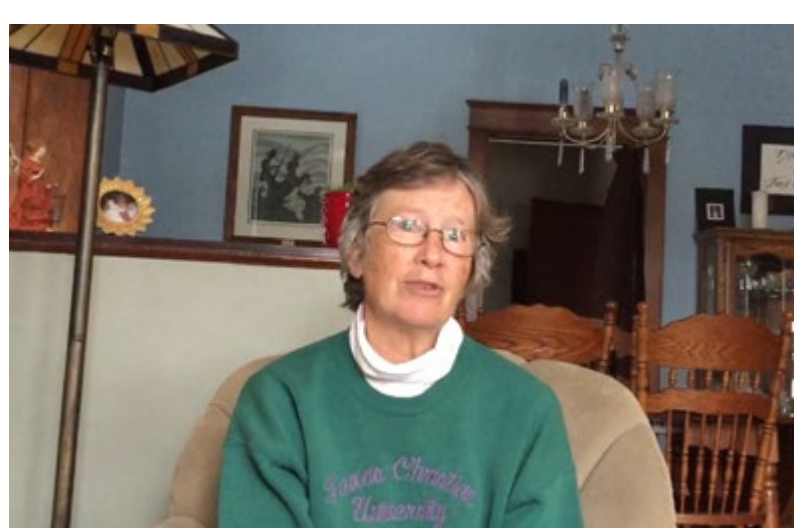




CHOUTEAU GREENWAY BRAID

JAMES
CORNER
FIELD
OPERATIONS
& TEAM



4 April 2018

Susan K. Trautman
Chief Executive Officer
Great Rivers Greenway

Dear Ms. Trautman and the Chouteau Greenway Competition Selection Committee,

It is with great pleasure that we submit to you our proposal for the Chouteau Greenway Design Competition in St. Louis. What an extraordinary and significant opportunity for the City of St. Louis!

We are inspired by your ambition for this project, particularly your emphasis on the corridor as a holistic urban network, and your aim to elevate social and human experience. These aspirations are reflected in your stated vision of creating a “vibrant corridor, dense with experiential opportunities that leverages community, institutional, and private assets”.

This project has invited us to think deeply about how a greenway can connect people and communities, contribute to what equitable cities can look like, and reflect and represent St. Louis’s values as a city. Over and over again, we have been reminded that the power of this project is about connections. We have been moved by the input, ideas and enthusiasm of community members who described St. Louis as a city of neighborhoods, each with its own distinctive style and character. And we have been struck by the great need and longing for connectivity and unity. In the words of one St. Louisan with whom we spoke, the great opportunity here is unity - “with all of the diversity we do have, anything that can bring unity...to say we are all people, we are all one species, we are all one race and we can thrive if we all just come together.”

In response, our proposal envisions the Chouteau Greenway Braid - a connector, a thread that stitches and ties, an ecological corridor, an economic generator, a “river” that brings energy, vitality and equity to the urban mosaic. Using the greenway to align the city’s rich history with its aspirant future, our design team has surpassed the design prompt guidelines in an attempt to make St. Louis’s most important resources, destinations, and landmarks accessible to more

neighborhoods; especially to those with residents who need them the most. We have used this opportunity to forthrightly grapple with the historic challenge of the Delmar Divide. By focusing on specific intersections where market conditions and the actions of landowners suggest there may be opportunities along Delmar, we believe the city can begin to eradicate the long-standing barrier between north St. Louis and the central corridor, enhancing the quality of life in the neighborhoods, while maintaining their individual character and thus helping us to forge a stronger, more unified city.

This project’s goals and objectives deeply resonate with our team’s design philosophy and experience. Field Operations has an extensive track record of success working with sites similar to yours, with comparable aspirations, civic significance and technical challenges. Our experience, combined with our commitment to implementation and built work, innovative public space design, community engagement, and economic revitalization make us an ideal match for the Chouteau Greenway. Our team is recognized for design excellence and leadership including national innovators and local experts who have a deep understanding of the site, its history, and the community.

Our team’s collective passion and energy for this project has been boundless. We have been pushed and challenged to reimagine what a greenway can be and more importantly what it can do. It has been a truly collaborative and enriching experience – working together to unravel deep and difficult issues and engage in meaningful and inspiring conversations, workshops, exchanges and actions. We believe we have delivered an extraordinary, yet achievable vision for Chouteau Greenway and hope very much that we are successful in being selected to work with you on this transformative project.

Sincerely,



James Corner
CEO and Founding Director



Lisa Switkin
Senior Principal

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DATE:

APRIL 4, 2018

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CHOUTEAU GREENWAY BRAID

We are in the homeland of the Osage Nation, Missouriia, Otoe, Iowa people, and Sac and Fox Nation. Born visitors upon a land many of us have only known, and call home.

Where the Mississippi runs through, so bridges were built to ensure our connection. Just as the winds blow from the north, south, east, and west, we must now create and cross-new paths to celebrate our past, present, and what's to come.

Allow movement to flow us into one another's histories. Hold in our hands, nature native to this space, the culture created within and throughout, interwoven with a spirit growing.

Cheeraz Gorman

"Where the Mississippi runs through, so bridges were built to ensure connection."

This project is all about connection – connecting people to nature, to one another and to future potentials. Inspired by the input and enthusiasm of community members who described St. Louis as a City of Neighborhoods, the Greenway should be more than just a trail – it should be a connector, a thread that stitches and ties, an ecological corridor, an economic generator, a "river" that brings energy, vitality and equity to the urban mosaic.

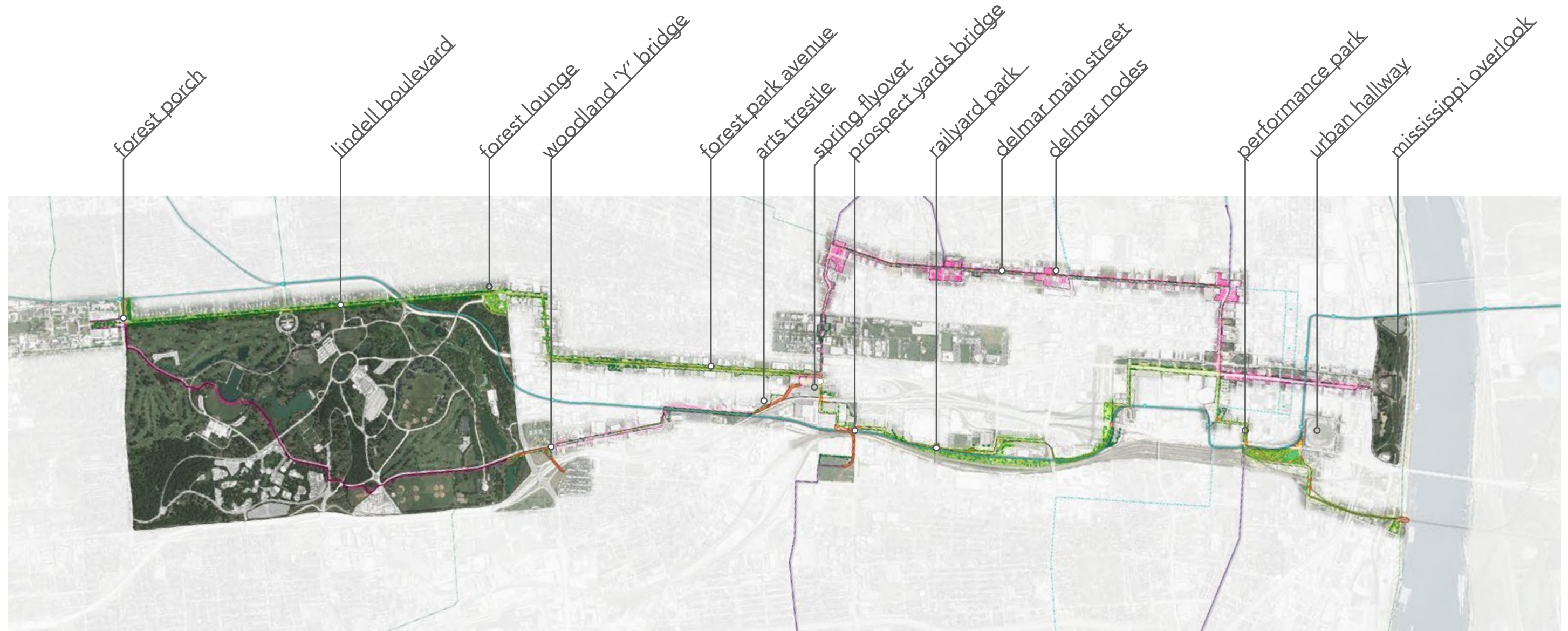
Toward this end, we propose not one thread, but three intertwined corridors that fold and braid to join and bind together the fabric of the City: Chouteau Greenway Braid. The first of these is "The Green Line," a soft ecological corridor featuring a restored Prairie meadow along its entire length, while supporting continuous bicycle and pedestrian experiences of nature, health and wellbeing. The second is "The Social Line," a more urban sequence of spaces woven through with culture, art, education, infrastructure and civic life. Here we propose an alignment that emphatically helps to bridge and repair the division north and south of Delmar, creating a 2-mile long Delmar Main Street as a strategy for investment in bike/pedestrian pathways, recreation, transit, open space, and economic development that is cognizant of both micro-market conditions and land ownership. The third line is the existing MetroLink corridor, in recognition of the crucial role that transit plays in bringing regional scale accessibility and mobility into the main Greenway Braid. As with the individual strands of a braid, these three lines work together to strengthen and enhance each other, resulting in a whole that is greater than the sum of its parts.

In addition, we propose over 6-miles of north-south Connectors that reach deeper into the city fabric to further connect neighborhoods

to the central corridor and make critical links to the larger regional trail and park network. Three new bridges and a series of underpasses allow for safe and inspired crossings over and under the spaghetti of highways and rail lines that divide the central corridor. Together, this 22-mile braided system supports multiple journeys and experiences, working to stitch the city together, east to west, north to south, over and under.

A number of memorable places proposed along the Greenway Braid build off of existing resources and proximity to technology and innovation, arts and culture, education and health, natural resources and industrial heritage. "Forest Porch" and "Forest Lounge" create welcoming entries into Forest Park and provide a strong connection to Washington University and existing transit hubs. An abandoned rail trestle over Vandeventer is reused as a new "Arts Trestle", featuring an elevated greenway on top and artist and maker studios underneath. Four distinct development nodes introduce Plug-in Parks and Creative Commons to enliven Delmar as a new Main Street. A 26-acre "Railyards Park" includes an 800m long recreational track and art mural, an Overlook and Glade Garden, and a Prairie Channel that filters stormwater. A 12-acre downtown tract becomes a new "Performance Park" showcasing both ecological and social performance including large meadows, rain gardens, a terraced amphitheater for outdoor performances, and a skate park under the highway. Finally, a 360 degree panoramic "Mississippi Overlook" hovers within the MacArthur Bridge structure, revealing dramatic new views to the River and Arch and highlighting an accessible connection across the Interstate and down to the existing Mississippi Greenway.

All in all, the project aspires to re-connect the neighborhoods and communities of St Louis, to bring new life and vitality to how people relate to nature, to one another and to civic life. Chouteau Greenway Braid is the tissue that binds, "interwoven with a spirit growing."

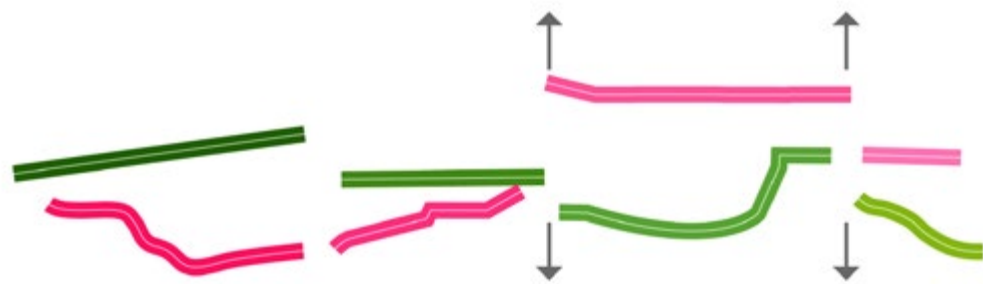


corridors, places & crossings
along Chouteau Braid



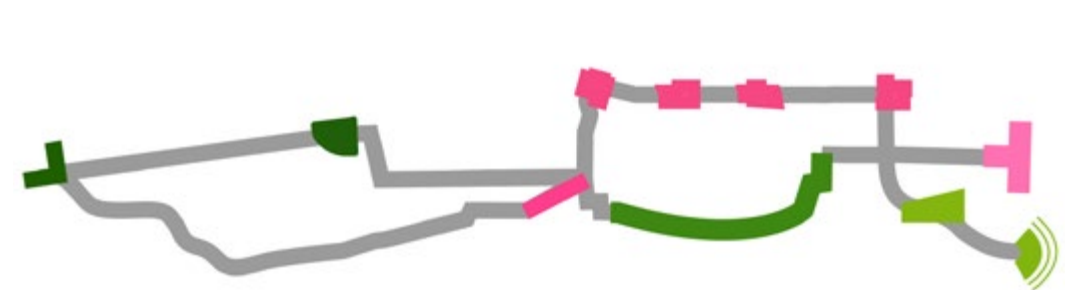
Left: Mississippi River Alluvial Valley
1944

Right: Neighborhood Map
Margaret Hagan



CORRIDORS

Nearly 16 miles of braided greenway Corridors connect Forest Park to the Arch Grounds and Mississippi River, along with over 6 miles of north-south Connectors that reach deeper into the city to make critical links to the larger regional trail and park network. Together, this 22-mile system supports multiple connections, conversations, journeys and experiences, working to stitch the city together, east to west, north to south, over and under.



PLACES

A number of memorable places punctuate the corridors, building off of existing resources and proximity to technology and innovation, arts and culture, education and health, natural resources and industrial heritage. The Places reimagine abandoned infrastructure, reinvigorate vacant city lots in the city and capture underutilized land along the railroads and highways. Success hinges upon working with project partners and communities to expand the greenway territory in an effort to thicken and activate the line and add to its recreational, cultural, social and community value.



CROSSINGS

Three new bridges, the reuse of an abandoned rail trestle and a series of underpasses allow for safe and inspired crossings over and under the spaghetti of highways and rail lines that disrupt and divide the central corridor.



LANDSCAPE

A restored prairie meadow is envisioned along the entire length of the Green Line and wherever possible; as planted buffers and medians, new gardens and parks and in large swaths along inaccessible lands adjacent to the rail tracks and highway. This new landscape inspired by Missouri planting communities provides enormous ecological benefit and links the entire braided greenway with the qualities of vivid color, seasonal change and a tactile sense of nature.



THE GREEN LINE

THE SOCIAL LINE

soft ecological recreational intimate passive nature biodiverse

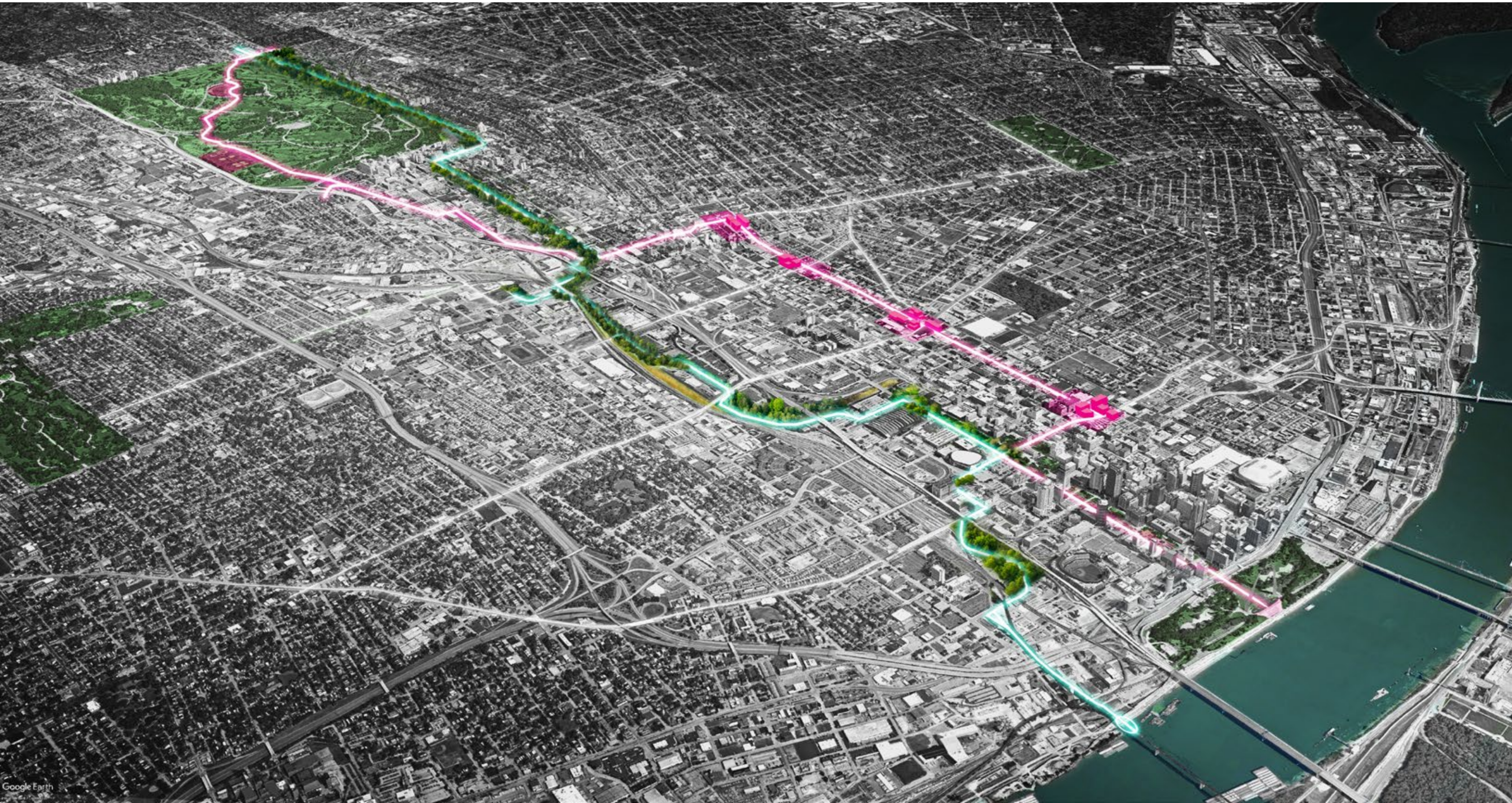
urban cultural civic public active city diverse

PEDESTRIAN LIGHTING
PUBLIC ART
SAFETY
CONCENTRATION OF ACTIVITY
FOUNTAINS
SCOOTER RENTALS
ENTERTAINMENT
FOOD TRUCK PARK
RESTROOMS
SIGNAGE/WAYFINDING/COLORS
WIFI
BUSKING
SPACES FOR MUSICIANS
DIVERSITY OF BUSINESS
GARDENS
PARKING/PARK & RIDE
PET PARKS - PET FRIENDLY
PUBLIC/COMMUNITY SPACE
EDUCATIONAL FEATURES
HISTORIC EXHIBITS
PLAY
BENCHES
INTERACTIVE
BIKESHARE/ BIKE REPAIR
ACCESS POINTS - MAPS
COMMUNITY ART - STL ARTISTS
TOWN SQUARE

PEDESTRIAN ONLY AREAS
CLOCKS
ENTREPRENEURIAL ROW
FARMER'S MARKET
SENIOR SPACE
SHADE
DISABLED SPACE
HEARING/SIGHT/SENSORY
BRAIL TRAIL
BIKE SIGNALS
MILL CREEK
BLUES MUSIC/MUSEUM
MULTIPLE LANGUAGES
REST STATIONS
SOLAR-POWER CHARGING
AMPHITHEATER
BREWERIES
CROSSWALK ART
HIGH TECH
GRAFFITI
MARDI GRAS
THEATER
SEASONAL PROGRAMMING
SHOPPING
ACTIVISM
WORSHIP
SKATEBOARDING

NATIVE PLANTINGS
LANDSCAPING
WATER
SMOOTH TRAIL
REFILL STATIONS
BIKE RENTALS
COLORS
RESTROOMS
SIGNAGE/WAYFINDING
VIEWS
GARDENS
MAINTENANCE
PARKING/PARK & RIDE
PET PARKS
POLLINATORS
ACTIVITIES
EDUCATIONAL FEATURES
HISTORIC EXHIBITS
PLAY
BENCHES
INTERACTIVE
MAPS
PET FRIENDLY
OPEN GRASS
BIKESHARE
CONSISTENCY
EMERGENCY CALL BOX

ACCESS POINTS
BIKE REPAIR
RECYCLED MATERIALS
SAFETY CAMERAS
OBSTACLE-FREE
BUTTERFLIES
CLOCAKS
DISTANCE MARKERS
DOG WASTE BAGS
RECYCLING
SHADE
DISABLED SPACE
HEARING/SIGHT/SENSORY
BRAIL TRAIL
BIKE SIGNALS
GRAIN ELEVATORS
FLOWERS
REST STATIONS
SITE-SPECIFIC ART
KID-FRIENDLY
BIKE BRIDGES
CHOUTEAU LAKE
RIVER HISTORY
GRAFFITI
MOUNDS
POROUS PAVEMENT
WATERFRONT



THE GREEN LINE

When asked, “How would you like to use the Chouteau Greenway?” the top three responses were for recreation, to improve health and to experience the outdoors. We therefore designed the “Green Line” as a soft, green and ecological greenway that promotes bike culture, nature, health and wellbeing, biodiversity, resilience and recreation. As such, the Green Line is an interconnected pedestrian and bicycle path immersed in a prairie meadow that harvests and filters stormwater, creates micro-habitats, and reforests the urban canopy. Planting is based on indigenous Missouri plant communities, transitioning from Upland Dry-Mesic Forest and Dry-Mesic Prairie to Wet-Mesic Prairie and Bottomland Forest, moving from Forest Park to the Mississippi River. As a piece of innovative green infrastructure, the Green Line is a unified, but varied sequence of performative landscapes, with diverse ecological functions as well as recreational amenities that connect people to nature.

A custom colored centerline marking along with unique wayfinding graphics on the light-colored asphalt bikeway and cast-in-place concrete pedestrian path allow for information to be displayed in a clear and an artful way and helps to provide a legible and recognizable path. Lighting is provided where necessary to improve safety and create a dappled light effect. A series of “Micro-Settings” inspired by industrial sheds and Native American platform mounds unique to this area are dispersed throughout the Green Line to house bike amenities such as bike repair stations, water bottle fillers and bike parking; micro-habitats that attract insects, bees, butterflies, birds, and other pollinators; rest areas to picnic, relax, sit and be immersed in nature paired with safety help points; and storage areas to aid the maintenance and operations of the greenways.



LINDELL BOULEVARD - FOREST PARK



EUCLID COURT



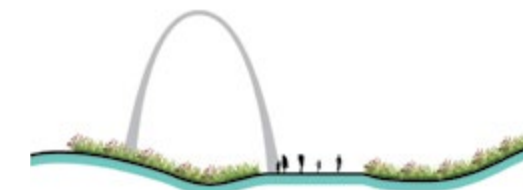
FOREST PARK AVE.



