancy and circulation analysis. The steep nature of Beechview is ideal for the project. Furthermore, the residential-focused area is much more prevalence in terms of community interaction.



b.

b. Three different systems are used throughout the neighborhood. The systems include, aquatic pockets (collect water), water channels (distribute water), and a sizable reservoir at the large parks (catch and use water appropriately).

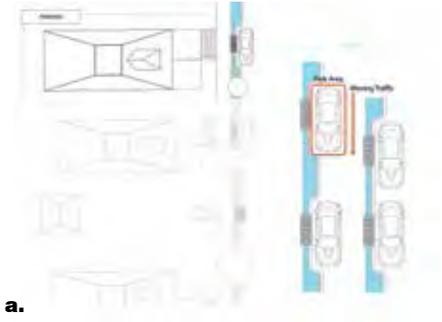


c.

c. Three different programs are proposed within the neighborhood. The programs include, a recreational center (exercise), an educational center (learn), and an entertainment center (perform). The three nodes create different programmatic hubs that create varying activities for the residential area.

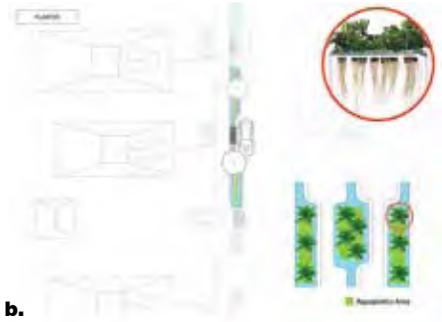
DIAGRAMS

a. Space for street parking must be compensated to reduce traffic flow in residential area and to allow space for the water channels. Undulating spaces of channel can be used to specify designated parking.



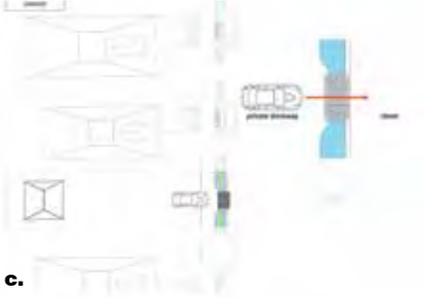
a.

b. Since Brookline is a greener neighborhood than Beechview, the channel also hopes to enhance the green aspect by creating planters. Hydroponic plants can be implemented to create greener spaces within the neighborhood.

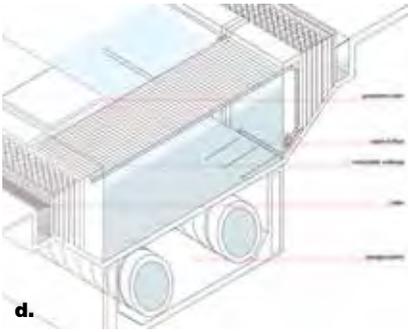


b.

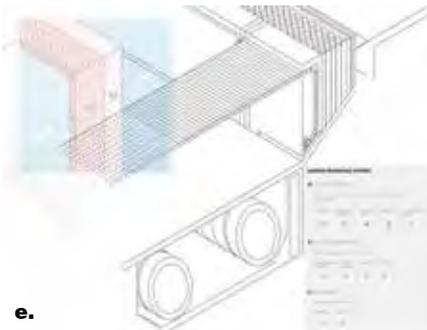
c. Existing private driveway/garage must be taken into consideration in terms of crossing the waterway. All the panels are retractable creating dynamic and both car and pedestrian-friendly spaces.



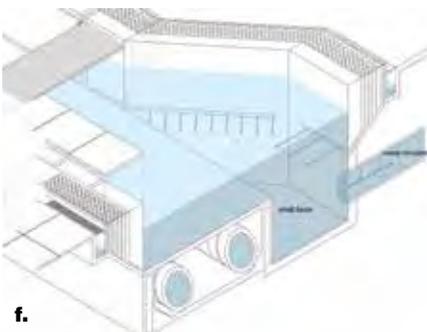
c.



d. Detail of waterway includes retractable walkway/driveway. Waterway is located above sewage line to allow for blackwater recovery system. As a result, water would continue flowing during the winter period.

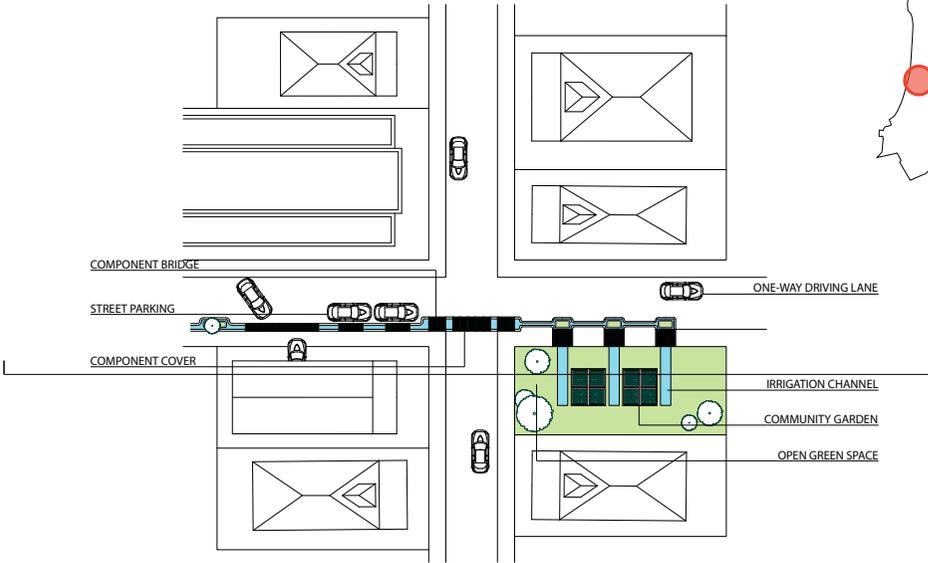


e. Water filtration system on the side wall of the channels provide clean water for human interaction. The system was sourced from the '+' pool project, New York.

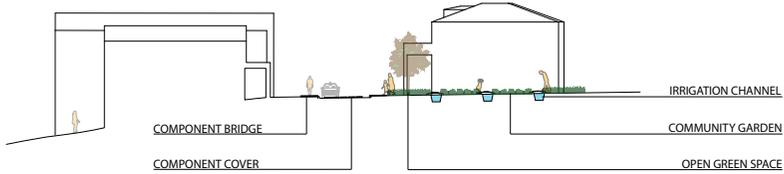


f. At prominent intersections of the neighborhood, a small basin is created to collect drained water. The collected water is pumped back to the top, as to create an infinite water flow during dry periods.

EDUCATION CENTER - AQUATIC POCKETS



1/16"=1'

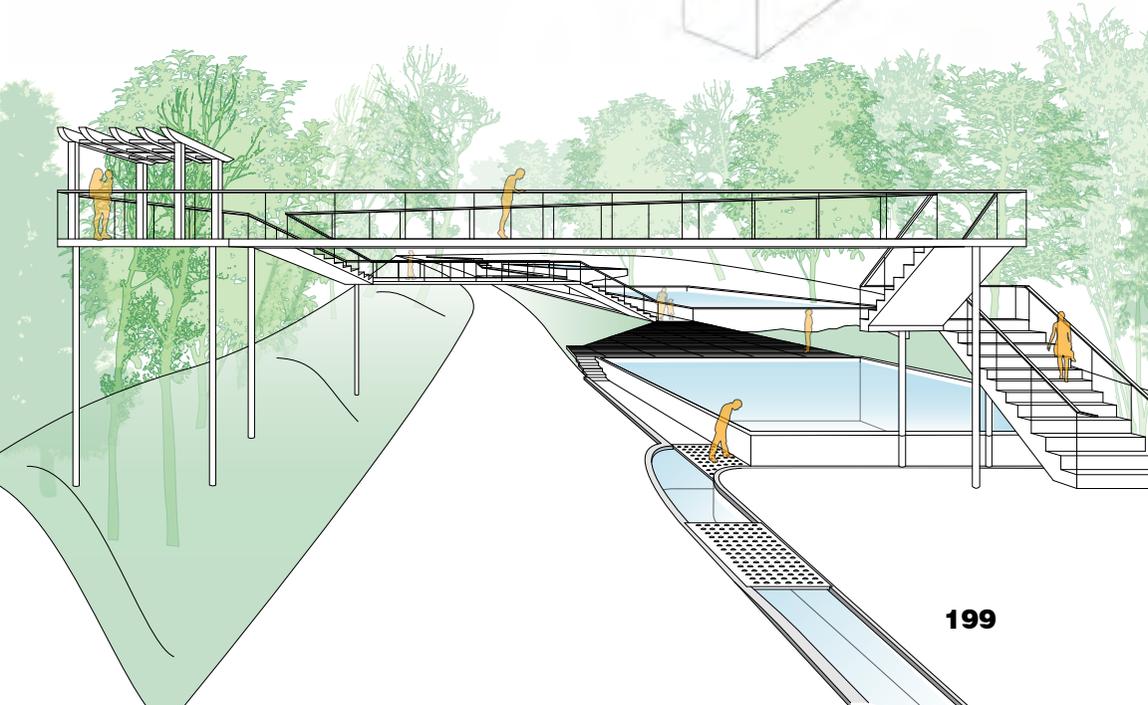


1/16"=1'

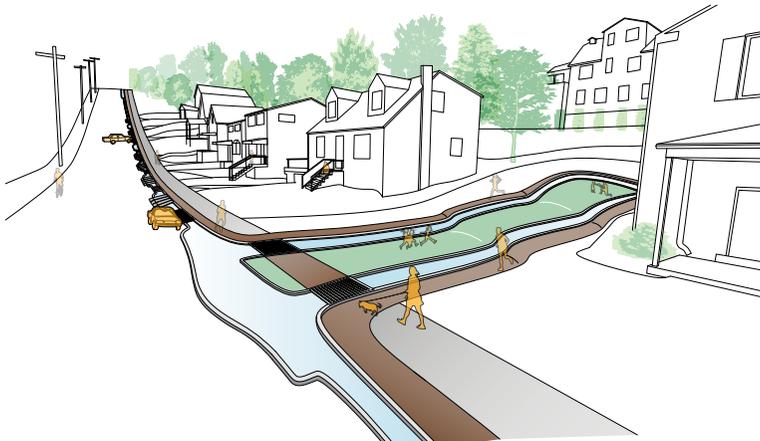
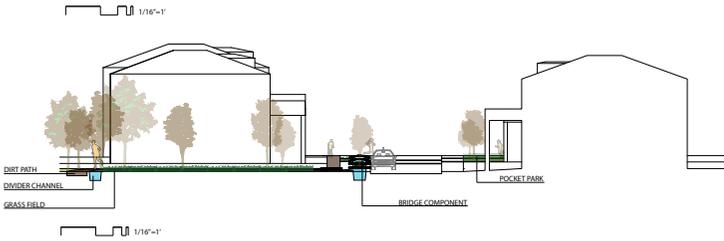
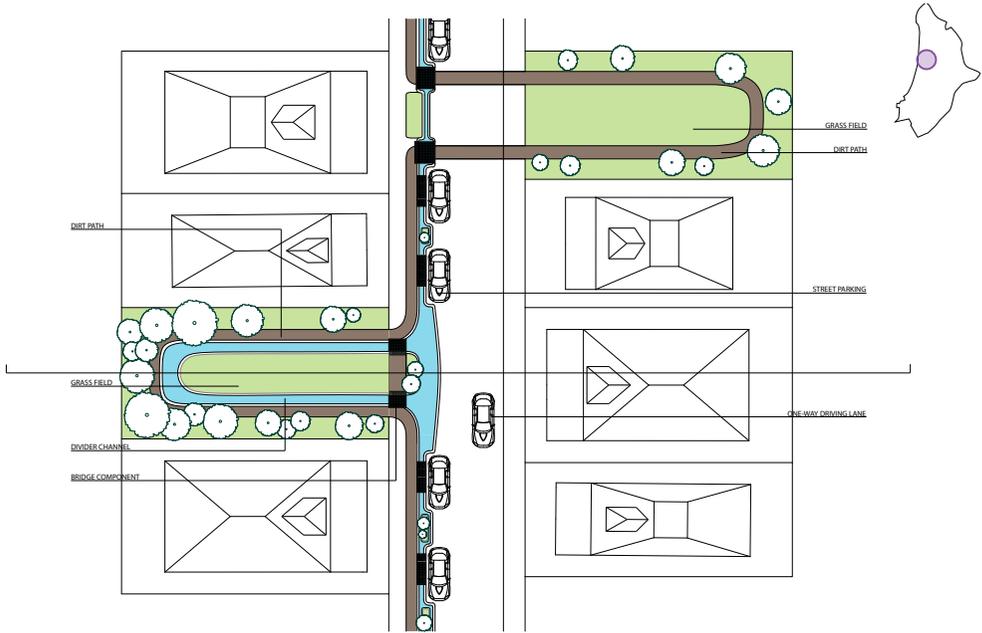


