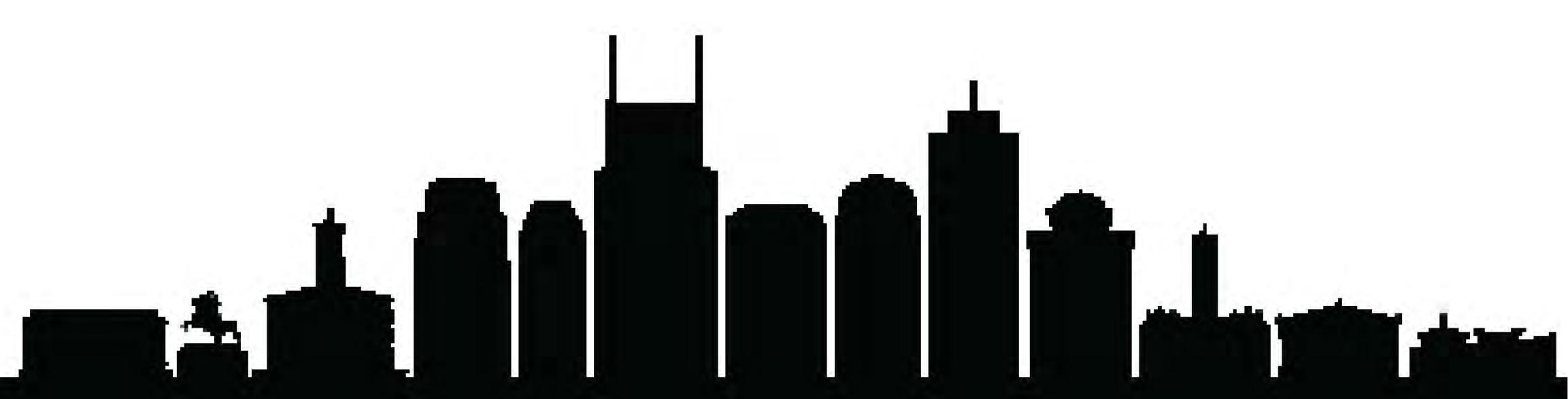
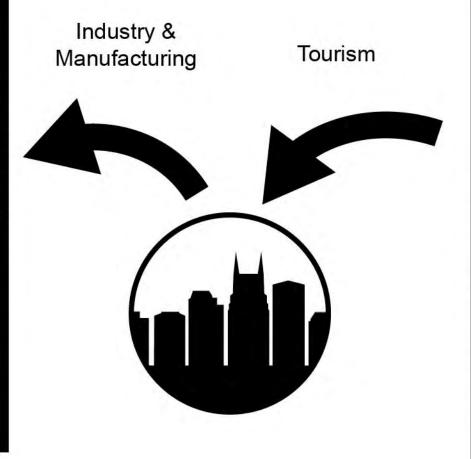
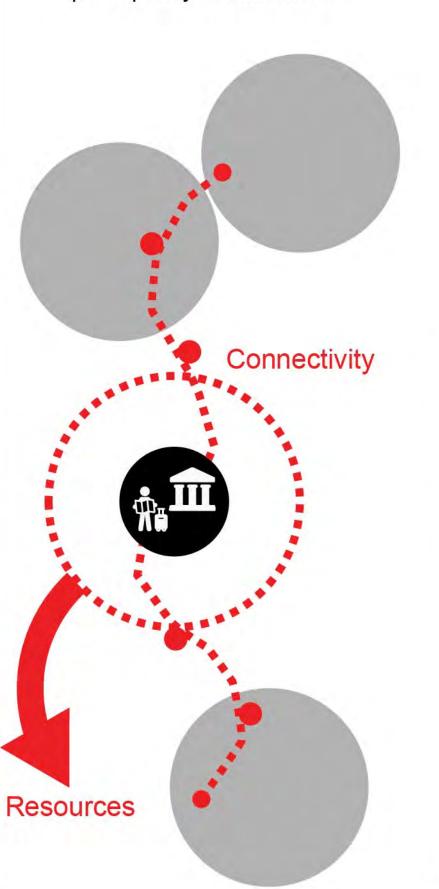
Mural Row: Growing the Connective Tissue of Nashville



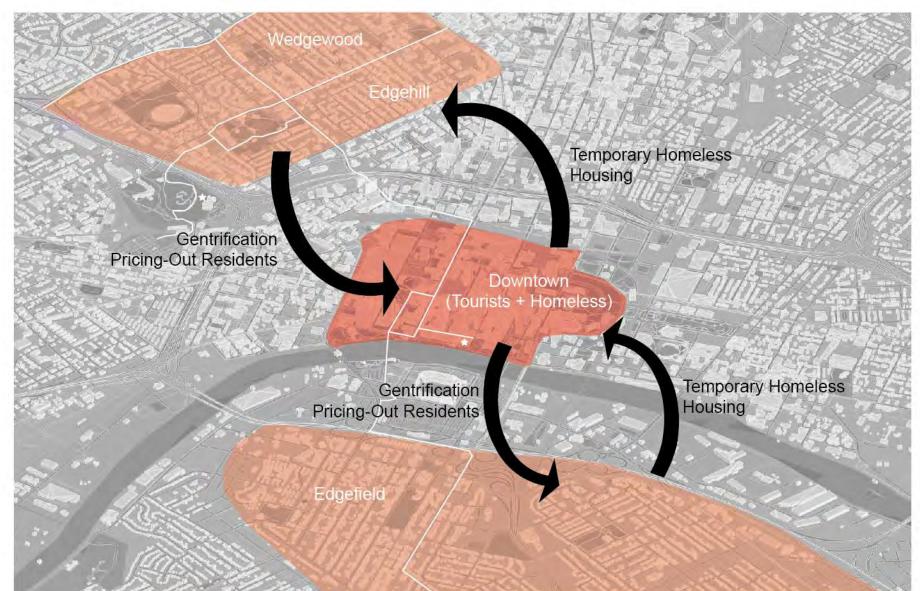
As urban economic centers transition away from manufacturing and industry, many American cities have turned to tourism as the new revenue industry. This transition to economic tourism morphs the monuments, identities, and memories of a site into a commodity for tourist consumption. This tourism movement not only hurts the larger community financially as the profit is isolated to a select few but also the oversimplifications and reductions of local culture creates a false narrative of the true essence and history of the surrounding community. The investigation of this thesis is to in turn capitalize on the tourist population to uplift the surrounding neighborhoods through the development of a connective infrastructure serving as a magnet to both pull tourists out of the central district and centralize necessary resources and development along its path.