RAILYARDS PARK



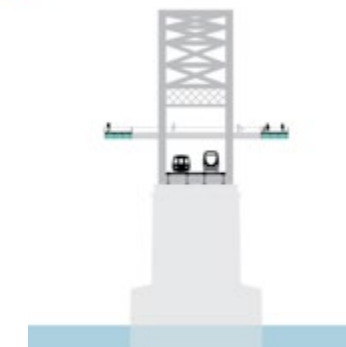
22ND ST. PRAIRIEWAY

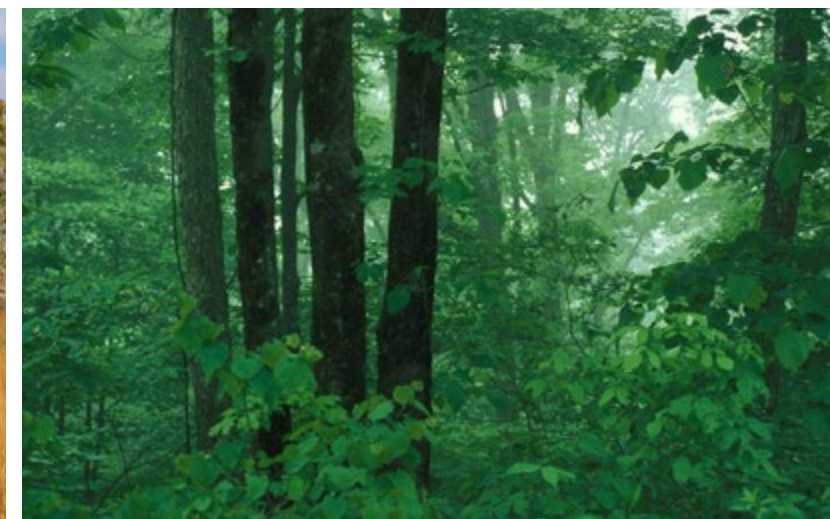
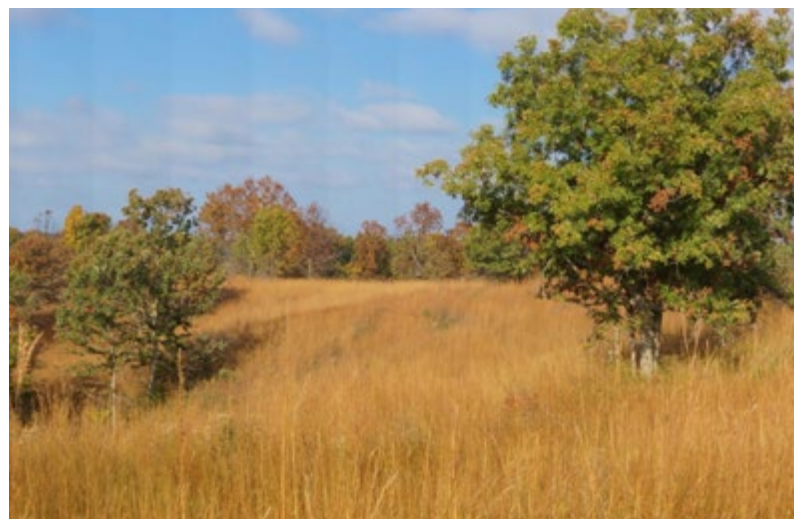


PERFORMANCE PARK

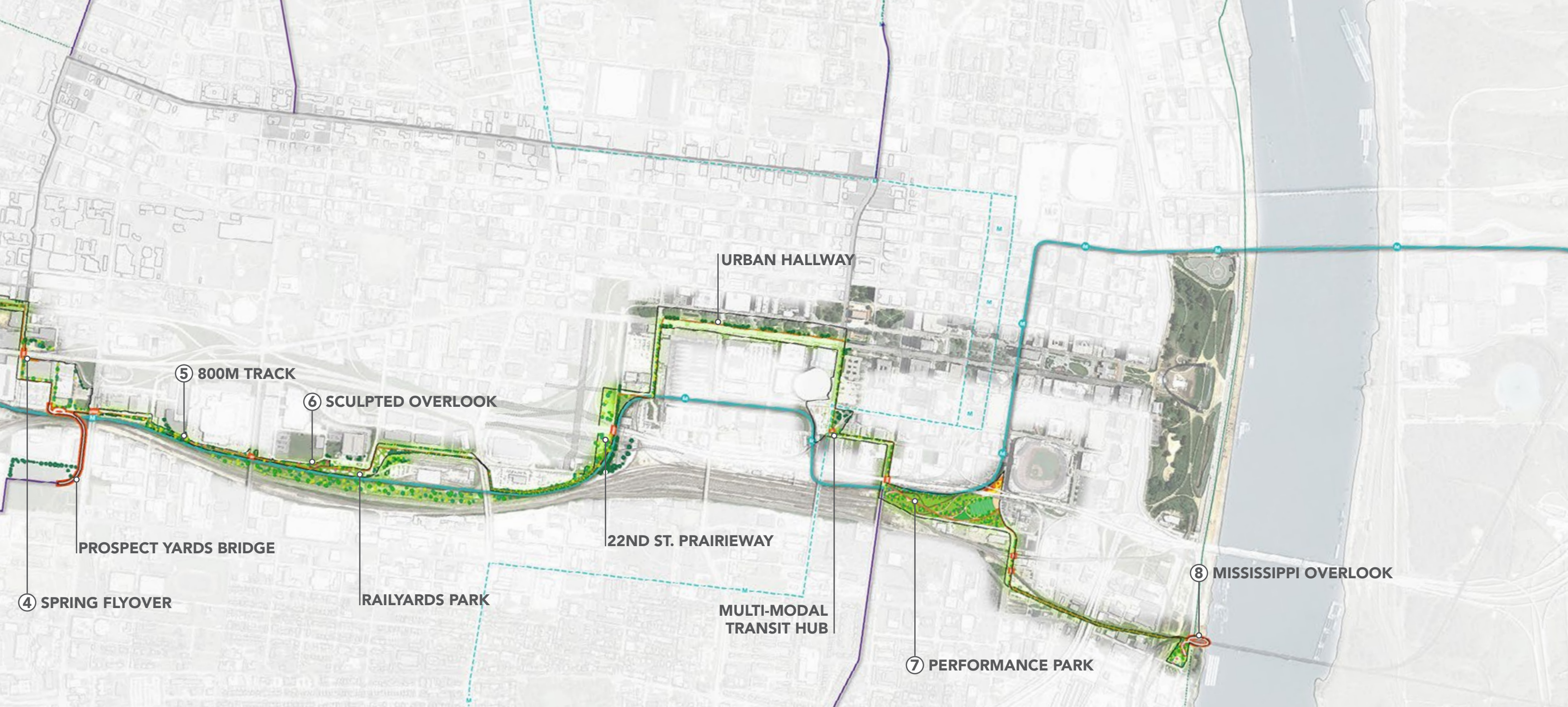


MISSISSIPPI OVERLOOK









GREEN LINE ELEMENTS



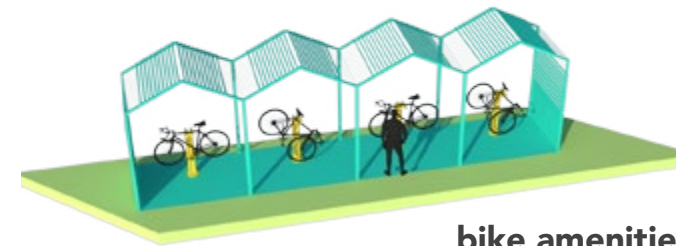
paving



lighting



micro-settings



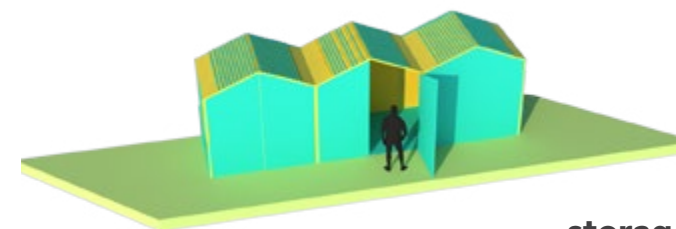
bike amenities

- bike repair
- water bottle fillers
- bike parking
- bike share



micro-habitats

- bird totems
- insect hotels
- soil building
- butterfly



storage

- maintenance yards
- gardening tools
- equipment



rest area

- shaded seating
- safety help points
- drinking fountains
- wifi





THE SOCIAL LINE

When asked “What do you feel is most important for this area?” the top response was to build connections from the greenway to nearby places people work, learn and play. We therefore designed the “Social Line” as an active urban trail that produces a dynamic pedestrian-oriented and human-scaled environment connected to civic, cultural, art and educational activities. As such, the Social Line is a distinctive and identifiable bike and pedestrian urban trail that connects major destinations, institutions and communities, catalyzes economic investment, promotes access and mobility, and foregrounds art, culture, and local history. As a piece of cultural infrastructure, the “Social Line” features public WiFi, utilities, and flexible social places for the community to plug-in, connect and come together.

A custom colored centerline marking along with unique wayfinding graphics on the light-colored asphalt bikeway and cast-in-place concrete pedestrian path allow for information to be displayed in a clear and an artful way and help to provide a legible and recognizable path. Lighting is provided where necessary to improve safety and allow for punctuation at activity areas and nodes. A series of “Micro-Settings” inspired by the fluvial islands of the Mississippi River are dispersed throughout the Social Line to encourage social seating and communal gathering; to provide a platform for media, art and communications including public WiFi, safety help points, device charging and access to city services, maps and directions; and to foster interactivity and play celebrating the history, culture and character of individual neighborhoods.



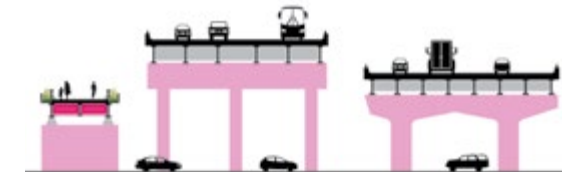
GATEWAY MALL - URBAN HALLWAY



DELMAR PLUG-IN PARK



DELMAR MAIN ST.



ARTS TRESTLE



FOREST PARK - GRAND BASIN



WASH U - FOREST PORCH



SOCIAL LINE ELEMENTS



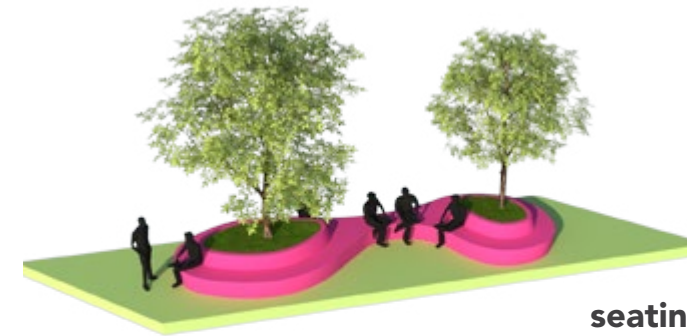
paving



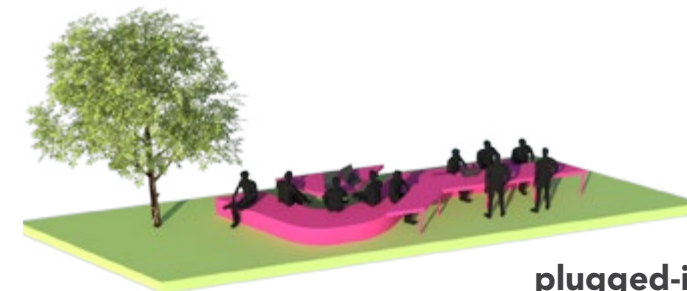
lighting



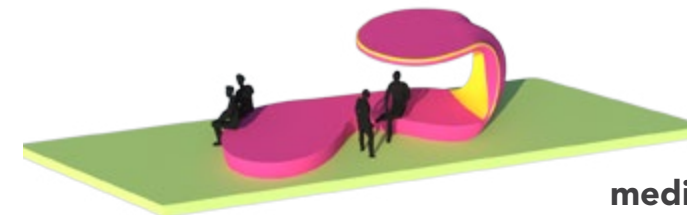
micro-settings



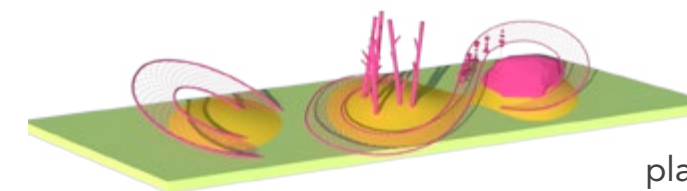
seating
shade
communal gathering



plugged-in
work stations
wifi
device charging
safety help point



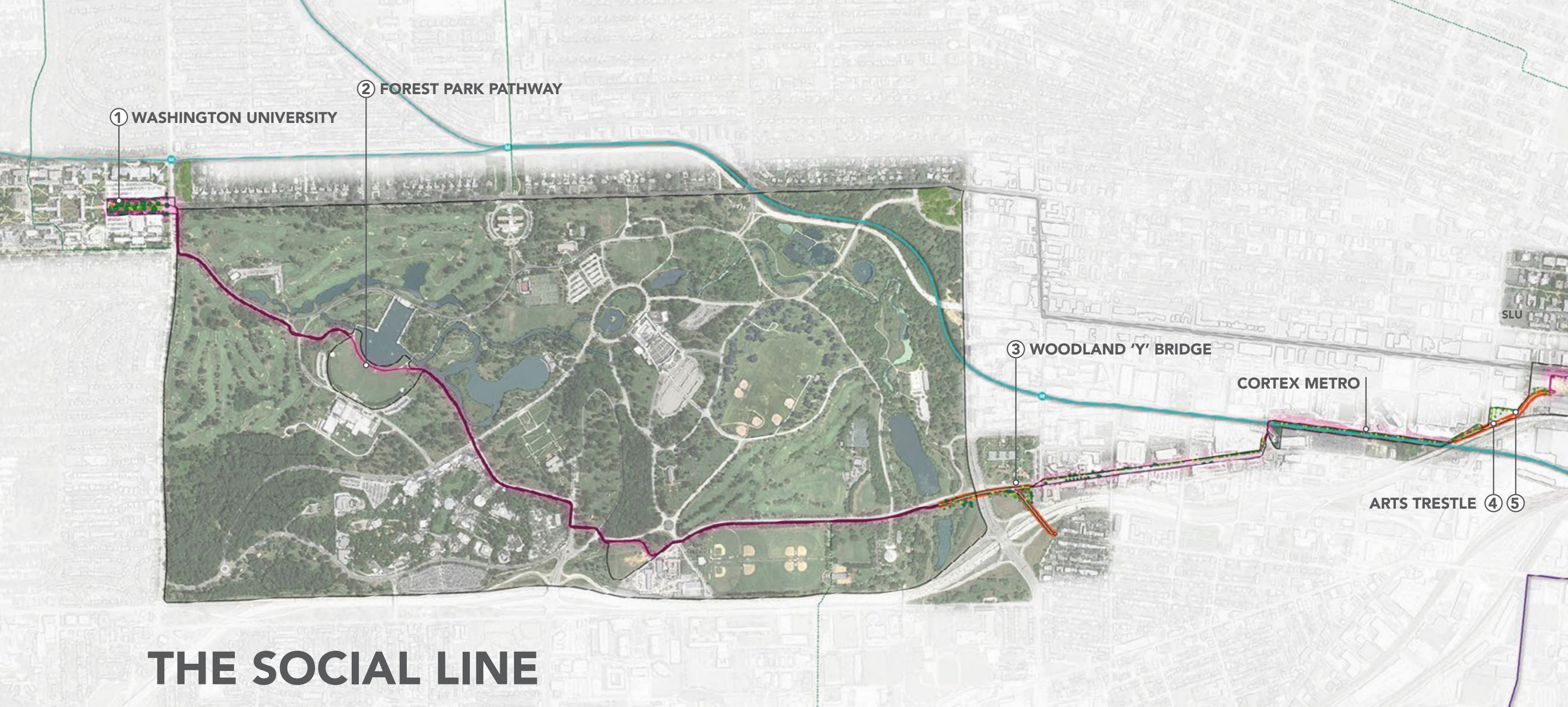
media
art
information
maps & directions

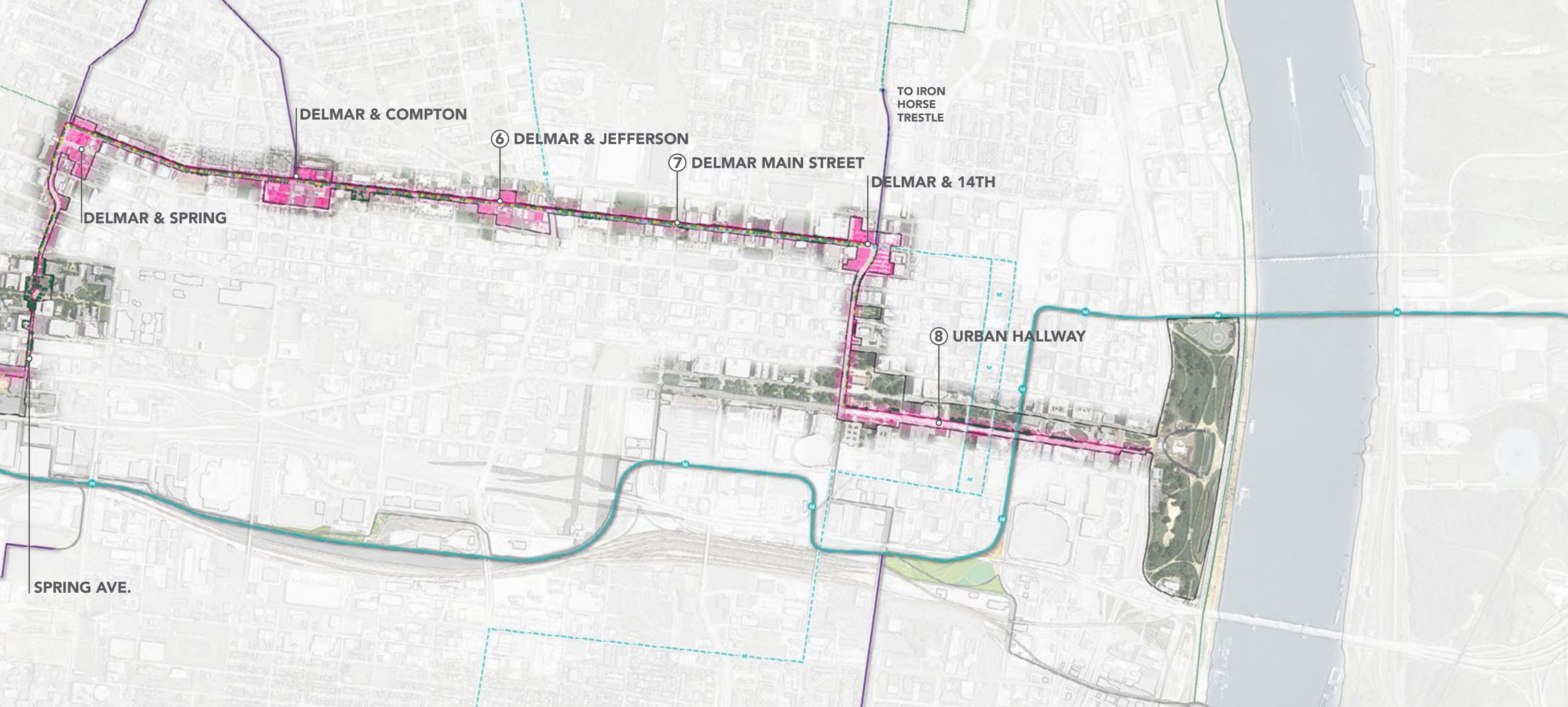


play
community amenities
interactive features







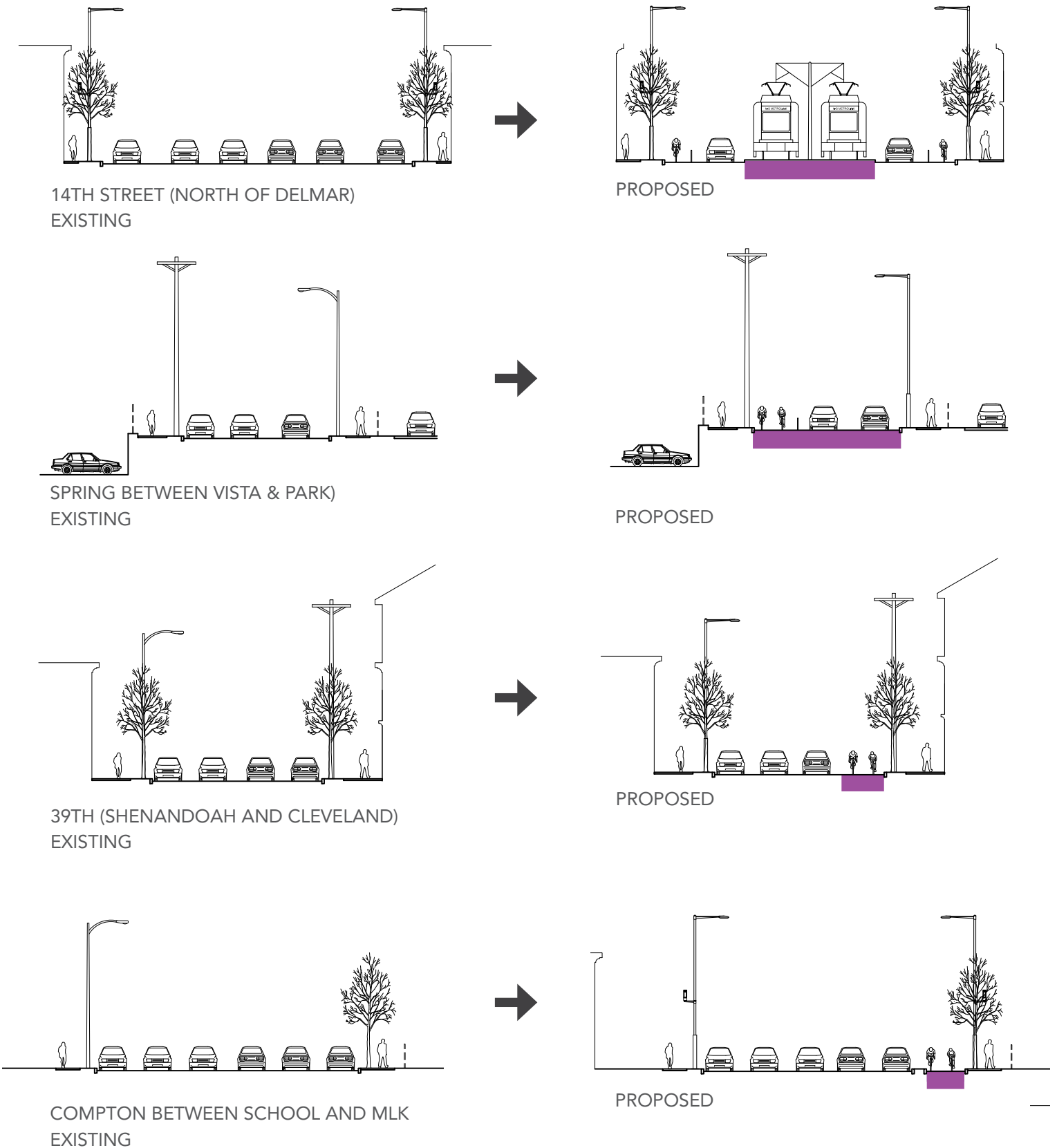


NORTH-SOUTH CONNECTIONS

Over 6-miles of north-south Connectors reach deeper into the city fabric to connect historically underserved neighborhoods to the central corridor and make critical links to the larger regional trail and park network as well as future North/South MetroLink line. The north-south Connectors are located at the nexuses where the Social Line and Green Line intersect, recognizing the strong north-south axis from Tower Grove Park to Fairground Park, identified on a large number of mental maps drawn by TAG members during our first Mid-Course Review and further reinforced in our discussions with the community.

We propose two Northern Connectors; at 14th Street (north of Delmar) connecting to the proposed Trestle and Mississippi Greenway and at Spring Avenue and MLK (north of Delmar) connecting to the proposed Hodiamont Greenway and Fairground Park. We also propose two Southern Connectors; at 39th Street (south of the Railyards Park and over our proposed Prospect Yards Bridge) connecting to Tower Grove Park and at Tucker Street (south of the new Performance Park) connecting to multiple neighborhoods, and eventually south to the Louisiana Calm Streets project in the Gravois Park and Dutchtown Neighborhoods.

To further reinforce north-south connections, we intentionally selected an alignment on Delmar to push investment north of the Central Corridor. We also chose to engage the Mississippi River at two levels, above with a dramatic Mississippi Overlook and below with a physical connection to the existing Mississippi Greenway. Finally, our series of acupuncture bridges and underpasses significantly strengthen north-south connections while enhancing the visibility of the Greenway and the River Ring.