EDUCATION CENTER - RESERVOIR

- A PARK
- B RESERVOIR: PARTICULATE
- C RESERVOIR: ADIABATIC
- D RESERVOIR: UV AND ANTI-BACTERIAL
- E RESERVOIR: CHLORINATION AND CARBONATION
- F WOODEN PLATFORM

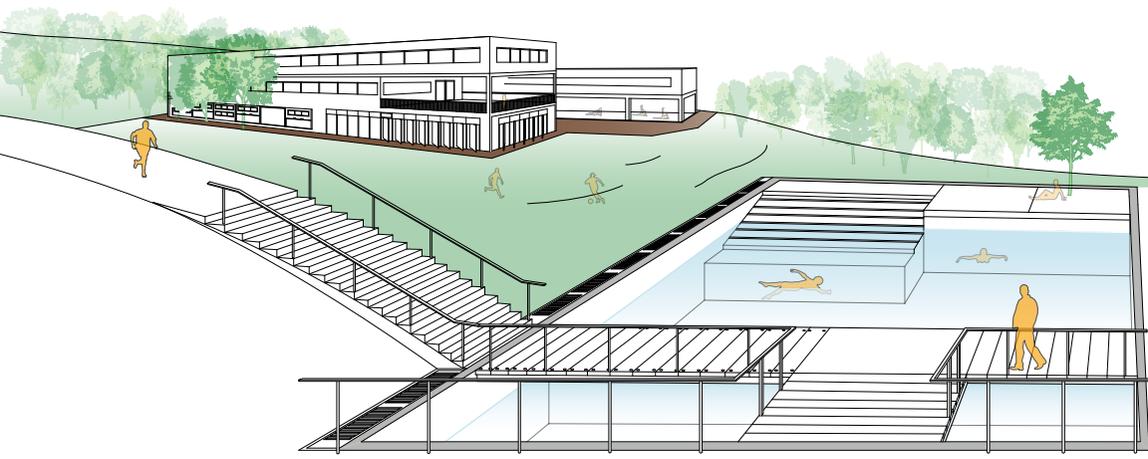
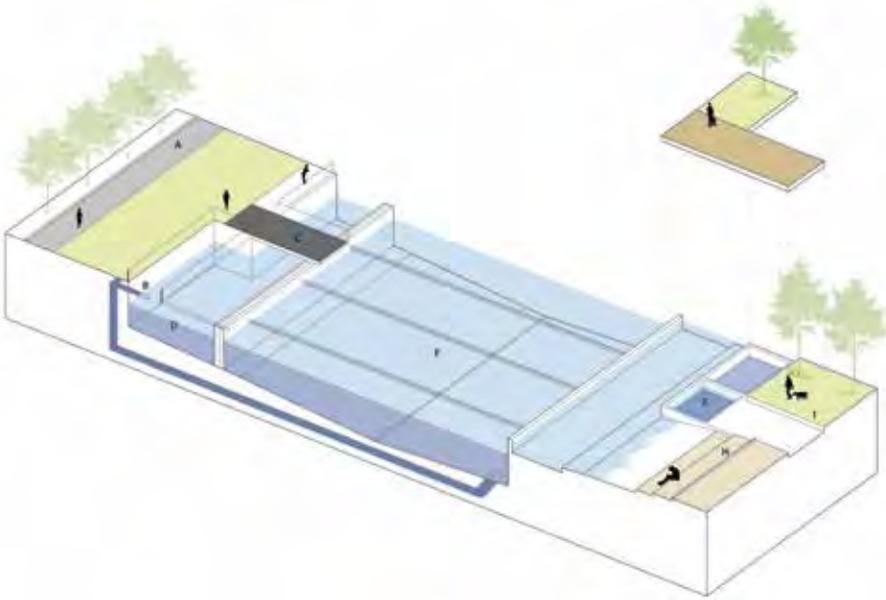


RECREATION CENTER - AQUATIC POCKETS



RECREATION CENTER - RESERVOIR

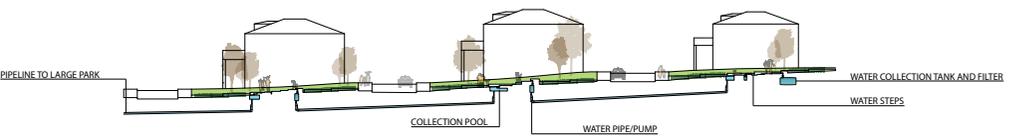
- A PAVEMENT
- B WATER FLOW
- C RUBBER MATTING
- D RESERVOIR
- E FILTER
- F COMMUNITY POOL
- G RESERVOIR
- H SPECTATOR GATHERING/SEATING
- I PARK



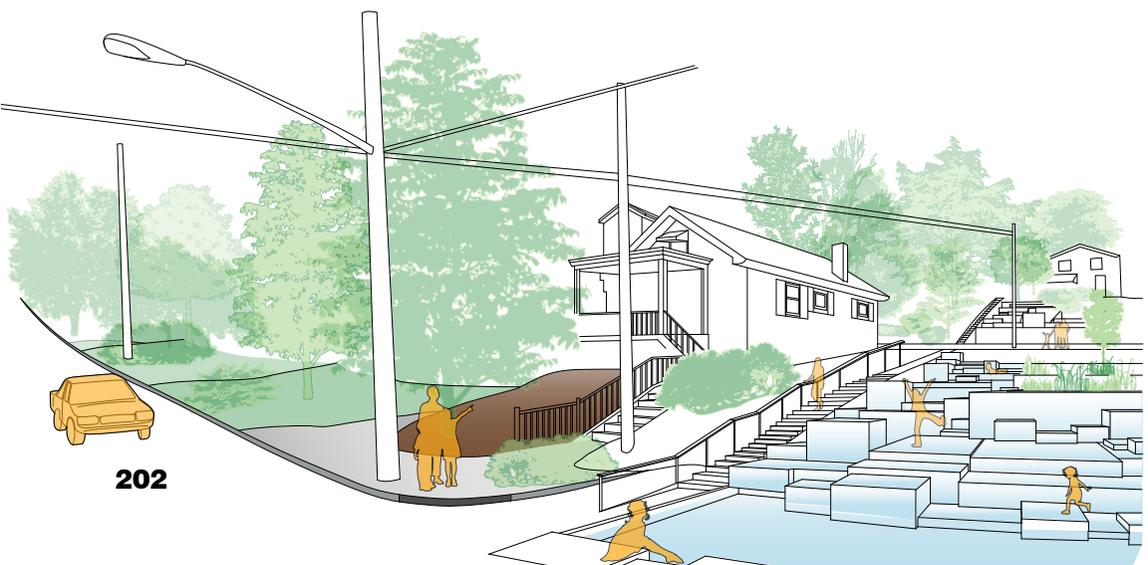
ENTERTAINMENT CENTER - AQUATIC POCKETS



1/16"=1'

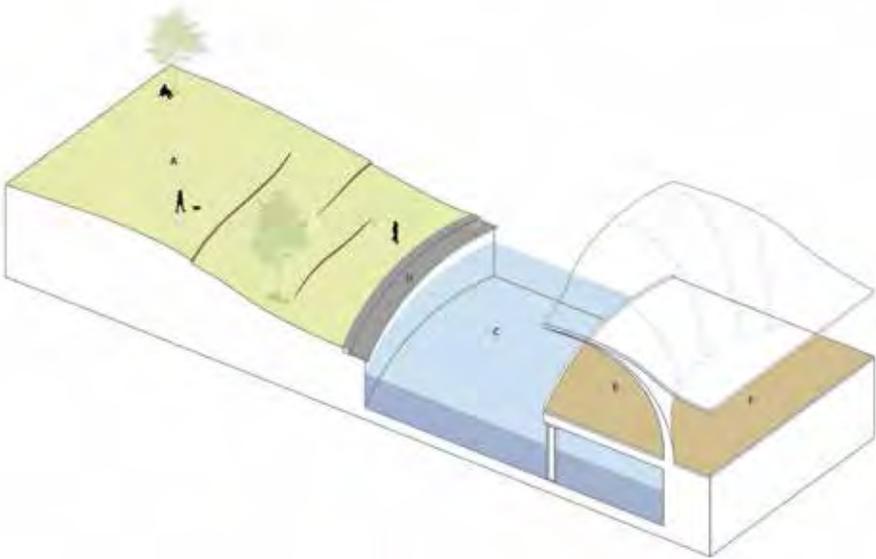


1/16"=1'



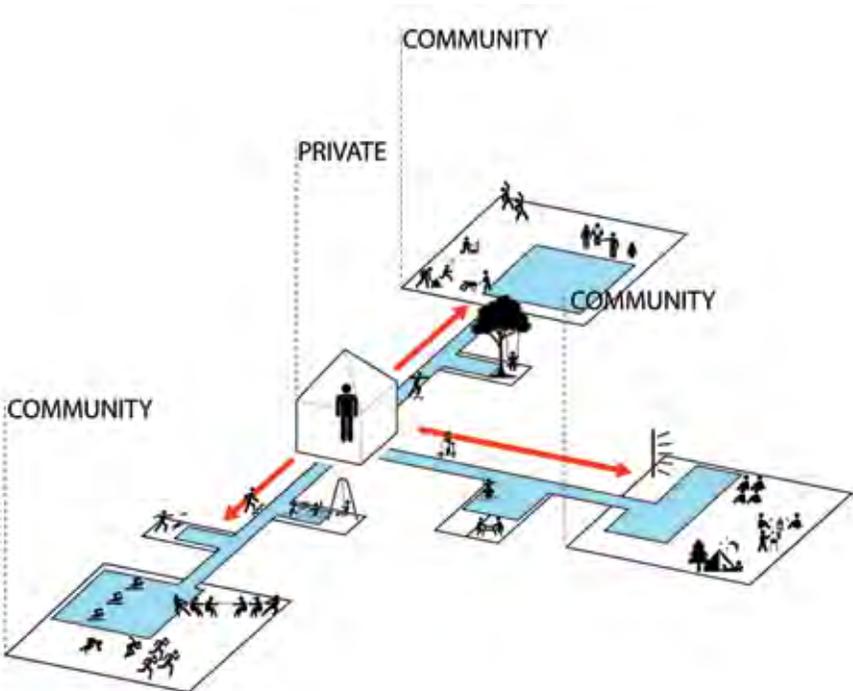
ENTERTAINMENT CENTER - RESERVOIR

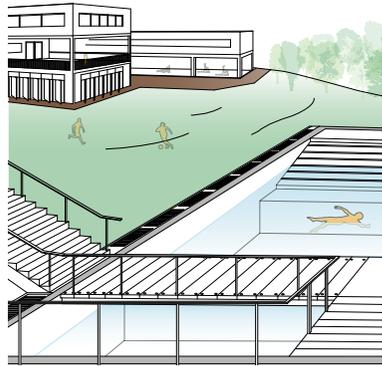
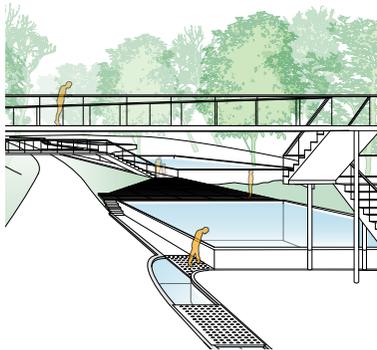
- A OPEN PARK
- B WATER PATH
- C RESERVOIR
- D SEATING/LOUNGE AREA
- E PERFORMANCE SPACE
- F BACKSTAGE



PROGRAMS AND SYSTEMS

There are three water programs running through Beechview under which the system small parks, channels, and large parks correspond to. The design of each area is defined by the designated programmatic elements of recreation, education, and entertainment. These three programs, in accordance to the “aquatic pocket parks” and channels, work together to help create a more engaging environment, ultimately establishing a stronger community.





FRAME YOUR PLACE!





REBECCA COLE
TALIA PERRY

FRAME YOUR PLACE!