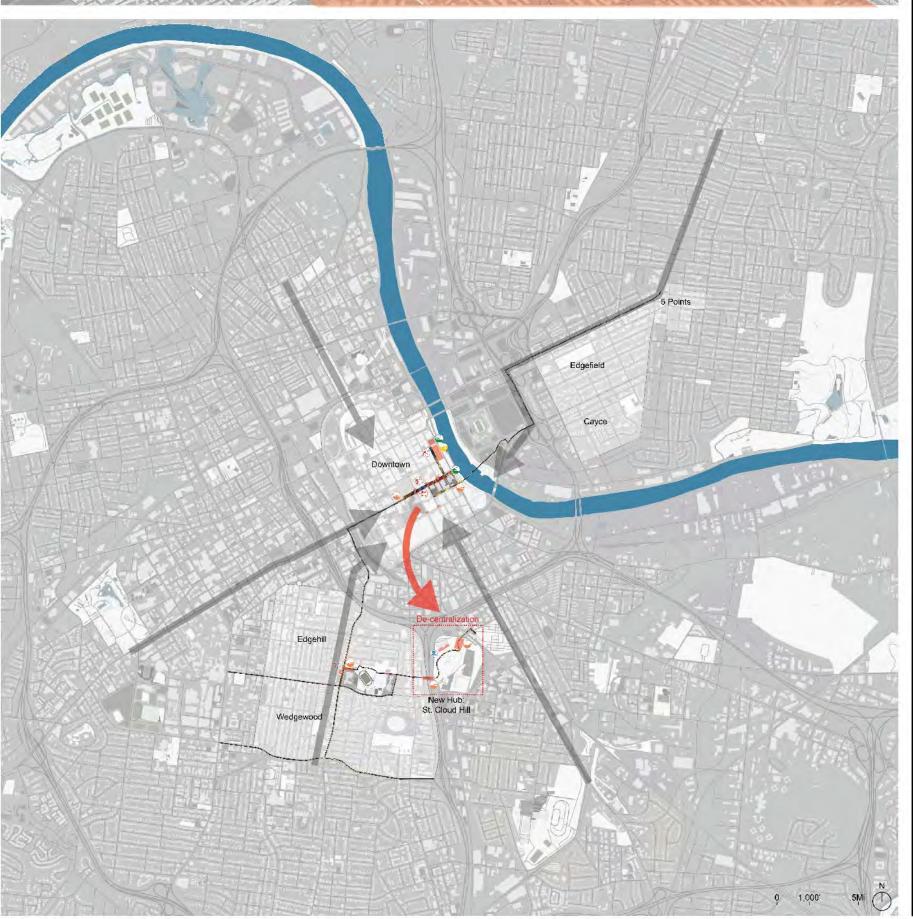


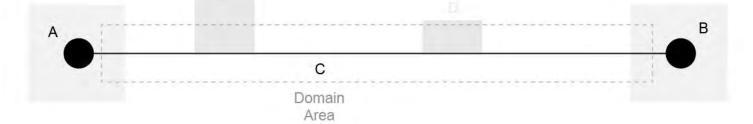
Maintain cultural autonomy through community supportive + participatory infrastructure



URBAN CONDITION







Mural Row consists of an urban corridor that connects two peripheral neighborhoods (Points A and B) through the intentional design of a graphic path (Line C) that engages the surrounding domain area and a variety of communities with moments of design interventions (zones D)

along the path. Design interventions were developed based on needs identified through a process of research and mapping. Those interventions can be organized into 5 typologies urban intervention.



The site of **Domestic** Terrorism becomes opportunity for enconomic balancing.



The threat of Climate Change can be mitigated through vegetation and beautification.



OF INTERVENTION

Public Infrastructure rather than dividing becomes a method of unification.



The issue of **Economic** Inequality is the driving research for design intervention.



The issue of Social Justice is an optimistic result of intervention.







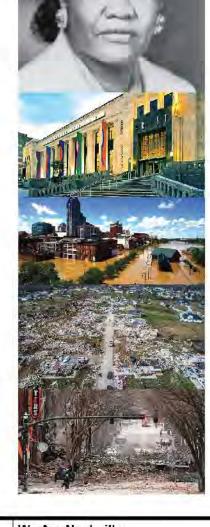


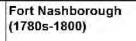












Before 1492: Native American tribes identified the Salt Lick near the Cumberland River and began to use the area of the Central Basin as common hunting ground.

1780: The eligible citizens (256 white male land-owners) sign the Cumberland Compact, the first constitutional government in the settlement.

1796: Tennessee becomes the 16th state admitted to the United States on June 1, 1796, giving Tennesseans their own government and renewing confidence in their destiny. New treaties and new roads bring more people into Middle Tennessee

Old Hickory (1800s-1840s)

1819: The General Jackson, owned by William Carroll, becomes the first steamboat to arrive in Nashville. It departs with a cargo of tobacco.

1822: The Nashville City Cemetery opens. as does the first bridge across the Cumberland River

1825: The University of Nashville is organized under the leadership of novative educator Philip Lindsley.

1837: Nashville women concerned about the plight of indigent women organize the rotestant House of Industry. Eight years ater. Nashville women organized the otestant Orphans' Asylum.

1838: A group of Cherokee pass through Nashville on their Trail of Tears journey from southeast Tennessee to the Oklahoma Territory as a result of Jackson's Indian Removal Act of 1830

Rock City (1840s-1860s)

1844: One hundred fifty women march on the Nashville Courthouse in support of Henry Clay for President.

1855: Nashville hosts the first State Fair.

1861: Tennessee becomes the 11th state to secede from the Union as the

(1860s)

army and the city prepares for war. 1862: Federal troops occupy Nashville after the fall of Fort Donelson to the northwest. The Union Army makes the city its headquarters, supply depot, and

baseball to Nashville. 1862: African-American laborers, both free blacks and former slaves, assist with the construction of Fort Negley. Union forces occupy Nashville until

1867, making Nashville the

hospital center. Union soldiers bring

longest-occupied city in the country. 1864: Union troops commanded by Gen. George Thomas defeat the Confederate Army of Tennessee at the Battle of Nashville (December 15-16), ending Confederate hopes to retake the

1865: Nashville's African-American population nearly triples during the war years, growing from 4000 in 1860 to over 11,000 by 1865.

1866: Tennessee becomes the first state to be readmitted to the Union after the General Assembly ratifies the 14th amendment

Athens of the South (1870s-1900)

866: Fisk Free School is established in former Union army barracks to provide Civil War begins. Thousands of young education for former slaves. It is Nashville men enlist in the Confederate corporated as Fisk University in 1867 to train teachers for the rising need for education among the African-American population in Tennessee and urrounding states.

> 871: Nine members of the choral group at Fisk embark upon a national and nternational tour to raise money for the expansion of the Fisk University campus. The Fisk Jubilee Singers raise over \$50,000 before returning to Nashville in 1874.

1872: Sampson Keeble of Nashville was the first of 13 African-American legislators elected to the Tennessee House of Representatives in the late 9th century.

1876: Meharry Medical College is established to train African-American doctors, nurses, and dentists.

880: Nashville celebrates the 100th nniversary of its founding. The city's population is 43,350.

1891: The Sunday School Board of the Southern Baptist Convention locates its headquarters in Nashville, in part because of the city's growing reputation as a center for printing and publishing.

1892: Steamboat captain Thomas Ryman builds the Union Gospel preached by Rev. Sam Jones. The building becomes known as the Ryman. Auditorium and hosts ministers. lecturers, singers, stage performances, and later becomes the home of the Grand Ole Opry,

1896: African-American Nashvillian Richard Henry Boyd establishes the National Baptist Publishing Board in Nashville.

1897: The Tennessee Centennial Celebration is held in Nashville, on the fairgrounds at West Side Park (now Centennial Park). Over one and a half million people visited the fair in the summer months of 1897, including the reunion of the United Confederate Veterans, and the state's first woman's equal suffrage convention.

1912: Tennessee Agricultural and Industrial Normal School for Negroes (now Tennessee State University)

Music City USA (Through the Years)

1824: "The Western Harmony" first ymnbook published in Nashville, eginnings of musical and religious ublishing in Nashville

1922: Thomas Talley, Fisk professor, publishes his collection of Negro Folk Rhymes, the first collection of African-American folklore and song in

1950: Capitol Records becomes first najor record label to locate its director of country music in Nashville

1954: Bradley Studios opens in a Quonset hut on Sixteenth Avenue South, marking the beginning of Music Row, and the development of the "Nashville Sound".

1957: RCA Studio B opens on Music Row with Chet Atkins as producer, ecording artists as diverse as Eddy Arnold, Elvis Presley, Everly Brothers, and others.

1961: Country Music Hall of Fame established on Music Row (relocated to downtown Nashville in 2001).

1969-1991: Hee Haw television show is lmed in Nashville, and popularizes many rising country musicians and medians across the nation.

1972: Opryland USA, a theme park devoted to country music, opens outside of Nashville in the Donelson area. pryland closed in 1997

the Ryman Auditorium to its new home. the Opry House, near Opryland USA.

1974: The Grand Ole Opry moves from

Powder City (1900-1930s)

1912: A sudden 175-foot breach in a wall of the Nashville Reservoir pours more than 25 million gallons of water onto South Nashville, causing a flood and extensive property damage.

1912: Hume School and Fogg School, Nashville's two oldest high schools. merge to form Hume-Fogg High School. A new building is constructed on Broadway in downtown Nashville for the

1916: A fire in East Nashville destroys more than 500 homes leaving 2500 people homeless.

1918: Two NC&StL trains collide at Dutchman's Bend in West Nashville, killing 121 people. This wreck continues to be regarded as the worst train accident in American history.

1918: The Spanish influenza epidemic strikes Nashville, making one in every four persons ill. and killing over 1300 people in Davidson County (most of them in Old Hickory).

1920: Tennessee becomes "the perfect 36," by casting the deciding vote for ratification of the 19th Amendment to the United States Constitution, guaranteeing American women the right to vote. The vote by the General Assembly followed a lengthy political debate in Nashville. with both support and opposition taking up residence at the Hermitage Hotel.

and McKissack is founded by African-American brothers and builders Moses and Calvin McKissack, both of whom had been designing, building, and teaching throughout the South for several years. McKissack and McKissack is considered the first African-American architectural firm in the United States.