Project Partners
Arch to Park Collaborative
Forest Park Forever
Great Rivers Greenway
Green Street St. Louis
St. Louis University
Washington University Medical Center
Redevelopment Corporation
City of St. Louis
Grand Center, Inc.
Great Rivers Greenway Foundation
Lawrence Group
Washington University in St. Louis

REGIONAL NETWORK & DESTINATIONS

The greenway corridors and connectors are carefully and strategically calibrated to link to project partners, leverage capital investment projects, build on existing resources and connect surrounding neighborhoods. The alignments thread through a sea of disparate islands, creating a legible, recognizable and interconnected multi-modal system.

Technically, the alignments follow streets where traffic counts support lane diets, thus allowing traffic lanes and/or parking lanes to be narrowed or removed to make way for new bike and pedestrian paths with ecologically significant planted buffers and medians. The alignments also capture vacant lots as well as underutilized land at the railyards and along the highway in an effort to thicken and activate the line and add to its recreational, cultural, social and community value. Potential sites for expansion were identified with members of the TAG during the Mid-Course Reviews and have been developed as important places and regional destinations along the route.

Finally, we envision public art, programming and activation as strong and meaningful ways to further engage and extend networks into the community – curated as part of the design process, during construction and becoming an integral part of the life of the greenway once the project is built.





FOREST LOUNGE



WOODLAND 'Y' BRIDGE



ARTS TRESTLE



PROSPECT YARDS BRIDGE



DELMAR MAIN STREET



800M TRACK



PERFORMANCE PARK



PERFORMANCE PARK



MISSISSIPPI OVERLOOK

ESTABLISH A TRANSFORMATIVE FRAMEWORK



Our alignments have been thoughtfully calibrated to connect communities, resources and institutions by way of two east-west braided greenway corridors, four strong north-south connectors, a number of memorable places that act as both local and regional destinations and a series of acupunctural bridges and crossings. Our design leverages public and private investment and advocates for an economic development strategy along Delmar between Spring Avenue and 14th Street to support and shape future investment. As a result, the Chouteau Greenway Braid creates a strong framework that stitches the city together and allows for multiple journeys, explorations and points of entry.

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CATALYZE COMMUNITY BUILDING



Our design is all about connections and community - strengthening relationships, bridging neighborhoods and providing welcoming and inviting places for people to come together and participate in the life of the city. Our design process always begins by listening and seeking multiple and diverse perspectives. Our proposal for the Chouteau Greenway Braid is the beginning of this conversation, not the end. We envision a greenway that celebrates, represents and reflects the City of St. Louis' values and the distinctive style and character of each neighborhood along the greenway, with community building happening throughout the life of the project and beyond.



CONTRIBUTE TO THE REGIONAL SYSTEM



The Greenway will create critical links and connections throughout St. Louis – to and from the Metrolink, amongst the regional trail network and park system, and within under-recognized and under-served areas of the city. Our design integrates industrial landscapes and areas of the central corridor that are currently treated as ‘leftovers’, establishes regional destinations such as the Railyards Park, Performance Park, Mississippi Overlook, and Delmar Main Street, and creates a city-wide eco-initiative to restore prairie in the city as part of a “Prairie Exchange”. As such, our proposal invites people to discover and explore the region, the city and connect with each other.



CHOREOGRAPH URBAN LIFE



The Chouteau Greenway Braid is designed as sequence of spaces and activities along an interconnected path. Each place is unique to its context, designed for exchange and interaction, drawing from and linking to existing resources, institutions, landmarks and communities. The Green Line and Social Line are intended to overlap and intersect – allowing for multiple journeys and routes. People are encouraged to use them as city adventures - jumping on and off and moving fluidly between them, allowing for a diverse set of experiences from quiet moments surrounded by nature to bustling areas where people come together, gather and celebrate.



CREATE DIVERSE & ACCESSIBLE EXPERIENCES



Our design provides a diverse range of activities, with more passive activities located along the Green Line and more active uses on the Social Line. The places where the two lines intersect allow for even greater concentrations of activity, leveraging existing institutions, transit and proposed developments. Accessibility is prioritized and integrated into the design, including smooth and compliant materials, proximity to parking and transit, and fully accessible crossings and bridges. Year-round interest and use during the day and night is encouraged. Unique and unusual programming opportunities include food trucks, tailgating and a skate park under the highway at Performance Park, Pop-up and Plug-in Parks and Creative Commons along Delmar Main Street, Artist Studios, Maker Yards and Outdoor Galleries at the Arts Trestle, and Sunken Gardens and Outdoor Nature Classrooms at Railyards Park.



PROVIDE A SAFE & SECURE ENVIRONMENT



Our proposal leverages existing energy, activity and resources in order to provide a critical mass at key places, working with the strategy that active places are safer places. Community engagement and empowerment is key to creating safe spaces. Engaging people early on in the process and throughout the design and construction will help to foster pride and new stewardship for years to come. New energy-efficient lighting is envisioned on the corridors and within the places to ensure a safe and secure environment. Help points are integrated with furnishings and distributed throughout the greenway to allow for direct emergency access and usage of cameras and video analytics. Safety should be further supported through patrolling, enforcement and neighborhood ambassador programs.



GENERATE ECONOMIC OPPORTUNITIES



Our approach catalyzes investment by physically linking resources and institutions and recognizing current public and private investment. Significant economic development is concentrated over 2-miles of Delmar between Spring Avenue and 14th Street with the aim to retain existing residents while attracting new ones to bolster neighborhood pride. Keeping this goal in mind, there are a variety of public incentives available to subsidize the cost of development and attract investment to the nodes, including City and State tax incentives to businesses investing within Enhanced Enterprise Zones; Targeted Employment Areas for EB-5 projects that lower the required foreign investment threshold; New Market Tax Credits; Special sales taxes through Transportation Development Districts; and, Tax Increment Financing (TIF) and Payment in Lieu of Taxes (PILOTS).



INTEGRATE ART & CULTURE



Chouteau Greenway Braid provides a place for people to create, view, and engage with art. In addition to connecting to existing institutions and communities, we have integrated three key ways to celebrate art. First we propose a number of large-scale works that leverage the highly visible and expansive scale of the project. Next, we envision infrastructure canvases that retain the spatial and material character of the city's fabric while at the same time transforming it into something fresh, meaningful, and visually compelling. Lastly, we incubate places for the arts community to flourish. This approach ensures art is alive and vibrant, not only as a finished piece of work, but also as the process of creation, discussion, response, and provocation.



IMPROVE MOBILITY & CONNECTIVITY



Modal Split statistics from 2012 show that the 92.2% of people in the State of Missouri and 82% in the city of St. Louis drive by car. The Central Corridor showed a higher percentage of people using alternate modes of transportation, with 69.6% of people driving by car. Our proposal invests in urban infrastructure for cyclists, transit, pedestrians, and services to push this trend even further towards supporting alternative modes of transportation. We do this at a number of different scales and with a number of different strategies from adding on-street cycle tracks to radically transforming Delmar from a car-centric street to a people-centric street, creating a complete street that is more dynamic and active. New bike lanes, sidewalk widenings, shared streets and spaces for community amenities are further supported by clear delineations and markings for modes of traffic, along with new safe, accessible and inspired crossings.



SHAPE A SUSTAINABLE FUTURE



Our design promotes ecological and social resilience and sustainability at many scales. The Green line reclaims large swaths of industrial wastelands as new parkland, proposes large-scale native prairie restoration, harvests and filters stormwater, reforests the urban canopy, and creates micro-habitats that attract insects, bees, butterflies, birds, and other pollinators. The Social Line proposes an economic development strategy with the incorporation of technology, media and communications, public WiFi, and social places for the community to plug-in, connect and come together. These are combined with energy efficient lighting, native planting and the use of local and recycled materials, as well as a sustainable operations and maintenance plan.



PROMOTE DESIGN EXCELLENCE



Our proposal contributes to the regional system, incorporates greenway innovations, provides new destinations and attractions, creates a legible identity, allows for a unique and diverse sequence of experiences and builds and fosters community. Design excellence is promoted at multiple scales and in a variety of ways, from large-scale urban design strategies to detailed material choices. Design is measured by ecological, economic and social performance but also by qualitative aspects that evoke inspiration and beauty. As such, design is central to enriching lives, cultivating curiosity, and building connections to one another and to nature.



BE ASPIRATIONAL & ACHIEVABLE

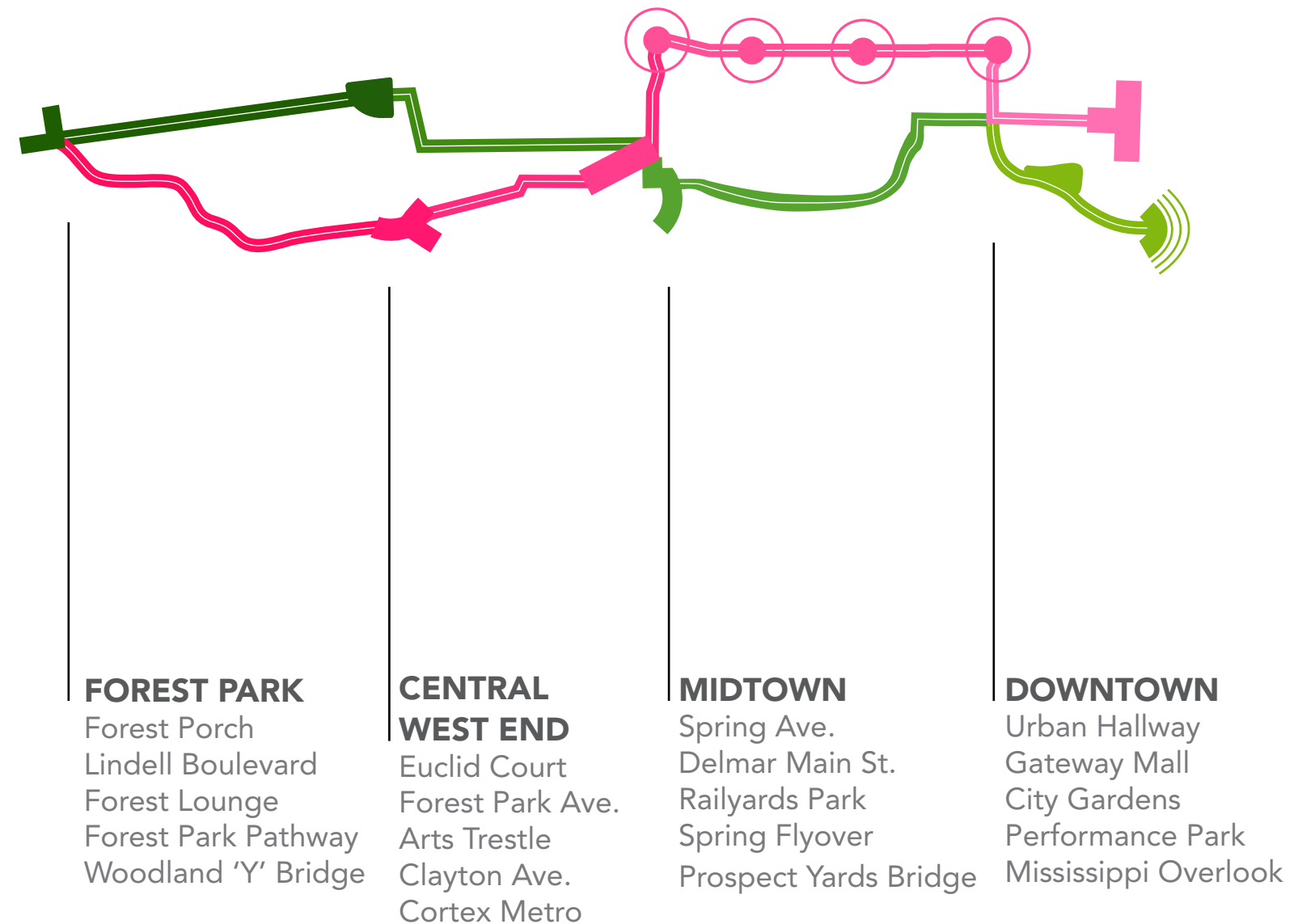


Our vision sees the greenway as a conduit for change. This project has the great opportunity and responsibility to unlock potential, to create value, to link and connect and therefore to heal and to mend. Chouteau Greenway Braid is both world-class and authentic to St. Louis. The design is feasible, flexible and phaseable. Working with GRG, the City, stakeholders and the community, the key concepts can be adapted to reflect local input, and can be adjusted to accommodate available resources and timing. We were inspired by the enthusiasm of community members who described St. Louis as “diverse”, “creative”, “a sandbox where you can do anything”, “a hidden gem”, “entrepreneurial”, and “changing”. We agree. St. Louis has great potential and this project is a once-in-a-lifetime opportunity to invest in infrastructure that weaves the many great things in St. Louis together.



GREEN LINE & SOCIAL LINE JOURNEYS

The Chouteau Greenway Braid is comprised of four main segments, related to the neighborhoods that it passes - Forest Park, Central West End, Midtown, and Downtown. Each leg of the journey includes greenways, places, points of access, and extensions to the north and south.



FOREST PARK



CENTRAL WEST END



MIDTOWN



DOWNTOWN

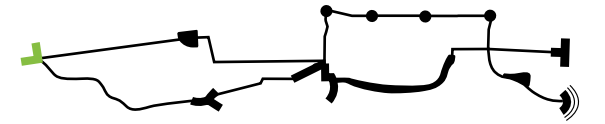


FOREST PORCH

Forest Porch is a new park that strengthens the connection between Forest Park and Washington University. At the intersection of the Green Line and the Social Line, it creates an inviting new entry and gateway to Forest Park. The corners are activated by a tiered seating steps and a stage for impromptu performances and gathering at one end and a water feature at the other, connected by a pathway with a series of large-scale porch like furnishings perched high with views to the Washington University. Planting is inspired by Missouri plant communities – dry mesic savanna and low-profile prairie including oaks, hickories and American hornbeams within a matrix of beebalm, switchgrass, butterfly milkweed and liatris.

32



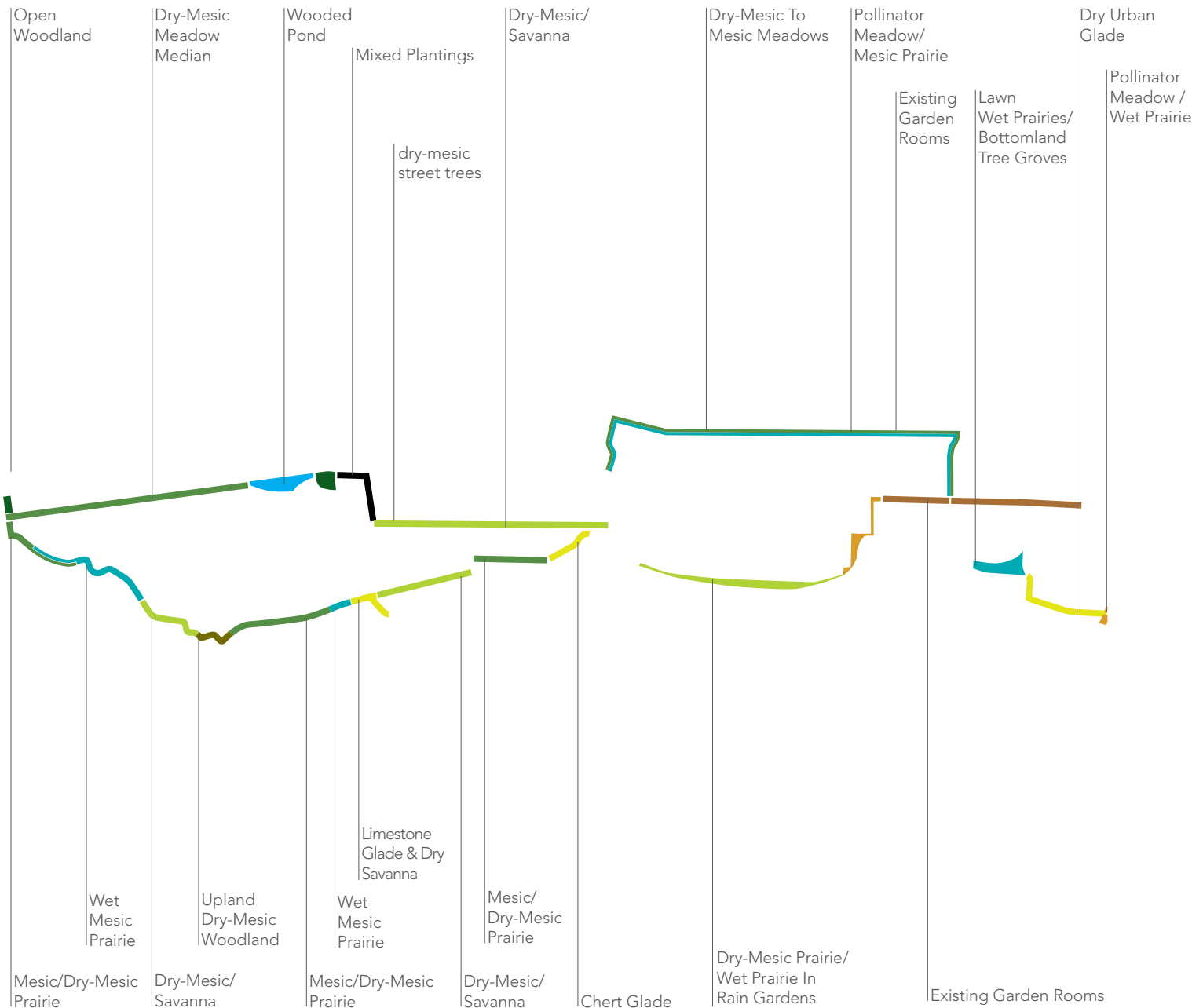


PLANT COMMUNITIES

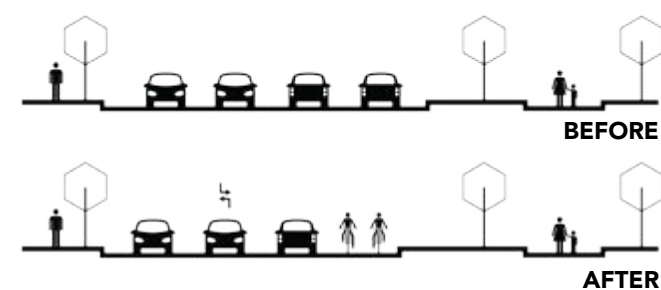
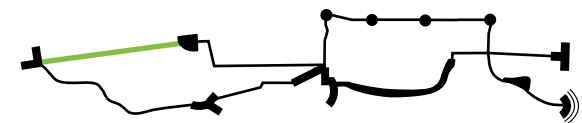
A restored prairie meadow is envisioned along the entire length of the Green Line and wherever possible; as planted buffers and medians, new gardens and parks and in large swaths along inaccessible lands adjacent to the rail tracks and highway. This new landscape provides enormous ecological benefit and links the entire braided greenway with the qualities of vivid color, seasonal change and a tactile sense of nature. Planting is based on indigenous Missouri plant communities, transitioning from upland dry-mesic forest and dry-mesic prairie to wet-mesic prairie and bottomland forest, moving from Forest Park to the Mississippi River.

LINDELL BLVD

Lindell Boulevard includes a new 2-mile two-way cycle track immersed in a prairie landscape. Here we propose to plant the existing median with dry-mesic prairie species, and implement a road diet in order to add a protected two-way cycle track with a planted median, including trees such as oaks, tupelos, birches and dogwoods and a prairie meadow understory of carex grasses, coneflowers, sideoats and baptisia. The new Lindell Boulevard creates a strong park edge that feels like an extension of Forest Park, but provides a dedicated and protected bike lane for commuters and faster speeds in contrast to the dual path within Forest Park that is used primarily for leisure and strolling.



Chouteau Greenway Braid
Plant Communities

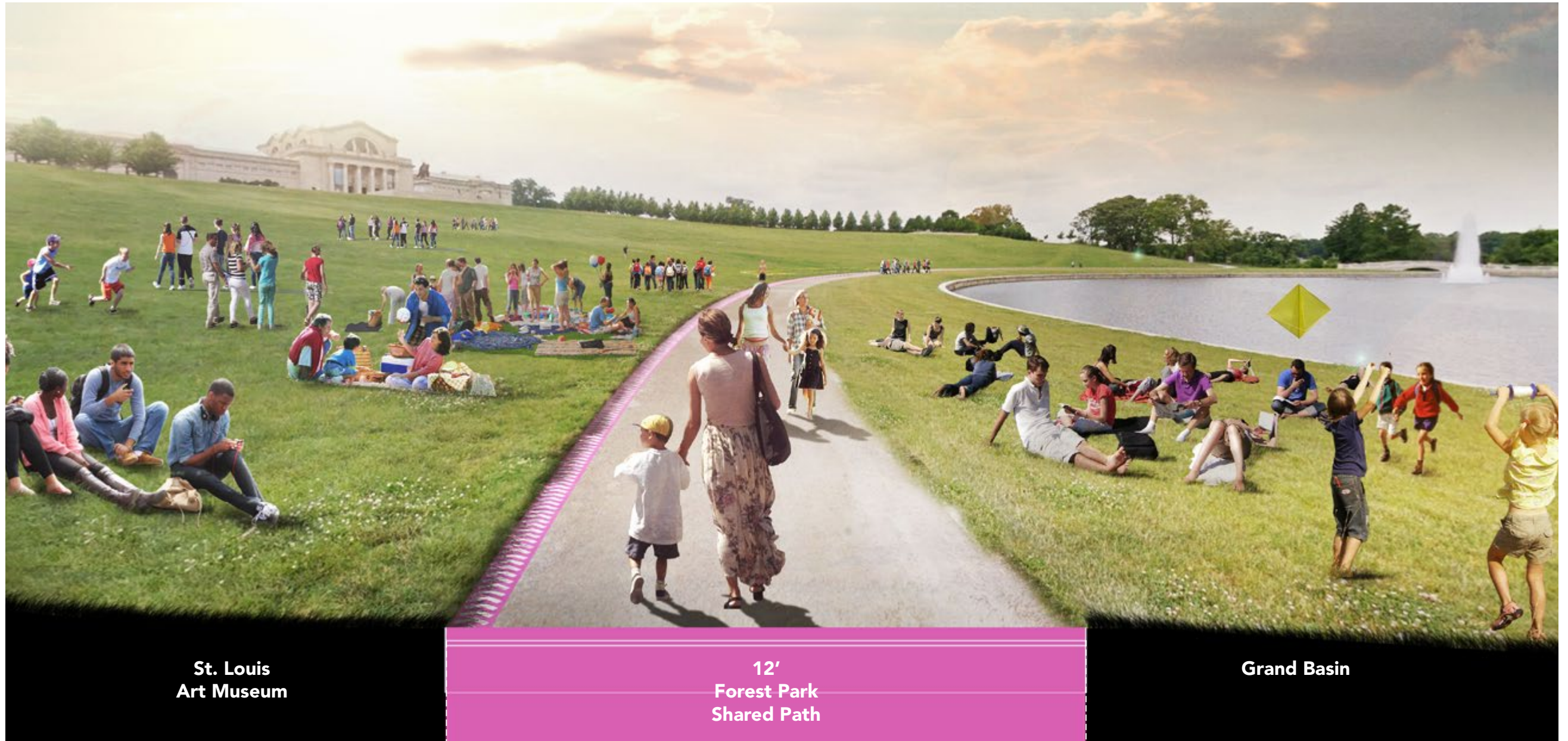
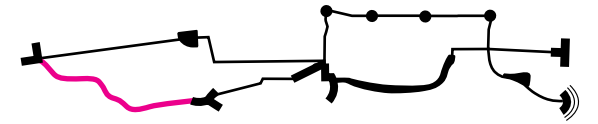


FOREST PARK PATHWAY WOODLAND 'Y' BRIDGE

Over 2.5 miles of greenway comprised of existing Forest Park trails create a singular interior bike and pedestrian path that connects to key institutions and attractions in Forest Park and links to the potential multi-modal transit hub at Forest Parkway and Grand Avenue. Here, we propose a minimal treatment – new paving and markings over existing interior Forest Park trails. The Forest Park Pathway is on the Social Line because Forest Park was described by many members of the community as one of the most inviting and welcoming places in the City, highly accessible, with a number of free activities, cultural institutions and attractions.