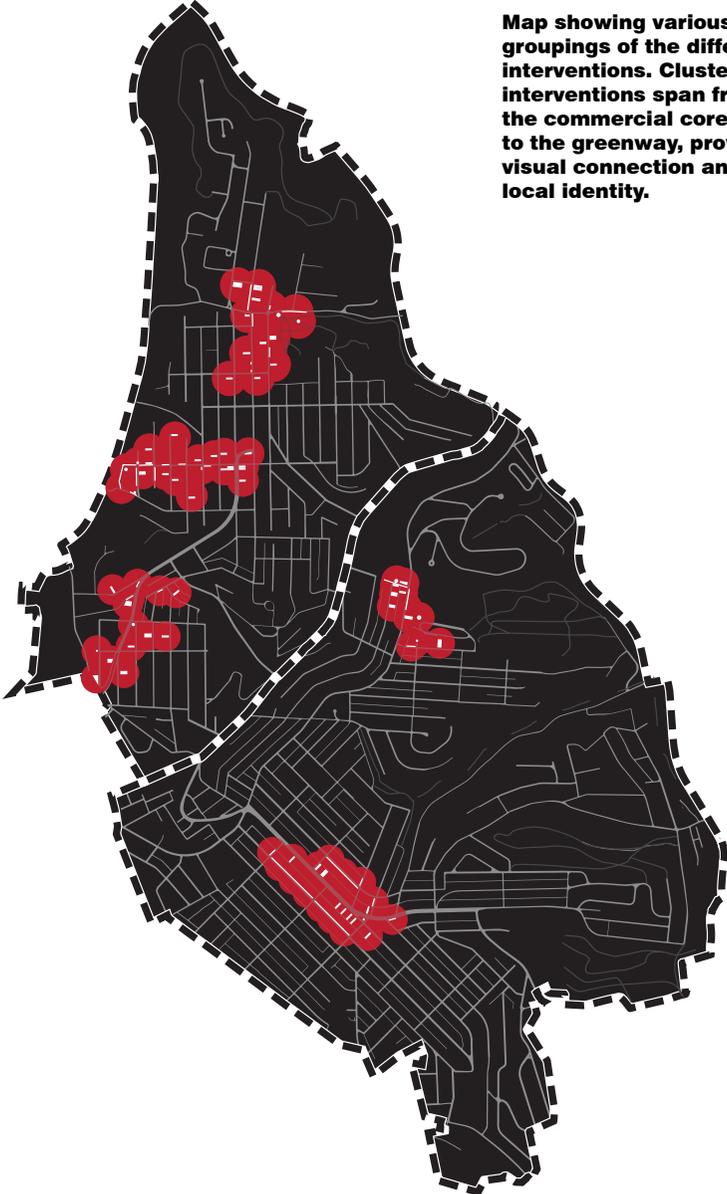
PROJECT INTRODUCTION

“Frame Your Place!” is a participatory system embedded in the community to create a shared identity through a series of interventions installed throughout Beechview and Brookline. The interventions consist of a simple set of materials and rules for construction that community members themselves can assemble and implement. The flexibility of the system allows for the project to embed itself in a variety of different locations - site conditions are adapted to in the autonomous design process.

Currently, both neighborhoods are doing well for themselves and their commercial cores are beginning to attract the attention of other Pittsburgh-dwellers. However, there are a few areas that could use some improvement - some vacancies, some maintenance issues - and other areas that, though in good condition, aren't very good at calling attention to themselves - unlike the commercial cores, the greenway, for instance, is tucked away on the hillsides, easily passed by speeding cars. As a network, the interventions act together to bring attention to, to provoke community involvement in, and to ultimately solve some of these social and environmental issues. Grouped in smaller clusters to provide visual connections and local identity, the interventions center around a hub construction center and community space.



LOCATION: EVERYWHERE!



Map showing various groupings of the different interventions. Clusters of interventions span from the commercial cores out to the greenway, providing visual connection and local identity.

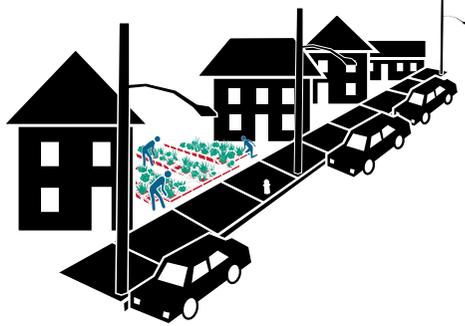
FROM COMMERCIAL CORE TO GREENWAY

Frame your space!

Location:
Vacant residential lot

Frame family:
Tactile frames

Length of installation:
Long-term



Frame your way!

Location:
Gateway - greenway entry

Frame family:
Recreational and tactile frames

Length of installation:
Long-term



Frame your way!

Location:
Greenway paths

Frame family:
Recreational and tactile frames

Length of installation:
Long-term



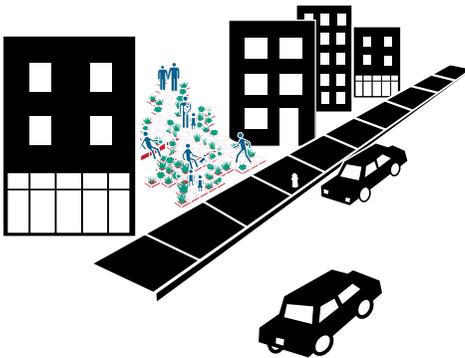


Frame your view!

Location:
Vacant storefront

Frame family:
Viewing frames

Length of installation:
Temporary



Frame your space!

Location:
Vacant commercial lot

Frame family:
Tactile frames

Length of installation:
Temporary



Frame your way!

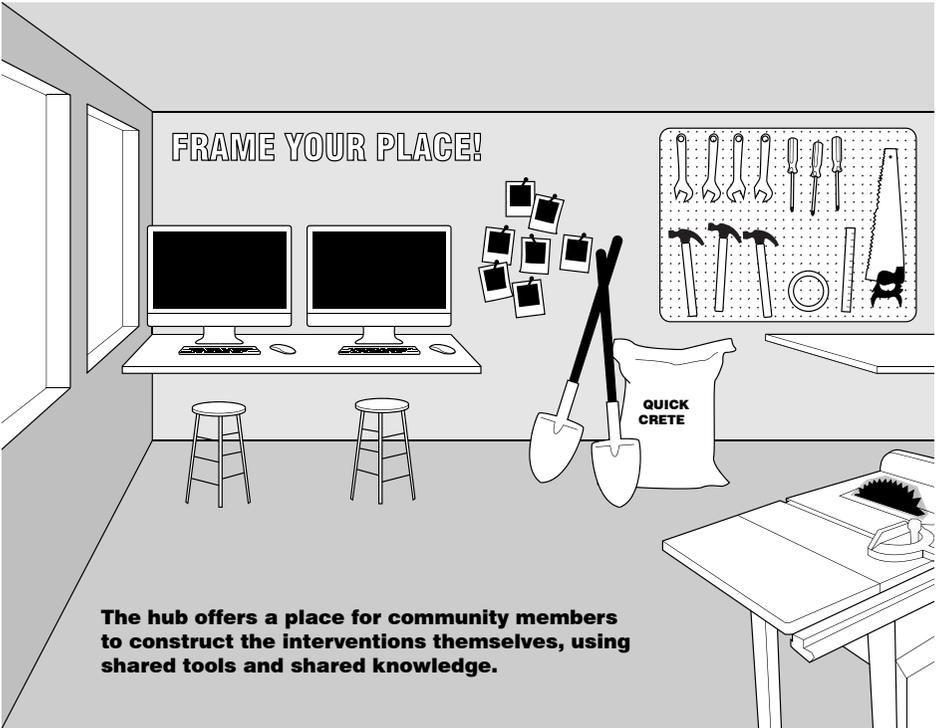
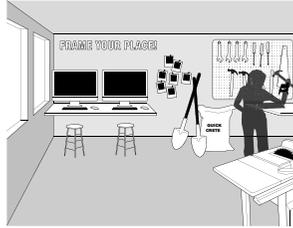
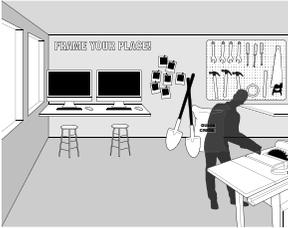
Location:
Street edge

Frame family:
Tactile frames

Length of installation:
Long-term

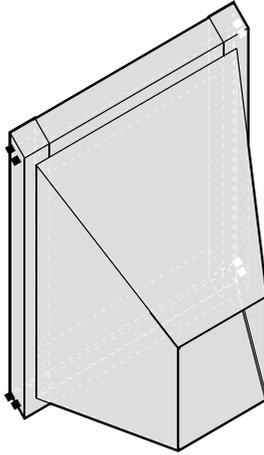


THE HUB: CONSTRUCTION, INSTRUCTION, AND COMMUNITY SPACE

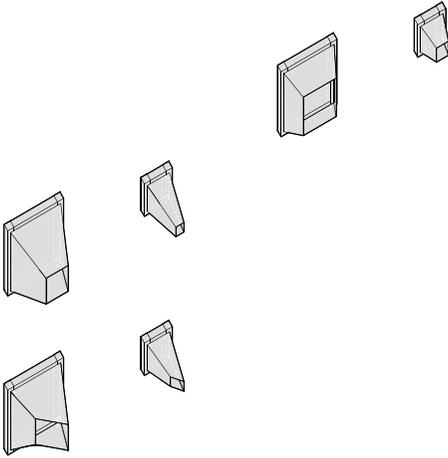


The hub offers a place for community members to construct the interventions themselves, using shared tools and shared knowledge.

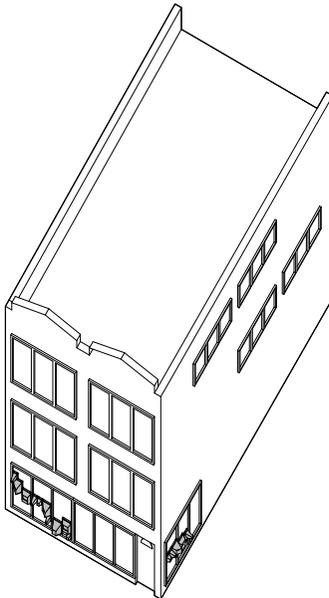
FRAME YOUR VIEW !



VIEWING_STRAIGHT_18:
2 wood 2X2 cut to 14" length, 2 wood 2X2 cut to 18" length, fastened with 8 3" common nails; inlay and glue 22.5" sq. transparent overlay; drill 1/8" holes in corners, and insert 1/8" rod (14.5" length, 30 deg. bend 1" in); wrap fabric around rods & glue flap; back vertical 2x2s with 2" wide industrial strength velcro



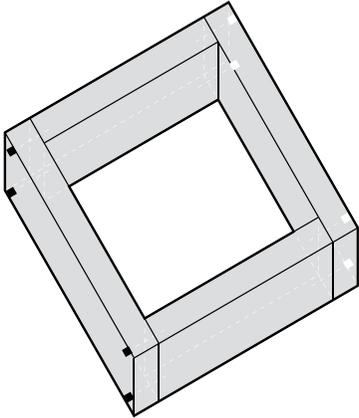
b. Viewing Frame Family

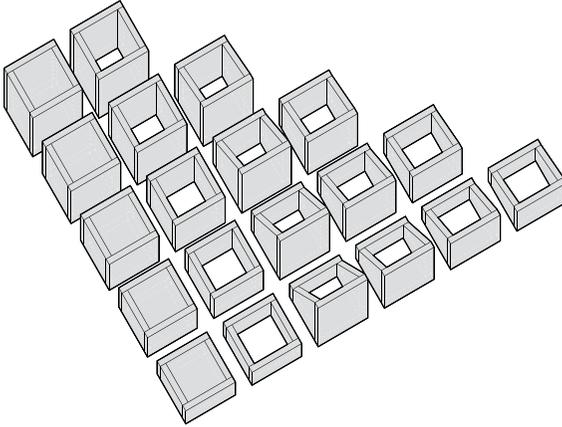


c. Example of component system installed on site (vacant storefront).