1933: A devastating tornado wreaks havoc in downtown Nashville, damaging the State Capitol and heading eastward demolishing buildings in East Nashville, Donelson, and on to Lebanon. Eleven people died and over 1400 buildings were damaged or destroyed. The 1998 tornado would follow a similar path.

The Wall Street of the South, and its Collapse + Recovery (1930s-1940s)

1936-1940: The Public Works Administration constructs several government buildings in downtown Nashville, including the Tennessee State Supreme Court Building, the John Sevier State Office Building, and the Davidson County Courthouse, as well as embarking on a large-scale school improvement project, with construction of several new schools throughout Davidson County.

1936-37: Designed by the African-American architectural firm McKissack and McKissack, Pearl High School opens for Nashville's African-American high school students

1941: The United States enters World War II after the bombing of Pearl Harbor on December 7: Nashville begins to

The Nashville Way (1950s-1963)

1949: Nashville files one of the first successful applications for the use of federal funds for urban renewal, leading to the Capitol Hill Redevelopment

1955: Z. Alexander Looby, a prominent local civil rights attorney, files Robert w. Kelly et al v. Board of Education of Nashville in U.S. District Court to challenge the city's segregated schools. Twenty-one African-American schoolchildren were named as plaintiffs.

1957: Hattie Cotton School in East Nashville is bombed after the city implements "The Nashville Plan" to allow for the voluntary integration of Nashville's public schools by desegregating one grade each year for twelve years.

1959: Rev. James Lawson begins training students from Fisk and TSU in non-violent protest; these students later become leaders in the Nashville Sit-Ins and Freedom Rides

1960: Nashville becomes the first major southern city with desegregated lunch counters after two months of sit-ins and demonstrations led by African-American college students. Following the bombing of Z. Alexander Looby's home in April, students led a silent march on the Nashville Courthouse, where they were met by Mayor Ben West, who admitted to student leader Diane Nash that segregation was wrong.

1962: The voters of Nashville and Davidson County vote to consolidate governments into a single metropolitan

We Are Nashville: Metropolitan Nashville + **Davidson County** (1963-2013)

1966: Dr. Dorothy Brown becomes the first African-American woman elected to the Tennessee General Assembly.

1966: The Metro School Board votes to eliminate the "grade a year" desegregation plan in favor of fully integrating Nashville's public schools.

1968: After the assassination of Dr. Martin Luther King in Memphis, Mayor Briley issues a city-wide curfew in an attempt to prevent rioting.

1994: The National Football League's Houston Oilers announce that the team will relocate to Nashville. The following year, voters approve a proposal to fund the construction of a new stadium for the team that is renamed the Tennessee

1996: Tennessee celebrates the 200th anniversary of statehood with the opening of the Bicentennial Mall in

1997: Nashville is granted an expansion franchise team by the National Hockey League. The Nashville Predators play their first game in the new downtown arena the next year.

1998: Three tornadoes sweep across Centennial Park, downtown, East Nashville, and into Donelson and Hermitage, along a 42-mile path. causing one fatality and over \$100 million in property damage.

2001: The Frist Center for the Visual Arts opens in the restored downtown Post Office.

2006: The Schermerhorn Symphony Hall opens in downtown Nashville and is immediately hailed as one of the finest concert halls in the country.

2010: A devastating flood hits middle Tennessee, killing 11 people in Nashville and Davidson County and causing an estimated \$2 billion in property damage. The floodwaters inundate the football stadium, arena, and symphony hall, all of which reopened.

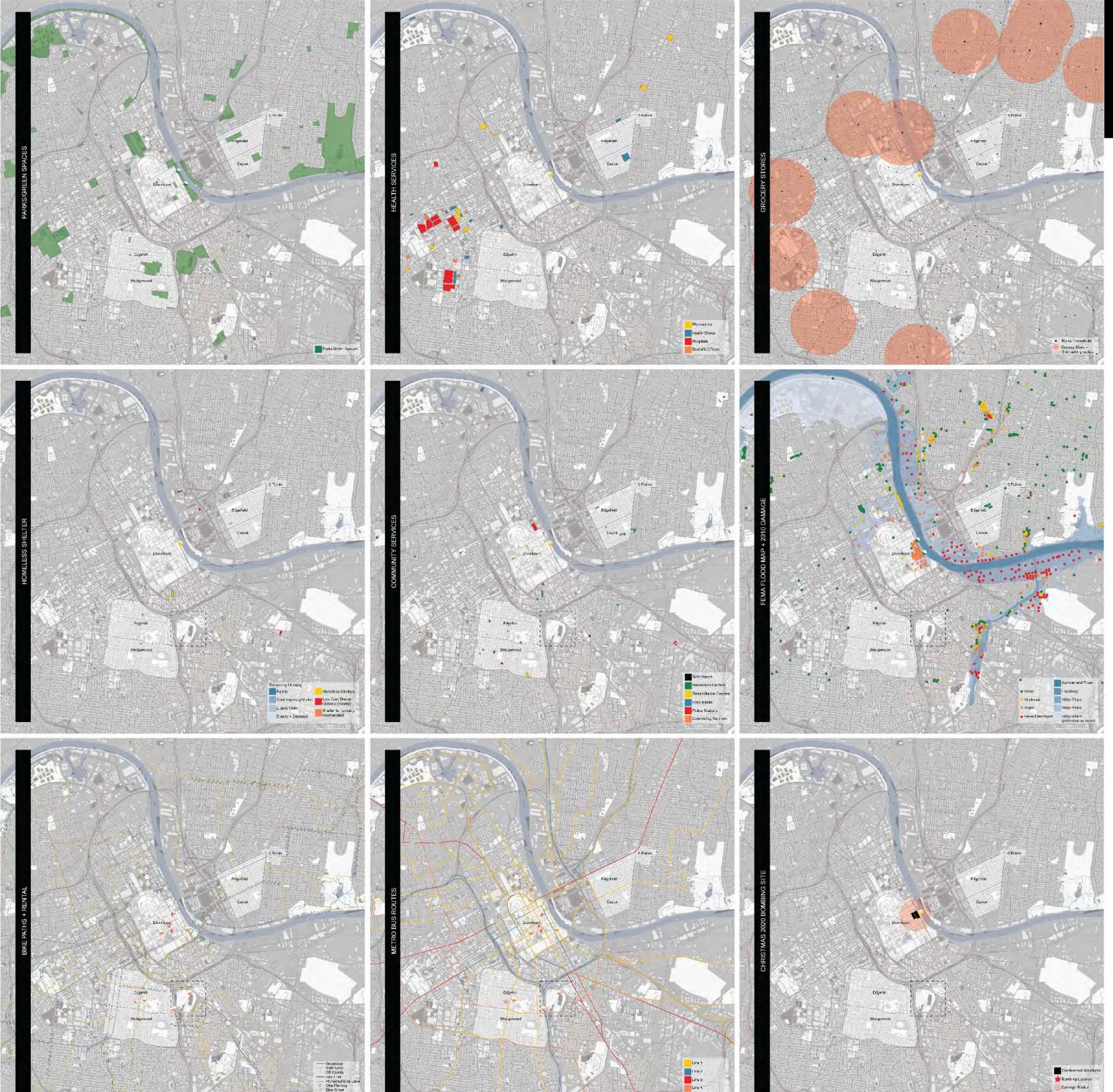
2020: A deadly tomado swept through East Nashville in March as the Covid-19 Pandemic began sweeping through the nation with significant hotspots in Tennessee. Nashville is awoken. Christmas Day to a devastating bombing on 2nd Ave targeted at AT&T servers.

