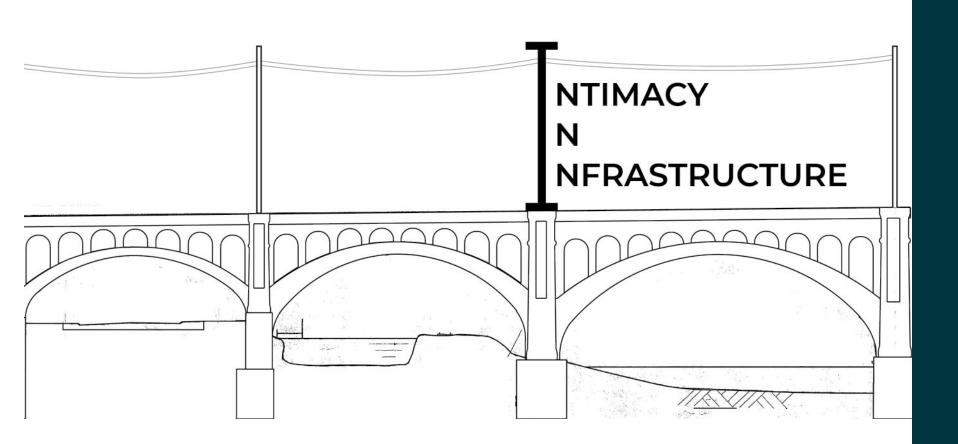
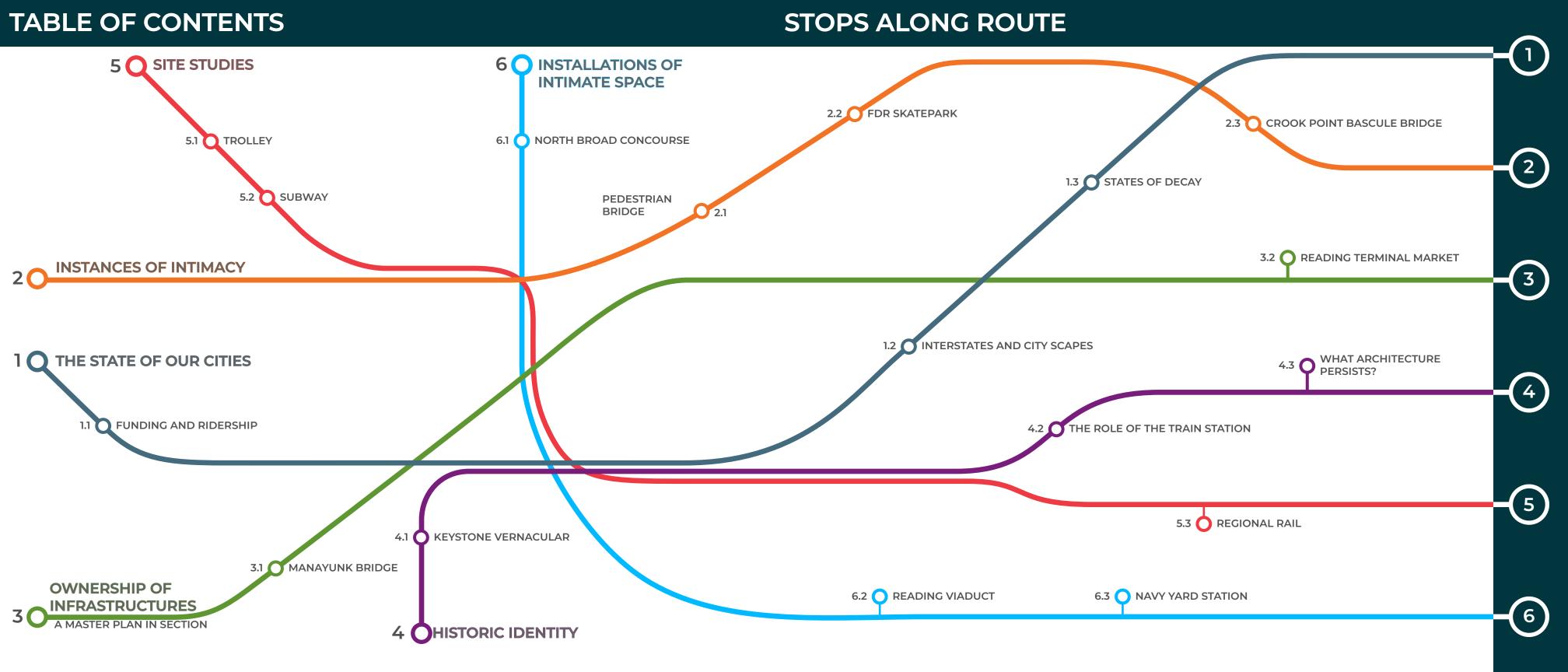
RHODE ISLAND SCHOOL OF DESIGN

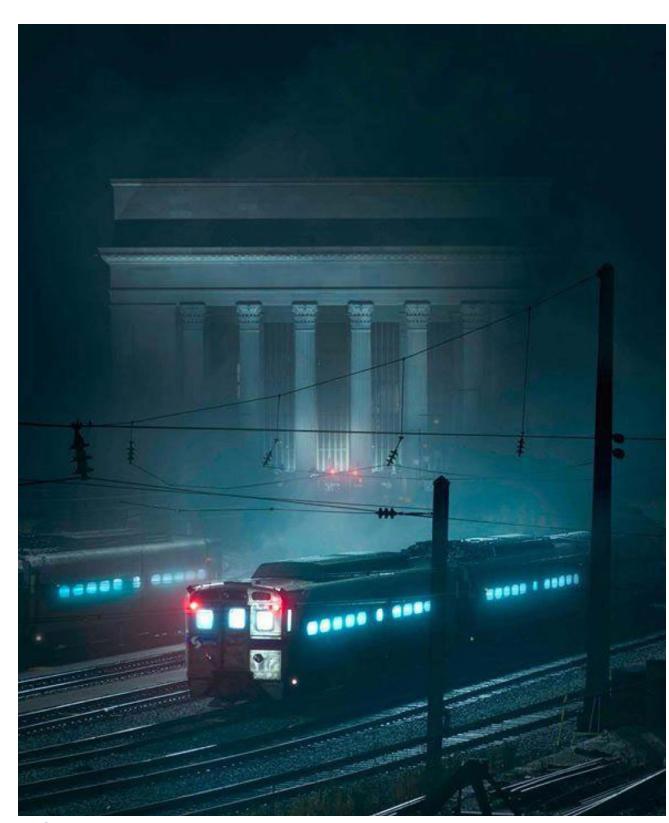
MASTERS THESIS 2020

ANDREW GUERRA RACHELY ROTEM | ADVISOR SPONSELLER



"WE MUST EMPLOY PUBLIC TRANSIT TO ESTABLISH REGIONAL RECLAMATIONS OF INFRASTRUCTURE, AND EMPOWER CULTURAL IDENTITIES THROUGH A VERNACULAR THAT IS REALIZED AND MATURED INTO THE CAPACITY OF TODAY."





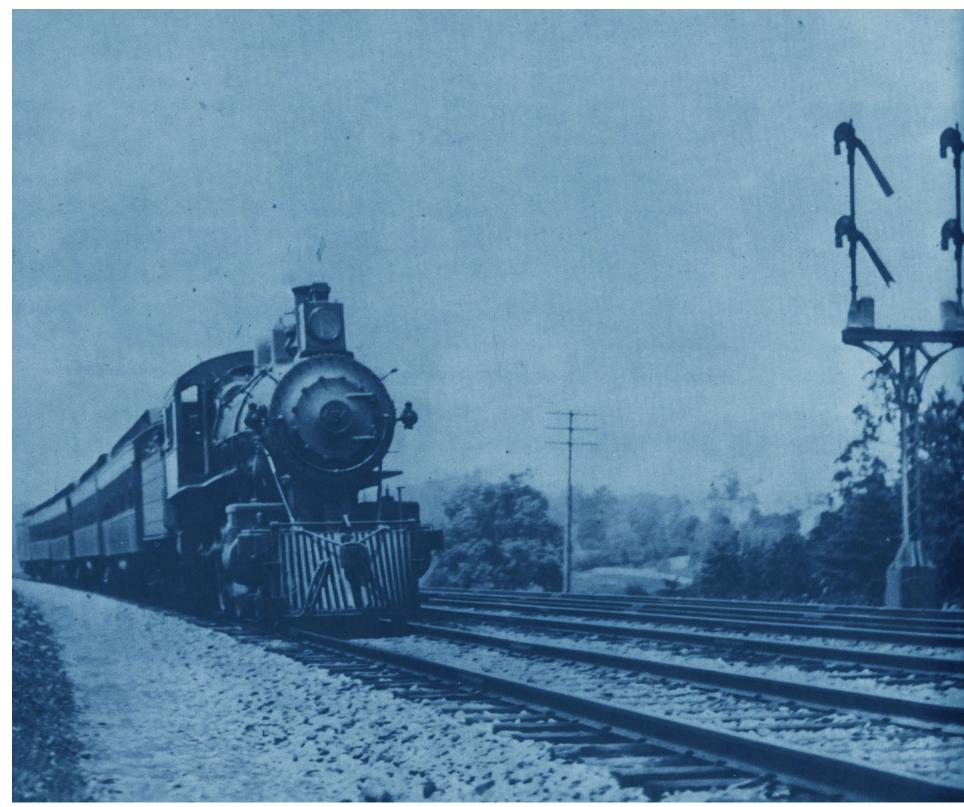
30th Street Station + Penn Coach Yard Philadelphia, PA 2019

Photo: Chris Hytha @hytha.cg

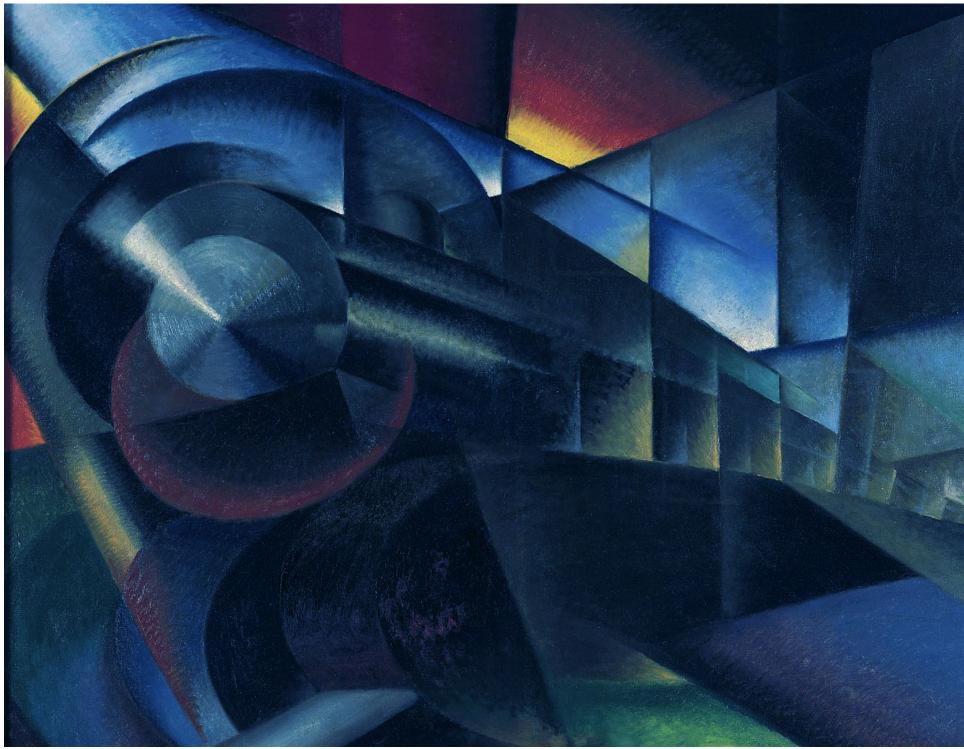
INTRODUCTION

This thesis employs public transit to establish regional reclamations of infrastructure, empowering cultural identities through a vernacular that is realized and matured into the capacity of today. The decaying state of our mass transit infrastructure is due to a decline of community ownership and regional identity represented in their architecture.