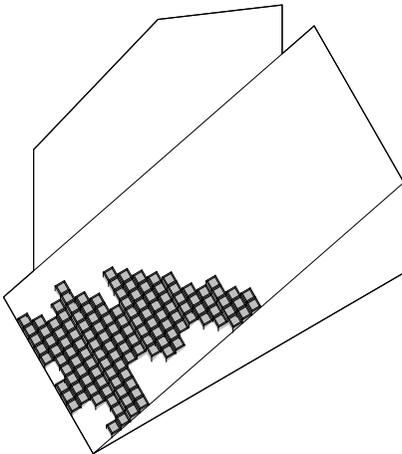
FRAME YOUR SPACE !

a. Tactile_Flat_4
2 wood 2x4 cut to 14”
length, 2 wood 2x4 cut
to 18” length, fastened
with 8 3” common nails





b. Tactile Frame Family

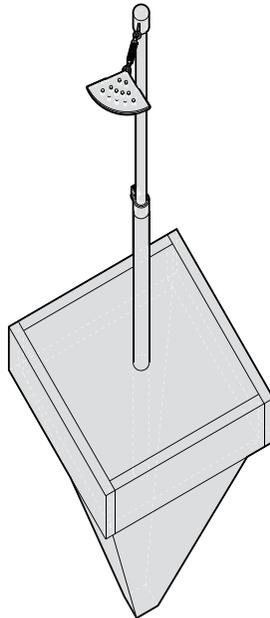


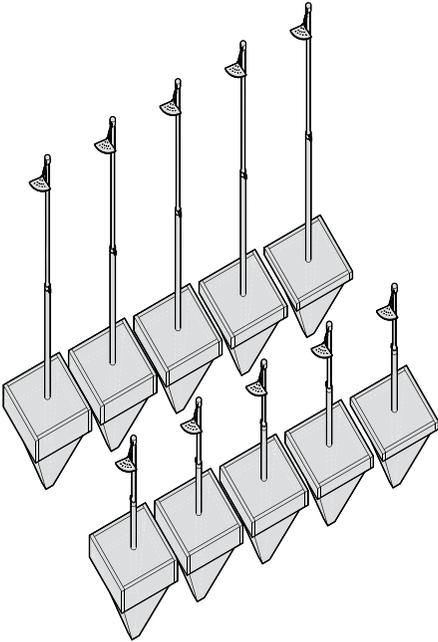
c. Example of component system installed on site (vacant residential lot).

FRAME YOUR WAY !

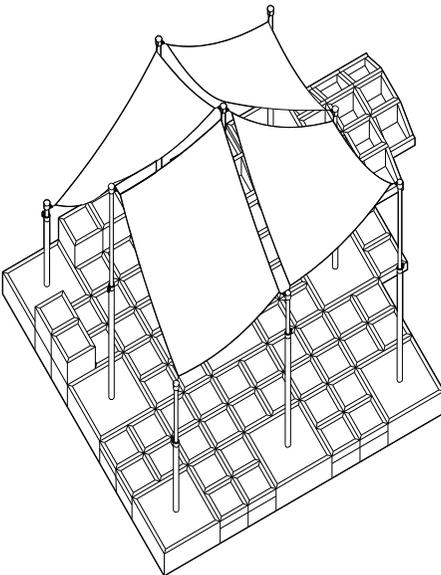
a. Recreational_Short_12

2 wood 2x12 cut to 32" length, 2 wood 2x12 cut to 36" length, fastened with 8 3" common nails; on site: 32" square hole approx. 36" deep; place constructed frame around the hole, suspend 48" rod (3" d, 2" int d) centered, suspended 12" into hole; pour concrete, level, and allow to set; add 36" rod (2" d) and adjustable clamp; cap rod with anchor point; once other components installed, attach fabric with turnbuckle and membrane plate





b. Recreational Frame Family



c. Example of component system installed on site (greenway path).

NARRATIVE

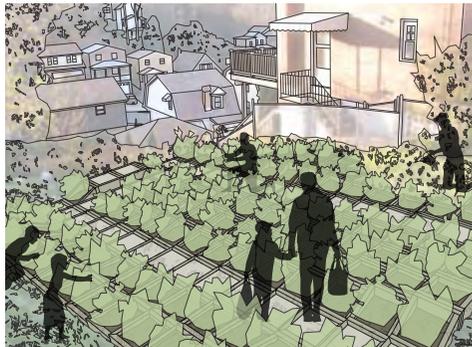
a. Greenway
Visitors to the greenway are provided with a place to rest, or play; adjustable poles allow users to adapt the space to their own needs.



b. Gateway
Each entry is provided with an intervention demarcating the pedestrian's arrival at the edge of the greenway; these can also serve as meeting or resting places.



c. Vacant Residential Lot
A possible future use of these vacant residential lots would be the development of a community garden.





d. Street edge
The interventions along the street edge encourage maintenance of existing pedestrian infrastructure, such as stairs and sidewalks.



e. Vacant commercial lot
The vacant commercial lot can serve as a gathering place for shoppers, restaurant patrons, and visitors just looking for a view of the hills.

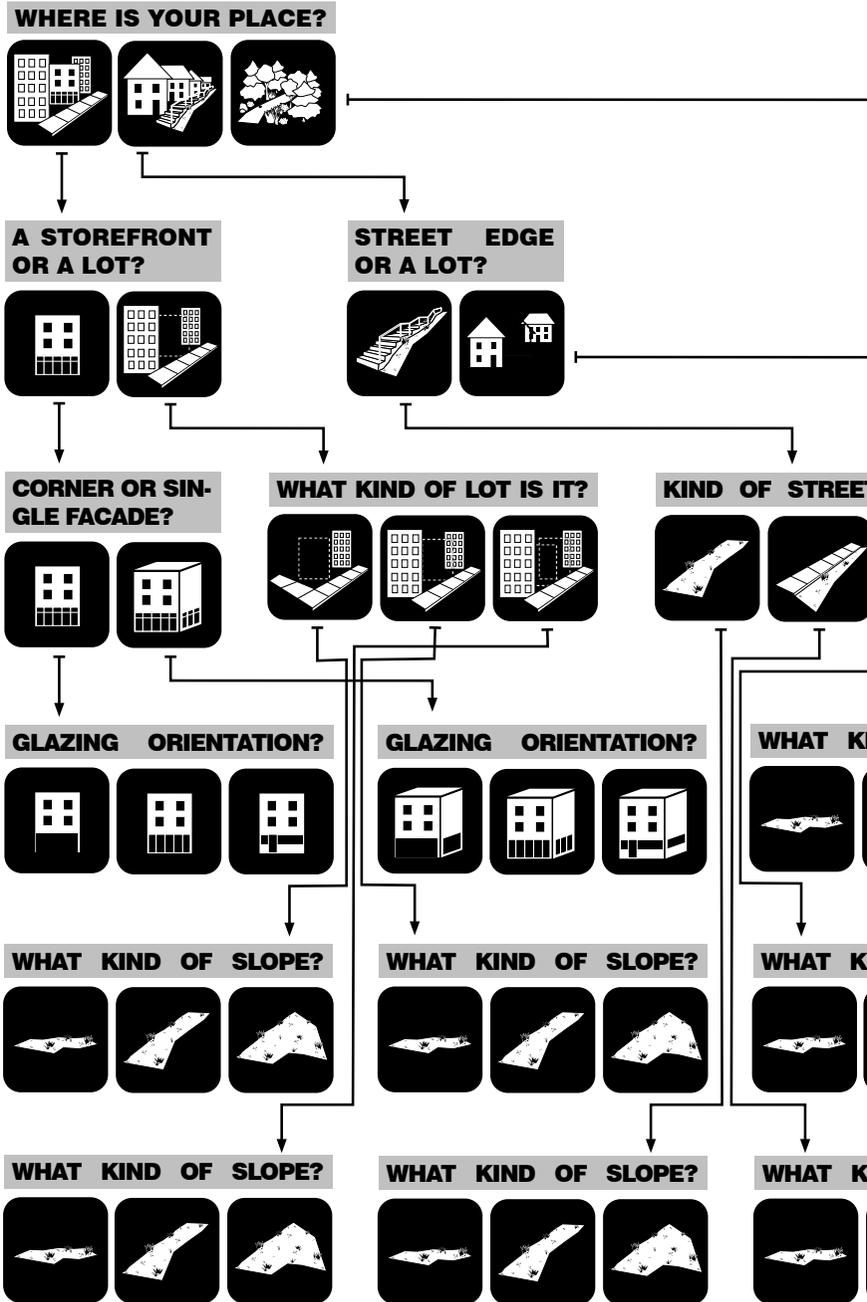


f. Vacant storefront
The interventions installed for a short time within the storefront windows of vacant shops help people to imagine what a potential new store could be in that space, using overlays within the frame to literally 'project' a future use.

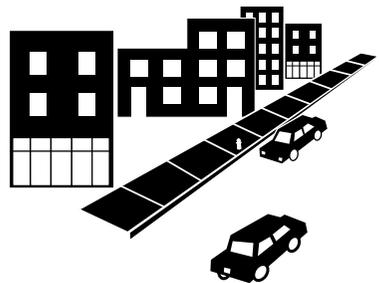
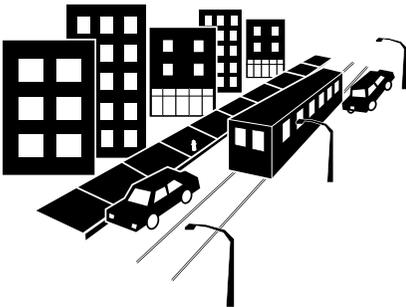
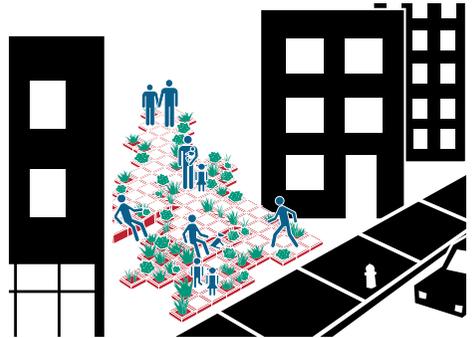
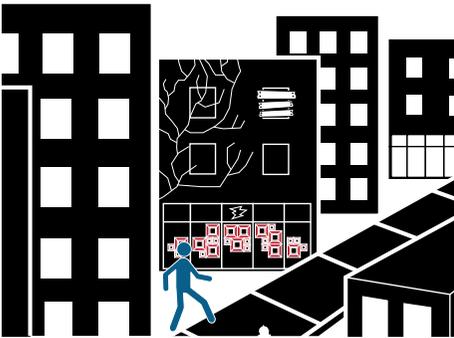
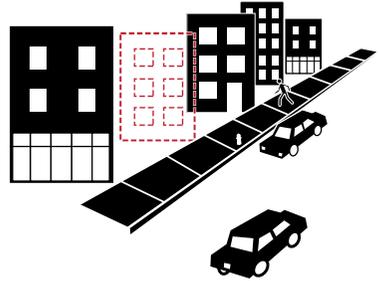
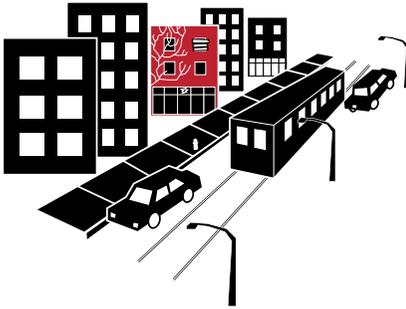
IF / THEN MACHINE

SIZE, ORGANIZATION, FRAME FAMILY & FRAME/STONE RATIO

CONNECTIONS

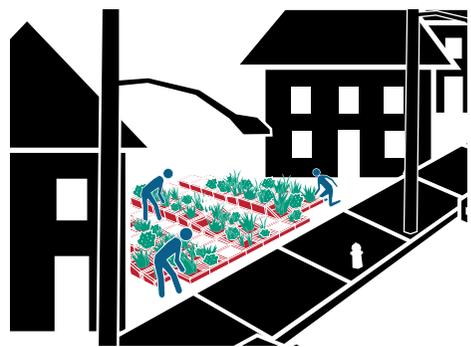
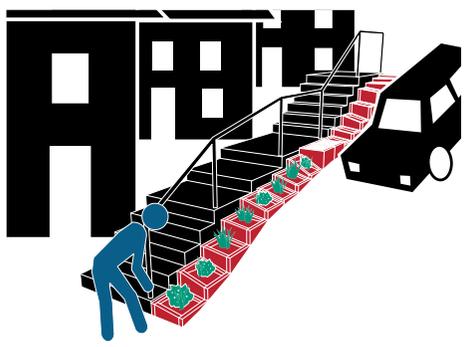
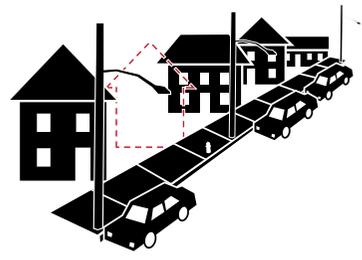


EVOLUTION



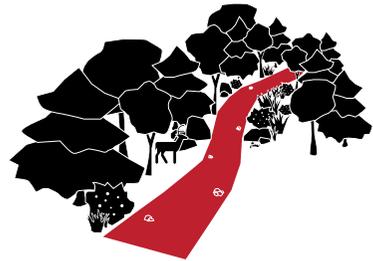
a. Evolution of a vacant storefront; temporary use of viewing frames inspires a budding entrepreneur to buy the property and open up a gallery.

b. Evolution of a vacant commercial lot; the neighbor's business expands after the intervention has brought visitors to the restaurant.



c. Evolution of a pedestrian stair; neighbors help care for the intervention and plants begin to bloom, solving water management issues and beautifying the street.

e. Evolution of a residential vacant lot; neighbors share an interest in planting vegetables, and a community garden is born.



f. Evolution of a gateway; by marking the greenway for residents and visitors, families and recreational users can find their way!

g. Evolution of a greenway; stopping points along the paths give users an additional reason to visit the greenway, as well as providing them with a place to stop and rest.