Perceived Elements of an Unsafe Location	Design Solution	Modeled Prototypical Interventions to proliferate throughout the city along the Mural Row	Intervention Categories
Trash/Litter ———————————————————————————————————	Disposal Bins		Susta: satility
Poor Transportation Support:			
Bus Stop with Only Sign —	➤ Sheltered Bust Stops + Seating		Transportation
Bikes Locked to Fences	➤ Bike Racks and Rentals		
Scattered Scooters (Walking Hazard)	➤ Scooter racks, chargers, + rentals		
			Panagoriation
Begging/Pandering—	Resource Station: library, food bank, take n' leave thrifting		(m)
Impromptu Gathering/	➤ Designated Gathering Spaces		Tvicesports live
Loitering	→ Designated Gathering Spaces		neds.
		E Property	Community identity
Poor Visibility/Lighting —	→ Lighting Fixtures		
			Accessibility
Unsafe Crossing/ High Speed Traffic	Pedestrian Bridge ▶ Ballard Pedestrian Protection		Azzmańbility
Sparce Landscape (Only Grass + Concrete)	Rest Spaces (Benches) + Vegetation/Planters		Contractly Identity
			Susta nability
Standing Water/ Poor drainage Management	Rainwater Collection Management		
Urban Heat Island Effect/ Thermal Comfort Range	→ Shading Devises → On-site Energy Generation		State rapplity
Message/Flyer Scattering —	➤ Designated Community Message Area		Education
ng the rings with red powder coated metal, the forms can a protective barrier along the pedestrian path. Public ture must be capable of taking a physical beating from the gredating effects of valous natural and artificial elements. The best color choice for its vibrancy, attention grabbing and ualities, and for its relation to the state colors.			
		SECTION AND ADDRESS OF THE SECTION ADDRESS OF THE S	
PHYSICAL TEST MODELS	ONE HUL	Un Bergie	atrougt, major interaction

SPIRAL MATRIX

There are a variety of elements that can make an area feel unsafe from issues of general upkeep like trash and vegetation that are merely a factor of public funding to deeper stereotypes of an area proliferated by the media and hearsay. The designs that I propose works to identify the perceived unsafe elements of the city based upon my research and own personal experience at the site, and it works to locally remediate those aspects through this connective infrastructure serving as a symbol of safety, connectivity, and change. The strategic placement of this infrastructural path intends to fix the problems of the current residents and communities rather than promote a scale of commercial activity that would displace residents through the cities continued gentrification movement. Through this process of urban acupuncture highly tied to local needs with overall identity tied to the identity and history of the site, the path and accompanying infrastructure would become a monument to the city reclaiming its resources and identity.

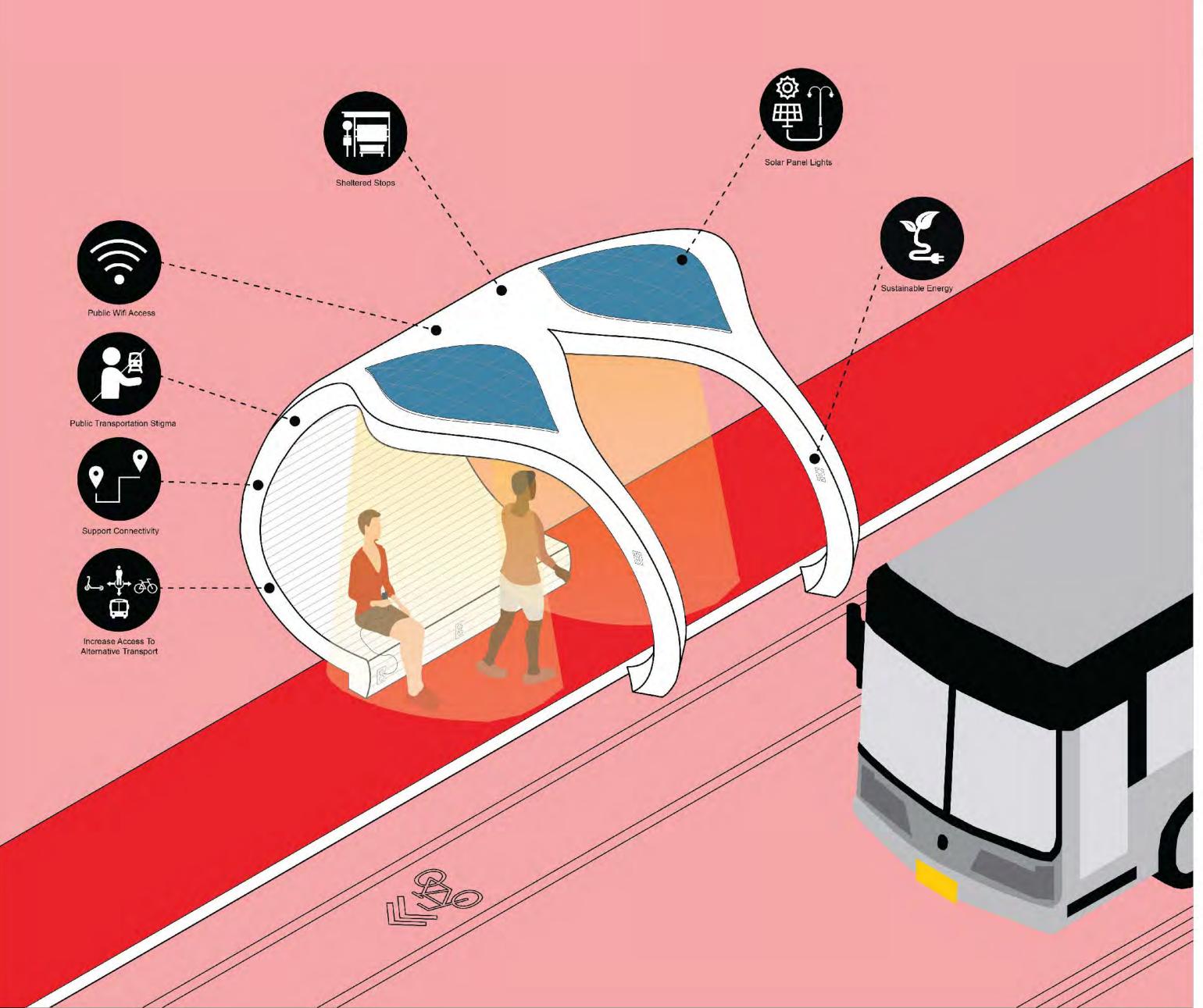
In this proposal, infrastructure at the individual scale takes the form of a spiral. With the ability to be formally morphed, the spiral holds unlimited potential. It can be stretched like a slinky to become the repeating barrier of a sidewalk, scale in size to give symbolic notice of a changing condition or fit the needs of an object like a bike, or thicken and stretch along its body to fulfill numerous programmatic needs.



RESEARCH MAPPING

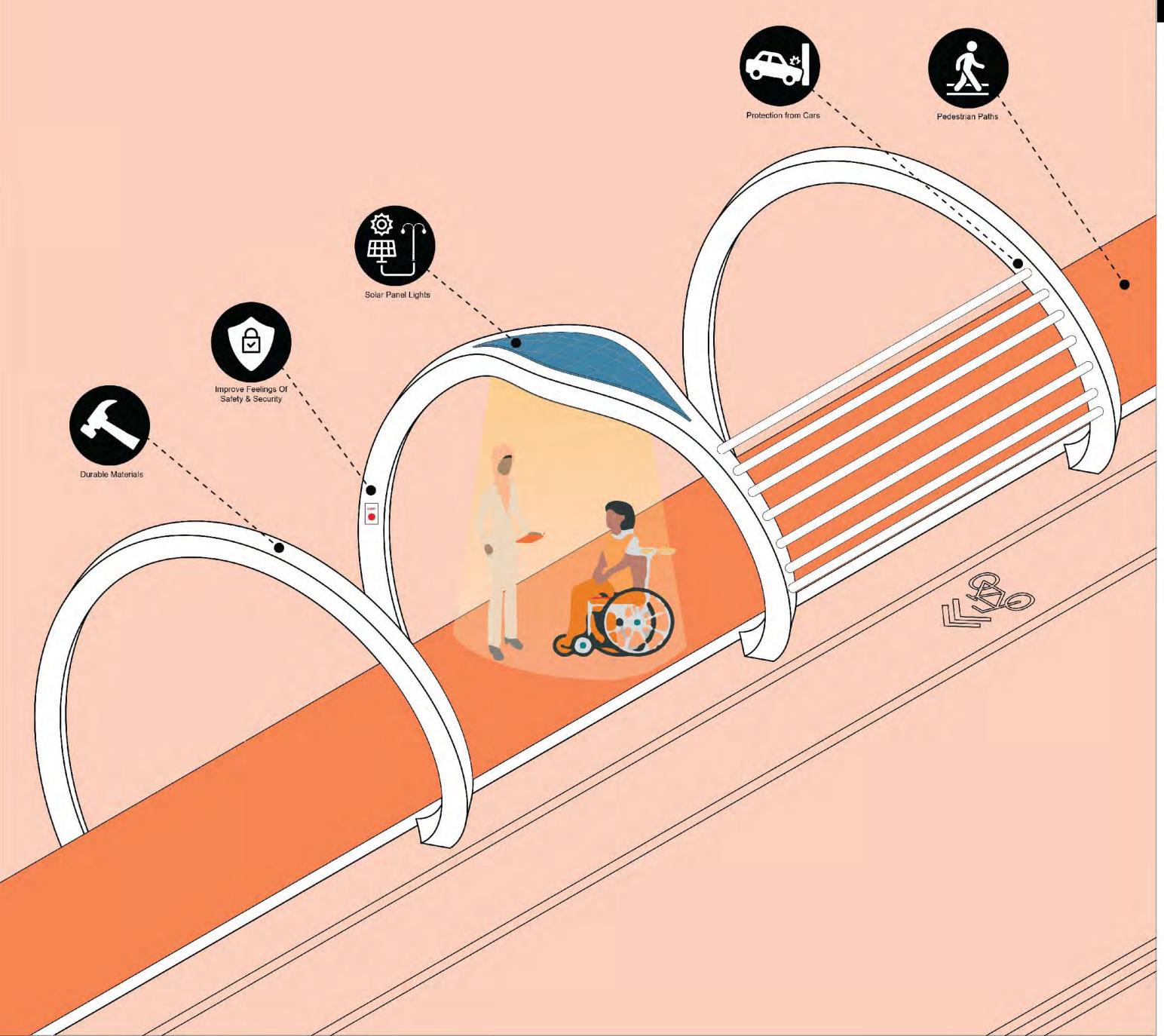
Through a process of extensive mapping, I began to understand the resource deserts and issues of Nashville. By understanding the scale and location of existing resources, I better understood where communities were left lacking. Various resources like green spaces, community support resources, and access to public and alternative transport in relation to recent disaster locations lead me to better understand the issues that Nashville faces. By understanding the larger scale flows and trends of the city, I propose a strategy that seeks to reverse the current development trajectory and develop an infrastructure of connectivity.