The “Woodland Y Bridge” is a new signature bridge that connects Forest Park to the Washington University Medical Campus, Cortex and the Forest Park Southeast neighborhood over Kingshighway Boulevard and I-64. The bridge is designed to fly through the canopy of oaks, hickories and endemic poplar trees, creating a beautiful, safe, accessible and celebrated entry into the park.





**St. Louis
Art Museum**

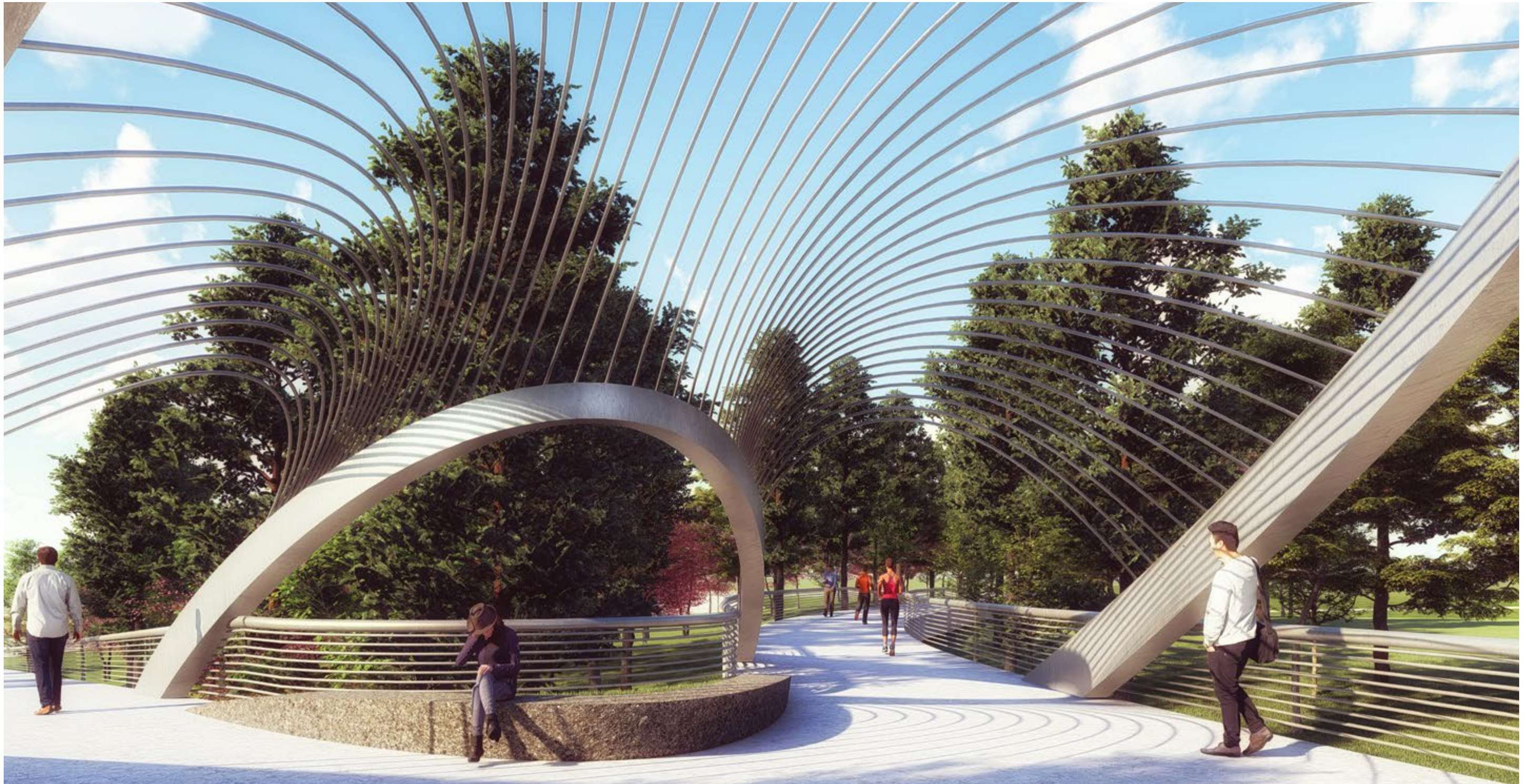
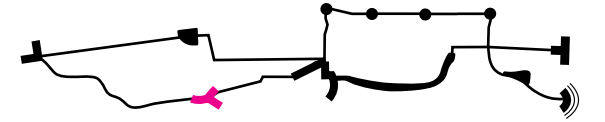
**12'
Forest Park
Shared Path**

Grand Basin

WOODLAND 'Y' BRIDGE

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FOREST LOUNGE EUCLID COURT FOREST PARK AVE.

Forest Lounge works with existing pathways, memorials and water features, carving out an important plaza at the corner of Lindell and Kingshighway to create a stronger, inviting and welcoming entrance that clearly signals that this is the beginning of Forest Park. A large water feature is envisioned at the corner to animate and enliven this important entrance. The water feature inspired by a prairie – creating a meadow of jets with dry paths meandering within. Our strategy preserves existing trees and interplants prairie meadows – building off of the more than 6 acres of the West Pine Woodland and the 9 acres of prairie adjacent the Steinberg complex within Forest Park.

Euclid Court is envisioned as a new shared street on Euclid Ave. between Lindell Blvd. and Forest Park Ave. that promotes active storefronts, outdoor dining, and encourages small business.

Forest Park Avenue Promenade transforms the existing central median into a 1.5-mile promenade with a two-way cycle track on one side, pedestrian path on the other and a richly planted median with amenities in between. By implementing a road diet and reclaiming space for bicycles and pedestrians within the promenade, we can make north-south intersections more efficient for cars, while more importantly reducing crossing times for pedestrians and creating refuge spaces. This will reduce crossing time make them safer for people and reshape the street into a public space.

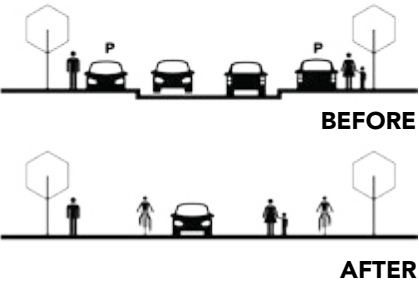
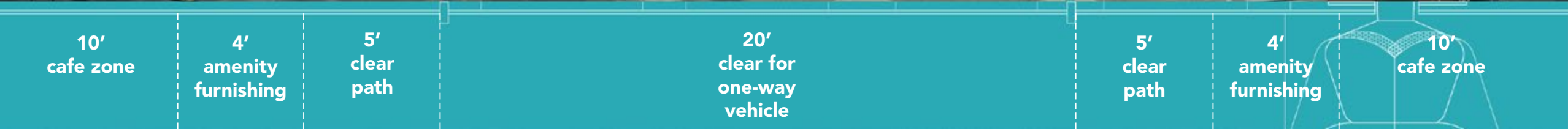
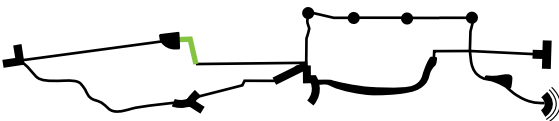


FOREST LOUNGE PLAN



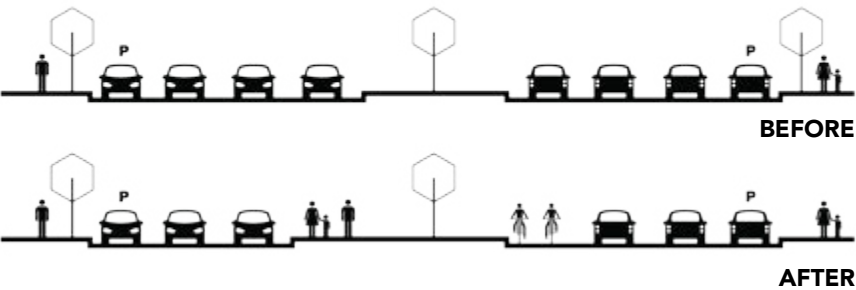
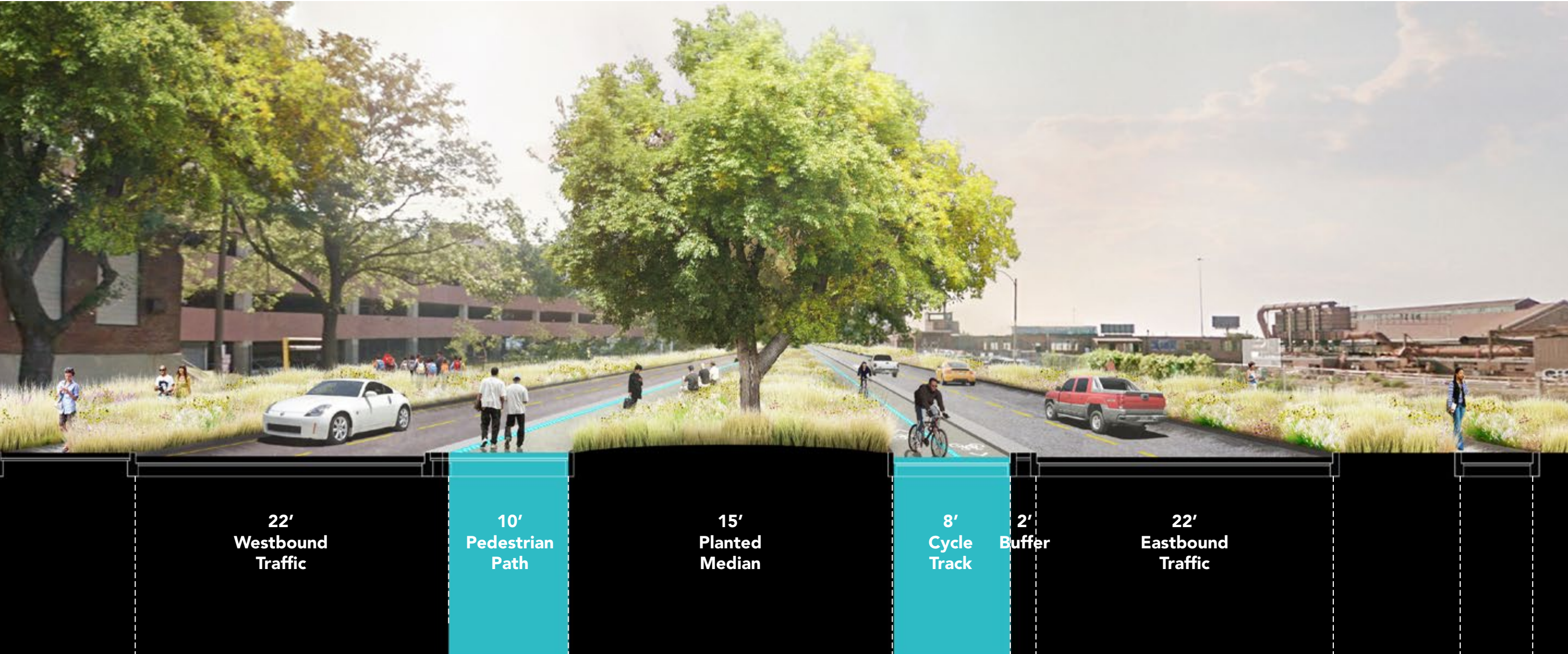
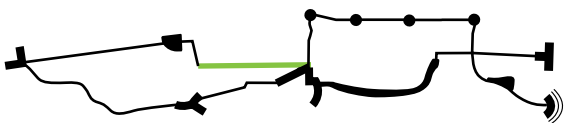


EUCLID COURT



* see appendix for traffic studies

FOREST PARK AVE.



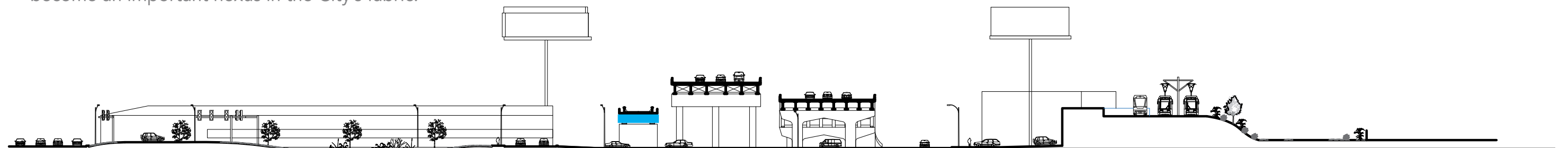
* see appendix for traffic studies

SOCIAL / GREEN NEXUS

The two lines meet at Spring Avenue and Forest Park Ave., where a number of key project partners come together. This intersection of infrastructure and capital investment creates a great opportunity for a vibrant node of public attractions and features three critical crossings: the Arts Trestle, Spring Flyover, and Prospect Yards Bridge.

ARTS TRESTLE

The Arts Trestle transforms the abandoned rail trestle near City Foundry into a place for the creation and experience of art, including a new elevated greenway on top with artist and maker studios and yards underneath. We propose a series of interventions working together to achieve this: temporary and easily-constructed “makers stalls” that offer low-cost studio and workshop space; art events beneath the adjacent highway overpass that can feature the art made in those studios; and the use of the trestle structure itself and highway overpass as opportunities for murals or installations. The Arts Trestle’s proximity to the metro makes it highly accessible for all, and the possibility of tapping into the energy of City Foundry next-door means that the Arts Trestle has the chance to become an important nexus in the City’s fabric.





SLU SOUTH

PROSPECT
YARDS BRIDGE

THE ARMORY

SPRING AVE.

FOREST PARK AVE.

CITY FOUNDRY

ARTS TRESTLE

VANDEVENTER

FOREST PARK AVE.

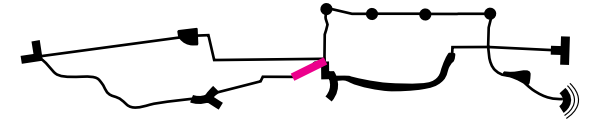
CHOUTEAU GREENWAY BRAID

45

ARTS TRESTLE

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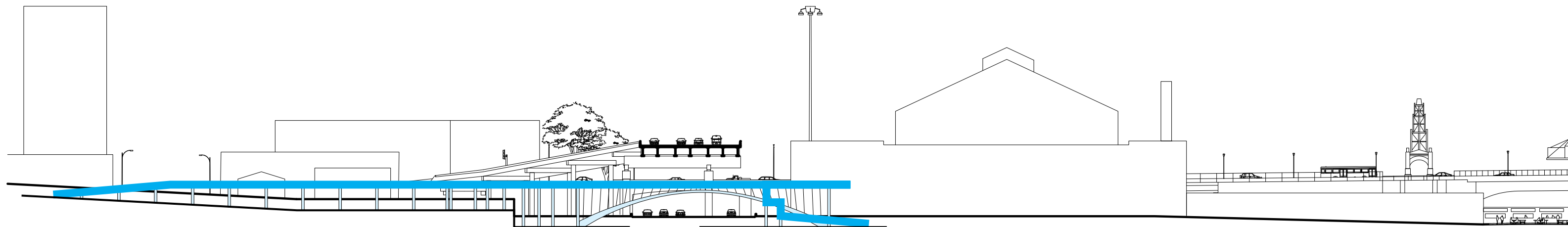
SPRING FLYOVER PROSPECT YARDS BRIDGE

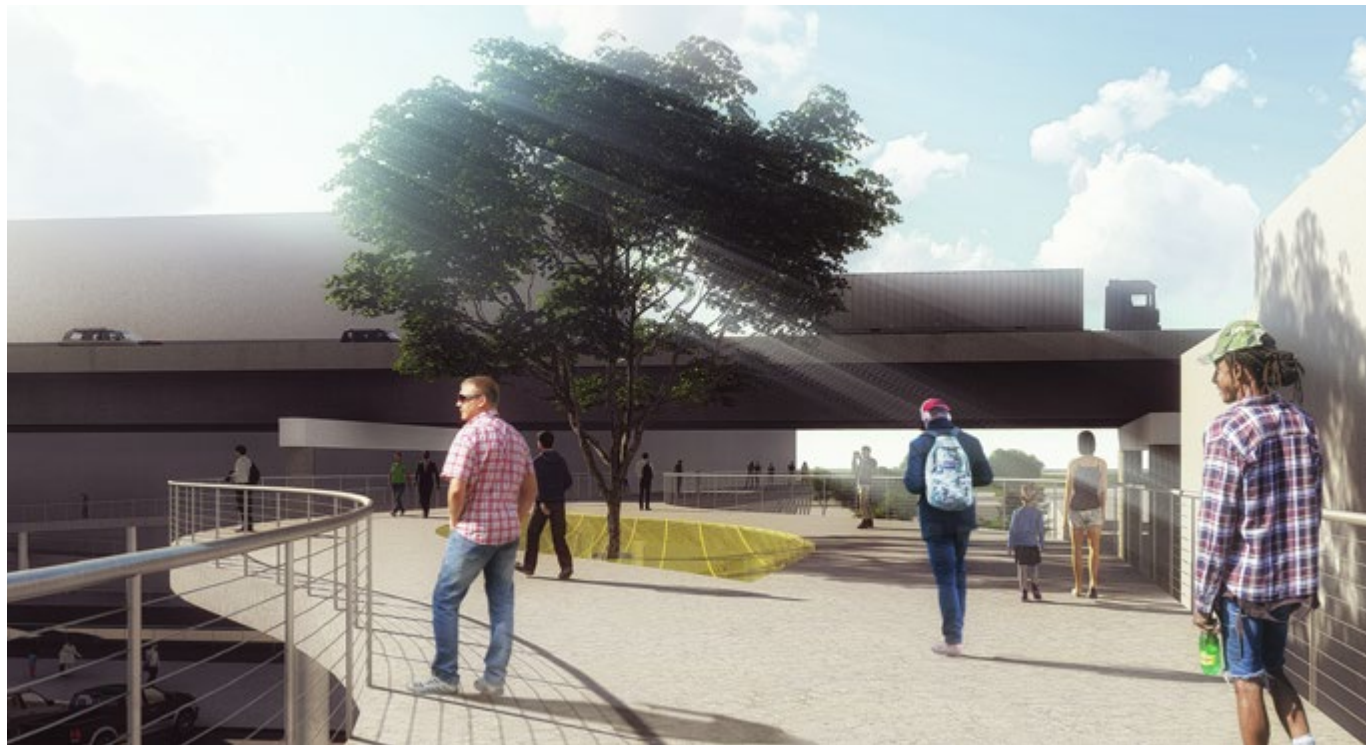
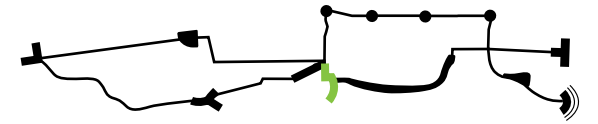
The Spring Flyover is a new bridge that extends Spring Ave. between the decks of I-64 to connect City Foundry to the Armory and provide access down to the Railyards. This is a critical link that will facilitate movement north and south and over and under. Reconnecting Spring Ave. helps to heal the urban fabric along the highway corridor, connecting neighborhoods to vibrant commercial and mixed-use areas of the City.

The Prospect Yards Bridge is a new signature bridge that connects SLU's north and south campuses over the rail tracks. With the expansion of the SSM Health St Louis University Hospital, the St. Louis Midtown Redevelopment Corporation is seeking to expand retail, housing, and supportive uses; as well as better connect both residents and students to public transportation and university facilities. By connecting across the rail tracks to Prospect Yards, SLMRC can make walking and biking between two of their major hubs safer and more experiential.



SPRING FLYOVER

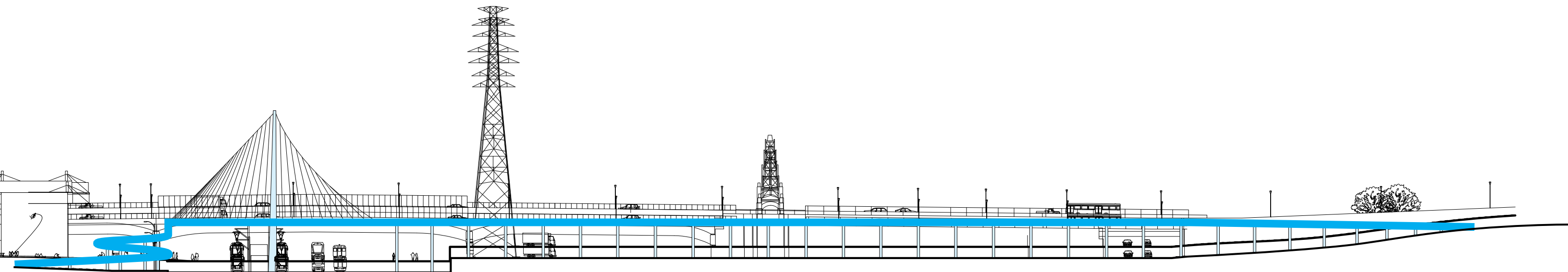




SPRING FLYOVER LOOKOUT



PROSPECT YARDS BRIDGE



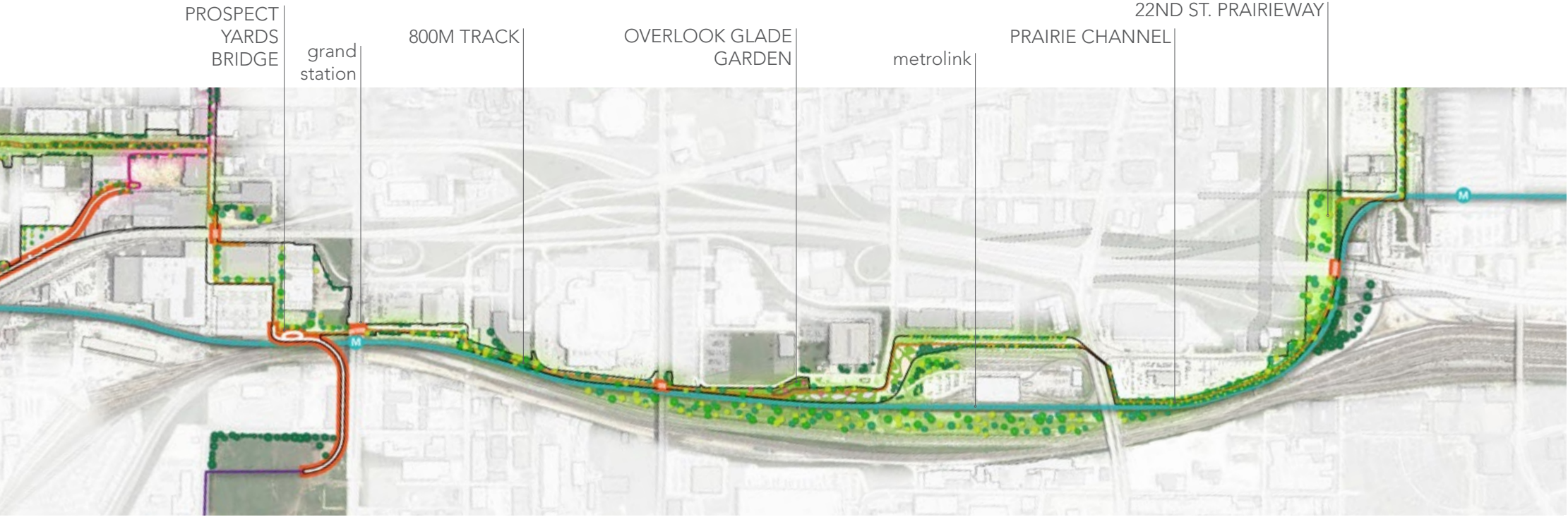
CHOUTEAU GREENWAY BRAID

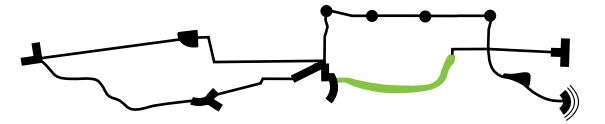
RAILYARDS PARK

Nearly 2-miles of the Green Line runs through a new 26-acre Railyards Park following the MetroLink alignment north of the working railyards, featuring an 800m long recreational track and art mural, a sculptural overlook and Glade Garden, and a Prairie Channel that filters stormwater. The 800m track is paired with a long linear screen that safely separates pedestrians and bikers from the working railyards and provides an artful sequence of perforations that function as windows with glimpses into the railyards. The screen also provides an exciting opportunity for large-scale artworks and installations, essentially functioning as an 800m long outdoor gallery. The Railyards Overlook includes two accessible ramps, one for pedestrians and one for cyclists, leading up to high point with sweeping vistas of the city. The overlook sits within a native Glade Garden with large Dolomite outcrops

imagined as a restful stop for relaxation and contemplation amidst native trees, grasses and perennials. The Prairie Channel is sited in a natural valley with incredible views to the Arch. Here we stack existing concrete drain pipes in a configuration that stabilizes the slopes and allows for both planting and water collection. The Prairie Way takes over the area currently occupied by the Chestnut St / 20th Street off-ramps (and formerly 21st Street) that will be removed as part of Project Connect and creates a new dual path for bicycles and pedestrians surrounding by native prairie plantings. Finally, large swaths of inaccessible lands along the railyards are utilized as an extension of the visual landscape, with restored prairie meadows, stormwater infiltration and public art installations enhancing the human experience.