DRIVE





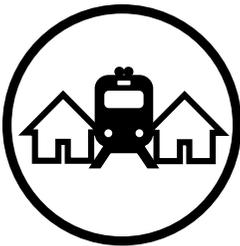
**IBRAHIM GARCIA-BENGOCHEA
PHYLLIS KIM**

DRIVE

PROJECT INTRODUCTION

West Liberty Avenue is a primary traffic corridor used by the residents of Beechview and Brookline to travel to and from work, along with all of their neighbors in the South Hills. It is essentially the only vehicular route connecting Downtown to the South Hills, and thousands of people travel it every day in their commutes to and from work.

DRIVE acknowledges that commuters are the primary users of this corridor along with visitors to its auto-related businesses and proposes to create an auto-related experience that is attractive and memorable. We do this by essentially extending the West Liberty Tunnel with a green, tunnel-like armature that traffic will continue to drive through. This armature will be created by a series of arms over which vines will be encouraged to grow. Together these arms will form a green ceiling over the road, thereby drawing the surrounding green hillsides down into the valley, and greening the concrete and asphalt that has been allowed consumed this unattractive corridor. High rate fruiting plants are introduced at the bases of these arms to document over time the destinations of those traversing West Liberty Ave.



LOCATION: WEST LIBERTY AVENUE



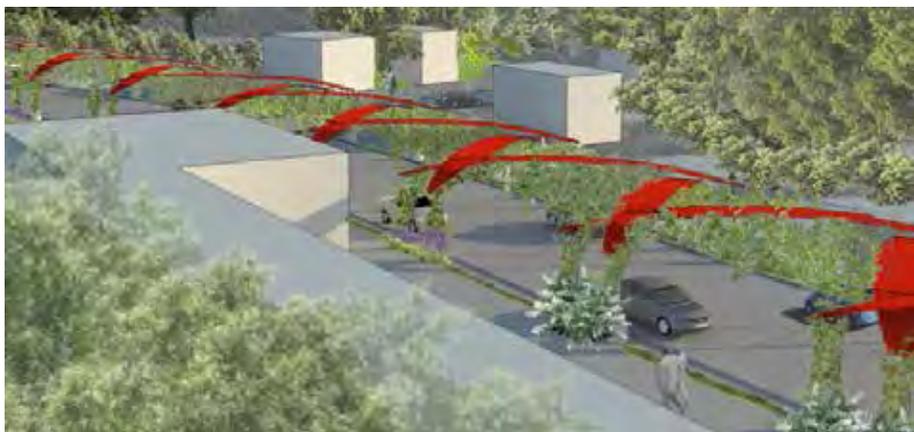
1. Drive extends the existing West Liberty Tunnel onto West Liberty Avenue.



2. The tunnel extension draws the existing greenery around the site into the corridor



3. As well as bringing the green into the corridor, the plants on the tunnel will attach themselves onto the many commuters and bring plants out to the various homes of the commuters



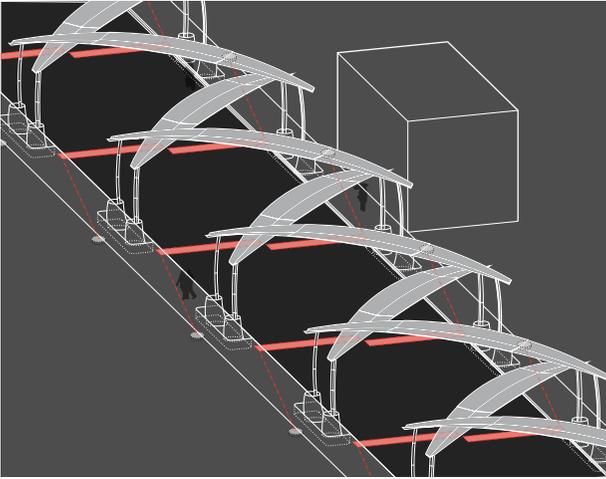
a. West Liberty Avenue view from above



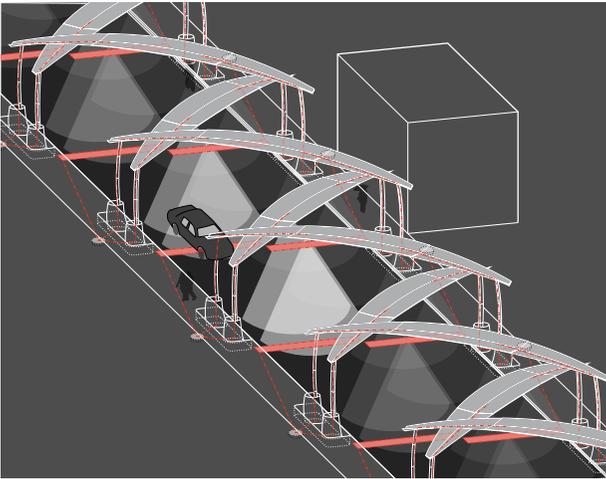
b. West Liberty Avenue summer



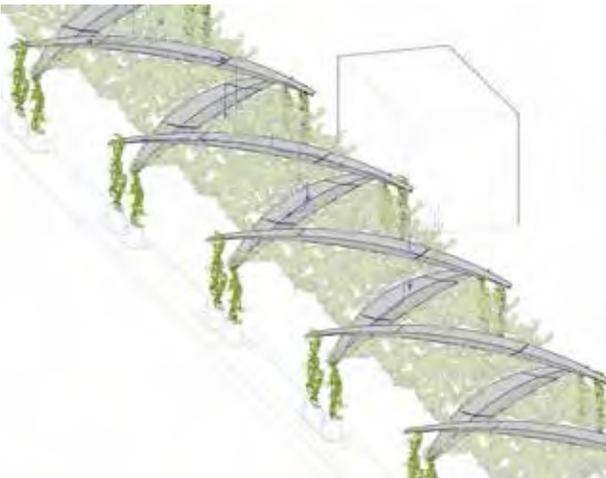
b. West Liberty Avenue winter



a. Piezoelectric panels in the road harvest energy from passing cars and store them in batteries imbedded beneath the sidewalk



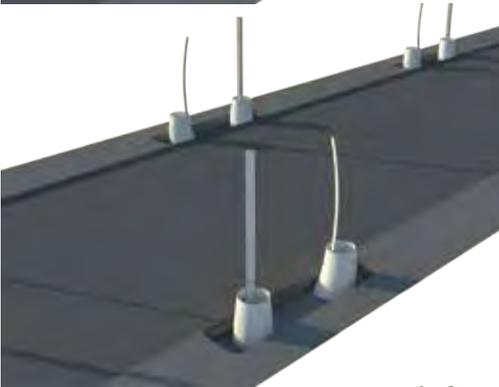
b. The batteries provide energy for the lighting that will increase in lumens as cars approach



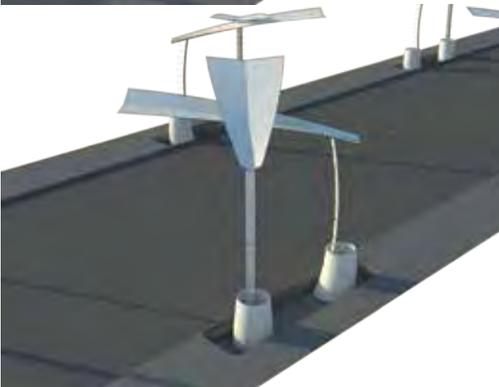
c. Plastic panels collect water and channel them to the basins which then promote plant growth



a. Concrete plant basins are lined with raidant pipes that will keep the plants alive through changing seasons



b. Arms are four interlocking pieces made of reinforced concrete

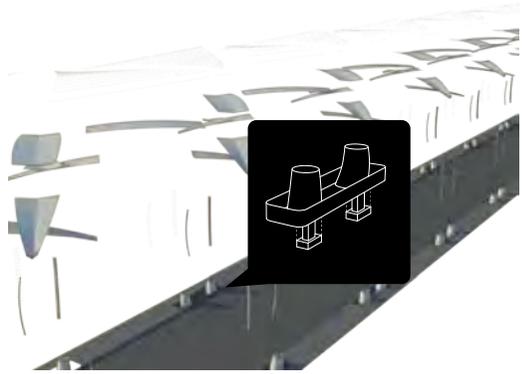


c. Plastic panels attach to the arms and house the lighting as well as device for water collection

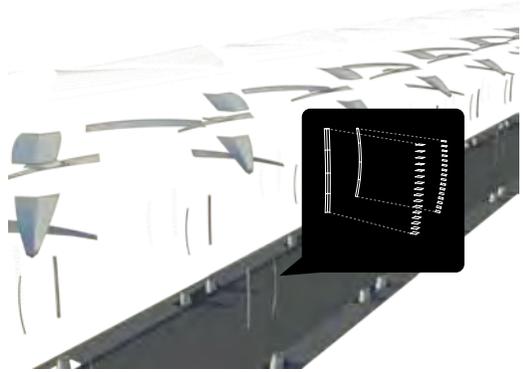


d. The center piece attaches across the road and takes up the tolerance of road width changes

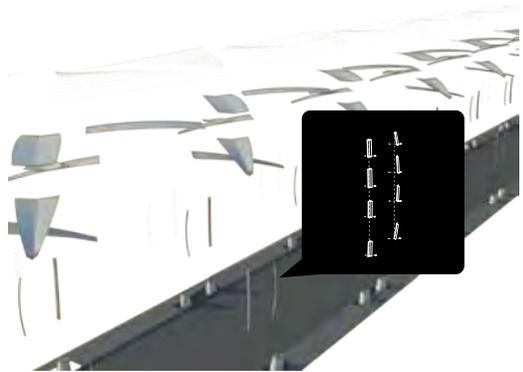
e. Footers provide the support for the reinforced concrete arms and plastic panel



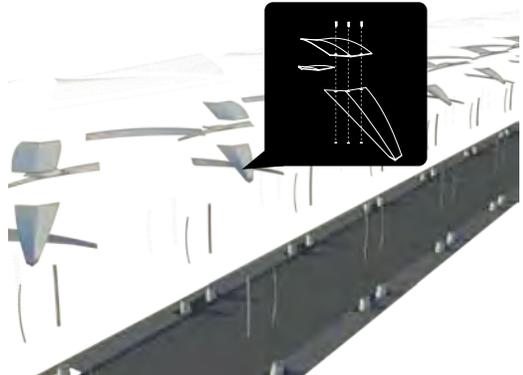
f. Arms have pvc-coated wire attached that act as scaffolding for plant growth



g. Stacked and bolted pieces that form the arm are regular and replicable so maintenance and construction are simplified



h. The center plastic panels are designed to lay above the side plastic panels to better allow for water collection



AUTOSCAPE





Jae Won "Joy" Kang

AUTOSCAPE

PROJECT INTRODUCTION

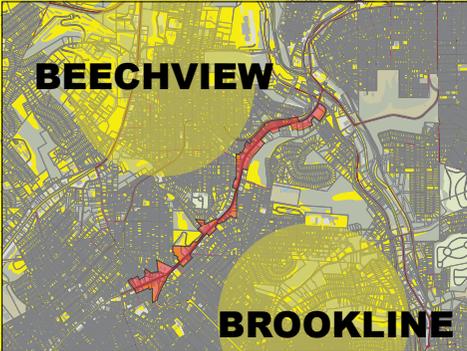
Autoscape will transform the heavily car dominated West Liberty Avenue corridor which divides Brookline and Beechview into an engaging public space. West Liberty Avenue handles in excess of hundreds of vehicles per day. Most businesses along the avenue are car related and the five lane road has absorbed the sidewalk ending any semblance of pedestrian activity. Autoscape addresses these conditions with a design strategy that encourages active pedestrian engagement, which in turn will increase the viability of the retail businesses along the avenue and in both neighborhoods bordering it.