"Communities" can be considered cities, neighborhoods, towns, or entire regions of States depending on the scale of the infrastructure. Philadelphia, Pennsylvania clearly exhibits the range of this decline. A city that went from being the center of the Pennsylvania Railroad, now is sprinkled with infrastructural shells of the past. These sites now provide an opportunity revitalization of the communities they inhabit.



As it stands today our transit systems are extremely antiquated, unreliable, and unattractive. If you look towards cities today and the number of citizens and commuters using public transit versus those that take the car into work, to grab groceries, or travel for vacation are extremely tilted towards the side of the automobile. This disuse of public transit has resulted in dilapidated stations infrastructure and organization throughout this publicly funded corporation's Iran our public mass transit systems. Rather than blame the state of these infrastructures, it's necessary to learn from their evolution overtime in hopes of uncovering unintentional design which spawns from them. These unintended instances are where intimate but resilient design and culture are born. There are a few examples of companies who have made a name for themselves by revamping public transit systems through data analysis and redistribution of each system's assets.



THE STATE OF OUR CITIES

PHOTOGRAPH OF THE MARKET FRANKFORD LINE ELEVATED / SUBWAY TRAIN UNDER CONSTRUCTION ON MARKET STREET



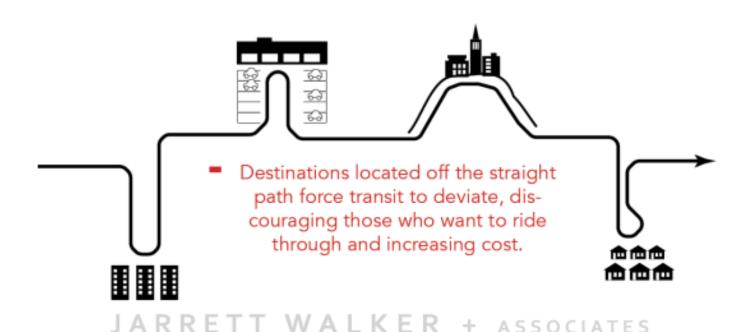
"FREEDOM IN FREQUENCY"

Jarret Walker + Associates | Transit Efficiency Diagram

LINEARITY Can transit run in reasonably straight lines?



A logical transit line is a direct path between any two destinations on it.



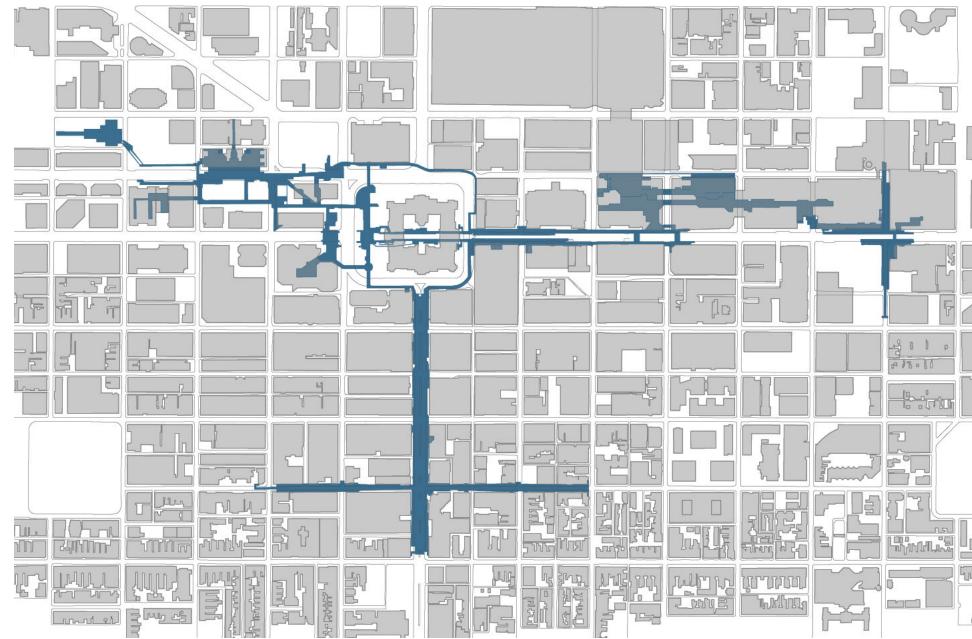
1.1 O FUNDING AND RIDERSHIP

One example of this type of company is JARRETT WALKER + ASSOCIATES. They introduce a catalogue of data driving techniques into transit systems, most notably their emphasis on reliability following the motto "there is freedom in frequency". In Portland, Oregon they reorganized an existing public transit system into one of the most successful in the U.S. Increasing ridership over time, and attracting people across all classes to utilize it. This data driven reorganization is an inspiring precedent on how to approach a system in decay, so how could you take it a step further in the design of architectural elements to accomplish the same thing? To start we must understand the tangled history of these infrastructural systems.

A PHILADELPHIA NEWS
PAPER ANNOUNCING THE
OPENING OF THE NEW
"HIGH SPEED" FRANKFORD
ELEVATED LINE.



The underground network of concourses in Philadelphia's Center City. Hosting varies modes of transit stations, such as Subway's, Trolleys, and light rail.



1.2 O INTERSTATES AND CITY SCAPES

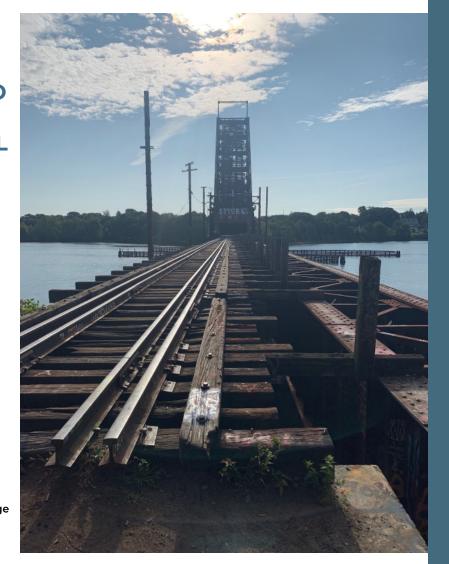
Since the federal government bought the private public transit organizations that existed in the first half of the 20th century, they have lost revenue every single year while owning these systems. While the government owns these public transit corporations, they have also generated millions of dollars in subsidies for both privately owned automobile companies and private contractors to build interstates on mobile infrastructure and less than the cost of automobiles themselves as well as the biggest influence on gas prices. Our Infrastructure of transit systems were simply pulled from the competitive market and sit by while other modes of transit fight to improve themselves. Any progress for public transportation remains stagnant.

When we look at the existing stations throughout our transit lines today, you often see stations designed with a vernacular reflective of the neighborhood fifty years in the past. The newer stations that are developed come from a template of each transit organization traded by choosing cheap cost-effective materials and low bid contractors to limit the amount of capital investment in the project. What remains is a building that the community doesn't see as their own, because there are six more like it down the train line. That sense of connection to a train station, bridge, or piece of infrastructure is the keystone for a successful design.



1.3 O STATES OF DECAY

THE DECAYING STATE
OF OUR MASS TRANSIT
INFRASTRUCTURE IS DUE TO
A DECLINE OF COMMUNITY
OWNERSHIP AND REGIONAL
IDENTITY REPRESENTED IN
THEIR ARCHITECTURE.
"COMMUNITIES" CAN
BE CONSIDERED CITIES,
NEIGHBORHOODS, TOWNS,
OR ENTIRE REGIONS
OF STATES DEPENDING
ON THE SCALE OF THE
INFRASTRUCTURE.



Crook Point Bascule Bridge Providence, RI Abandoned and Frozen





INSTANCES OF INTAMACY

Reading Terminal Market in the Early 1900's

THE IDEA THAT A PIECE OF DESIGN CAN
REPRESENT A REGION ACTING AS AN AGGREGATE
FOR INTERACTION BETWEEN ALL CLASSES, WHILE
BINDING IT TO A GREATER SYSTEM.

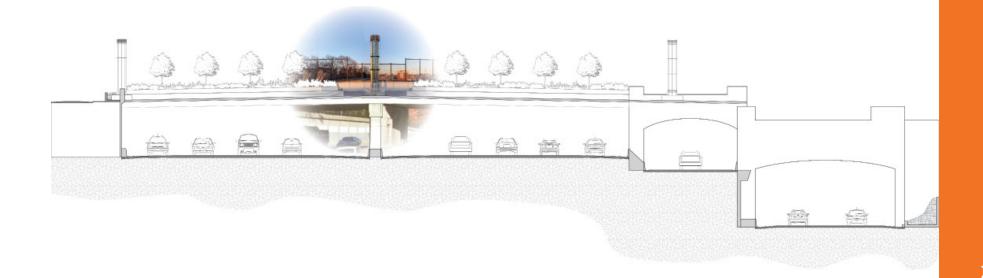
Reading Terminal Market today

10

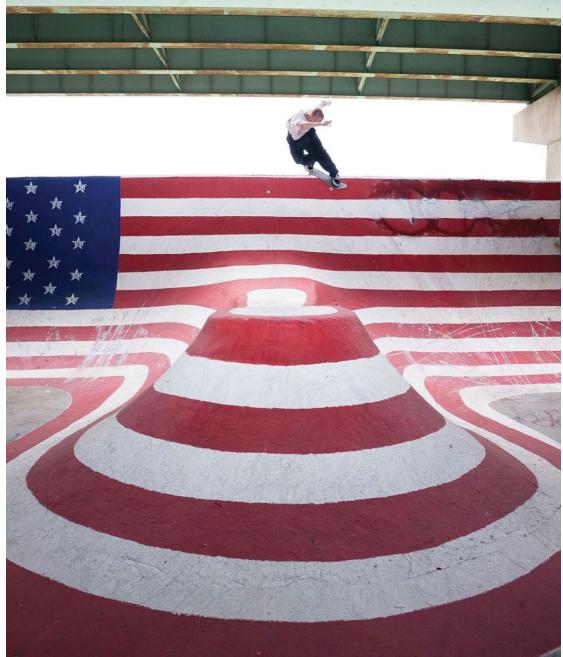
The research for this thesis began in providence studying the IPP pedestrian bridge and the unintended moments of intimacy which occurred on it. Noise from the I-195 highway below gave pedestrians an audible mask of privacy in the center of the bridge enabling intimate gathering to occur there.