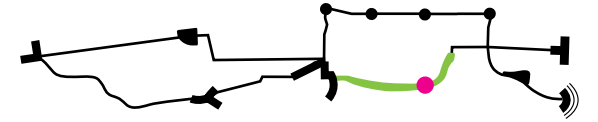
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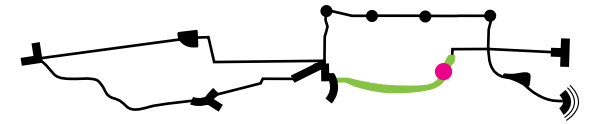
OVERLOOK GLADE GARDEN





PRAIRIE CHANNEL

JAMES
CORNER
FIELD
OPERATIONS



5TH ST

22ND ST. PRAIRIEWAY

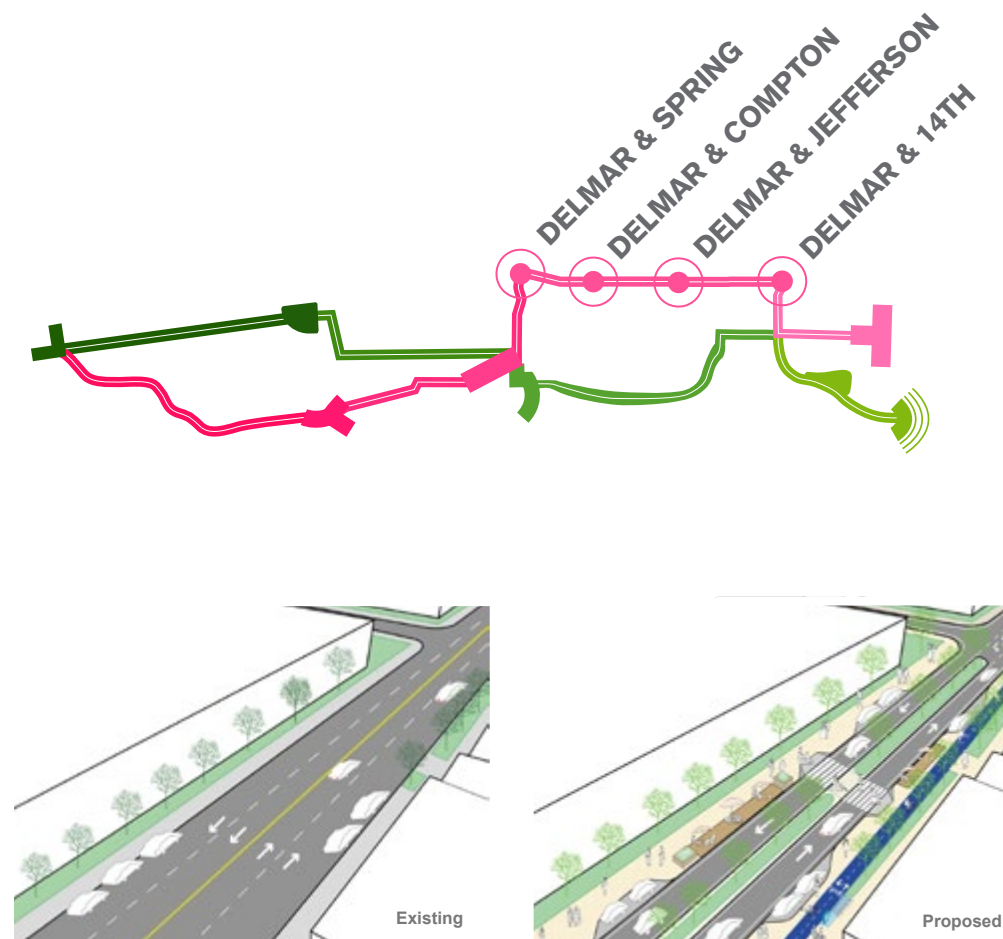
DELMAR MAIN ST

DELMAR NODES

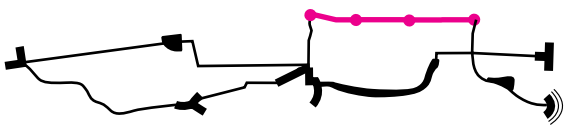
We propose an alignment that emphatically helps to bridge and repair the division north and south of Delmar, creating a 2-mile long Delmar Main Street as a strategy for investment in bike/pedestrian pathways, recreation, transit, open space, and economic development that is cognizant of both micro-market conditions and land ownership. With the rich African-American history of neighborhoods to the North, proposed future MetroLink stops, proximity to the central corridor and future NGA site, Delmar is primed for further investment and development. Change has come to many other areas in St. Louis, particularly along central thoroughfares like Washington Avenue and in neighborhoods where there has been investment in cultural districts and employment centers.

Sensitive development along Delmar will provide opportunity for some of the most economically challenged residents of St. Louis. The population along Delmar Boulevard has experienced a 15% decline in population over the past 17 years; current median household income is approximately \$20,000, just at the Federal Poverty Guideline for a family of three and well below the \$25,100 threshold for a family of four; and unemployment is 20%. The housing stock in this area is poorly maintained, with 45% of units built before 1979 and 23% vacant. Strengthening the neighborhoods north of Delmar by developing housing and amenities (including open space and retail) as well as local jobs will provide great quality of life benefits to the current population, while attracting new residents to the area.

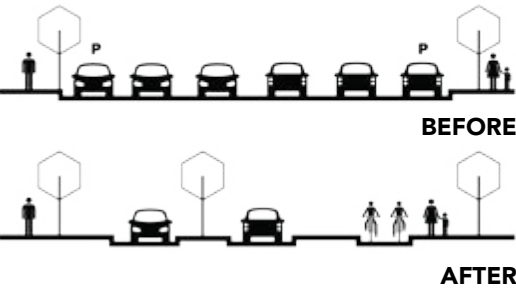
Here, at the epicenter of the Social Line, public realm improvements include a series of new plug-in parks and creative commons as well as state-of-the-art streetscape enhancements showcasing best practices in mobility and access. Delmar Main Street transforms a car-centric corridor into a people-centric corridor by providing significant greening, protected bike lanes, generous sidewalks, and community amenities. The strategy concentrate efforts at four distinct intersections, called the Delmar Nodes.



DELMAR MAIN ST.



57



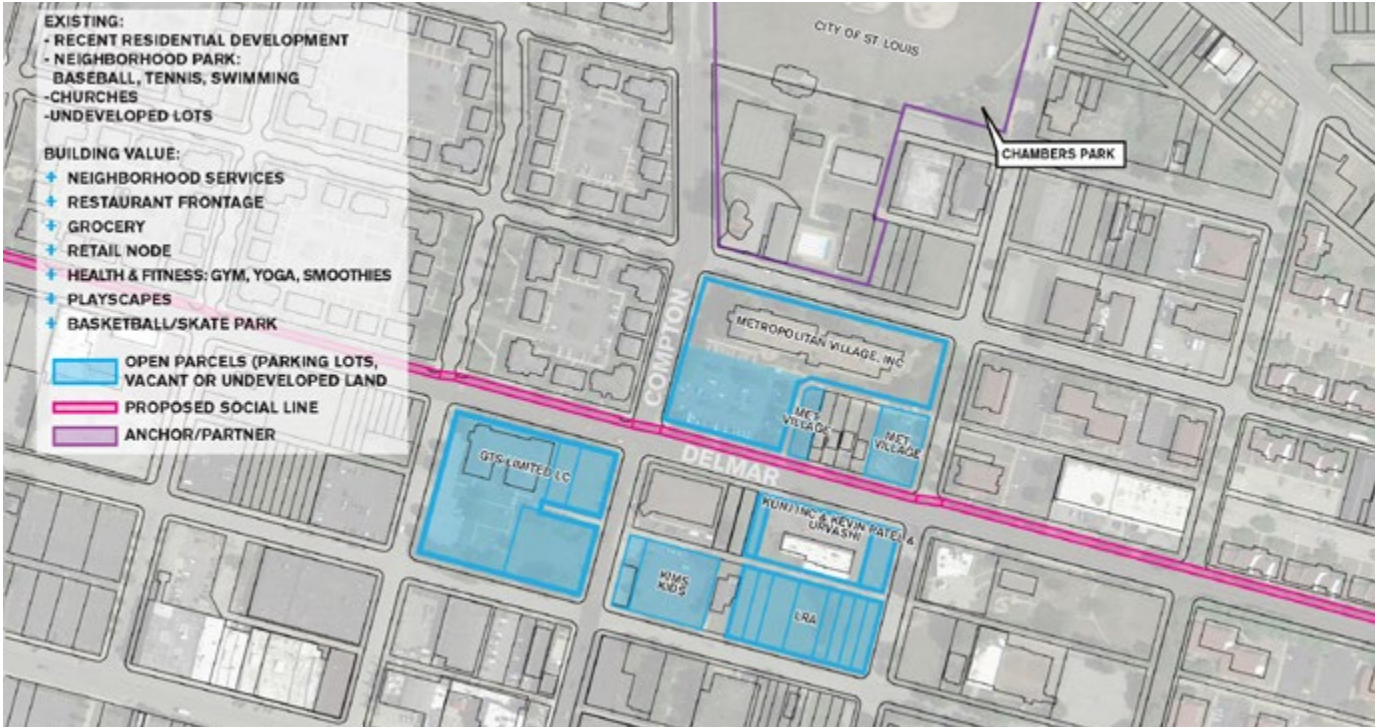
* see appendix for traffic studies

DELMAR NODES



DELMAR & SPRING

With proximity to the VA Medical Center, this node could support senior housing and amenities such as ground floor gardens, retail, and food and beverage for hospital workers, visitors, and residents. In addition, with the Contemporary Art Museum and Grand Center Arts District located nearby, this node could be enhanced by artist studios, residences, and galleries (indoor and/or outdoor). Acknowledging that the federal government is both likely-to-be-sympathetic but also slow-moving partner, the parcels south of the VA Medical Center, owned by the US Government, could be ideal sites for a senior housing component. The numerous sites further south, owned by Grand Center, Inc., the entity supporting the Grand Center Arts District, might be nearer term opportunities to host artist studios, residences, and galleries, as well as healthcare amenities and related retail.



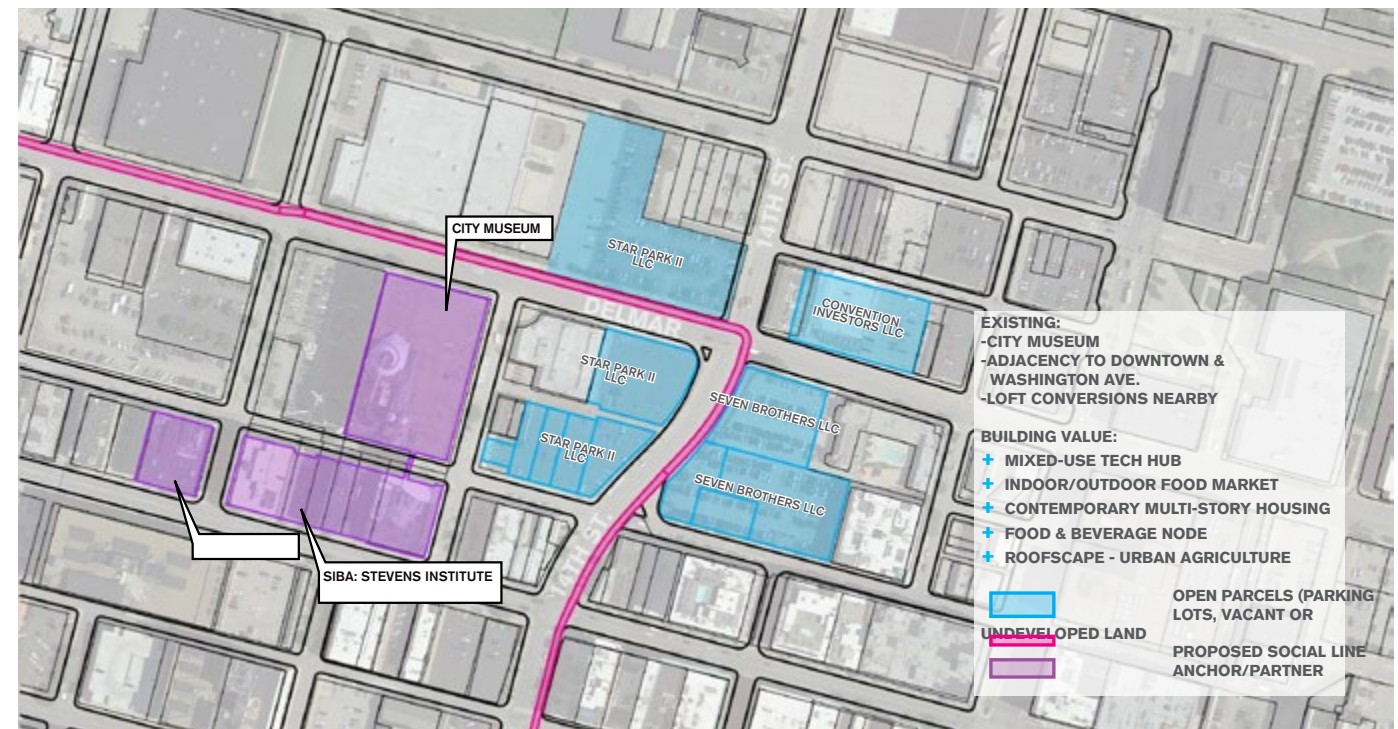
DELMAR & COMPTON

To complement existing residential developments, neighborhood parks and recreational facilities, and churches, this node could be further developed to include neighborhood amenities such as a grocery store, restaurants, and health and fitness uses. In addition, with the addition of recent residential development, this node could be supported by additional recreational facilities such as playscapes, basketball courts/facilities, and a skate park. The parcels owned by the Land Reutilization Authority (LRA), the governmental agency that receives title to all tax delinquent properties not sold at a Sheriff's sale, and Kim's Kids, the local daycare facility, would be ideal for the developments discussed.



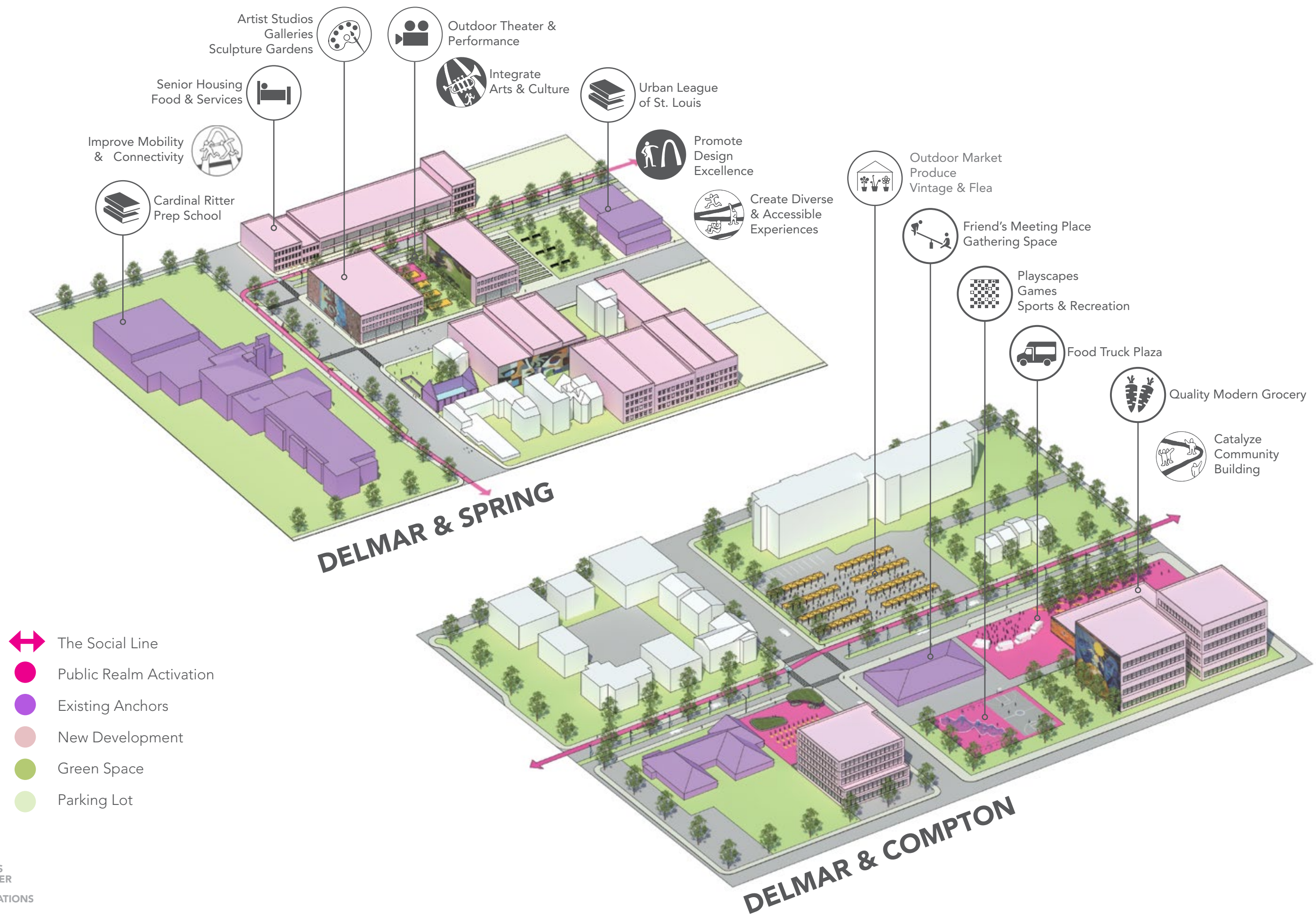
DELMAR & JEFFERSON

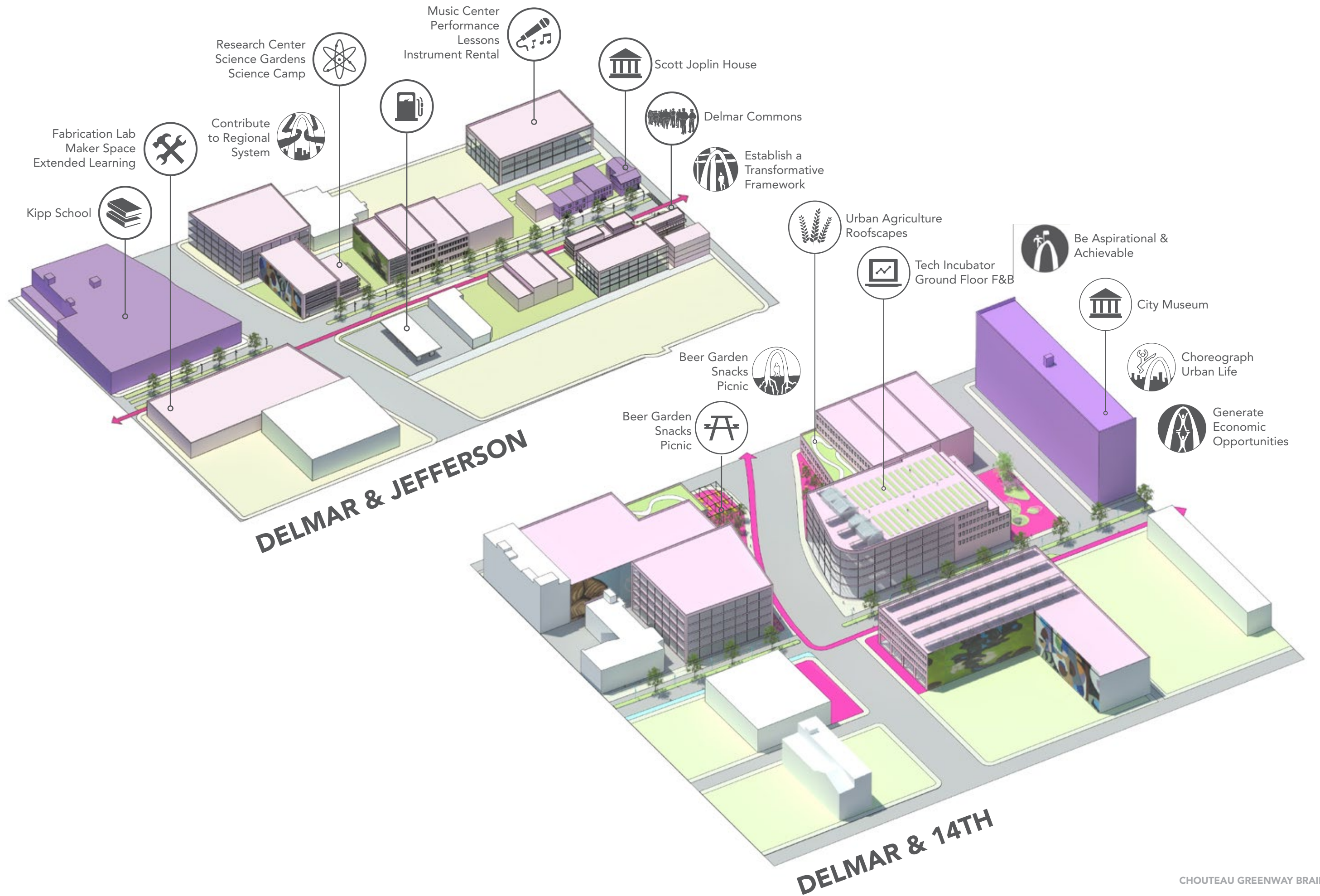
To support and grow existing office and manufacturing tenants, development within this node should include additional office and fabrication space as well as ground floor retail to support area workers. Redevelopment should include renovation of existing buildings to ensure that the layouts and technology are sufficient to meet the needs of the modern-day workforce. This node appears to be the site of recent immigrant investment, which should be supported. With the abundance of vacant and undeveloped land, this node could also be host to flexible performance spaces to encourage the growth of the creative sector of St. Louis. The three large, vacant lots owned by the Department of Natural Resources are ideal locations for this type of pop-up redevelopment.



DELMAR & 14TH

With proximity to Washington Avenue and downtown St. Louis, this area could be strengthened by newly constructed creative space and contemporary multi-story housing. To further support existing and new tenants and users of this node, development should include additional ground floor food and beverage uses and potentially an indoor/outdoor food market and roovescape with urban agriculture. The numerous large surface parking lots owned by Star Park II LLC and Seven Brothers LLC are ideal locations for this development. Experience in other cities suggest that current ownership is likely either family-based parking operators who might be induced to partner to advance a redevelopment containing replacement parking or an assembler of land for redevelopment, suggesting existing, if nascent, market interest. The timing of redevelopment of these sites could emerge from conversations with current owners.