This design is a proposed path with proliferating programmatic spiral infrastructure with larger programmatic nodes tied to each of the 5 intervention categories throughout the city with the main central hub at St. Cloud hill. The recentering of the cultural and transport hub out of the center of Nashville to this location symbolizes the detachment from the downtown district as well as physically relocating these resources closer to areas in need thus developing wider connectivity and sense of reclaiming the community.



WeGo Ride

Many bus stops in the surrounding neighborhoods are marked only by a location marker. With long ride time and poor waiting conditions with neither seating nor protection from the weather, bus waiting areas do not encourage commuters to utilize the system. The bus system also struggles with the last mile issue with commuters' final stops being far from home or work making public transport an inconvenient option. By incorporating multiple transportation types into the spiral infrastructure, commuters can easily get to their final destination. Bike and Scooter rentals are incorporated near bus shelters to help remove many of the obstacles commuters face. The spiral form as it morphs to take on various programmatic needs adapts formally to improve the experience of the individual. Many bus stops in the area are only marked by a blue sign with no coverage for weather conditions or lighting for safety and visibility discouraging commuters from using the already quite disconnected system. By adding amenities to the bus stop unit like coverage, lighting, electric plugs, and wifi, commuters are more likely to be willing to use public transport.

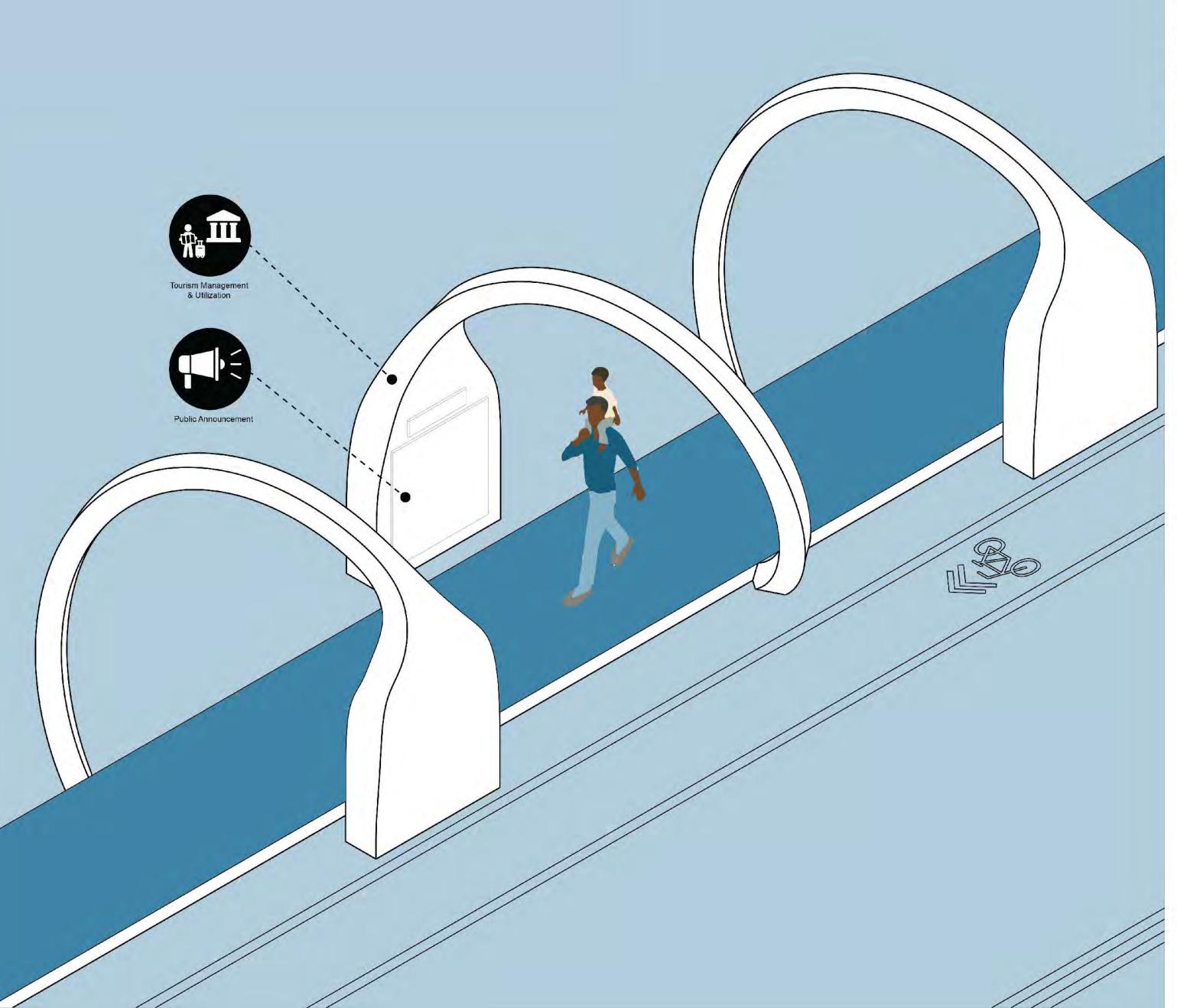


SAFETY

Measured by the ability to be utilized, reached, or accessed, accessibility can define the strongest divisions of the "have" and "have not"s of a society. Infrastructure in Nashville is designed primarily for cars leaving pedestrian traffic to be secondary or even tertiary form of transportation. With planning in the downtown area and wealthy surrounding neighborhoods focused on community walkability, that same mentality must be applied to the other neighborhoods of Nashville. It is not enough to relocate resources closer to those in need but the path itself must be safer for those using it. Close proximity to high speed traffic of the sidewalk to the road as well as a lack of safety barrier life vegetation or ballards makes the path feel dangerous. The spiral infrastructure through onsite energy generation through photovoltaic panels can provide light creating a safer appearing path. The spiral also provides pedestrian protection through strength of materiality and separating barriers between the pedestrians and the high speed road.