2.1 O INDIA POINT PARK PEDESTRIAN BRIDGE

The research for this thesis began in providence studying the India Point Park pedestrian bridge and the unintended moments of intimacy which occurred on it. This bridge connects the Fox Point neighborhood to India Point park by spanning over the eight lanes of I-195 below. While studying this bridge, one in a series of case studies in Providence, the paths of those traveled across it revealed something interesting. Those traveling across the bridge rarely stopped, but when they did it was usually in the most exposed portion of the span right in the middle overlooking the interstate. Noise from the I-195 highway below gave pedestrians an audible mask of privacy in the center of the bridge enabling intimate gathering to occur there. Resulting in couples, friends, and those just taking a break from a run, taking time to sit and, knowingly or not, take advantage of this ideosychrisy in design.



FDR Skatepark, located under I-95 in south Philadelphia. This area has been largely forgotten, until skateboarders started building on the space. Creating a skatepark with a character unlike any other park in the north east. The space is now thriving with life, and community from those who built the concrete ramps and gave the forgotten area a purpose.



The "None-Space" left by the urban slice of I-95 has been inhabited by the counterculture of skateboarders who spent their own time to build ramps and clean the area underneath the bridge. The skatepark has since been given "ligitamacy" by the city of Philadelphia and is consistently more populated than any other portion of FDR Park.

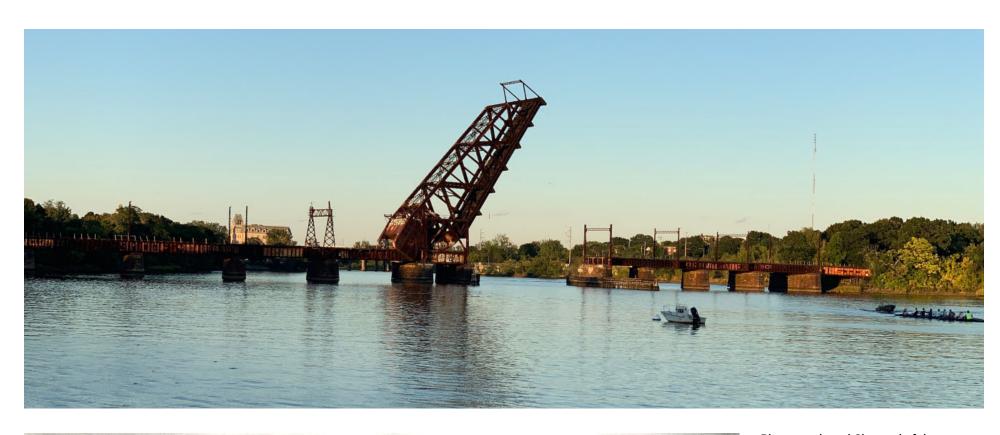




2.2 FDR SKATEPARK

If you follow I-195 south for a few hundred miles you will find the next moment of unintended connection occurring in spite of a highway. This time it's happening underneath I-95 in south Philadelphia at FDR skatepark. FDR Park is a large public park in Philadelphia and has I-95 running its entire southern border. The space underneath the bridge is immense as the height of the highway raises upwards leaving a forest of huge concrete piers, which skateboarders started using in the late 1990's to create ramps. The isolated sight made it an ideal sight for counter cultures to occupy and overtime make their own. From the first concrete transition poured onto a pier, the "skatepark" has now grown into a landscape of curvilinear surfaces flowing from pier to pier. The work, money, and design for the park didn't come from any one particular source, but grew overtime as more skateboarders added portions of the park. FDR skatepark continues to grow, everytime you visit there will be form work up or material being collected. Although they didn't ask for it, the city of Philadelphia granted permission for skateboarders to continue building on the site, as they were keeping away other forms of crime from that area of the park, while keeping the area clean of trash. This technique of latching onto infrastructure in such a literal way is fascinating in a few regards. The first being that the installation of this design requires a complete reimagining of the space. The harsh landscape of underneath an Interstate viewed through the right lense could turn into a space that draws in more of a crowd daily than the entire park it's connected to. Another attribute to FDR skatepark as a design precedent, is that it's a living work. It continues to grow as more people from that counter culture take part in it's sprawl. It wasn't made by one person or group but a series of skateboarders who were eager to contribute whatever they could. That is intimacy with infrastructure.

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Photograph and Charcoal of the Bascule bridge in its current frozen upward state.

2.3 CROOK POINT BASCULE BRIDGE

Other instances of intimate connections can be inspired by scale and longevity of a structure. As is the case of the Crook Point Bascule Bridge in Providence, RI. Once functioning as a Freight bridge connecting India Point railyard to East Providence, then as a walking path, up until it's current state; frozen pointing upward. Any original utilitarian function of the bridge has been stopped, it doesn't even span the Seekonk River. It hasn't lost all value as a piece of infrastructure however, by simply studying those who pass by it on the pedestrian path you can see the bridge having an impact on the community. It's impact isn't as a bridge, as much as it is that of a monument. The decayed state of abandon gives character to the structure, turning any adjacent spanning structures into simple extruded roads. It acts as a landmark for wayfinding, its erect state making it visible from It's raised center is visible from the adjacent neighborhoods of Wayland, Fox Point and Watchemoket Square. It's this type of observation, which is vital for truly understanding what a community values and how they make undesigned connections with the built world around them.

24

Present day East Conestoga Road and what was then called New Lancaster Pike and the railroad bridge spanning the Main Line Route. The Mainline or "Paoli-Thorndale" Line has the largest ridership in SEPTA's Regional Rail system.

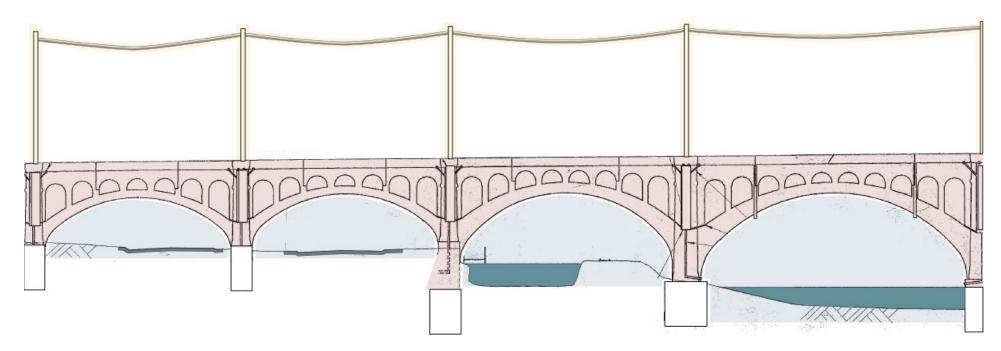
DILAPIDATED CONCRETE LOCALLY SOURCED AND **EXPANSION TO BRIDGE.** MANUFACTURED MATERIALS SIMPLE DIRT ROADWAYS WITH LITTLE MAINTAINENCE **ASPHALT ROADWAY** NEEDING MAINTENAINCED **EVERY 10 YEARS**

OWNERSHIP OF INFRASTRUCTURES

The routes we travel daily by train or car pass over numerous types of bridges along their path. These are experienced by most utilizing the infrastructure in plan, as they observe a transit map or type directions into their phone. The audience that is overlooked are the ones who pass underneath these bridges in their day to day lives. These bridges have different histories, and characteristics from one to the next. These differences are what gives them value, and connect them to their neighborhoods. Through peeling away built expansions you can start to appreciate the observational quality this palimpsest provides. In section these interactions with infrastructure exhibit overlap in ownership of the built infrastructure and adjacent properties, public spaces through both of these areas, and where intimate moments occur because of these interactions.

CUTTING SECTIONS IN MASTERPLANS

Manayunk Bridge 1918 - Ownership Section Diagram



- LEASED REAL ESTATE

BRIDGE SPAN / O.H. WIRES:

PECO (ELECTRIC)

COMCAST (INTERNET)

MANAYUNK DEVELOPMENT CORP.

LOWER MERION TOWNSHIP

- 1

PRIVATELY OWNED

BRIDGE STRUCTURE:

SEPTA STRUCTO

AMTRAK

PENNSYLVANIA RAILROAD

OWNERSHIP HISTORY

SCHUYLKILL CANAL:

OWNED AND MAINTAINED BY CSX FRIEGHT

- PUBLICLY OWNED

SCHUYLKILL RIVER:

DELAWARE RIVER BASIN COMMISSION SCHUYLKILL RIVER CONSERVATION ASSOC.