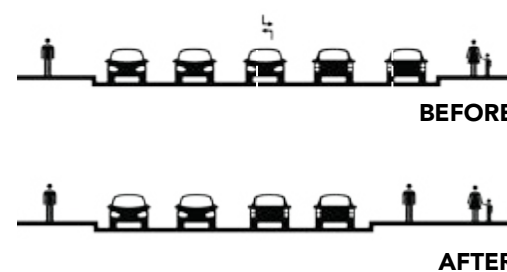
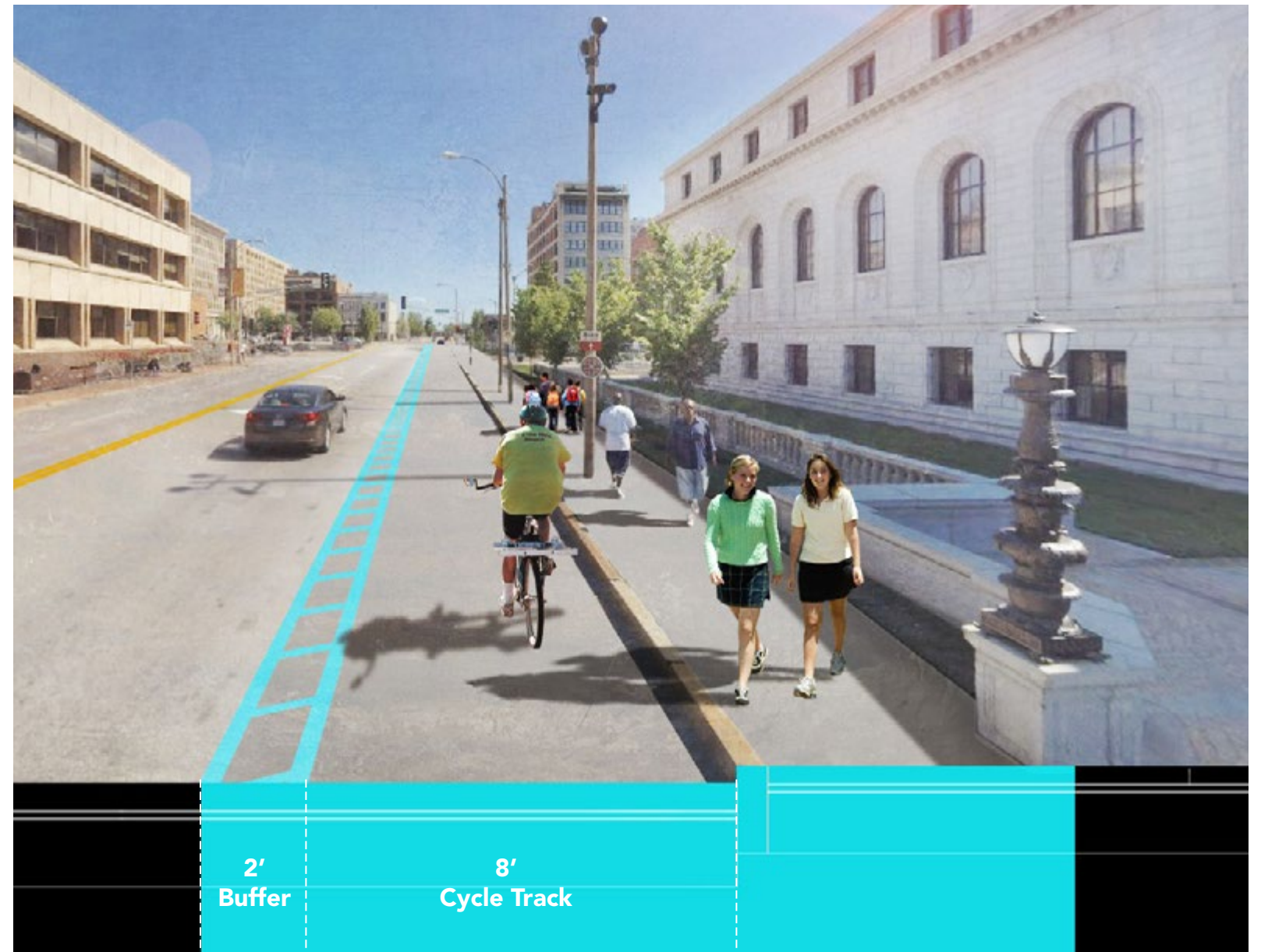
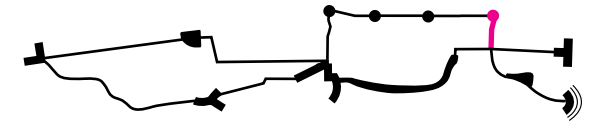


14TH STREET

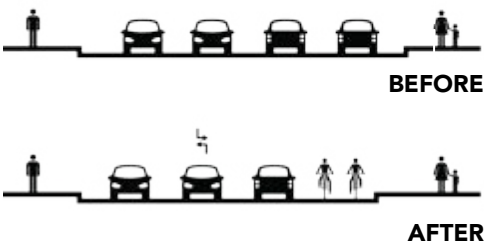
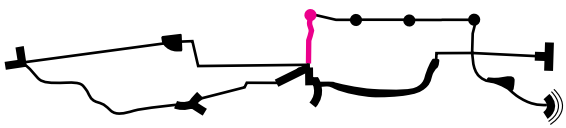
Delmar Main Street is strategically anchored to the east and west, where there are two corners with existing energy and investment.

The Green Line and Social Line intersect at 14th Street and Market Street in the civic heart of downtown. Our proposed on-street cycle track links the City Museum, Central Public Library, Soldiers Memorial, Peabody Opera House, Scottrade Center, and the Multi-Modal Transit Hub to the larger greenway network.

In the heart of the Grand Center Arts District at Spring and Delmar, our proposed on-street cycle track and enhanced streetscape plugs into a nexus of art and cultural institutions including the Contemporary Art Museum St. Louis, galleries, public media organizations, as well as the Art Walk and GRG Midtown Loop Trail.



SPRING AVE.



URBAN HALLWAY GATEWAY MALL

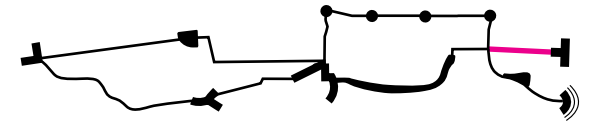
Realizing the civic vision proposed in previous studies, the Urban Hallway is proposed to be completed through the Chouteau Greenway Braid. Engaging the southern edge of the Gateway Mall from 21st Street to the Gateway Arch National Park, this large-scale public corridor leverages the recent successes of Luther Ely Smith Park, Kiener Plaza, Citygarden, and Soldiers Memorial along the Mall corridor. Future block-by-block improvements can connect into this infrastructure, as evident in the already-improved blocks downtown.

64



St. Louis
Gateway Mall
Master Plan

October 2007



2'
Buffer

8'
Cycle Track

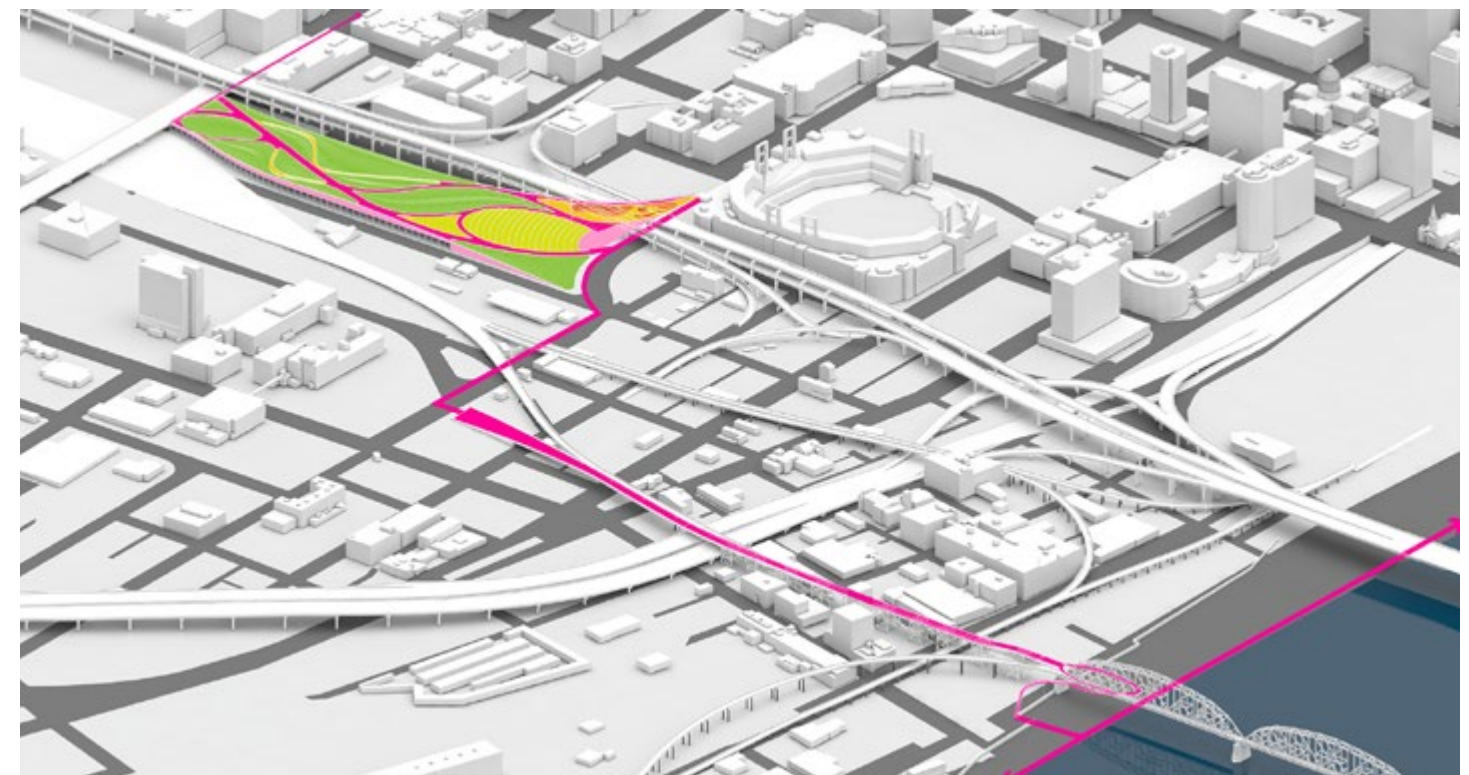
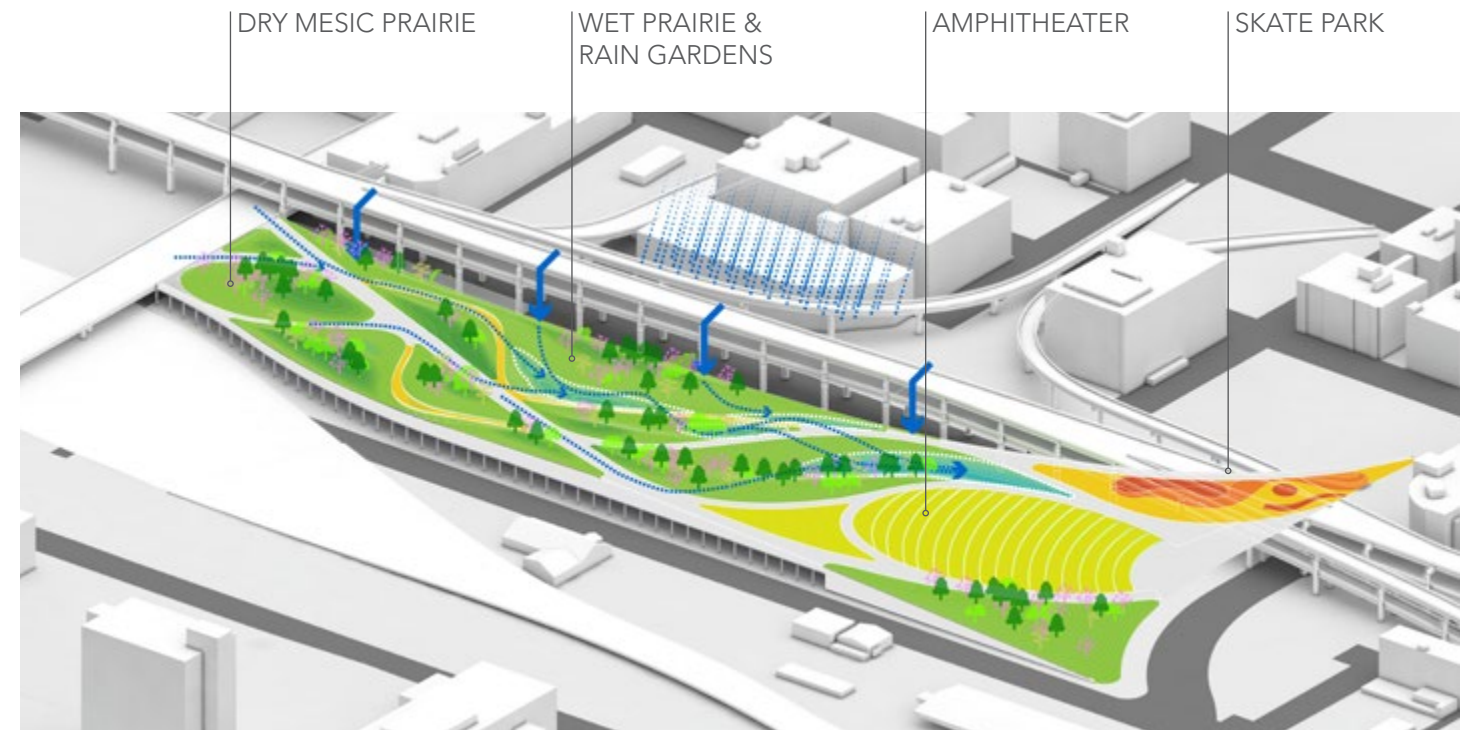
PERFORMANCE PARK & MISSISSIPPI OVERLOOK

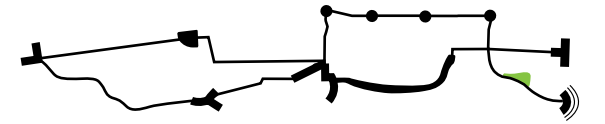
A new 12-acre downtown “Performance Park” across from the Stadium showcases both ecological and social performance including large prairie meadows, rain gardens that capture water off of the adjacent highway, a terraced amphitheater for outdoor performances, and a skate park under the highway. Planting showcases bottomland tree groves of cottonwood, bur oak, swamp white oak, and big shellbark hickory with wet mesic prairie species such as big bluestem and switch grass with sawtooth sunflower, prairie blazing star, rattlesnake master and bluestar.

66

A new parking structure underneath replaces and expands the existing at-grade parking lot and allows the park above to function as a land bridge, creating a critical connection between Busch Stadium and Tucker Street. Performance Park compliments the new Gateway Arch Park as it allows for extensive and diverse programming prohibited at the National Park.

A new 360-panoramic “Mississippi Overlook” hovers within the MacArthur Bridge structure with dramatic views of the River and Arch and an accessible connection down to the Mississippi Greenway.











PERFORMANCE PARK

JAMES
CORNER
FIELD
OPERATIONS

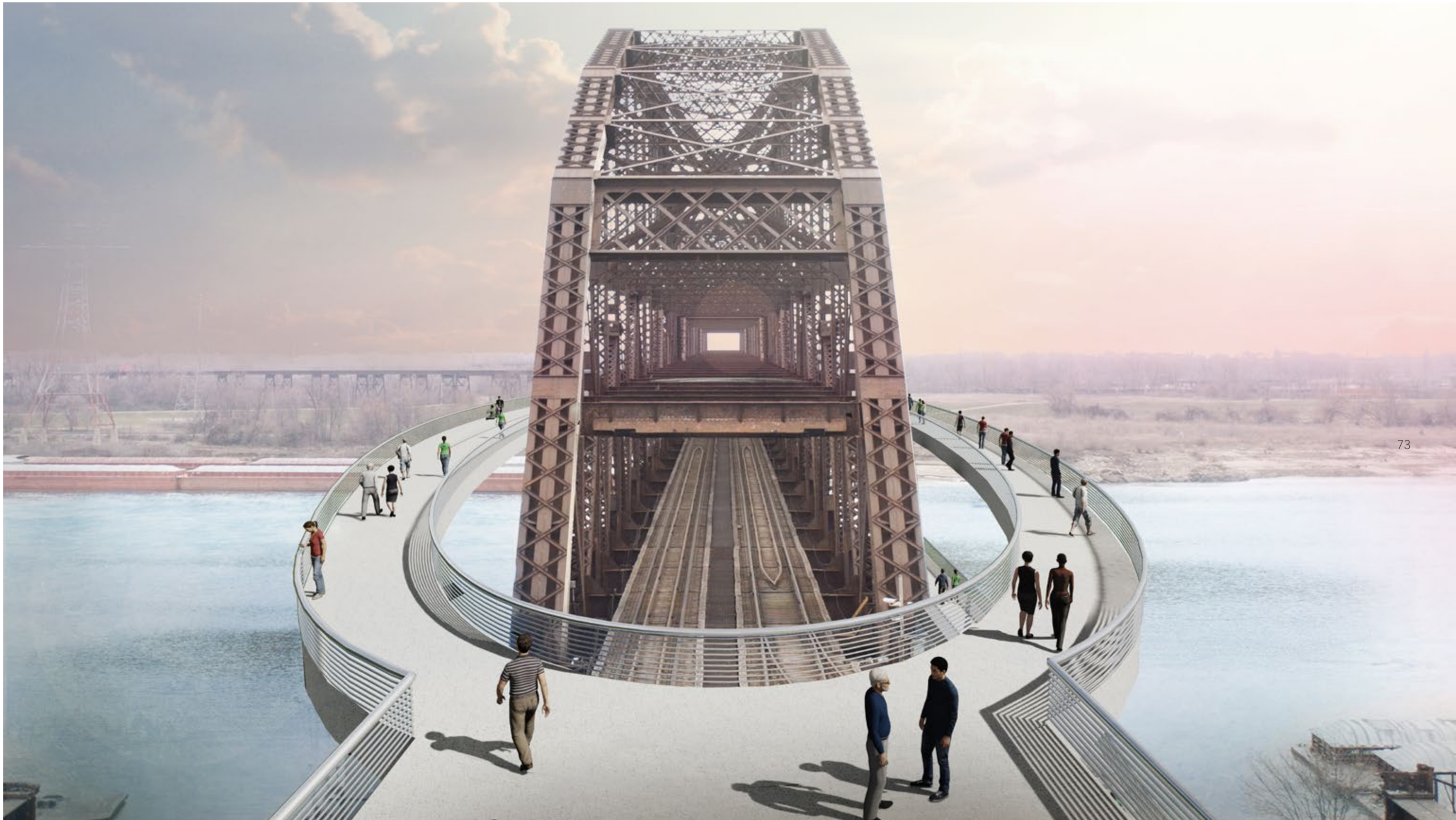




72

MISSISSIPPI OVERLOOK

JAMES
CORNER
FIELD
OPERATIONS







IMPLEMENTATION

The design is flexible, phaseable and adaptable. Working with GRG, the City and the community, the key concepts can be adapted to reflect local input and can be adjusted to accommodate available resources and timing.

Currently, our phasing implementation plan divides the project into three phases, of similar cost, with each phase including portions of the east-west Chouteau Greenway Braid, north-south connectors, places and community amenities.

Greenway/streetscape improvements are categorized by four levels of improvement, from minimal level to high-level based on local and national project examples. Places and crossings are categorized based on proposed designs and generally follow a range of improvement from low-range to high-range based on local and national project examples.

Donor Opportunities

Chouteau Greenway has been designed with several key elements that can be sponsored by different sources (grants, philanthropies, developers, etc.). The Design can be phased in such a way to support the site’s development as funding is secured. Elements within the design that lend themselves towards donors are:

Greenways

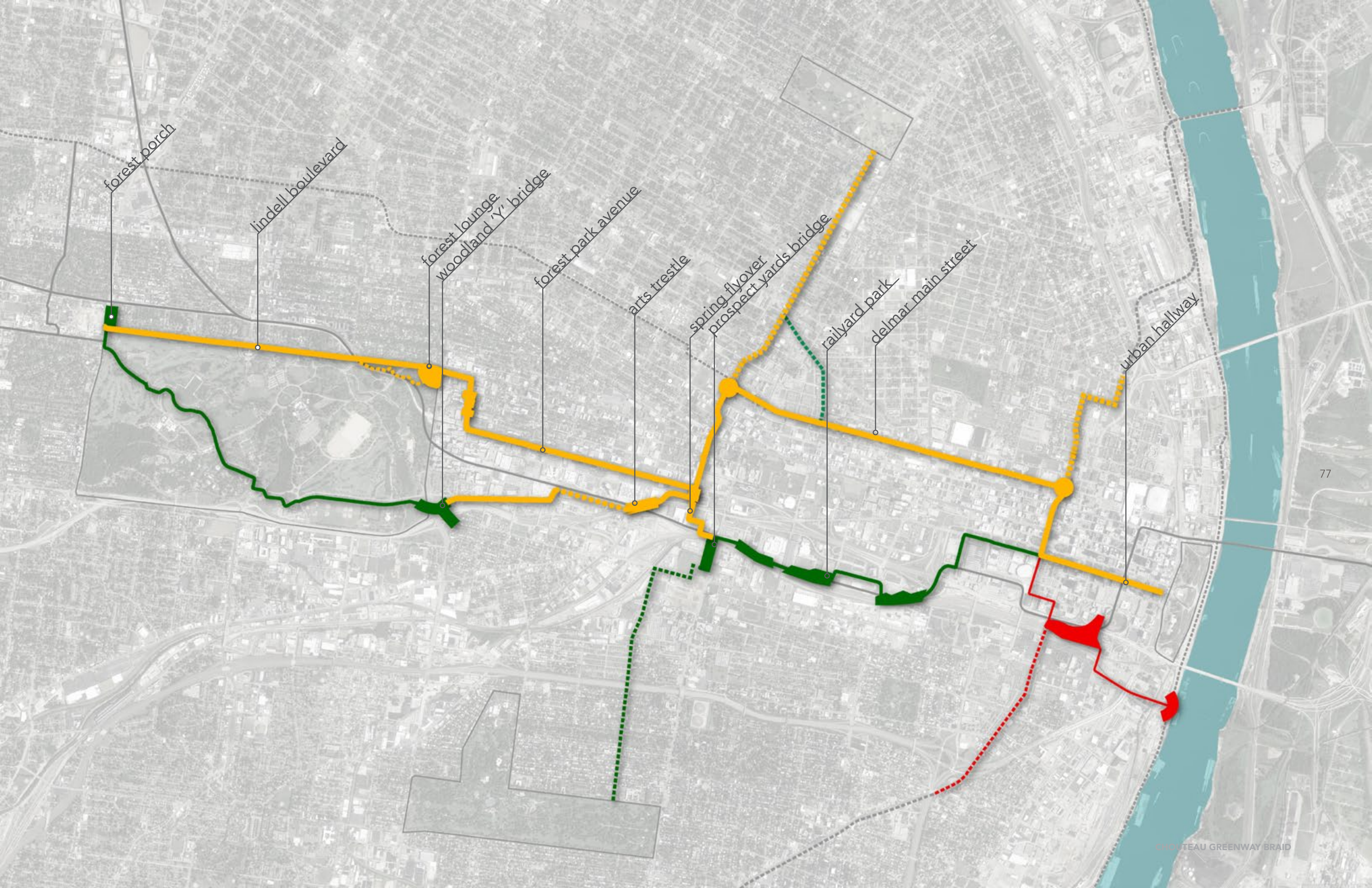
- Clayton Avenue/Railroad ROW
- Forest Park Pathways
- Project Connect Pathways
- Railyards Park Green Line

Bridges

- Woodland Y Bridge
- Spring Flyover
- Prospect Yards Bridge

Places

- Forest Porch
- Forest Lounge
- Railyards Park
- Arts Trestle
- Mississippi Overlook
- Performance Park