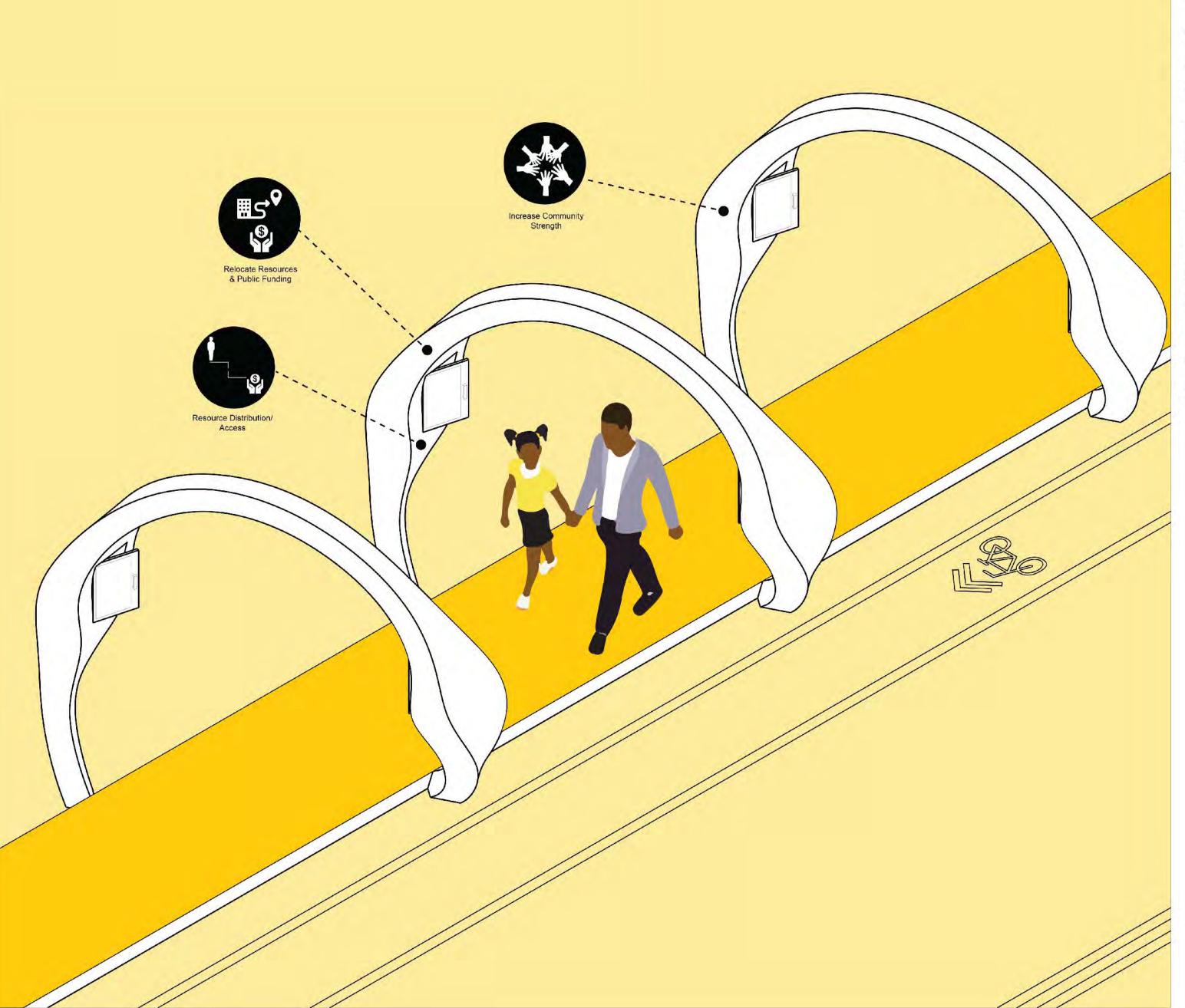
WATER RESILIENCE

Given the significant threat flooding poses to Nashville, storm water must be more deliberately managed. By incorporating rainwater collection and vegetative filtration into the sidewalk infrastructure, this intervention can help slow storm water drainage to a more manageable rate for the existing infrastructure. Vegetation can have striking spatial effects by: reducing urban noise by up to 50%, trapping airborne pollutants and particulate matter, reducing volume and peak flow of stormwater runoff, increasing community health through likelihood of physical activity, and actively treating many forms of wastewater.



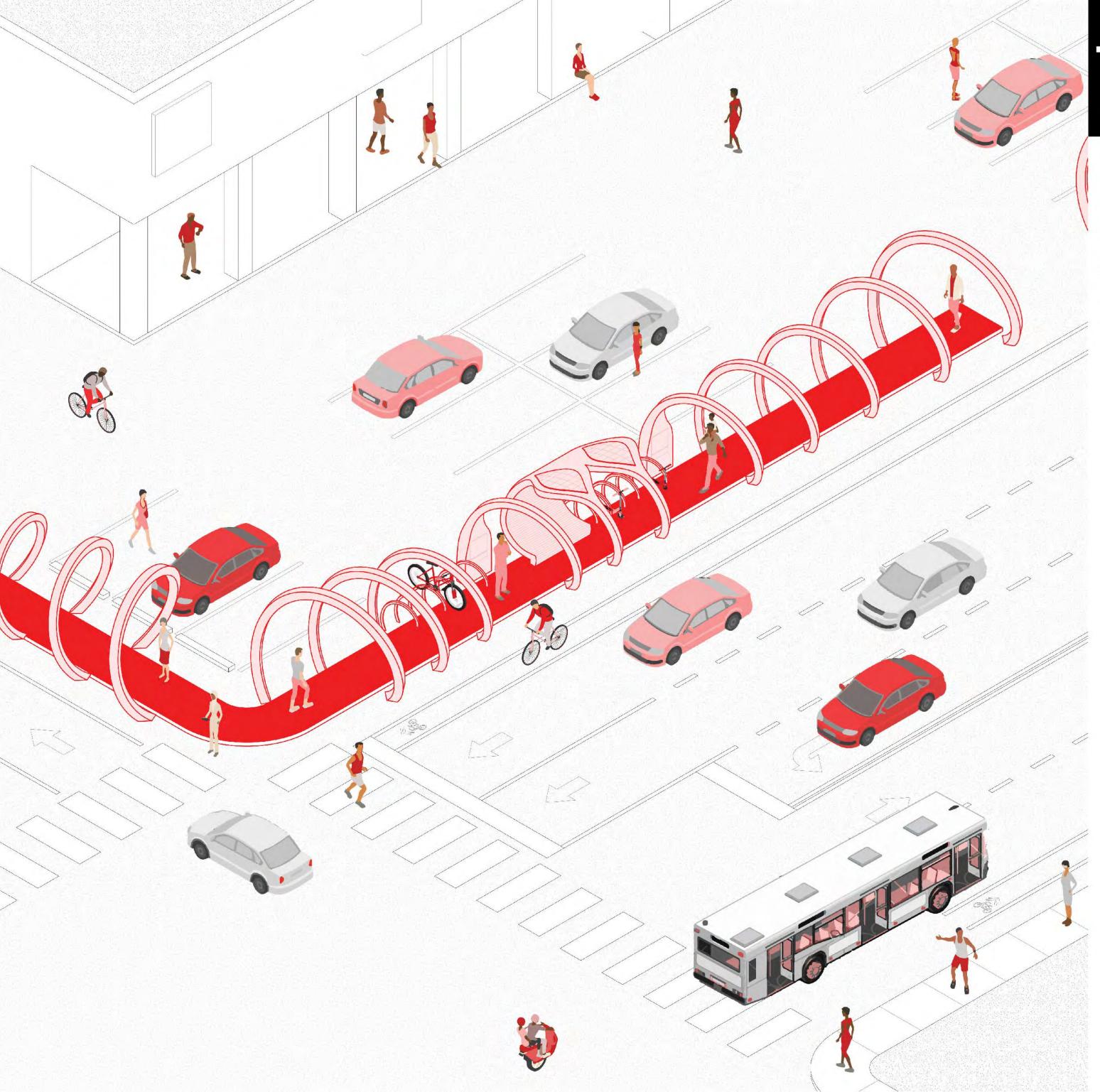
PUBLIC MESSAGING

Transference of information is crucial to the intention of infrastructure. With such a variance in the population in and around Nashville, using public infrastructure to disperse information is best. Whether its tourist information about a historic or cultural site, fun botany facts about native landscape, or maps and community announcements, a standardized message board incorporated into the spiral infrastructure allows the signage to meld into the surrounding urban landscape serving not only an educational but also an infrastructural purpose.