I-76 SCHUYLKILL EXPRESSWAY: OWNED AND MAINTAINED BY PENNDOT

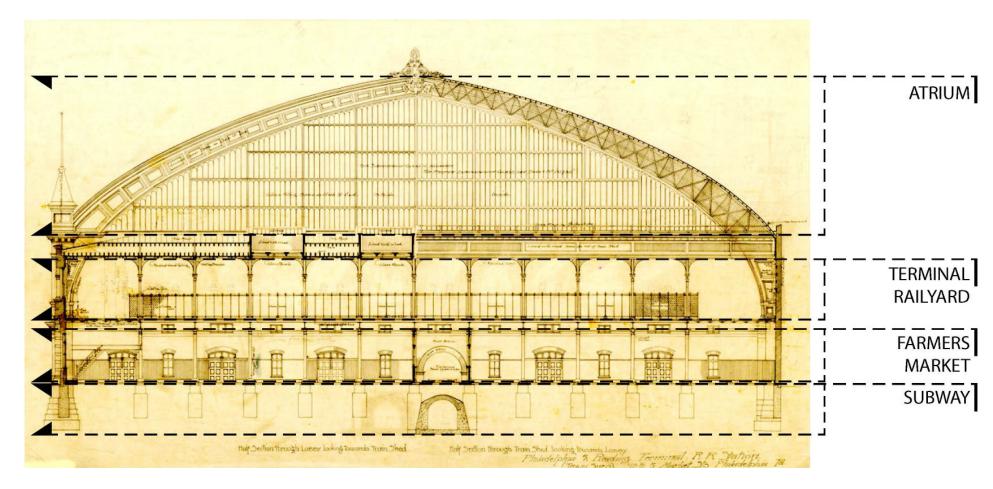
3.1 MANAYUNK BRIDGE

This iconic concrete arch bridge built in 1918 for the Pennsylvania Railroad for transporting Coal, then acquired by SEPTA in 1976, and then most recently in 2011 it was converted and leased from SEPTA to become a pedestrian/bike path. It is located in the north west Philadelphia neighborhood of Manayunk. The bridge has established itself as an iconic landmark synonymous with Manayunks identity. Outside of the identity it provides to the neighborhood, it still utilizes its spanning of the Schuylkill River acting as a conduit for the adjacent neighborhoods. The top of the bridge provides pedestrians, bicycles, and runners with a pathway. Above this the towers that used to house the train catenary lines now support internet and other tele-communication cables traveling across the river. The manayunk bridge has had a varied history of ownership and when viewed in section can review how this ability to adapt to new programmatic uses gave the bridge its longevity which lead to it's iconic role in the community.

Reading Railroad Carshed 1893
1115 Market Street, Philadelphia PA





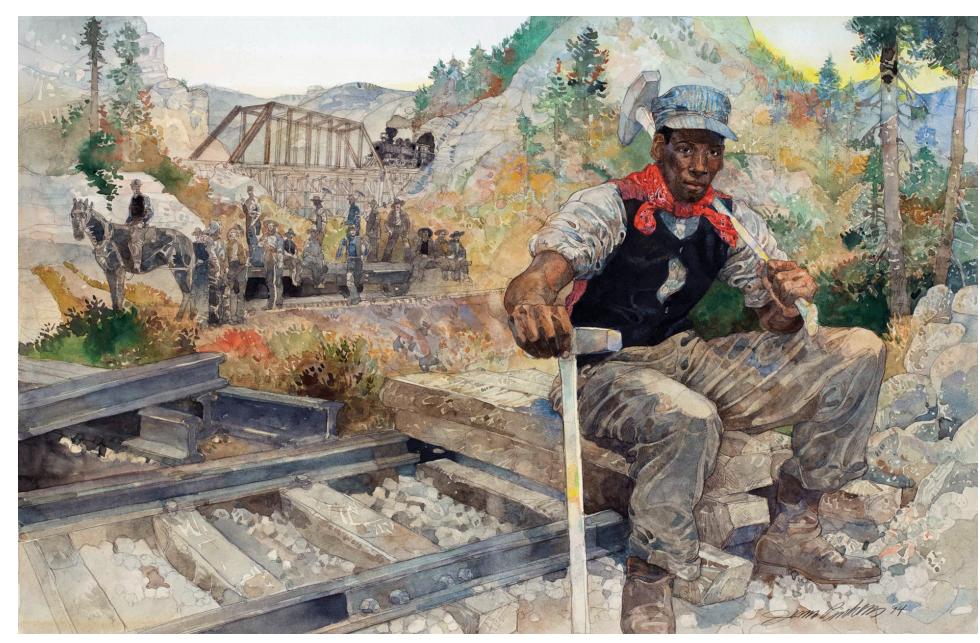


3.2 READING RAILROAD CARSHED

THESE STUDIES ON THE LAYERING OF PUBLIC AND PRIVATE SPACES, DISPLAY HOW VARIETIES OF OWNERSHIPS OF INFRASTRUCTURES GIVES THE ELEMENTS LONGEVITY.

Reading Railroad Carshed (now Reading Terminal Market and Philadelphia Convention Center) in its height of production for the Pennsylvania Railroad it was nicknamed "The Workshop of the World". This was the Pennsylvania Railroads hub for research and development, making strides in new transit technologies during its decades of operation. It was the hub for all research and development for the most progressive railroad of its time.

The real value of Carshed sat at a level below in Reading Terminal Market, the only program within the building that has occupied the entirety of the building's lifespan. The market is made up of a collection of locally owned businesses, mostly family owned, offering a huge collection of foods from different backgrounds for the entire Center City Philadelphia area. The vitality and importance of this market to philadelphians is a huge reason that the building still exists today. When the railroad went under in the late 1960's the space above stayed largely unoccupied for over 20 years until the city used the site for it's convention center. The resiliency should also be attributed to the design of the building. The Carshed above Reading Terminal Market embraced the huge space filled with natural light turning it into the center's main gallery room. This malleability of design to accommodate a variety of programs is a necessary architectural efficiency, particularly in the rapidly evolving needs of today's society.



"John Henry" | by Jerry Pinkney

HISTORIC IDENTITY THROUGH THE RAILROAD

The Railroads has played a key role in defining the United States as a country, and establishing it culturally. They streamlined the manifest destiny mindset, connecting the country east to west via the state of the art Iron Horse. It revealed itself in the arts, spanning from folk songs, children's books, and paintings. Entire generations took advantage of the connections through capillaries of rail that leaped between cities across North America. Either by being employed by the Railroad or taking advantage of the newly widened market and capitalizing on its network for their own businesses. It established a culture of proud blue collar workers who took pride in their contribution to the network of rail and understood it's scale and massive undertaking as a true American feat of the time. Those generations passed the torch to their next of kin who shared the same attraction to working on projects at a scale that is truly infrastructural. I am one of these next in kin. I come from a railroad family of engineers who worked for railroad companies at local scales to the Pennsylvania Railroad in its prime. I feel my responsibility as an architectural designer is to understand how these engineering accomplishments connected to people and made them feel something that is missing today. The railroad network that spans across the country created a tangible uniting of the states, which is why will always be held close to those who understand its impact.



Construction of the Broad Street Subway line. Looking North on South Broad Street towards city hall, this image shows the excavation of the concourse level. This is part of a vast concourse system that exists today.

4.1 O KEYSTONE VERNACULAR



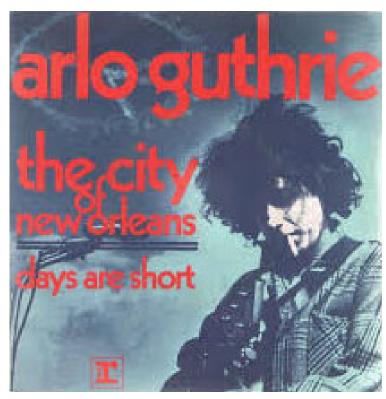
The creation of the Railroad in the United States changed the shape of our cities, especially in the northeast where most of these systems were spawn from. They created opportunities for train stations to become civic palaces for the people. Where citizens on the outbound side would feel proud as they passed through architecture that served them daily, and inbound commuters would experience the first impression of a city being welcomed through them. Philadelphia acted as the hub for the largest Railroad company (and company overall) in United States history, leaving vast arteries of infrastructure behind that have since been abandoned, in decay, or never finished. Historic images of the building of subways, elevated lines, stations, and carsheds emphasize the impact that this type of infrastructure had on shaping the city physically and it's identity within the context of the Country.

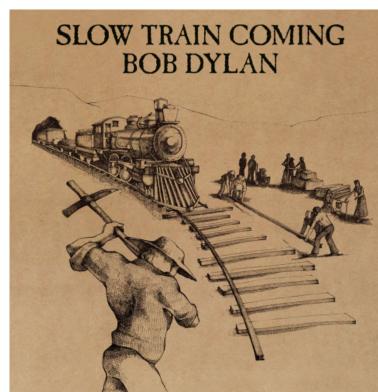


Map of the north eastern United States showing the expanse of the Pennylvania Railroad at its height of operation

Fig. 14

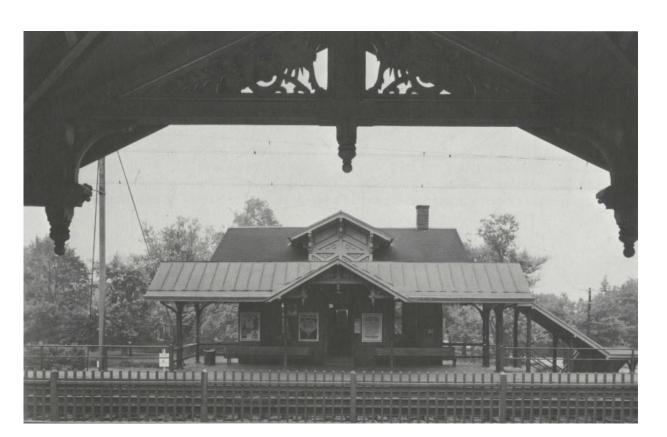






O RYTHM ON THE RAILS

The music of a culture plays a key role in both defining it, but also recording its place in time historically in a way less creative outlets lack. Songwriting and popular music binds history with a pathos of those represented in the composition which can capture a culture in time. The railroad has been referenced abundantly in the music of the United States, and those writing these songs aren't the same people who own the companies operating them. They provide a valuable working class perspective of interactions with the railroad, the station, and what role it had in the lives of a silent majority of the population. The rhythmic sound of the train running over the tracks catered to genres of folk and blues which portrayed the feeling of escapism that the train provides in times of struggle or simply for the hell of it. Hank Williams in his popular song "So Lonesome I could Cry" sings of a hearing "...that lonesome whistle blow" a sound every American could hear resonating in their mind as they listened. Metaphorically they were used to depict where someone was at in their life, whether they were going forward at full speed one moment and veering off the tracks the next, the commonality of this infrastructure made these stories all the more potent. The power and scale of the locomotive gives power to a song, such as Sister Rosetta Tharpe's Gospel popular rendition of "This Train is Bound for Glory" (1939), paired with her powerful vocals the song emanates a feeling of hope aimed at a minority population that had very little in the United states at that time.



Platform Photograph of Inbound Station Building



Inbound Side Station Building Photograph

Historic Photographs of Strafford Station | 1954 Strafford, PA Regional Rail station on the Paoli-Thorndale Line

THE ROLE OF THE TRAIN STATION

A "station" for the sake of this study should not be limited to buildings that still operate as direct connections to the railroad. Pieces of architecture that were created with that designated role of a station and are able to adapt overtime set an example of how powerful good architecture at the scale of infrastructure can be. If well designed, the architecture can outlast whatever company, corporation, or developer funded it; and rely solely on it's identity in the city and flexible programmatic space to thrive over time.

BRINGIN COMMUNITIES TOGETHER, THROUGH A COMMONALITY IN TRAVEL.