The objectives of Autoscape are three fold: first, to establish a new identity and BRAND the corridor with supergraphics; second, to reduce undesirable conditions and encourage a stronger pedestrian presence and connections that will BRIDGE the two neighborhoods; third, to BLEND automobile and pedestrian activities encouraging the coexistence of both.



WHERE ARE WE?

WEST LIBERTY AVENUE, PITTSBURGH, PA



The project is a development of West Liberty Avenue which is located in between Beechview and Brookline.

LACK OF **COMMUNITY CHARACTER** / STREETS MAINTENANCE ISSUES (GENERAL LITTER PROBLEMS) / LACK OF **COMMUNITY PRIDE** / TOO LOUD / TOO MANY CARS / UNFRIENDLY AUTOBODYSHOPS **TYPOLOGIES** / **PEDESTRIAN UNFRIENDLY** WEST LIBERTY AVE / POTENTIAL DEVELOPMENT OF COMMERCIAL BUSINESSES ON BROADWAY AVE. / LACK OF **VISITORS** / LACK OF RETAIL TYPOLOGY/ NO BIKE PATHS / LACK OF RETAILS ON BROAD WAY / WEST LIBERTY **DIVIDES** NEIGHBORHOODS OF BEECHVIEW AND BROOKLINE / LACK OF **PUBLIC GATHERING SPACE** / MINIMAL PEDESTRIAN TRAVEL / LACK OF GREEN SPACE / NO **STRONG MARKET ACTIVITIES**

A - FOCUSED ISSUES
 A - OTHER COMMUNITY ISSUES

2

A series of community meeting was hold and the project focused on some issues brought during the meetings.



Similar precedents are Highline in NYC and Superkilen in Copenhagen.

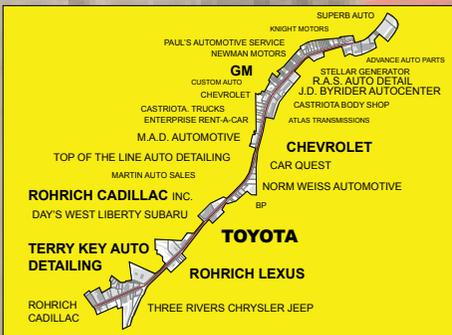
BRAND



“a brand has to exude a sense of seduction” (Brandscape, 56)

Autoscape will start with the existing asset along West Liberty Avenue -- the automobile -- and brand the corridor with a sexy super graphic applied to its length. A unique space will be created – one that both acknowledges both the automobile and the pedestrian, and ensures the safety of those on foot by making pedestrian zones bright and clearly visible.

WHY



Its automobile industry dominated corridor, therefore, the project focused on not only revitalizing their business but also bring more visitors for pedestrian activities.

HOW



Supergraphic, that will be painted on the public spaces, will attract more visitors.

WHO



KIM BECK

“

I look at **eyesores** in the landscape. Sometimes these things are avoided, overlooked, or literally stepped over, such as weeds in the sidewalk, or ignored because of their ubiquity, like everything must-go banners or fast-food signs along the highway. I wonder what happens when these are moved from the margins or periphery and made noticeable as drawings or installations.

Through the **process of repositioning and renaming**, the work elicits **questions about perception**, emptiness and accumulation. It also weighs an aversion for commercialization and homogenization of the landscape with an appreciation for the awkwardness and surprising idiosyncrasy of these same spaces. In every parking lot there is a parking lot island with a badly pruned tree. Despite the asphalt, the tree is quirky and shows pluck. By drawing attention to these moments, my work brings the banal and everyday into focus.

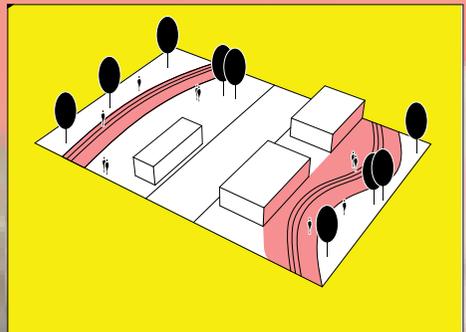
”





Some artists such as Kim Back, Oscar Peter, will be invited to design a supergraphic layout for the neighborhood

WHERE



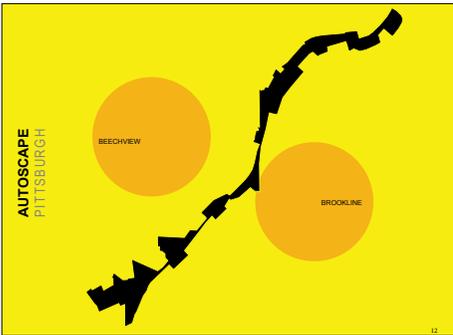
Supergraphic will applied through streets and side of building and put emphasis on pedestrian activities.

BRIDGE



Bridging components will be added along West Liberty Avenue, encouraging connections between the two neighborhoods, essentially acting as a BRIDGE between them. Synchronized traffic lights and cameras that detect the presence of vehicles will streamline rush hour and allow crossing opportunities for pedestrians.

WHY



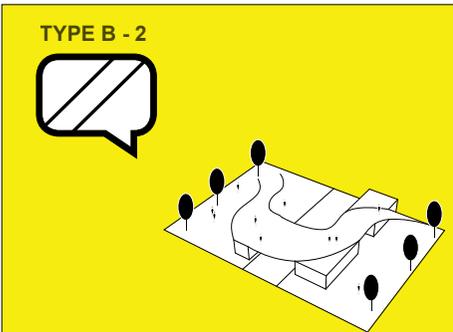
West Liberty Avenue is acting as a divider of two neighborhood, and it is lacking bridging infrastructures crossing the corridor

WHO



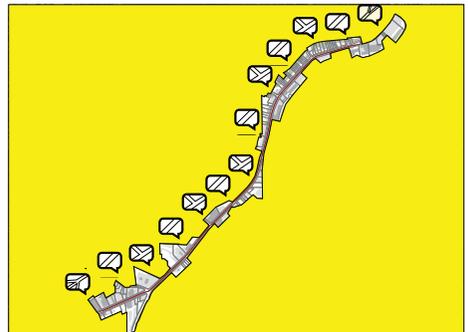
The targeted user for the project will be not only the residents of neighborhoods but also for the visitors who will use it as part of their autoscape activities.

HOW



There will be more bridge infrastructures, more crosswalks.

WHERE



The bridging infrastructure will be installed according to the size of the surrounding activity spaces.

BLEND



A playful blend of automobile and pedestrian activities will be encouraged through design interventions, encouraging them to coexist. Automobile activities will be studied, and driver behaviors surveyed, providing insight and inspiration for these interventions.

1. How much gas do you usually put in your tank at one time?



3. If you go, what do you usually buy?



5. What do you usually do when you get your ENGINE OIL CHANGED?



2. Do you utilize gas station convenient stores?



4. What do you usually do, when you get your CAR FIXED?



6. What do you usually do, when you get your TIRE REPLACED?



Sample Survey results charts

A series of survey was conducted to evaluate driver's behavior during their automobile related activities. As a result the "wasted" time were found, which includes; waiting to fill up the full tank in the gas station, or waiting for their car to get fixed... etc. The project is benefiting from those "wasted" time by combining automobile activities and pedestrian interactive activities.

CONVENIENCE

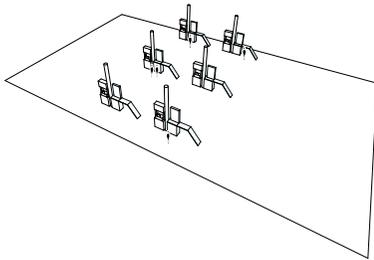
LEISURE

ENTERTAINMENT

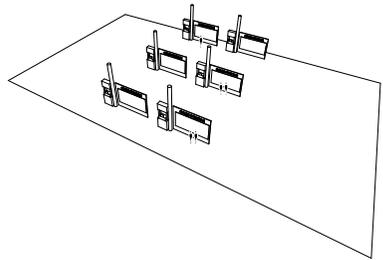
1 MIN

ALL DAY

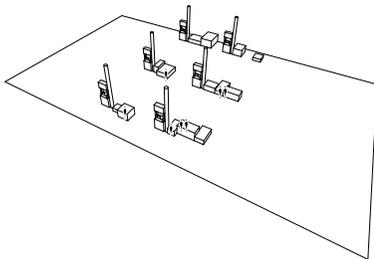
- GAS-STATION
- CAR WASH
- REPLACE TIRE
- REPLACE ENGINE OIL
- CAR FIX (SERVICE)
- CAR CLEAN (DETAIL)
- AUTO MOBILE TUNING
- AUTO SHOWS
- PARADES (CAR)
- AUTO MUSEUM
- AUTO MOBILE MOVIE THEATER
- CAR TESTING SPACE (ROAD)
- CAR RACING SHOW