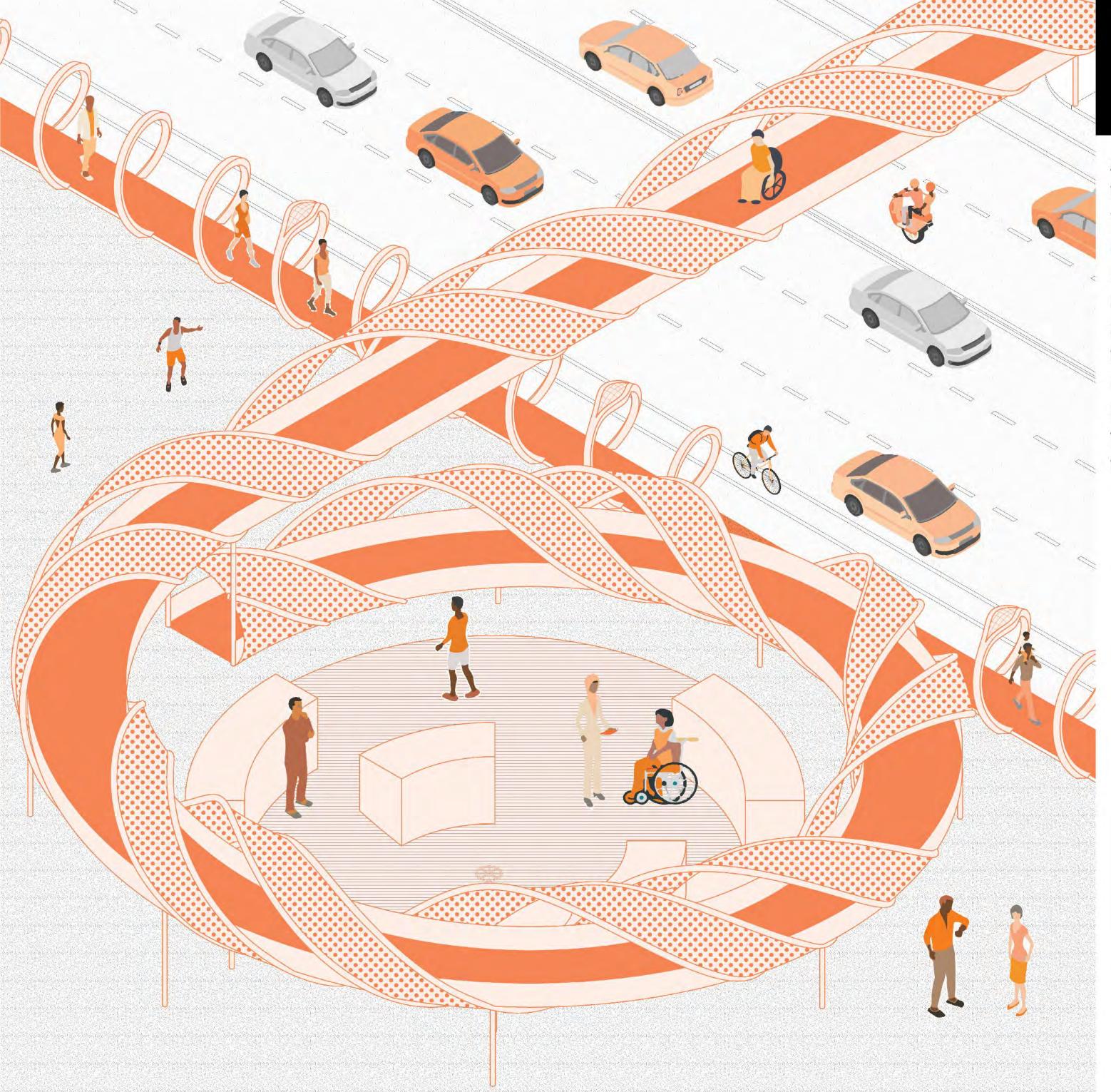
RESOURCE SHARING

In the Edgehill community, churches take on the social welfare strategies to care for community members left lacking from government welfare programs. Through programs like food banks, second hand exchanges, and general resource sharing, churches care for the in-need community members. By incorporating community sharing spaces into the infrastructure, resources can be exchanged closer to those members most in-need. The homeless population of Nashville is simultaneously pushed away from the center due to the city's image desires to remove those unwanted and the magnetic draw of resources in the downtown. Through this infrastructure of exchange and community support, resources can be more widely distributed to in need members who can get help with dignity on their terms.



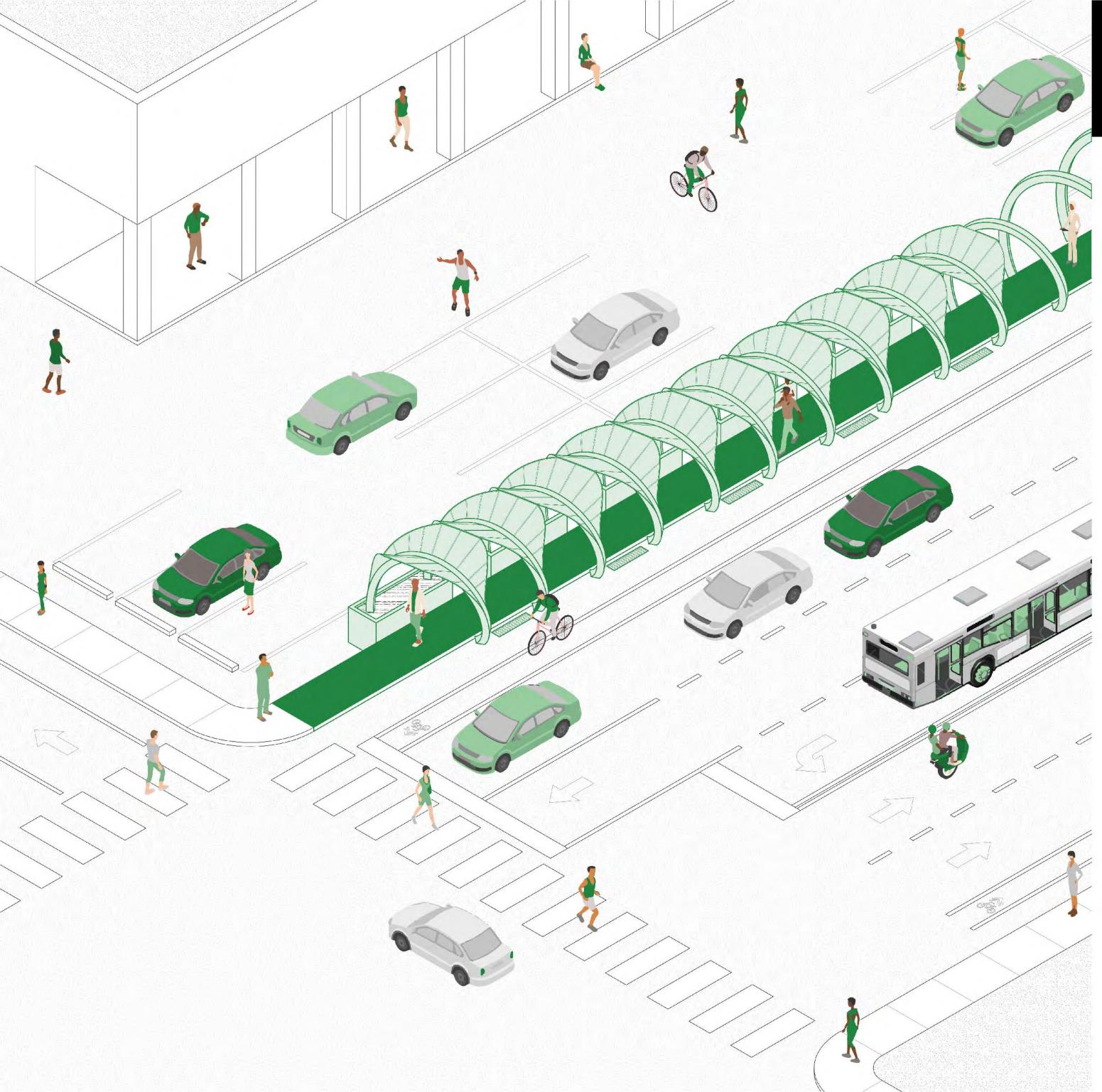
TRANSPORT CLUSTER

The bus stop form can be aggregated with other forms like bike and scooter rentals to assist with the ever persistent issue of the "last mile problem" helping commuters connect from bus stops to their final destinations. This aggregation allows for combined infrastructure in close proximity and helps promote the use of public transportation by filling the gaps not serviced by the WeGo bus routes.