ENCOURAGING A HUMAN INTERACTION IN A WORLD THAT'S BECOMING MORE AND MORE ISOLATED.

CREATING A CENTER OF A TOWN OR CITY WITH A STATION THAT IS ENABLES WALKABILITY AND FREES THE COMMUTER FROM THE RESTRICTIONS AND COSTS OF THE AUTOMOBILE.

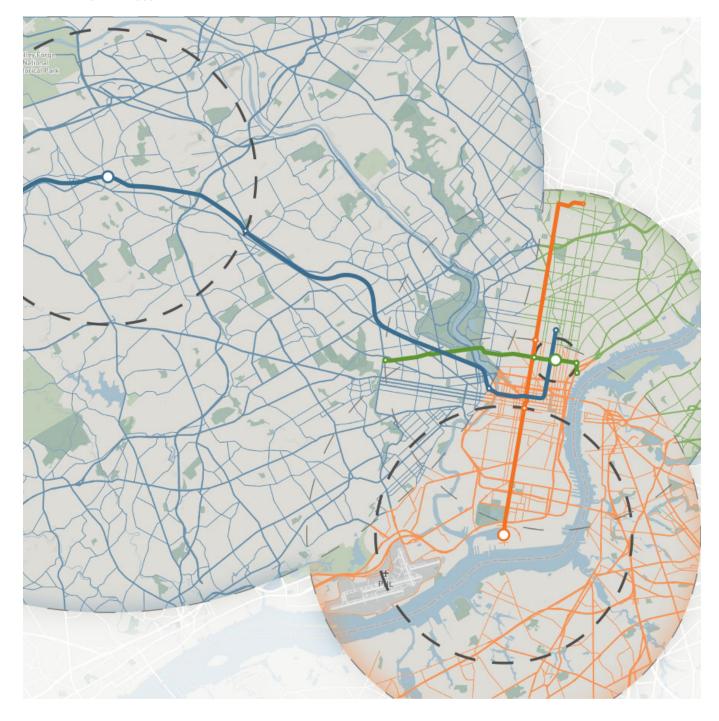


Early 1900's perspective drawing of Reading Terminal Carshed

4.4 O WHAT TYPES OF ARCHITECTURE PERSIST?

Reading terminal market in Center City Philadelphia showcases what this type of successful architecture can look like. This building developed over 100 years was made up of two parts, the car shed a huge steel structure on the north end and then an ornate Victorian style building on the south side facing Main Street market Street. Today both buildings are still standing maintained and are occupied by multiple programs and diverse public and private entities. When first built the car shed housed Reading Terminals maintenance facility for the rail cars. The taller south part of the building was occupied by the corporation's officer. The car show is located 25 feet above street level below the car shed was a local farmers market which muscle it's inception and throughout the existence of the market till today. Reading Terminal Market is the premier example of public investment in the train station in the long range vitality that I can provide. When the train shed and then tire line for that matter went out of use the structure above laid untouched for decades. Only in the 90s was there a proposal for the Pennsylvania convention center to inhabit that space and utilize this huge structure and natural light has a main ballroom for the building. While no longer a station it's entirely malleable programmatic spaces give us a very clear example of how to design for the future transit. Today Reading Terminal Market is sandwiched between the Pennsylvania Convention Center above it and Jefferson Station below making it more lively than ever.

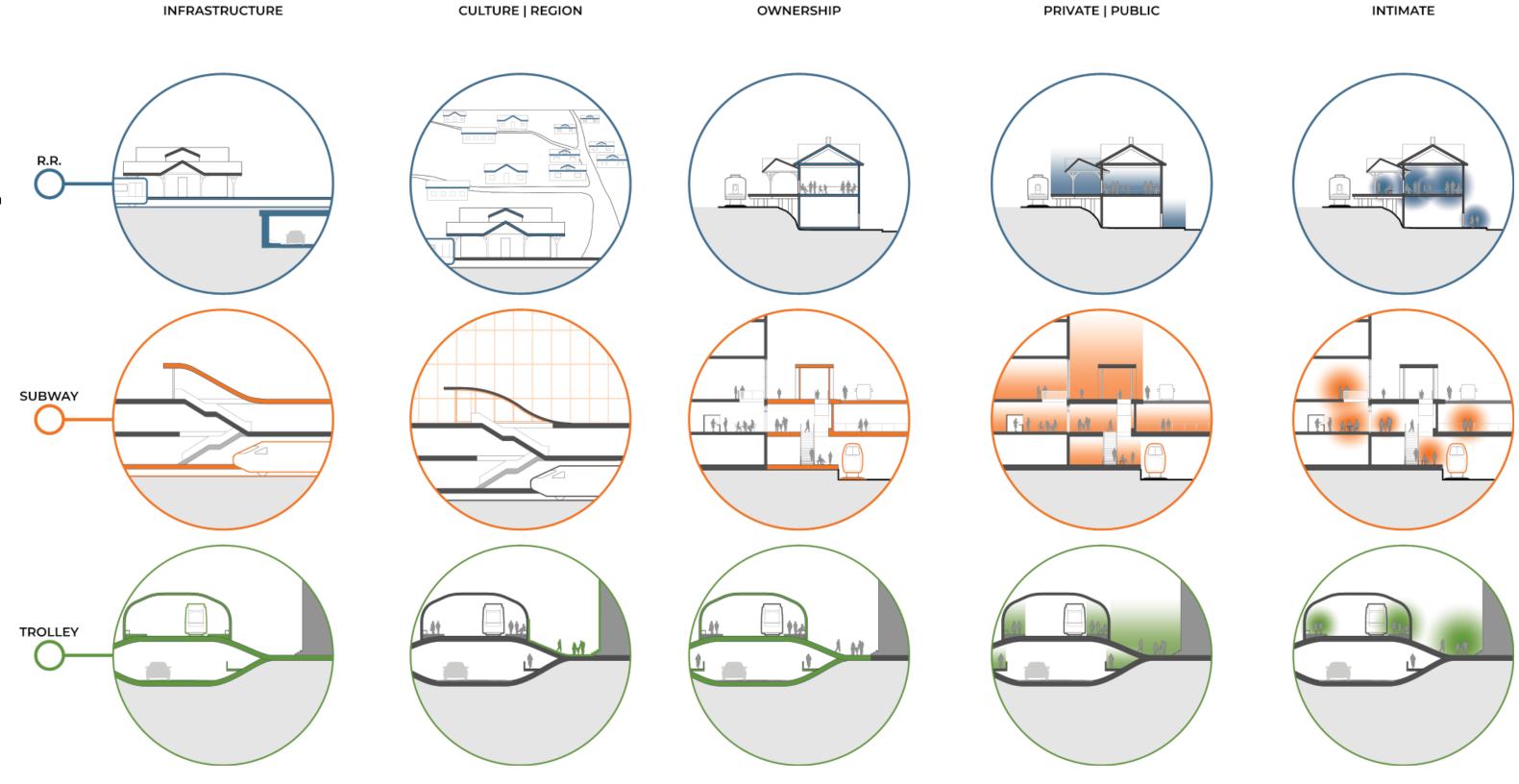
MAP OF COAL INDUSTRY THROUGHOUT THE U.S. ON THE RAILROAD IN 1950

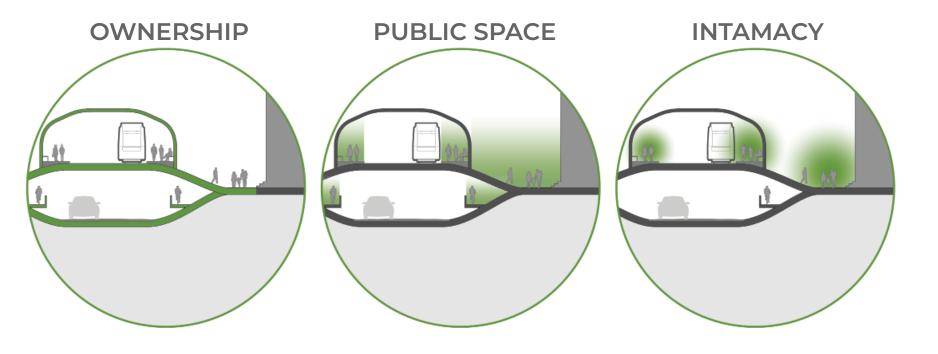


PRECEDENTS WITHIN PHILADELPHIA

HONING IN ON PHILADELPHIA'S TRANSIT TYPOLOGIES I CHOSE THREE TO EXAMINE. CHARTING THEIR ROUTES OVERLAP AND SPEED, AND HOW THIS TRANSLATES TO A CONNECTION WITH THE CITY.

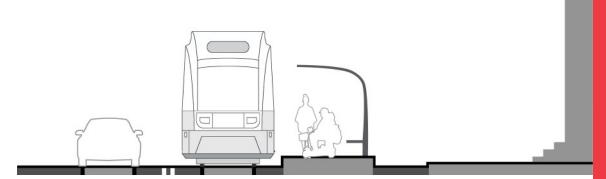
This series of thumbnail section studies, seeks to examine and catalogue typical instances of each scale of transit station taken from the existing cityscape; and identify attributes within each. Specifically considering the overlap of public and private ownership to what is used and experienced as a public space. This blending of circulation spaces reveals itself as a key part in finding where intimate moments occur in infrastructural city scapes.