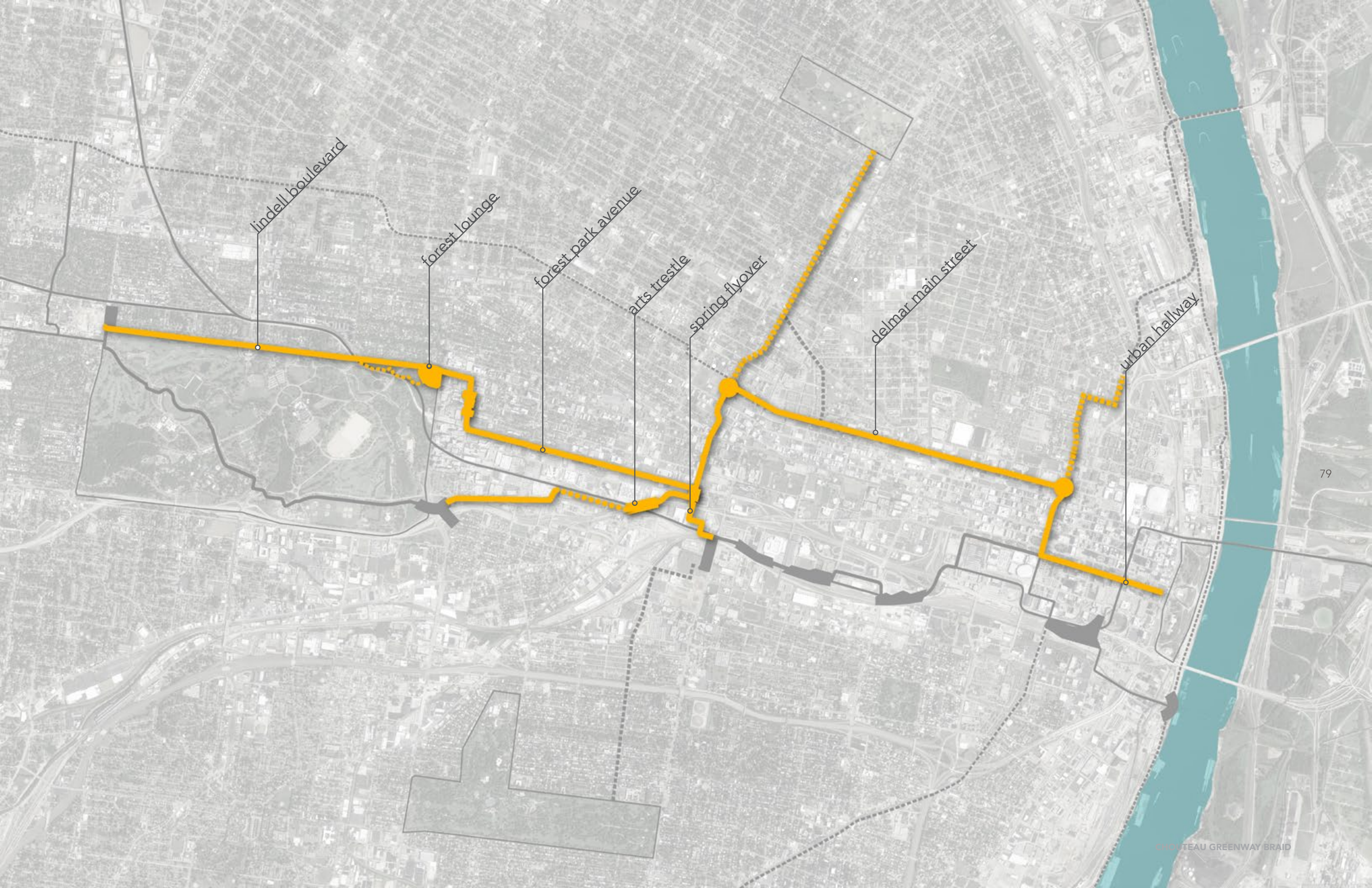
PHASE 1

Phase 1 includes over 12 miles of greenway corridors, including nearly 10 miles of the east-west Chouteau Greenway Braid encompassing 5.7 miles of the Green Line and nearly 4 miles of the Social Line to complete a full connection between Forest Park and the Arch Grounds, as well as 2.6 miles of north-south Connectors connecting the existing Mississippi Greenway and Fairground Park. The first phase prioritizes a strong connection to Forest Park, Gateway Mall and the completion of Delmar Main Street between Spring Avenue and 14th Street as an important first step to catalyze investment.

New Places include Forest Lounge at Lindell Boulevard and Kingshighway; two new Plug-in parks and Creative Commons at either end of Delmar Main Street, at Delmar and Spring and Delmar and 14th Street; the Arts Trestle from Metrolink tracks to City Foundry, and the Spring Flyover between the decks of I-64 to connect City Foundry to the Armory and provide access down to the Railyards. Phase 1 also expands and connects the Cortex Metro Greenway Trail currently underway by GRG linking it to the Arts Trestle and Forest Park.

PHASE 1.0	Length (LM)	Area (AC)	Units (UN)
Social Line (S)	5.74	2.00	-
Green Line (G)	3.97	6.90	-
Both (S+G)	0.00	0.00	60
Connector (C)	2.61	0.00	-
Sub-Total for Phase 1	12.32	8.90	60

PHASE 1.0 - YEAR 1-3					
Greenways / Streetscapes	Details	Zone	Length (LM)	Improvements	Possible Donor / Partner
14th Street (from Market Street to Delmar Boulevard)	Separate Multi-Use Bicycle Facility / Road Diet	Social Line (S)	0.53	Low-Level	
14th Street / Cass Avenue / Hadley Street (Various)	Separate Multi-Use Bicycle Facility / Road Diet	Connector (C)	1.00	Minimum-Level	
Clayton Avenue / Railroad ROW (from Euclid Avenue to Spring Avenue)	Protected Cycle Track / Road Diet and Rail Trail	Social Line (S)	1.36	Minimum-Level	✓
Delmar Boulevard (from Spring Avenue to 14th Street)	Protected On-Street Cycle Track / Road Diet	Social Line (S)	2.16	High-Level	
Euclid Avenue (from Lindell Boulevard to Forest Park Avenue)	Pedestrian and Bicycle Mall / Vacated Roadway (N/S)	Green Line (G)	0.28	High-Level	
Forest Park Avenue (from Euclid Avenue to Spring Avenue)	Protected On-Street Cycle Track / Road Diet	Green Line (G)	1.36	Average-Level	
Lindell Boulevard (from Skinker Boulevard to Euclid Avenue)	Protected On-Street Cycle Track / Road Diet	Green Line (G)	2.16	Low-Level	
Market Street Urban Hallway (from 14th Street to the Arch)	Expanded Existing Facilities to Include Protected Buffers	Social Line (S)	0.76	Low-Level	
Spring Avenue (from Delmar Boulevard to Market Street)	Separate Multi-Use Bicycle Facility / Road Diet	Social Line (S)	0.70	Low-Level	
Spring Avenue Connector (from Delmar Boulevard to Natural Bridge Avenue)	Buffered or Protected On-Street Bicycle Facilities	Connector (C)	1.61	Minimum-Level	
Improved Traffic Signalization (for all routes listed above)	Traffic lights, controllers, and ancillary improvements.	Intersection (I)	60 (UN)	Standard	
Sub-Total			11.92 LM		
Places / Spaces / Parks	Details	Zone	Area (AC)	Improvements	Possible Donor / Partner
Delmar Commons (Along Delmar Boulevard at Spring Avenue and 14th Street)	Reclaimed and Programmed Urban Park Spaces	Social Line (S)	2.00	Average-Range	
Forest Lounge (At Lindell Boulevard and Kingshighway Boulevard)	Programmed Park Space W/ Potential Commercial	Green Line (G)	6.90	Low-Range	✓
Sub-Total			8.90 AC		
Passages / Overpasses / Underpasses	Details	Zone	Length (LM)	Improvements	Possible Donor / Partner
Arts Trestle (from MetroLink Tracks to City Foundry)	Reclaimed Railroad Trestle into New Developments	Social Line (S)	0.23	Average-Range	✓
Spring Street Flyover (from City Foundry to the Armory)	New Bicycle / Pedestrian Bridge b/t New Developments)	Green Line (G)	0.17	Average-Range	✓
Sub-Total			0.40 LM		



lindell boulevard

forest lounge

forest park avenue

arts trestle

spring flyover

delmar main street

urban hallway

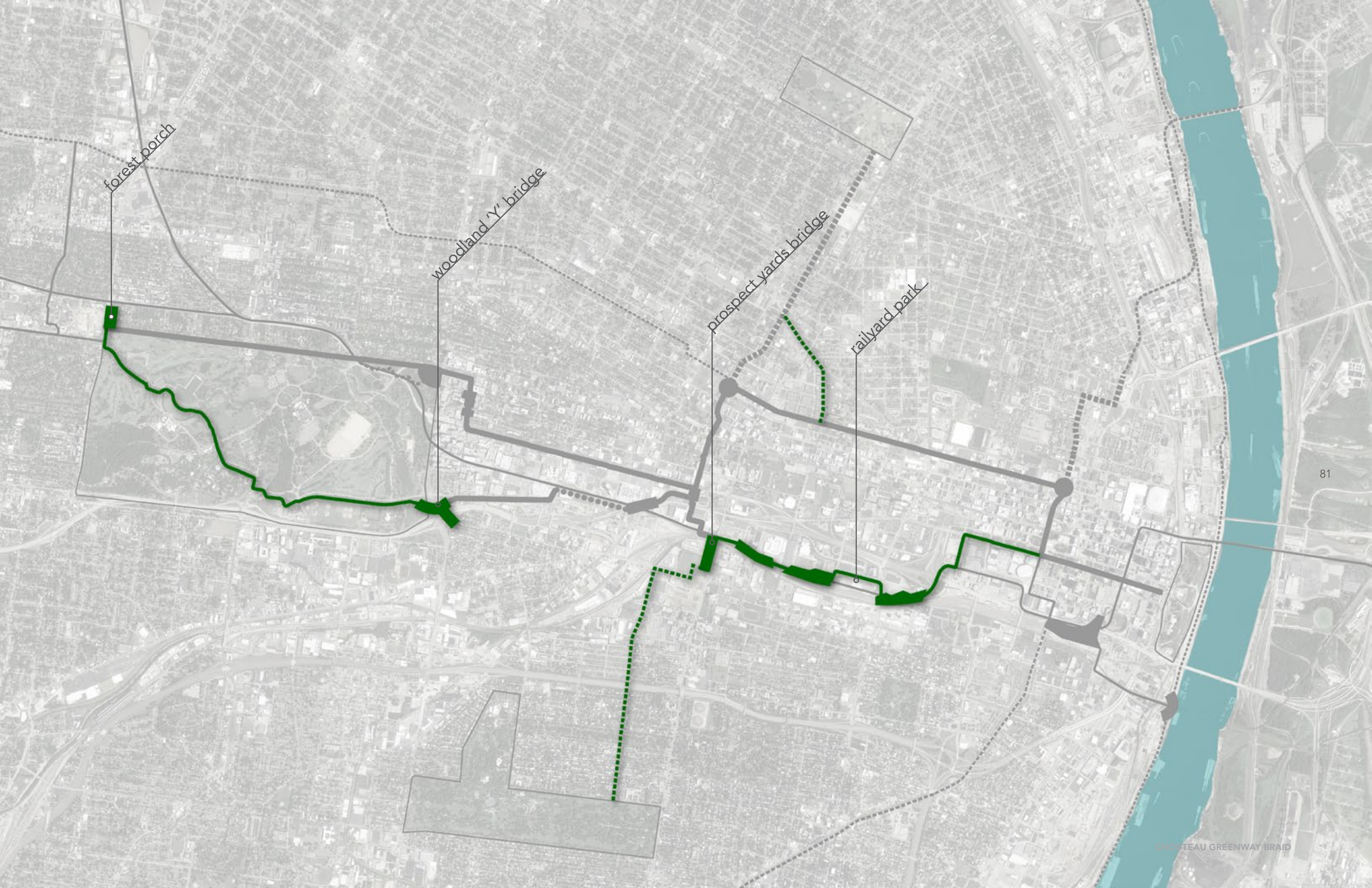
PHASE 2

Phase 2 includes over 8 miles of greenway corridors, including 3.3 miles on the Social Line and 2.4 miles on the Green Line as well as 2.5 miles of north-south Connectors linking to Tower Grove Park to the south and strengthening connections to Fairgrounds Park to the north. The second phase prioritizes the transformation of the railyards into new parkland, connections to the south and deeper connections within Forest Park.

New Places include Forest Porch as key connection to Wash University, a new 26-acre Railyards Park, featuring an 800m long recreational track and art mural, a sculptural overlook and Glade Garden, a Prairie Channel that filters stormwater, and new meadows at the Project Connect site, the Woodland ‘Y’ Bridge at Interstate 64 and Clayton Avenue and the Prospect Yards Bridge connecting SLU’s north and south campuses.

PHASE 2.0	Length (LM)	Area (AC)	Units (UN)
Social Line (S)	3.32	0.00	-
Green Line (G)	2.40	23.80	-
Both (S+G)	0.00	2.50	10
Connector (C)	2.54	0.00	-
Sub-Total for Phase 2	8.26	26.30	10

PHASE 2.0 - YEAR 4-6					
Greenways / Streetscapes	Details	Zone	Length (LM)	Improvements	Possible Donor / Partner
Chouteau Boulevard / 39th Street (Various Segments)	Buffered or Protected On-Street Bicycle Facilities	Connector (C)	1.84	Average-Level	
Compton Avenue / Dr. Martin Luther King JR Drive (Various Segments)	Buffered or Protected On-Street Bicycle Facilities	Connector (C)	0.70	Minimum-Level	
Forest Park Pathways (from Skinker Boulevard to Kingshighway Boulevard)	Expanded and Improved Existing Facilities in Park	Social Line (S)	2.58	Minimum-Level	✓
Market Street Urban Hallway (from the Former 21st Street to 14th Street)	Expanded Existing Facilities to Include Protected Buffers	Green Line (G)	0.45	Low-Level	
Project Connect Pathways (along the I-64 and Former 21st Street ROWs)	Greenway Bicycle Facility and Park Improvements	Green Line (G)	0.47	Average-Level	✓
Railyards Park Pathways (from Grand Boulevard to the Former 21st Street)	Greenway Bicycle Facility and Improvements along Railroad	Green Line (G)	1.48	Average-Level	✓
Improved Traffic Signalization (for all routes listed above)	Traffic lights, controllers, and ancillary improvements.	Intersection (I)	10 (UN)	Standard	
Sub-Total			7.52 LM		
Places / Spaces / Parks	Details	Zone	Area (AC)	Improvements	Possible Donor / Partner
Forest Porch (At Brookings Drive and Lindell Boulevard)	Passive Transit Park W / Seating and Walkways	Both (Social Line & Green Line)	2.50	Low-Range	✓
Railyards & Project Connect Parks (Special Features and Prairie Meadows along Route)	Ecological Park and Natural Area along Pathways	Green Line (G)	23.8	Low-Range	✓
Sub-Total			26.30 AC		
Passages / Overpassess / Underpasses	Details	Zone	Length (LM)	Improvements	Possible Donor / Partner
Prospect Yards Connection (Between MetroLink and Chouteau Boulevard)	Bicycle and Pedestrian Only Bridge	Social Line (S)	0.40	High-Range	✓
Woodland "Y" Bridge (at Interstate-64 and Clayton Avenue)	Signature Bridge Connecting FP, FPSE, and WUMC	Social Line (S)	0.34	High-Range	✓
Sub-Total			0.74 LM		



forest porch

woodland Y bridge

prospect yards bridge

railyard park

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PHASE 3

Phase 3 includes nearly 3 miles of greenway corridors, including over 1.5 miles of the Green Line, physically connecting downtown to the Mississippi River and 1.3 miles of north-south Connectors at Tucker Street, connecting to multiple neighborhoods, and eventually south to the Louisiana Calm Streets project in the Gravois Park and Dutchtown Neighborhoods. The final phase prioritizes a strong downtown connection and the development of two new destinations and attractions. These are conceived of in the final phase as they easily lend themselves to towards donor funding.

New places include the 12-acre Performance Park across from the Stadium at 8th Street and Cerre Street located in the GRG owned parcel including a new parking structure underneath that replaces and expands the existing at-grade parking lot and allows the park above to function as a land bridge, creating a critical connection between Busch Stadium and Tucker Street and a new 360 degree panoramic Mississippi Overlook with dramatic views of the River and Arch and an accessible connection down to the existing Mississippi Greenway. Two underpasses are enhanced with art and media installations to provide safe and beautiful crossings.

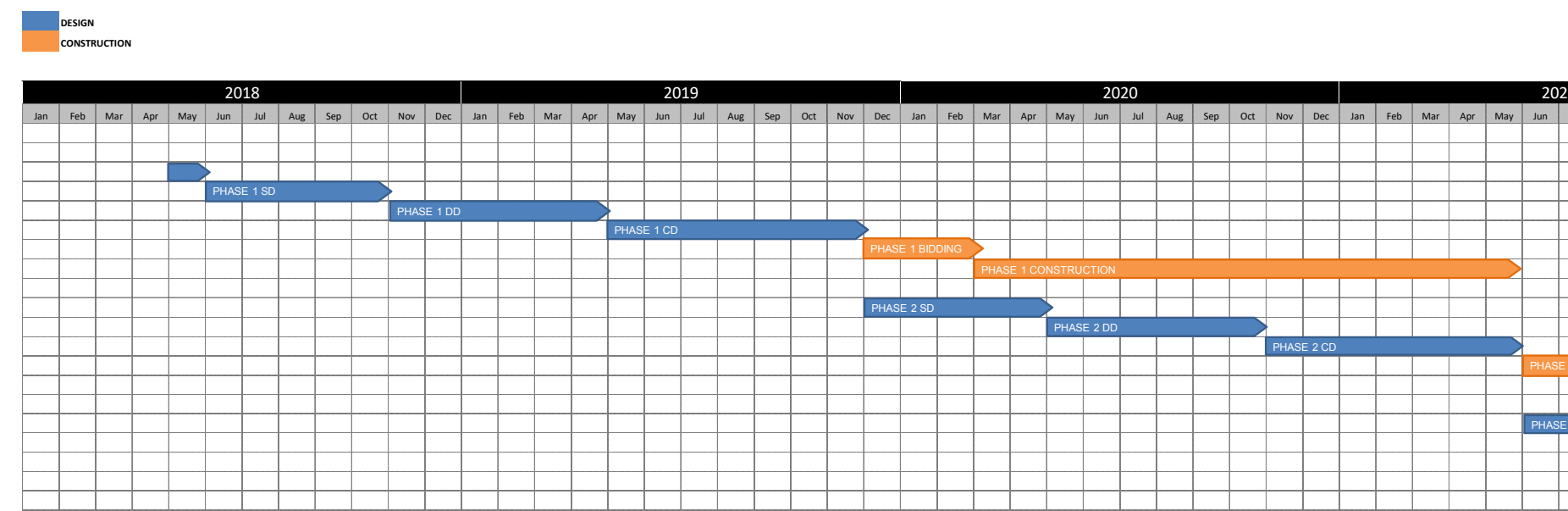
PHASE 3.0	Length (LM)	Area (AC)	Units (UN)
Social Line (S)	0.00	0.00	-
Green Line (G)	1.54	0.00	-
Both (S+G)	0.00	12.70	10
Connector (C)	1.29	0.00	-
Sub-Total Cost for Phase 3	2.83	12.70	10

PHASE 3.0 - YEAR 7-9					
Greenways / Streetscapes	Details	Zone	Length (LM)	Improvements	Possible Donor / Partner
14th Street / Spruce Street / Tucker Boulevard (Various Segments)	Protected On-Street Cycle Track / Road Diet (W/ROW)	Green Line (G)	0.53	Average-Level	
Performance Park / 8th Street / Mississippi Overlook Trestle (Various Segments)	Facility through Park and Protected On-Street Cycle Track	Green Line (G)	0.49	Average-Level	
Tucker Boulevard / Gravois Avenue (Various Segments)	Buffered or Protected On-Street Bicycle Facilities / Road Diet	Connector (C)	1.29	Minimum-Level	
Improved Traffic Signalization (for all routes listed above)	Traffic lights, controllers, and ancillary improvements.	Intersection (I)	10 (UN)	Standard	
Sub-Total			2.31 LM		
Places / Spaces / Parks	Details	Zone	Area (AC)	Improvements	Possible Donor / Partner
Performance Park (At 8th Street and Cerre Street)	Active Park W / Amphitheater, Garage, and Skate Park	Both (Social Line & Green Line)	12.70	High-Range	✓
Sub-Total			12.70 AC		
Passages / Overpassess / Underpasses	Details	Zone	Length (LM)	Improvements	Possible Donor / Partner
Mississippi Overlook (from 8th Street onto the Merchants Bridge)	Reclaimed Railroad Trestle to River Overlook	Green Line (G)	0.50	High-Range	✓
14th Street & Spruce Street Multi-Media Passage (at the MMTc)	Enhanced Underpass with Artistic / Media Installations	Green Line (G)	0.007	Low-Range	
Tucker Street Multi-Media Passage (at Interstate 64 / Highway 40)	Enhanced Underpass with Artistic / Media Installations	Green Line (G)	0.014	Low-Range	
Sub-Total			0.52 LM		

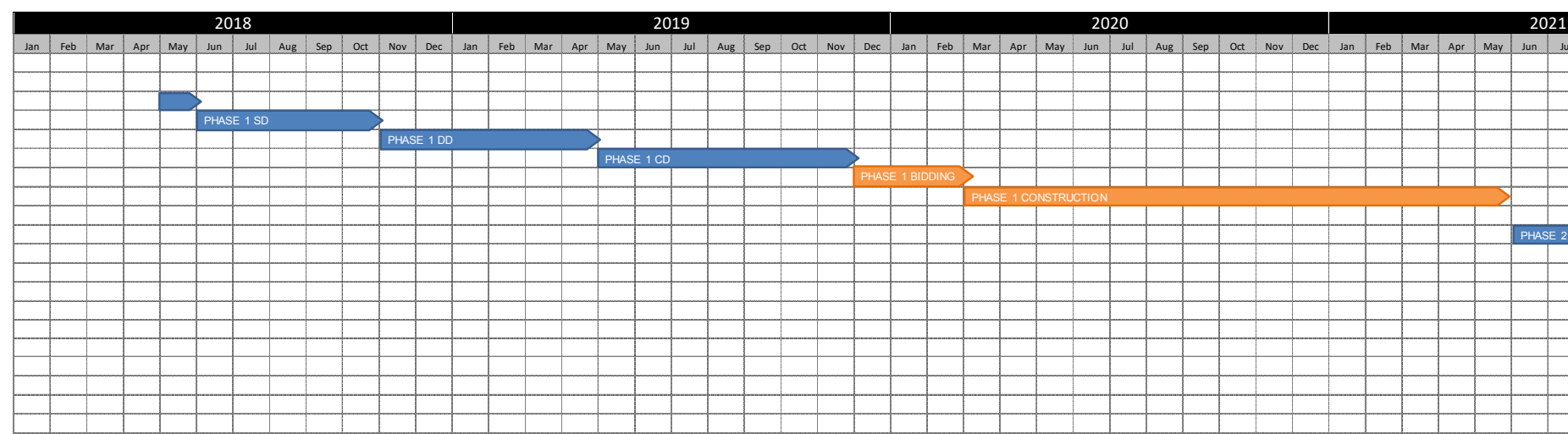


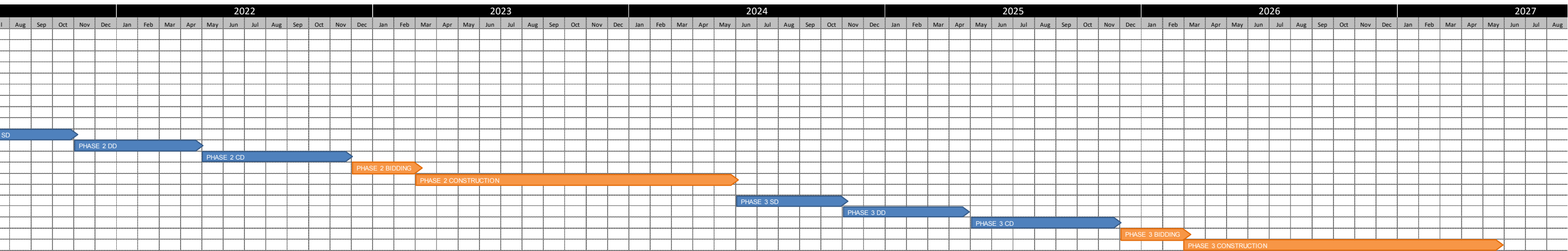
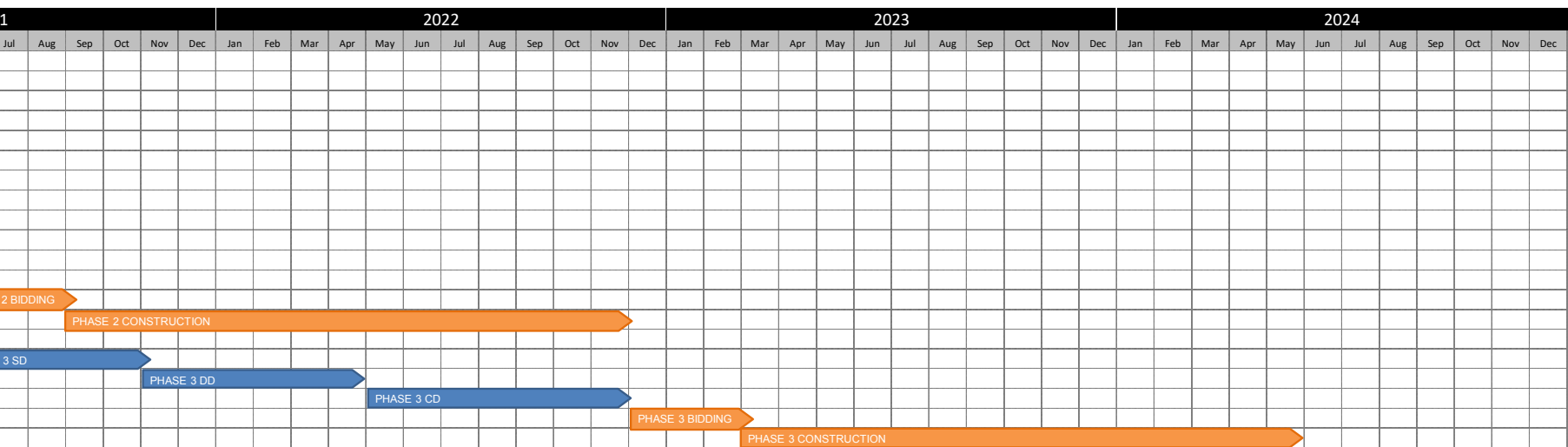
IMPLEMENTATION TIMELINE

Each phase is conceived of as 3-years from start to finish (a year and half for design and a year and a half for construction). If design and construction is overlapped all 3-phases could be completed in as little as six years and if sequential up to nine years.