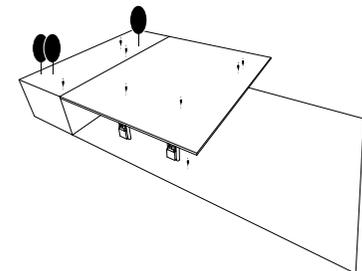
STANDING CAFE



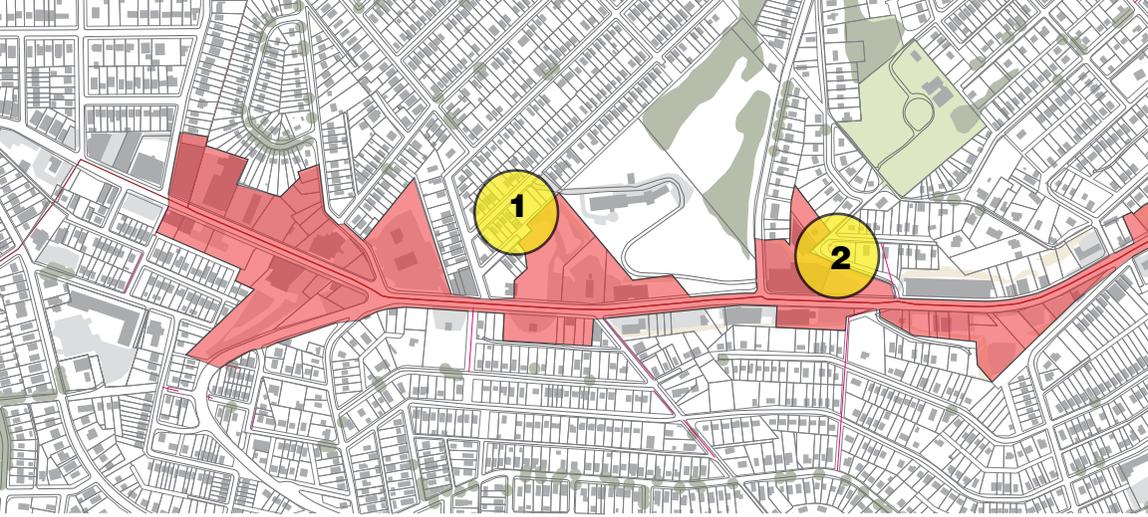
INTERACTIVE GAME

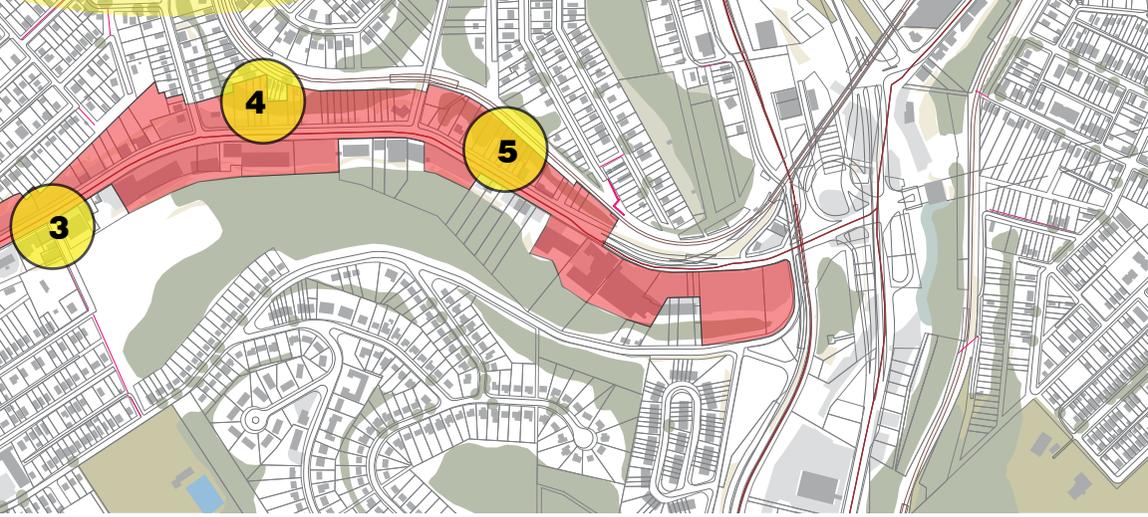


STREET FURNITURE

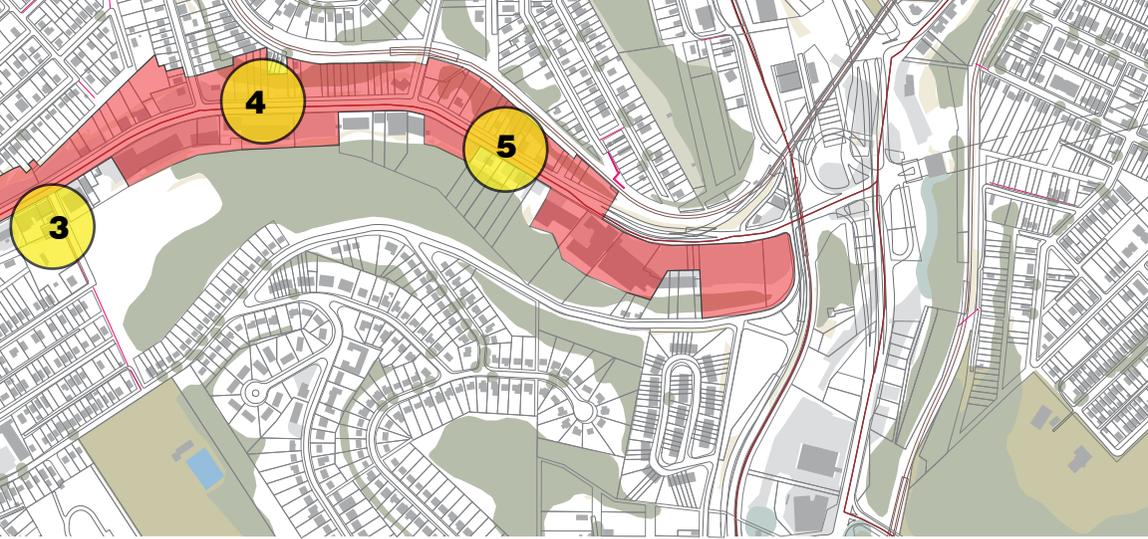


ROOFTOP USAGE





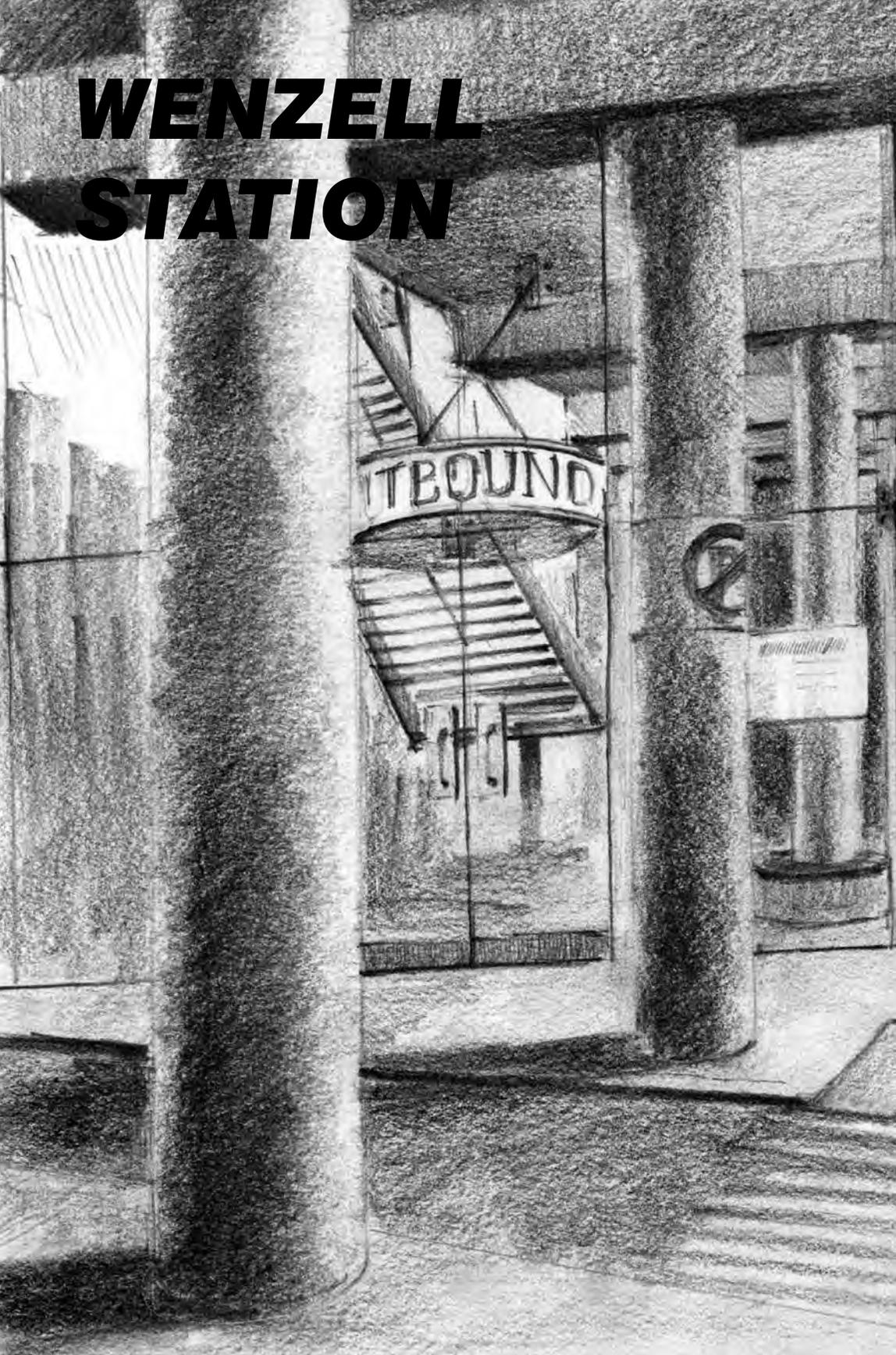


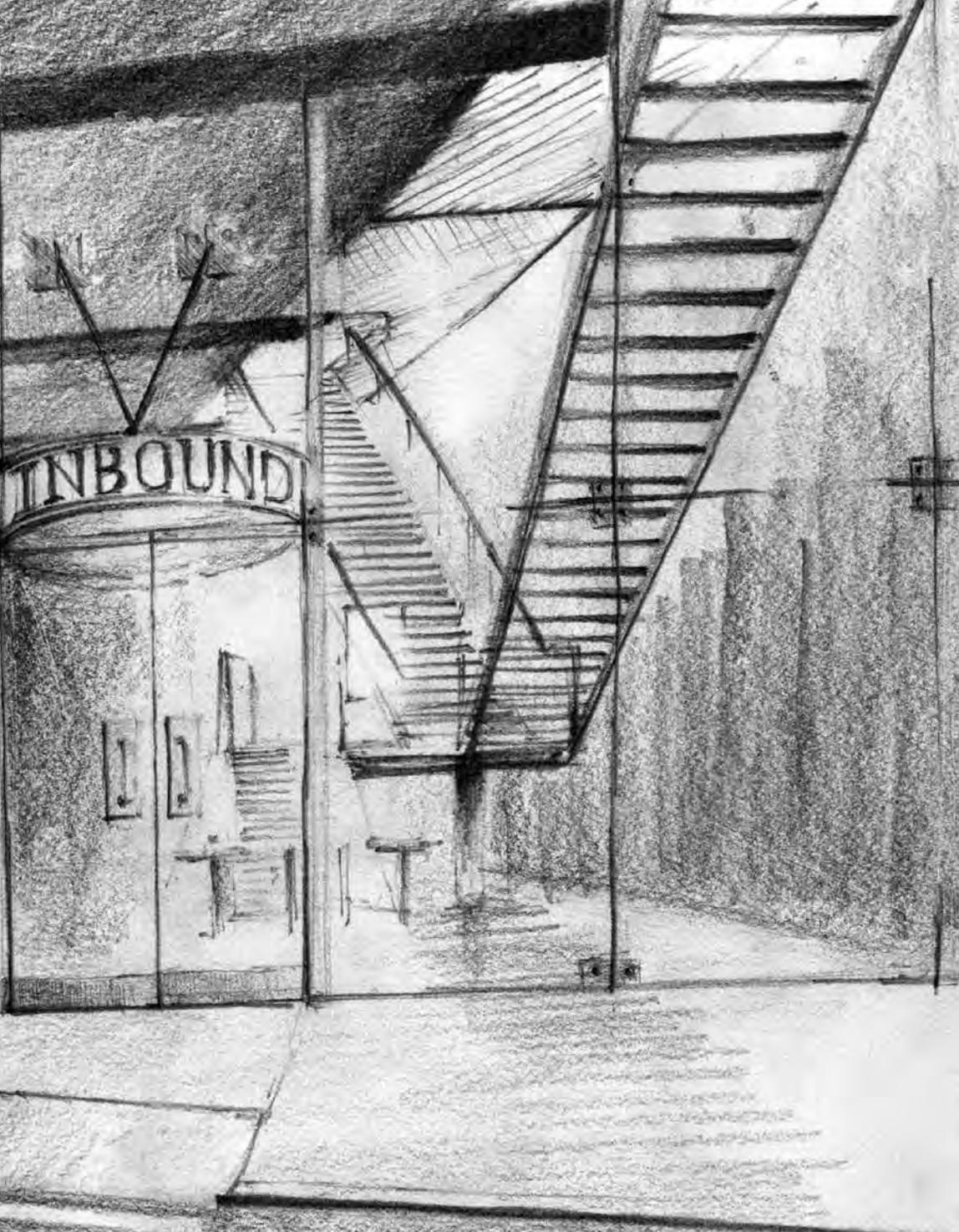






WENZELL STATION





HENRY GLENNON

WENZELL STATION

PROJECT INTRODUCTION

The Wenzell Station is designed to act as the terminus for the new Green Line, which will replace stations at Shiras in Beechview, and Stevenson in Dormont. In keeping with the projected population growth from other proposed developments along the Brookline and Beechview commercial corridors, this station is designed for heavy use. Eventually, as the fulcrum of the region's transit oriented development, the terminus will serve more than four thousand residents to the South Hills per day, and function as the terminus station for a light rail Green Line. The station hub is roughly 11,000 square feet, with two separate terminals for arrivals and departures to ensure the rapid transfer of passengers from the Red Line and the Green Line. The station has a café, a ticket office on the departure side, and each platform is fully handicapped accessible.



LOCATION BROADWAY AT WENZELL



a. The intersection as it exists now is a surprisingly busy thoroughfare on the border between Beechview and Dormont.