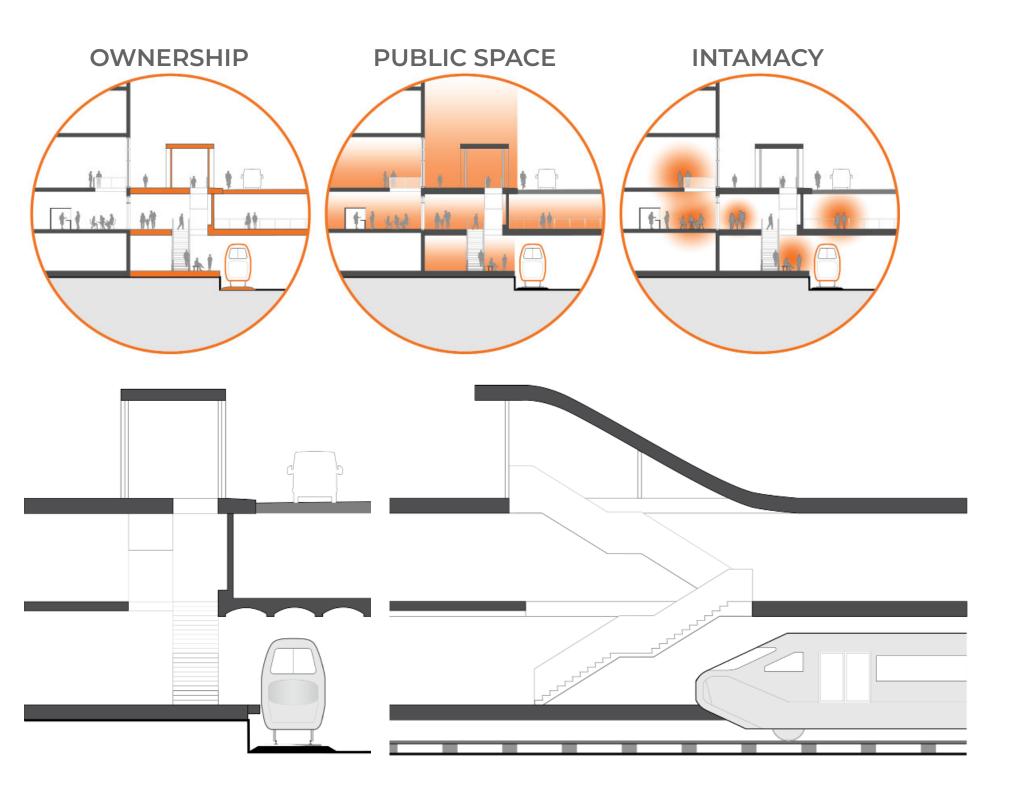






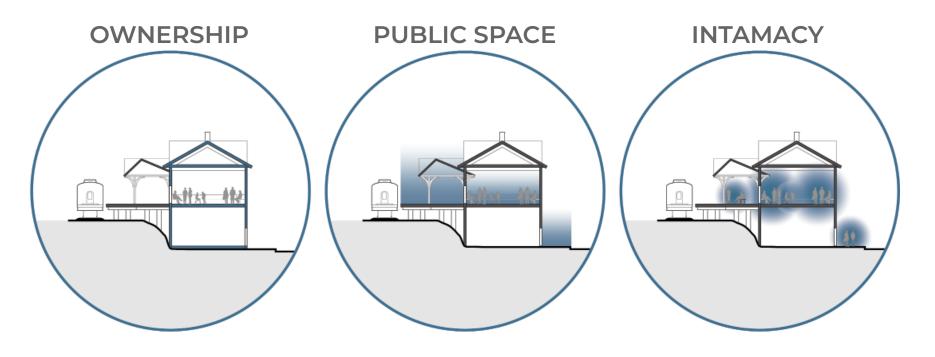
The trolley station will require a tactical site plan to allow pedestrians safe travel through a road posting automobiles and bicycles. This is at a much smaller scale than the other two proposals but just as important because it takes stress off of the other two systems and allows for those in decent neighborhoods a connection to the main arteries of the vascular capillary system. The ideas of walk ability frequency and safety are essential.

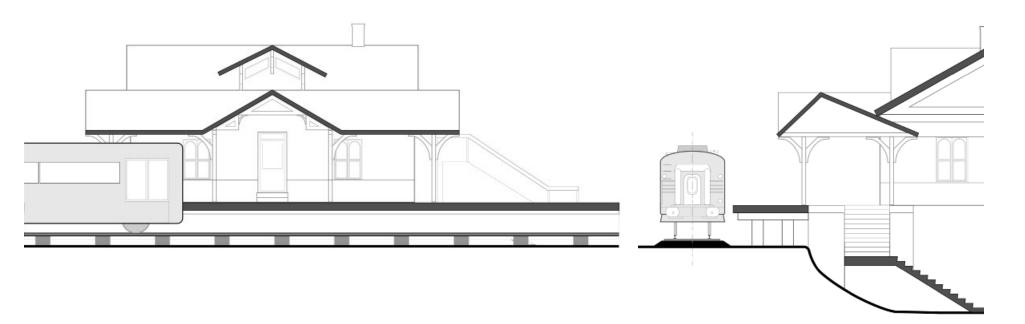




5.2 O SUBWAY STATION

In the case of a Subway it becomes important to try and capture the connective capabilities station throughout a system. Given it's largely vertical layering these moments provide a problem to be resolved in section. Discovering interactions with public transit infrastructure by exhibiting specific interest in overlap of ownership of the built infrastructure and adjacent properties, public spaces through both of these areas. Leaving some forgotten spaces where intimate connections with the space can occur.





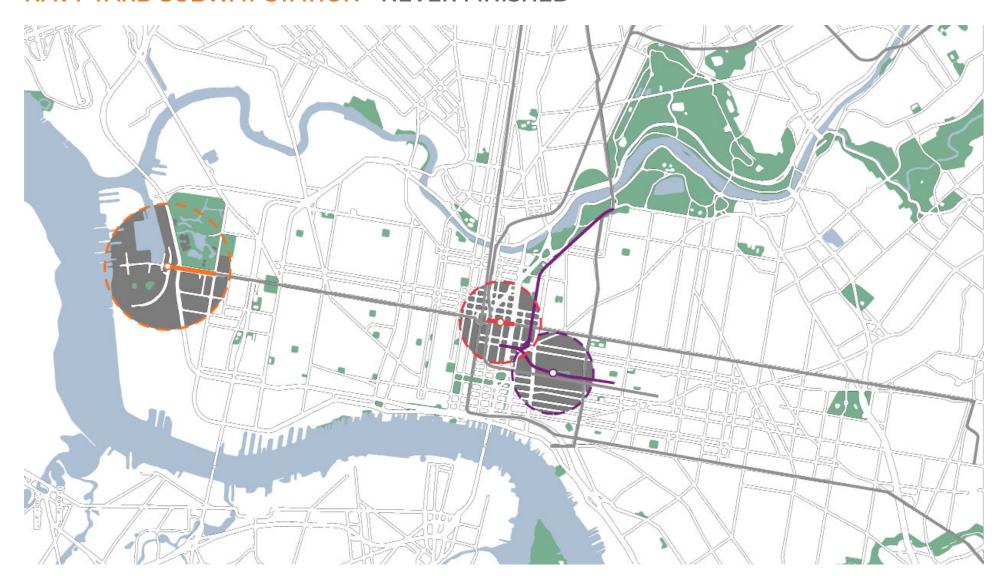
5.3 REGIONAL RAIL STATION

Third is our largest scale station located in the suburbs of our city. This station has the hardest job in battling the automobile, which makes it our most important Design tactic winning the war on ridership. Our train stations needs to not only encourage walk ability, but discourage automobile use, promote businesses to discourage automobile use within the proximity of our station and free our overall design and the small towns from the need of parking.

READING VIADUCT - DECAY

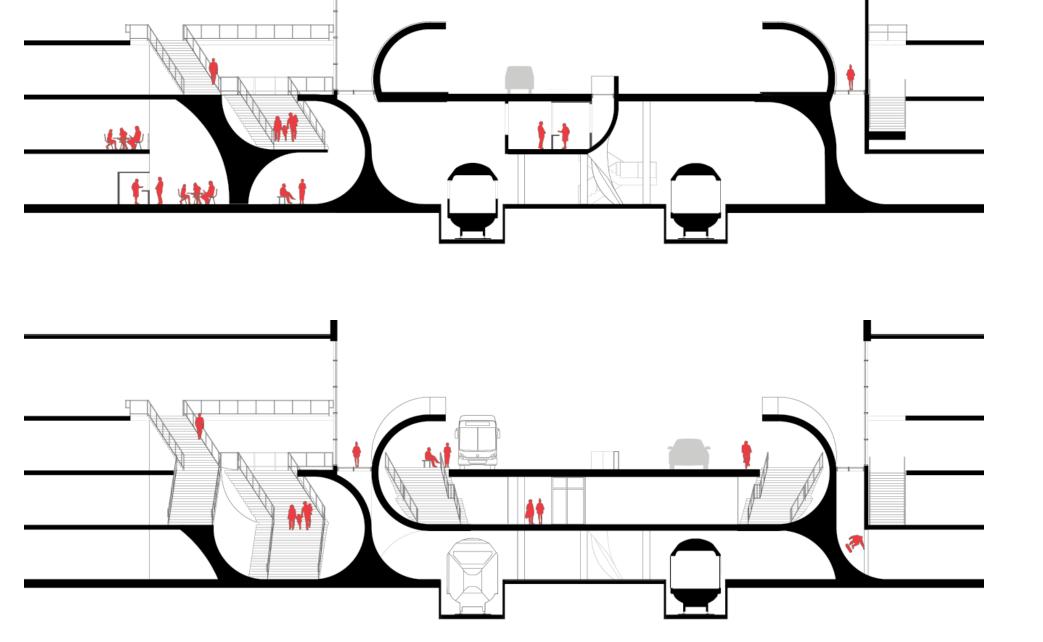
NORTH BROAD CONCOURSE - ABANDONED

NAVY YARD SUBWAY STATION - NEVER FINISHED



INSTALLATIONS OF INTIMANT SPACE

I chose three sites within philadelphia to implement architectural elements within infrastructural systems that were in decay, abandoned or never built. Throughout this process worked to compile a design catalogue which sought to inspire moments of intimacy with the infrastructure, the city, and other people. These designs have been introduced into the three sites at a variety of scales and aim to create these connections and reinvigorate the areas they inhabit.

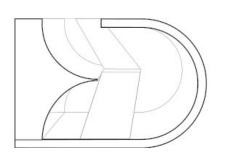


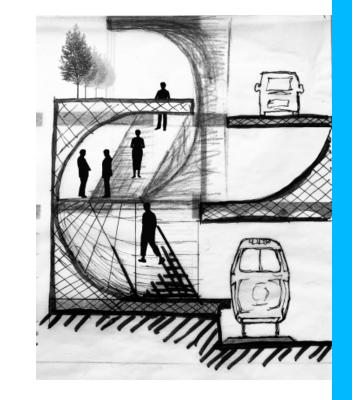
6.1 O NORTH BROAD STREET SUBWAY CONCOURSE

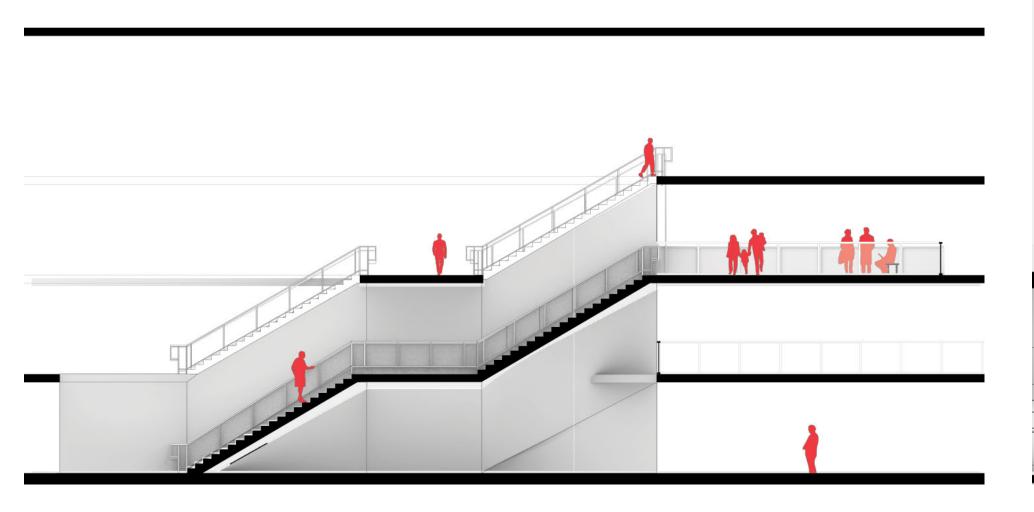
Starting with a design which acts as a simple subway headhouse which has a system that extends into the commercial or business centers adjacent to it. Providing a sheltered path way across Broad street, and back into the main concourse system of the city which spans over 8 blocks. The subway station provides opportunity and design opportunities to connect a layered programmatic space with circulation piercing through each level.