ADA OVERPASS

As previously stated, close proximity to high speed traffic of the sidewalk to the road as well as a lack of safety barrier life vegetation or ballards makes the path feel dangerous. The spiral also provides pedestrian protection through strength of materiality and separating barriers between the pedestrians and the high speed road, or if necessary as it is in some areas, completely separating pedestrians from the level of traffic. By completely removing pedestrians from the dangers of high speed roads, walking in the area becomes safer and more enjoyable. Other accessible gathering spaces with flexible uses can also be combined with bridge structures and the continuous, proliferating sidewalk protection.



RAIN COLLECTION

Due to the high level of impermeable surfaces, there is great pressure put on the drainage system and frequent localized as well as widespread flooding occurs. On-site utilization by vegetation also helps contain the spread of any contaminants and provides vegetation in areas potentially lacking greenery. The installation of water capture and containment systems throughout the cities is crucial to address this growing issue rather than focusing all prevention efforts in flood-zone/riverfront areas.



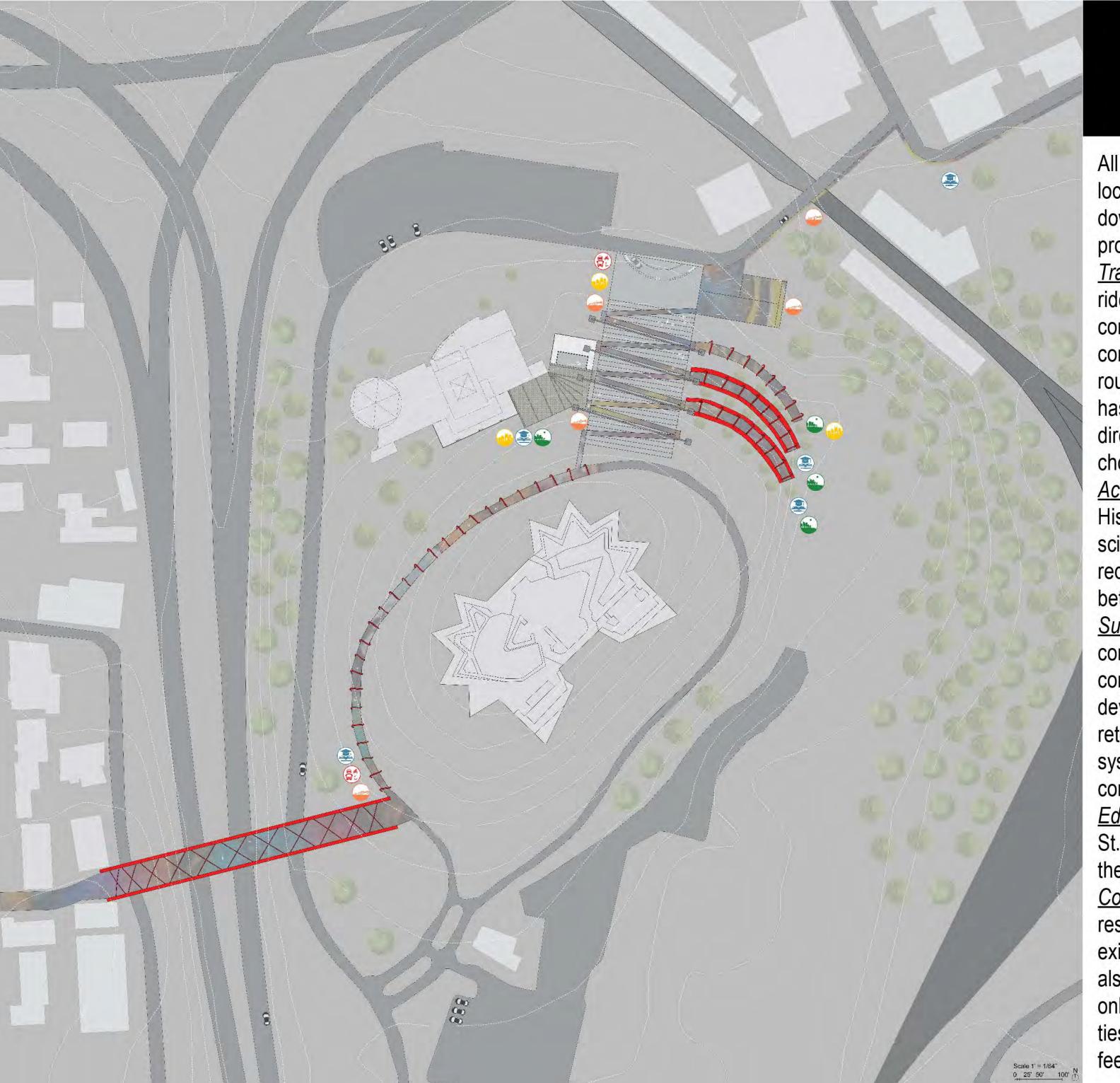
LOCAL VEGETATION

Education and sustainability come together in public exhibitions of various native plants creating a learning garden that could be placed anywhere in Nashville improving the biodiversity that is at great risk in the city and surrounding areas- simultaneously providing a chance for re-vegetation as well as an educational tool for all ages.



PLAYGROUND

Community also includes spaces of gathering like playgrounds. Through the incorporation of play structures protected from traffic by the tell-tale spirals, children and families of a range of ages and physical abilities can gather. While the spirals serve as the protective ring, they also morph into the elements of play as well as each of the typical and unusual play formals take on spiral qualities. The concept of community requires for acceptance of all members; therefore, it is imperative that elements of the play structure are ADA accessible to allow children of all abilities to play together.



ST. CLOUD HUB

All themes of intervention converge at the St. Cloud hub location simultaneously pulling focus away from the downtown and centering resources around a new and productive hub.

<u>Transport</u>: By relocating the main bus hub to St. Cloud Hill ride times can be reduced by allowing line changes closer to commuters using the busses rather than the current commuter times that are greatly lengthened because all routes change in the downtown Nashville hub. The site also has many tourist attractions. By linking these attractions to a direct method of transport, visitors will be more likely to choose the bus rather than driving or using a car service.

<u>Accessibility</u>: The existing monuments of St. Cloud Hill: the Historic Nashville Cemetery, Ft. Negley, and the adventure science center are physically disconnected, desperately requiring an accessible path that allows visitors to travel between each site without having to drive.

<u>Sustainability</u>: At the St. Cloud hill site, due to my proposal of concrete steps at staging on the hill side, dramatic water containment must balance the design intervention. By developing a floodable gorge, the area can flood becoming a retention pond slowly releasing water into the storm water system decreasing immediate strain while in all other conditions serving as an active program for community usage. <u>Education</u>: Such an exhibition is perfectly placed at the St.Cloud Hill site where the hill is currently semi-manicured by the parks department.

<u>Community</u>: Community requires buy-in through public resources and private/commercial members. The St. Cloud existing programs are not only physically disconnected but also programmatically ignorant of the others. By creating not only a physical flow throughout the site but also conceptual ties between public and private areas, there can develop a feeling of connectivity.

BUILT INTERVENTION

The formic morphing by the spiral structure in combination with the mapped needs of Nashville give this infrastructure the ability to self-proliferate throughout the city and potentially allows the concept to be passed over to the community to continue the development. The needed program can be adapted into the spiral structure in these and many more ways providing resource relief to the community-in-need through this method of individualized, highly site specific, and localized design yet in its entirety is a massive and far reaching infrastructure proposal that latches onto the city like a positive paracite. Its nodes of intervention reach far to the cities edges and its path and recognizable form becoming a monument to an infrastructure that is reclaim the city for its residents rather than the continued economic control by tourists.



EVALUATION

In conclusion, the diagnosed condition of Nashville was that of exclusion and resource hoarding in the wealthy tourist area of the downtown. The goal of this project was to reclaim space through the design of an infrastructure at the scale of the individual that reclaims space on the ground with a larger hub at St. Cloud to centralize the aspects of Community, Education, Sustainability, Accessibility, and Transportation. I believe this proposal is self proliferating with the ability to continue adapting to an even wider variety of needs that can be recombined in different and exciting ways. As the design is tested against my original contention, it takes on multiple programmatic codifications that have the potential to resolve the wide and dynamic issues facing Nashville. This infrastructure has the potential to meet though adapting needs both now and in the uncertain future of the city.