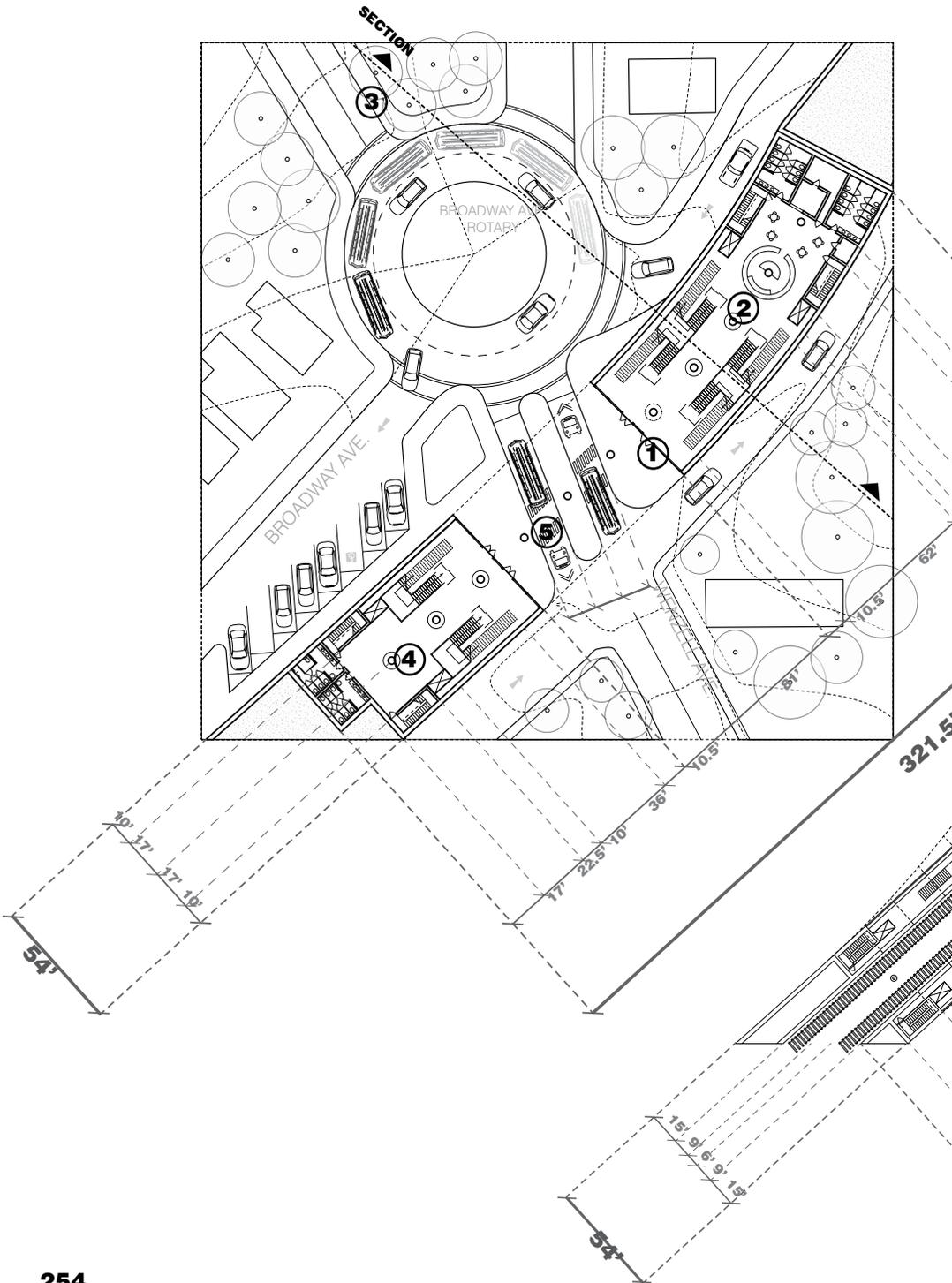


b. At the site now is a small rail bridge over the intersection between Broadway and Wenzell Ave.



c. The Red Line runs through the residential neighborhood between the commercial nodes at Beechview to the north and Dormont to the south

GROUND LEVEL PLAN



1

BUS ARRIVES

The Green Line bus arrives every fifteen minutes from its loop through Beechview and Brookline, dropping of up to seventy people at a time.

2

PASSENGERS MOUNT STAIRS

Passengers looking to board both inbound and outbound trains enter the northern side of the building where they can access the departure platform.

3

BUS TURNS AROUND

Once all passengers have disembarked the bus, it does a turn around at the rotary on the far side of the station and returns to the arrival platform.

4

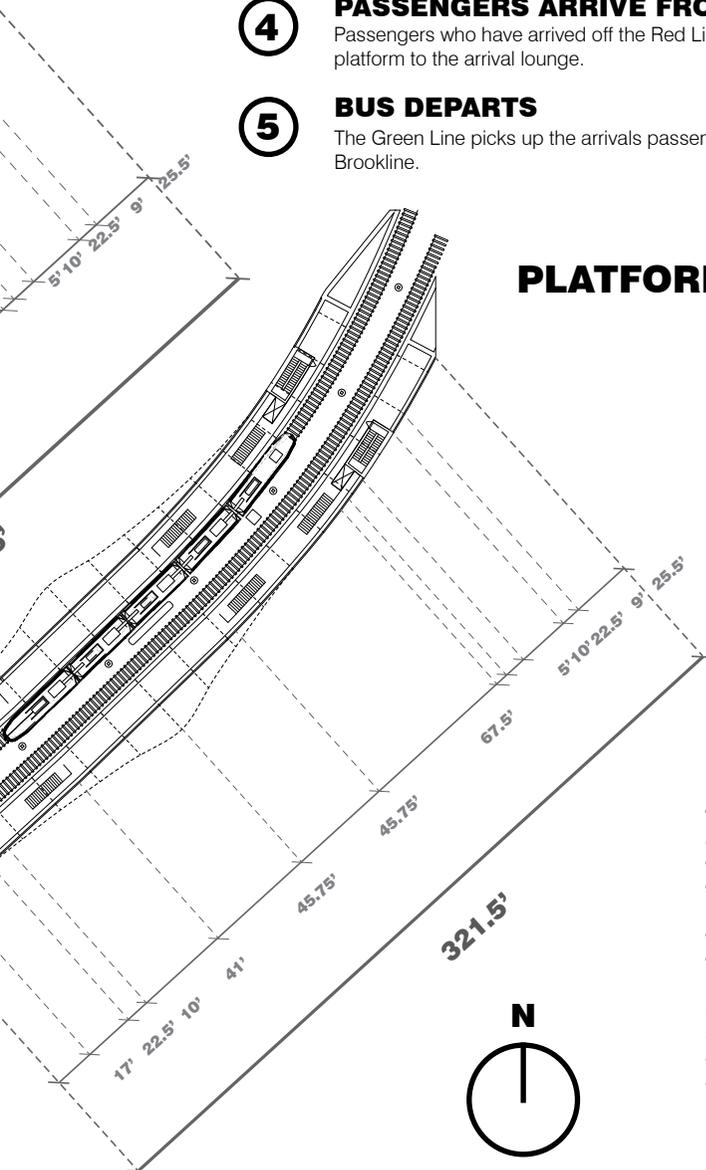
PASSENGERS ARRIVE FROM TRAIN

Passengers who have arrived off the Red Line take the stairs down from the platform to the arrival lounge.

5

BUS DEPARTS

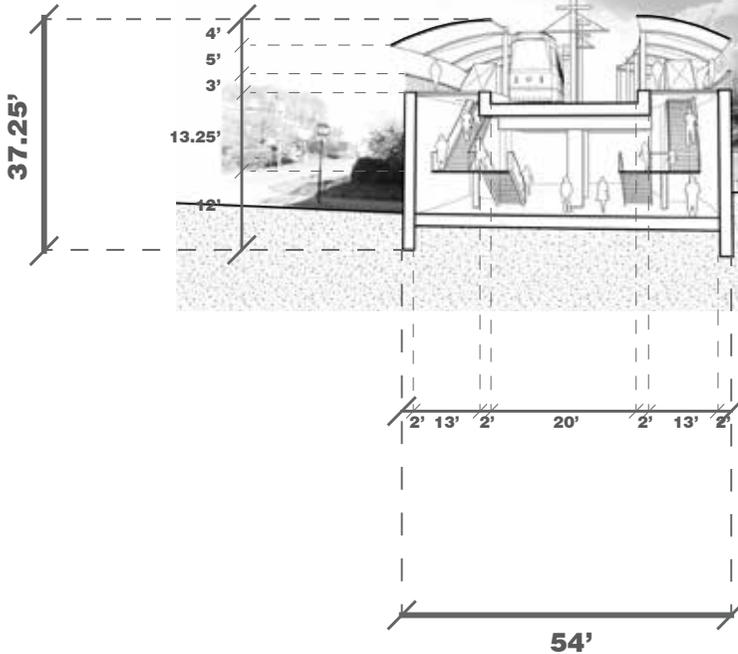
The Green Line picks up the arrivals passengers and departs towards Brookline.



PLATFORM LEVEL PLAN

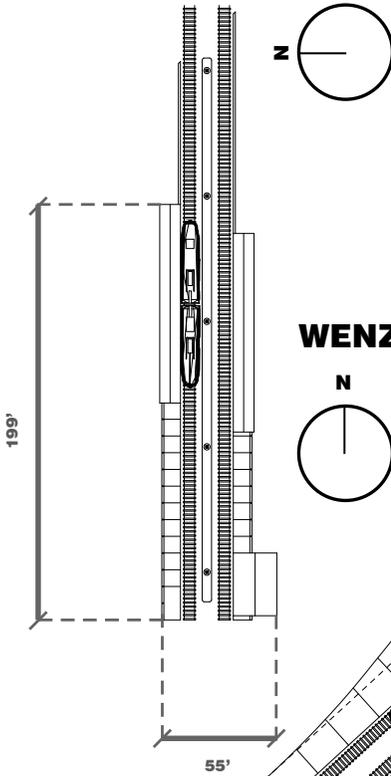
The ground floor plan is designed to streamline the process of accessing the platform. The platforms are designed to allow for longer trains than are currently in use by the Port Authority. Boarding and departure access are two disparate elements to make embarking more efficient.

TRANSVERSAL SECTION



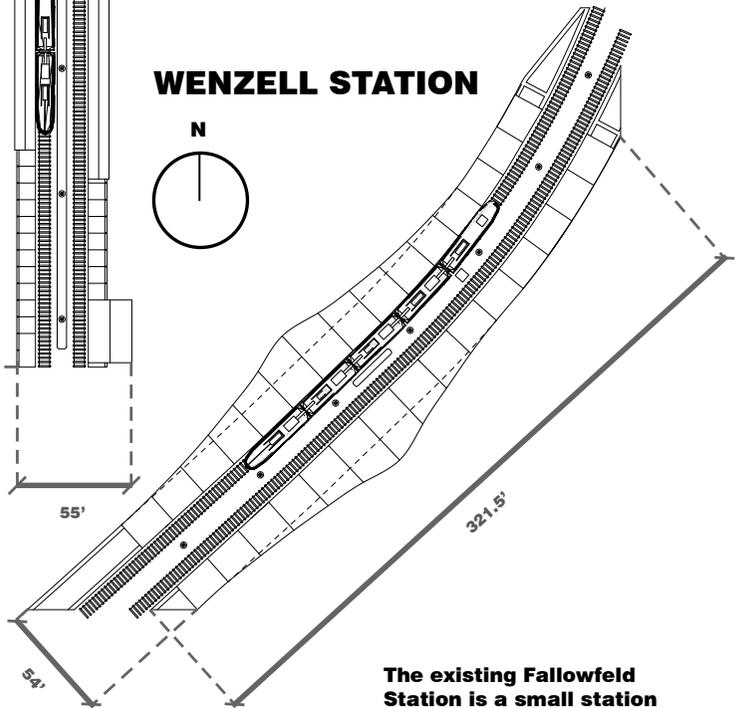
The design of the station is a reinterpretation of the site conditions which exist at the rail bridge over the intersection of Wenzell Avenue and Broadway Ave. A primary concern is to ensure that the Red Line through Dormont and Castle Shannon remains operational through construction for as long as possible. A shorter construction period can be achieved by first engineering a flat landscape for the terminal and rebuilding the rail bridge. Thus the key elements of the building are large retaining walls and a spine of columns supporting the rail line. All of the other building elements are suspended or inserted around this shell. The platform is simply a grate secured above a giant continuous skylight, which acts as infill between the retaining walls and the bridge structure. The skylight allows sunlight to filter through the platforms indicating to commuters arriving under the platforms in which direction to move. Shelter on the platforms is provided with light stretched canvas which acts as a sculptural counterpoint to the solidity of the station's base, its fluid form suggesting the movement below it.

FALLOWFELD STATION



The scale of this station is much larger than that of the Fallowfeld Station. This is for two reasons: one, the station must accommodate a more complex program than the Fallowfeld stop, because it must directly interact with the Green Line bus line. Two, the station is designed for higher occupancy and use because of added demand because of transit oriented development in Brookline, and the increased ridership that must occur to encourage growth.

WENZELL STATION



The existing Fallowfeld Station is a small station built on top of a bridge facing east away from Broadway Avenue. The platforms are extended sidewalks, with 95 feet of their lengths covered. There is no conditioned space at this stop, nor any amenities at this stop.