Concourse - Thumbnail



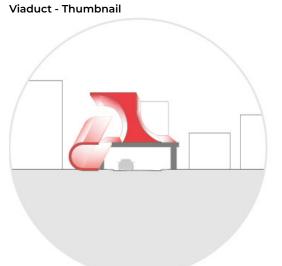








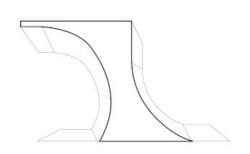
6.2 READING VIADUCT



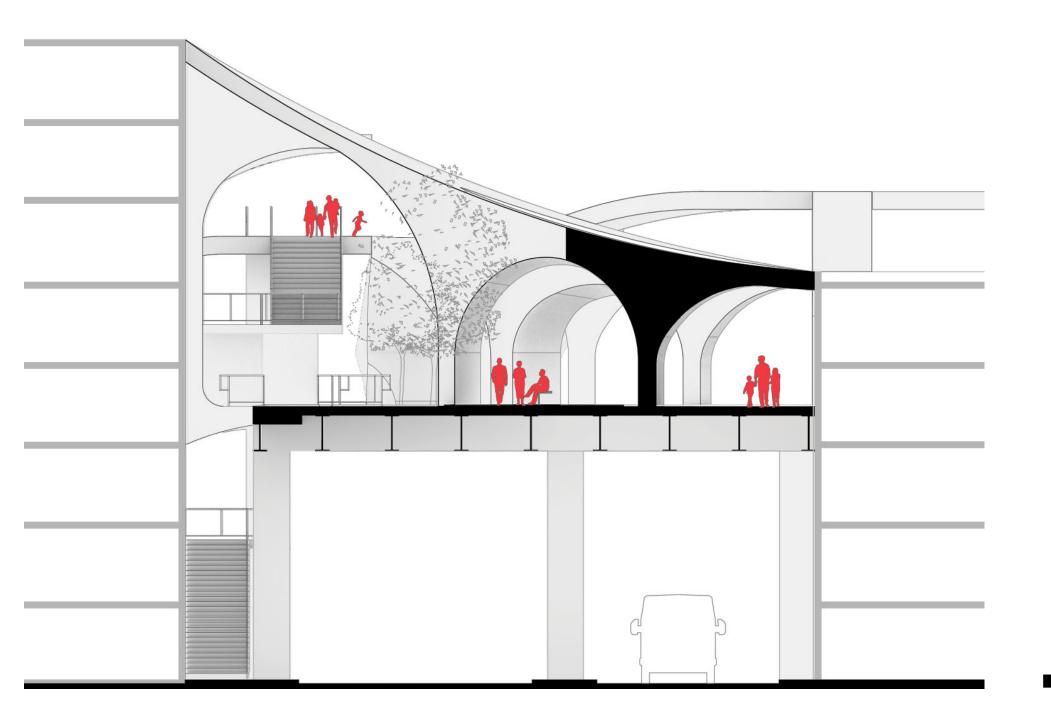
Using a series of undulating archways that leap from street level, to viaduct level, and between the existing buildings, this design sits just north of spring garden street and creates a pathway in a heavily commercial and industrial area that lacks public spaces of recluse.

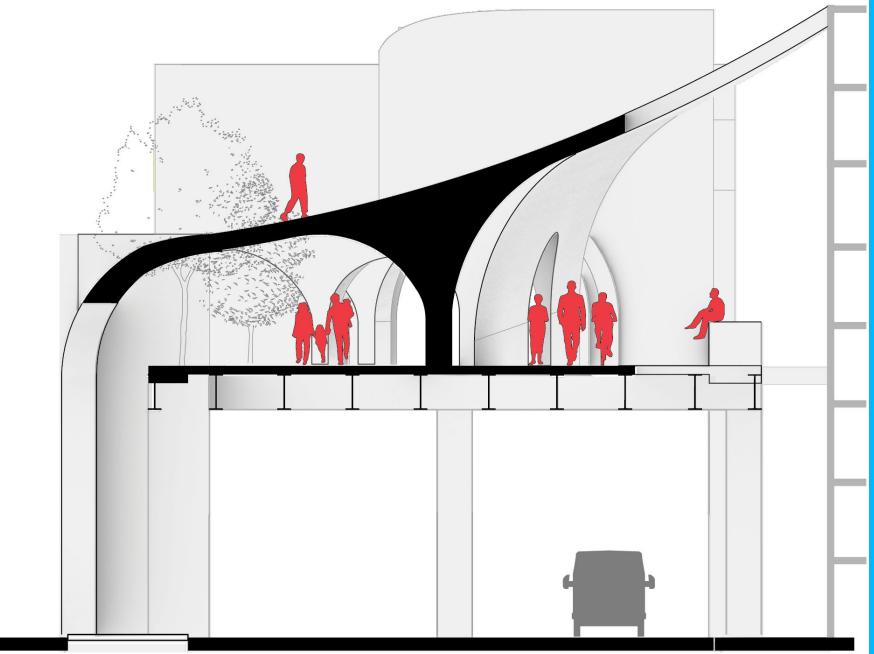




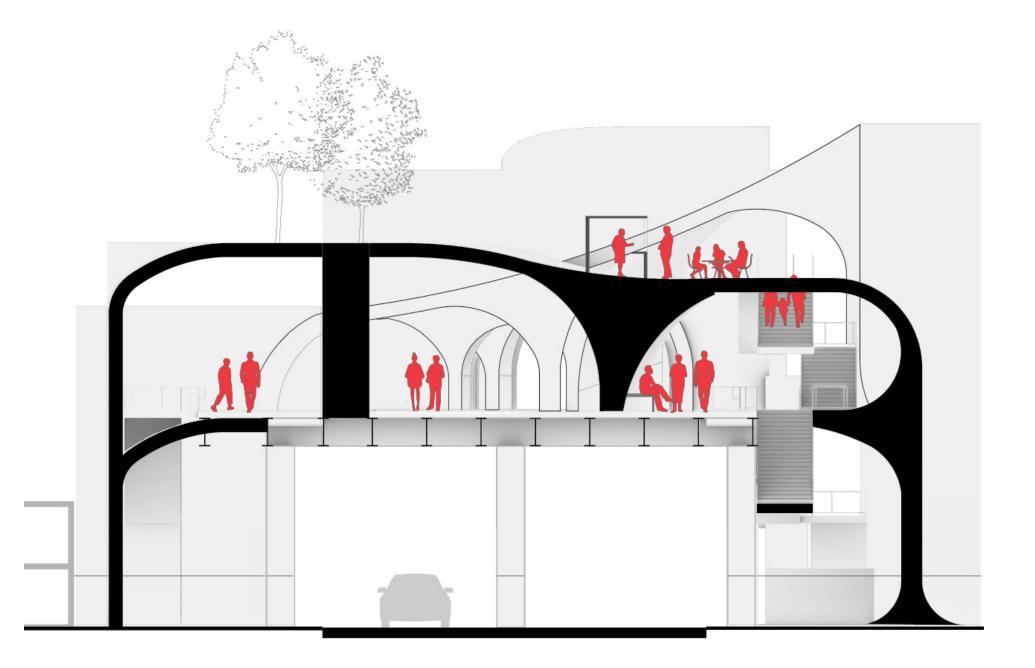






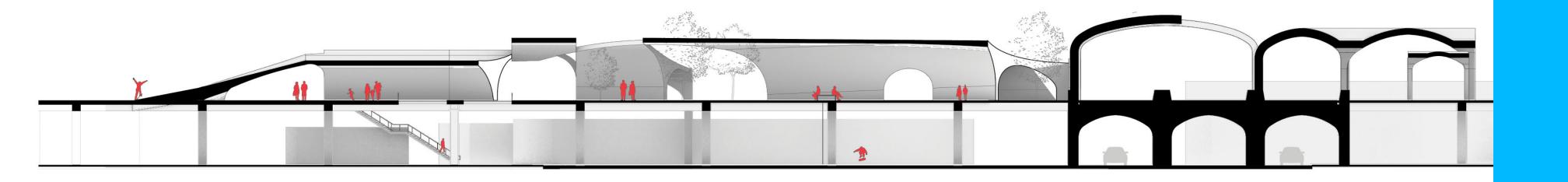


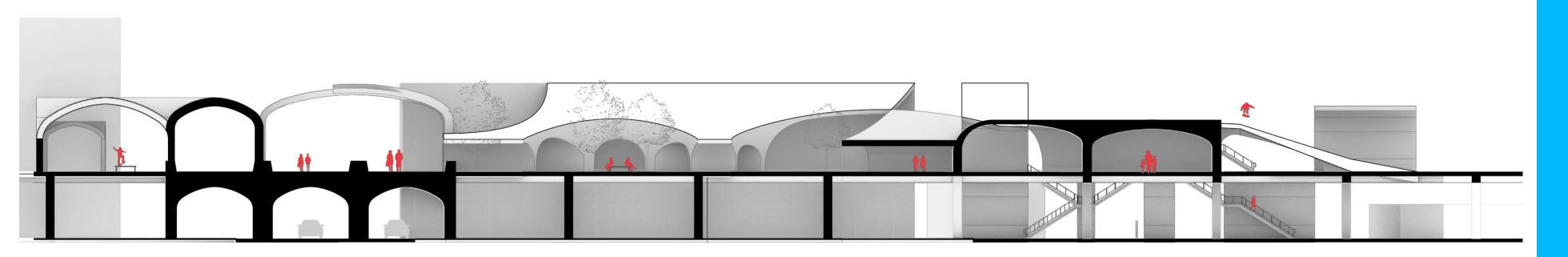
VIADUCT - SECTION VIADUCT - RENDERS











NAVY YARD - RENDER

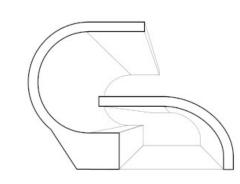


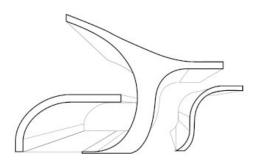
6.3 NAVY YARD SUBWAY STATION TERMINAL

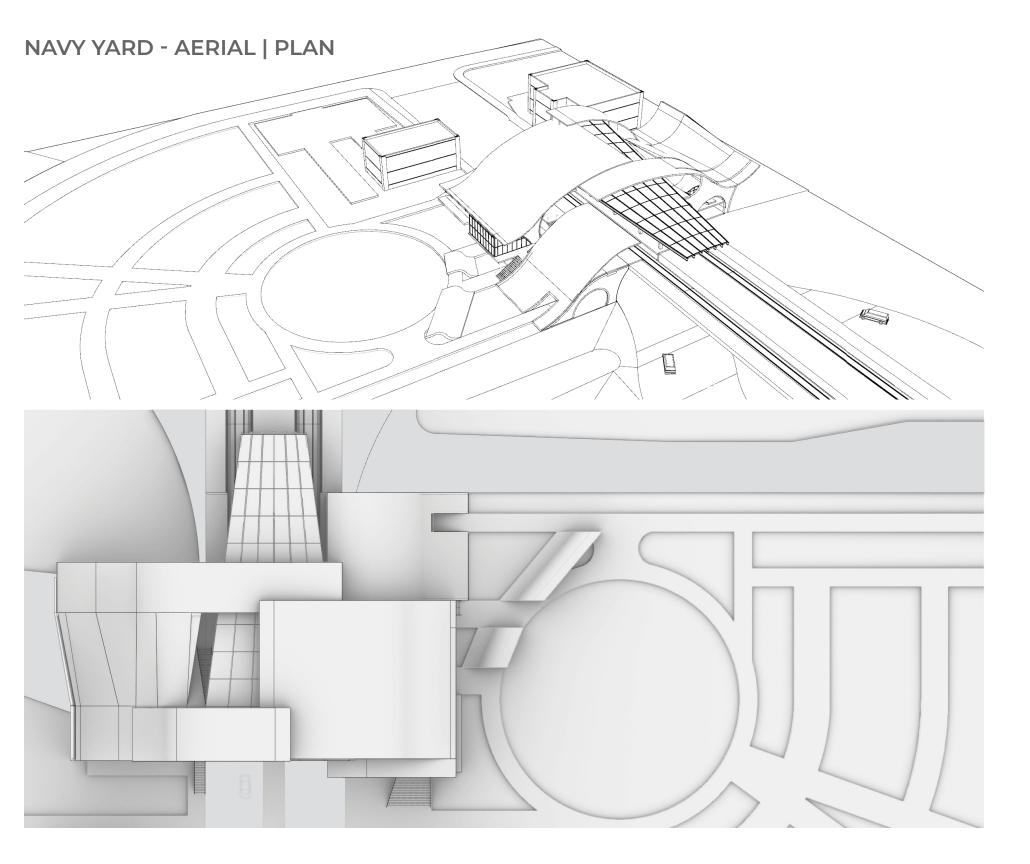


Navy Yard - Thumbnail

This extension of the broad street line connects the navy yard in Philadelphia with the rest of the city via subway. A connection that has long been bottlenecked by I 95 which cuts this booming commercial and residential community off from the rest of the city to the north. The design implementations pull the subway above ground, and a series of peels and overlaps of the station blend the interior and exterior creating spaces of curiosity that fade into the public park to the east.



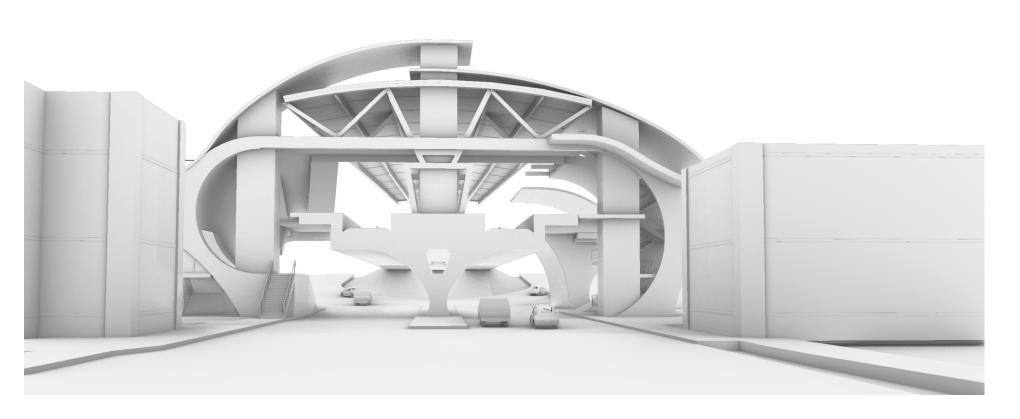




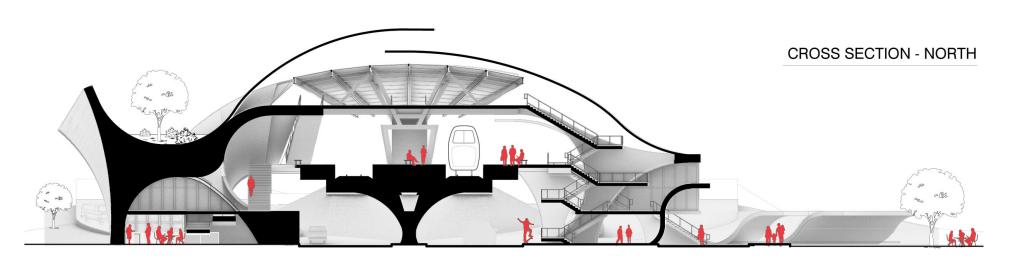
NAVY YARD - AERIAL RENDER

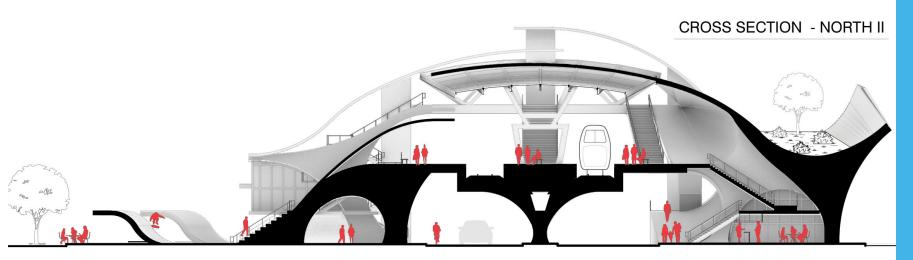


NAVY YARD - SECTIONS + PLATFORM RENDER









APPENDIX

RISD ARCHIECTURE A TRAIN OF THOUGHT

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2019-2020

GLOSSARY

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APPENDIX





ANDREW SPONSELLER

ANDREW SPONSELLER

FEDERAL HIGHWAY ACT OF 1956 GLOBALIZED DESIGN JANE JACOBS PRIVATE VS. PUBLIC OWNERSHIP PUBLIC TRANSIT NODE **NON-PLACE SPRAWL SUBSIDIES VERNACULAR**

Dwight Eisenhower passed the law authorizing 41,000-miles of interstate highways, allocating \$26 billion dollars to pay for it. The main reasons this was passed were not only due to the rise of popularity of the automobile, but with the threat of nuclear war cities needed adequate means for emergency evacuation. This act was the nail in the coffin for privately owned rail systems, who would start going bankrupt in that decade.

Design whether architectural, structural, or mechanical, has become more uniform worldwide. The ability to spread content in seconds, has resulted in cheap building typologies implemented in environments and cultures they are alien too. This is a result of cheap construction of the designs, and globalized standard of living. Developers react to public demand and replicate these types of buildings resulting in lose of culture and monotonous cities.

An American-Canadian journalist and author whose book "The Life and Death of American Cities" made the arguement in 1961, that developers weren't designing with the needs of cities dwellers in mind. She pushed the idea that mixed-use neighborhoods had the best chance to flourish, as well as how important walkability is to a resident in a city. She fought Robert Moses, blocking the production of a highway through washington square park in NYC.

Private versus public ownership is a very important factor to consider when looking at public transit. The decline of the railroads industry correlates directly with the transition of railroad ownership to the U.S. Government. These days 93% of tracks are owned by private freight companies, while the railcars and stations are own by the government. This ownership percentage plays a large part in the U.S. railways being so antiquated in their design.

A mass transit system which includes railroads, trolleys, buses, and subways.

The use of the word public is only meant to address that the transit system serves a public, not that it is owned by a public entity.

A stop along a system. This could be a result of a focused population density.

The notion of a node, in this case, signifies that their are multiple of them through a system. reaching out through capillary connections a node is both part of a system while maintaining its own identity.

A site that is the result of a large infrastructural design, usually either underneath or behind. It is no considered as inhabitable space when it's designed, rather it's put aside and forgotten. Usually affecting those in working class households. These spaces have a habit of being inhabited by sub-cultures outside the status quo. So they create their own space and use a "D.I.Y" method of construction where no one will bother them.

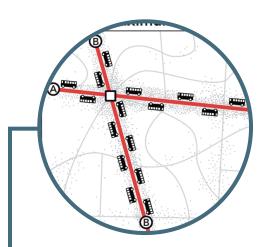
A branching system of either migration paths or transit routes usually steming from a citie.

Charting these paths can reveal trends in pull factors of why certain routes extend where they do.

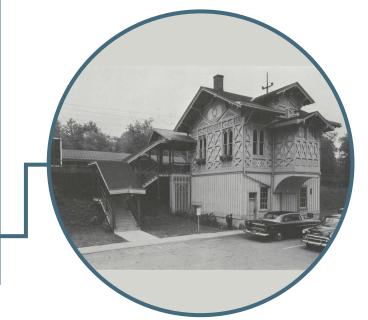
A grant of a sum of money, from the government to an industry or business to maintain a reasonable price of their product, service or commodity. The main example of this is gas pricing, and how because of the governments help, drivers are more willing to use their vehicles more than necessary. The real price of their drive isn't realized, because it's been so diluted by gov. subsidies.

This term is used in how architectural design and building techniques are specific to a regions culture, environment, and social needs.

Find a the true vernacular requires the seperation of globalized design that have become part of most cities and suburbs without recognizing that most of the existing building typologies had very real reasons they existed.







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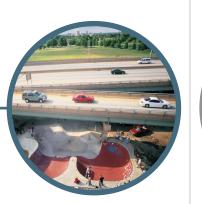
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