ICATION AND APPROVAL





APPROACH TO INTEGRATED ART PROGRAM

We believe that art is powerful, and that it is best when anchored into a community. Our experience integrating art into our projects has taken various forms, from incorporating significant new works of public art, as well as existing and beloved pieces, for Minneapolis' Nicollet Mall; to working with the City of Seattle to create a comprehensive Art Plan for their 26-block-long waterfront promenade that responds to the history, ecology, economy, and adjacent communities.

As such, our proposal for Chouteau Greenway is specifically designed to provide opportunities to integrate art of all forms, with a variety of places and opportunities for all different types and scales of art. We are greatly encouraged and excited by GRG's similar commitment to art as an integral part of a successful and thriving Greenway.

Just as great public spaces have a variety of activities, uses, and programs that change throughout the year, season, and even week—encouraging people to return again and again—so do they have a strong commitment to art, especially work that is anchored in the community. It is essential that each strand of the Chouteau Greenway Braid provides a framework for both permanent and temporary works of art, from murals to sculpture to experiential pieces and performance. Even more, Chouteau Greenway's streets, plazas, parks, and

even buildings can support GRG's commitment to building community through art, by providing a place for nearby residents and visitors to create, view, and engage with art. We believe that a successful Chouteau Greenway will foster cultural exchange while supporting discovery and an entrepreneurial spirit, and are committed to supporting GRG in their endeavor to create a Greenway that achieves these goals through art.

In line with our belief that art must be an integral part of this project from the very beginning, we have been working with two highly renowned St. Louis-based artists to create evocative and experiential journeys: Cbabi Bayoc and Cheeraz Gormon, both artists of color with deep familiarity with the Chouteau Greenway corridor over the years. Their input has been focused not only on art, but on the project as a whole, as keen observers of the city and its residents. A few of our initial ideas on opportunities for art are discussed in the following pages.

We applaud GRG's commitment to creating an Artists of Color Council, and look forward to working with them to bring the goals of the Design Competition stage into fruition, ensuring that Chouteau Greenway's art is reflective of the surrounding neighborhoods, supports and celebrates local artists of color, and is anchored in community engagement.

LARGE-SCALE WORKS

Our team has integrated three key ways to incorporate art into Chouteau Greenway, the first of which is through large-scale works of art. Chouteau Greenway has an open and expansive scale in many areas, which can be leveraged as an opportunity for monumental, large-scale art, both permanent and a rotating curation. At this scale, art will become a major part of the character of the space, fundamentally informing the surrounding landscape.



INFRASTRUCTURE CANVASES

While often challenging from a planning and engineering perspective, Chouteau Greenway's intersection with many elements of infrastructure, from roads to railways to highway underpasses, is an exciting opportunity to use these elements as a canvas for art, retaining the spatial and material character of the city's fabric while at the same time transforming it into something fresh, meaningful, and visually compelling.



INCUBATE ARTS COMMUNITY

Beyond providing a canvas for art, the Chouteau Greenway must foster community. Art is not only a finished piece of work, but is also the process of creation, of discussion, of response, and of challenge. Much of art's impact is tied to the community of people who both create and respond to it, and through incubating places for this community to occur, our design will ensure that Chouteau Greenway's art is alive and vibrant.



LARGE-SCALE WORKS: DELMAR NODES

We propose using the vertical surfaces of new buildings along each of our Delmar Nodes as locations for site-specific art. One way this could happen is through a singular piece that touches each of the surfaces at a specific node, giving each intersection a strong and distinctive visual character, and reinforcing their function as nodes of activity and centers for creative collaboration.

Similar initiatives in Germantown Ave in Philadelphia, Wynwood Walls in Miami, and St. Louis's own Grove, have been highly successful in bringing energy and growth to those neighborhoods, and the best of these have paired that growth with a focus on benefitting existing residents – which is what the Chouteau Greenway must also do.



GERMANTOWN, PHILADELPHIA

LARGE-SCALE WORKS: RAILYARDS PARK

The Railyards Park offers an exceptional moment of open vistas and continuous vertical surfaces. Strolling along the path here will be a much more cinematic experience, with a pace that is unique from the rest of the city. We envision this as a chance to create large-scale works of art, either on the 800-meter screen that separates pedestrians and bikes from the working railyards, or within the path and adjacent inaccessible areas of the landscape, which allow the viewer to experience them through time from many points of view.

The large format of this area also offers the opportunity to implement a sort of “rolling curation” — a mural, for example, will take many months to install along the entire length, and not long after it is installed, a new piece could begin production, leading to a constant, ever-changing work that allows difference pieces to build on and respond to one another.



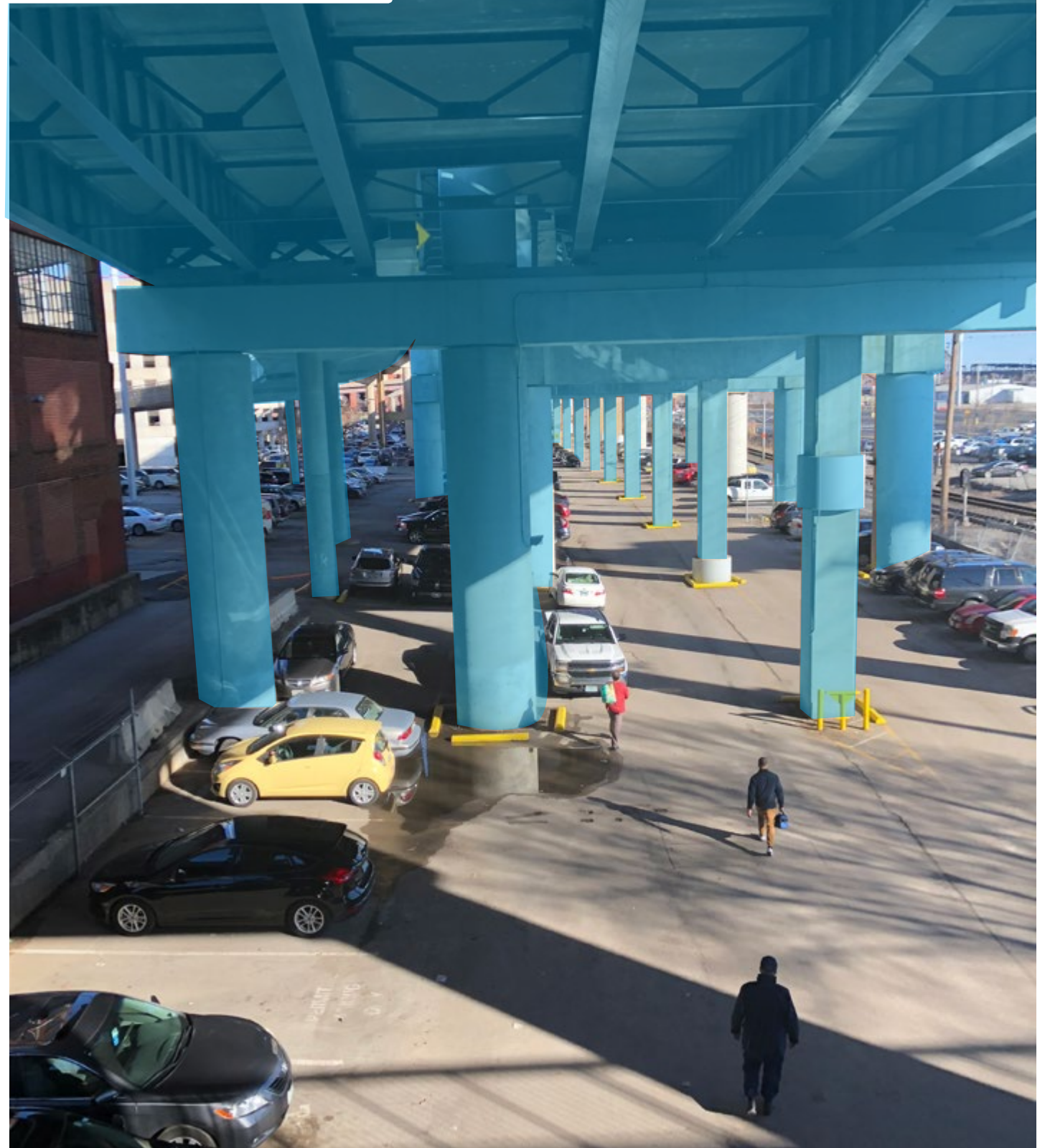
INFRASTRUCTURE CANVASES

Chouteau Greenway's highway underpasses create a natural outdoor 'rooms', which offer unique opportunities for performance, as well as motion-based visual and audio pieces, as well as light installations. The under-surface of the highways themselves are a great place for murals and applied graphics. The heavy automobile use of these spaces means the surfaces are regularly exposed to more dirt, pollution, and oils than, for example, a building façade would be – making these areas prime opportunities for rotating commissions. Their high visibility also makes them great places for education- and information-based art, as well as branding and project awareness.

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PERFORMANCE PARK





INCUBATE ARTS COMMUNITY

Art is a way to showcase and celebrate a community's history and values. Beyond providing a canvas for art, the Chouteau Greenway must foster community. Our design includes places for permanent or temporary works of art, and also places for art creation, community discussion, and communal gatherings.

Much of art's impact is tied to the community of people who both create and respond to it. Chouteau Greenway is an opportunity to connect the existing artist communities throughout the corridor, and to foster new communities. In line with GRG's commitment to promote and support artists of color, we must offer space to under-represented or nontraditional artists, supporting their community as well as established ones.

These places can include informal gathering space, performance and practice space, studios, galleries, yards, and public forums for talking about and experiencing art. While many of these uses can benefit from proximity to one another, resulting in incubation clusters, we believe that these clusters must be dispersed throughout the corridor, so that residents of all backgrounds, ages, and abilities have everyday access to the arts.

Along with economic and housing efforts, creating places for long-term arts communities that are embedded in the Greenway and the neighborhoods will help ensure that the Greenway can maintain its character and be a resource for local people, even as it evolves and grows over the years. Through incubating places for this community to occur, our design will ensure that Chouteau Greenway's art is alive and vibrant.



CREATIVE COMMONS

One aspect of fostering an arts community is to establish a commons – an open forum where ideas are valued. We propose creating multi-disciplinary centers where artists of all media can interact with each other and the greater community – young people, older people, families, students, institutions, and newcomers. These multi-disciplinary centers can be a mix of existing institutions, such as the Grand Center Arts District, as well as new development and pocket parks, such as the one proposed for Delmar between Spring and 14th St. The Greenway itself will stitch these centers together, greatly enhancing access to all of them.

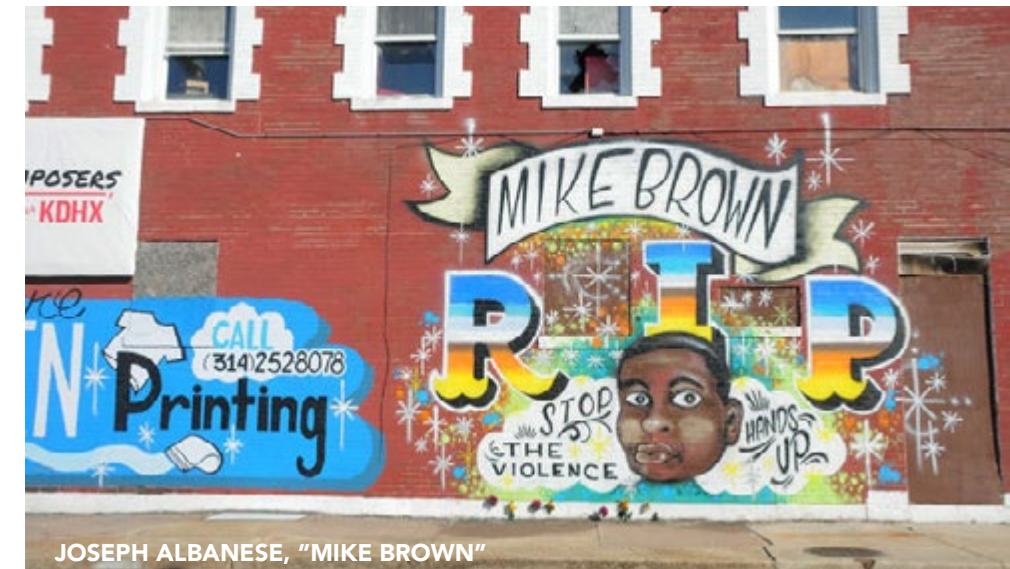
COLLABORATION WITH ARTISTS OF COLOR COUNCIL

In line with our belief that art must be an integral part of this project from the very beginning, we have been working with two highly renowned, St. Louis-based artists: Cbabi Bayoc and Cheeraz Gormon, both artists of color with deep familiarity with the Chouteau Greenway corridor over the years. Their input has been focused not only on art, but on the project as a whole, as keen observers of the city and its residents.

We share GRG’s philosophy that art is fundamental to a vibrant and thriving community, and that local artists of color should be deeply involved with Chouteau Greenway. We applaud GRG’s commitment to creating an Artists of Color Council, and look forward to working with the Council to bring the goals of the Design Competition stage into fruition, ensuring that Chouteau Greenway’s art is reflective of the surrounding neighborhoods, supports and celebrates local artists of color, and is anchored in community engagement.



PEAT WOLLAEGER, "RISE UP AS ONE", NORTH ST. LOUIS



JOSEPH ALBANESE, "MIKE BROWN"

ARTS ACTIVISM

Art has incredible power to bridge social and psychological divides in the city, and to create conversations and forums for people who don't often have a voice. It has the power to acknowledge long-standing wrongs, seek justice, spur real change, and heal communities. St. Louis has a wealth of creative, world-class artists that are able to take on questions about family, gender, racism, class, the environment, and many more topics, in an illuminating and insightful way. This kind of art activism provokes conversation and facilitates change, and Chouteau Greenway must be a platform for it.

INCUBATE ARTS COMMUNITY: ARTS TRESTLE

The Arts Trestle transforms the abandoned rail trestle between IKEA and City Foundry into a place for the creation and experience of art. We propose a series of interventions working together to achieve this: temporary and easily-constructed “makers stalls” that offer low-cost studio and workshop space; art events beneath the adjacent highway overpass that can feature the art made in those studios; and, of course, the trestle side and highway overpass as opportunities for murals or installations.

The Arts Trestle’s proximity to the Metro makes it highly accessible for all, and the possibility of tapping into the energy of City Foundry, SLU, and the Armory means that the Arts Trestle has the chance to become an important nexus in the City’s fabric.





PRAIRIE EXCHANGE

Throughout the Greenway, we see an opportunity for a close relationship between art and landscape, reclaiming the corridor’s past, both as a prairie and part of the Mississippi River watershed. More than one third of pre-settlement Missouri, and 50% of St. Louis City, was prairie punctuated by oak and hickory trees. With less than 1% of the original tallgrass prairie remaining in the State, it has become one of the most endangered habitats in the world.

Therefore, the “prairie exchange” is a large-scale planting/ reclamation initiative to restore native prairie throughout the city. We propose developing a “Green Line Prairie Seed Mix,” similar to the palette we would actually plant along the Green Line, which can be used to vegetate vacant and abandoned lots for ecological benefit in the corridor and beyond as well as allow people to take home and plant in their gardens and communities.

This could be combined with a number of ecological/arts-based engagement initiatives, from spring cutback on the Greenway, to community composting, to habitat and wildlife efforts.





COMMUNITY ENGAGEMENT APPROACH

Public engagement is about building relationships. As a team, we are committed to fostering a strong coalition of supporters that includes a wide range of people, voices, ideas and communities in order to equitably represent the diversity and character of the city and the region.

In reading Great Rivers Greenway's thoughtful and thorough Engagement Strategy guide, we are pleased to see that we share a similar commitment and approach to building consensus, collaborating with the community, and establishing a stewardship base. GRG's experience building not only greenways, but also relationships, throughout St. Louis will ensure that Chouteau Greenway is poised to be anchored in its surrounding neighborhoods. We look forward to collaborating with Great Rivers

Greenway, the City of St. Louis, the Design Oversight Committee, the TAG and the CAC on a robust and intensive Public Outreach and Engagement Plan for the Chouteau Greenway project.

The following paragraphs outline our approach and initial ideas for how to support GRG in a creative and effective engagement process that will define the future of the greenway.

Through our extensive experience working in the public realm on high profile projects such as the High Line in New York, Seattle's Central Waterfront, Shelby Farms Park in Memphis, Nicollet Mall in Minneapolis, Cleveland's Public Square and Tongva Park in Santa Monica we have developed an inclusive design approach and process. We are able to encourage enthusiastic participation because we develop workshops and agendas that engage the public in thoughtful and interesting ways and because the quality of our visuals is very high, allowing participants to readily imagine the kinds of ambiance, amenities, and physical designs we propose. We are well-versed in communicating the basis of the design to all groups, from design professionals to everyday citizens and are highly effective at facilitating government and agency approvals, engaging a wide audience, and incorporating a broad range of feedback into a cohesive and fully integrated design.

The public process is integrated in our design process as a whole.



We engage with the client, stakeholders, and community in a consistent, regular, and informed way. This engagement allows us to carefully tailor the process to both the unique needs of the site and the community, and also ensure that each gathering is a productive exercise that can inform design. Our process is quite different from the traditional “show-and-defend” model of public engagement where a designer will present a final idea to the community. We use the engagement process to gather input very early on (themes, uses, priorities, etc.) which inform initial design ideas and concepts. From there we enter an iterative design process, clearly showing how input is being absorbed and incorporated throughout the design process, each time with targeted questions and activities that are aimed to obtain useful comments that are appropriate to each stage of the design.

We have found that this iterative process allows people to see how their input is shaping the project, building a shared sense of ownership over the final product. Through this process, we build consensus among groups, and create shared values. The community understands how various priorities are balanced, and can easily see why the design is the way it is.

Our support for GRG’s engagement efforts will be led by Field Operations, with additional help from Lord Cultural Resources, DTLS, Atelier 3, Cbabi Bayoc, and Cheeraz Gormon. Cbabi and



Cheeraz, especially, are trusted voices within their communities, and have offered invaluable insight and expertise throughout this competition process. Together with GRG we are confident that our engagement approach can empower, create feedback loops, and respond to a broad range of stakeholders within the city and region, while also hosting more intimate conversations and events to foster strong local participation.

As additional support for GRG’s robust engagement model, we envision a strategy that curates a variety of experience-based engagements and activities. From the onset of the project, we

can identify ways to build curiosity and bring people on site to experience it physically, while also holding events to meet people where they are, in their communities. This experience-based strategy emphasizes those who are not interested in or able to attend typical engagement meetings, in order to create grassroots familiarity and advocacy. These events remind everyone, design team included, that the greenway is a universally shared asset. There is no better way to foster intimacy, ownership, excitement, and creativity than to experience the place as it is and participate in the conversation of what it will become. Outreach and Engagement will feature a layered approach to assure that the process is meaningful, inclusive, interactive and fun, including some or a range of the following:

- Regular Working Sessions with Great River Greenways and project partners and stakeholders;
- Major Public Meetings aimed at a broad audience;
- Small Scale Community and Stakeholder Meetings at more intimate, focused venues;
- On site Experience-Based Events, Gatherings, Talks, Workshops and Installations (aligned with Major Public Meetings to increase participation and reach);
- Themed Based Working Sessions with Stakeholders and the Community; and
- Listening Sessions: One-on-one Interviews + Conversations.

We agree with GRG that a project will not be successful without the active engagement and sense of ownership by the people who will use it. We are genuinely interested in the public process and in strengthening the design by incorporating public input, and look forward to working together.

COMMUNITY PROGRAMMING

Chouteau Greenway is poised to become a strong anchor for the communities it serves, through increased access to recreation, better connectivity and mobility, strategic and beneficial economic growth, and through the arts.

Ongoing programming that is thoughtful and well-designed will allow the Greenway to achieve these goals, by engaging the community and providing amenities and needed benefits for them. We have worked closely with our clients in the past to ensure that our designs provide a flexible yet distinctive framework for all sorts of programming opportunities, from charity runs to children's art



classes; from cultural festivals to live music; from block parties to stargazing. Chouteau Greenway's programming should showcase St. Louis's vibrant social life through a curated calendar of events, activities, and programs throughout the day, year, and seasons.

The Greenway must balance programs that benefit the community with those that generate revenue, while ensuring that all programming is locally supported. If we are able to achieve this, we can create a Greenway that is open, connected, and welcoming – one which invites users of all ages and backgrounds to enjoy the life of the city together, making Chouteau Greenway truly one of St. Louis' great public spaces.



THE TEAM

Our Team of creative and experienced professionals comprises both local and national talent with a deep and personal commitment to make something special, specific and thoughtful for St. Louis.

The Field Operations Team is exceptionally suited to solve the challenges of this complex project, having designed and built a number of highly visible, complex urban landscapes around the world. In each case, we work closely with our Client, various stakeholders, and the public to develop the vision through robust community engagement. We work hard to create unique design responses that are specific to the time, culture, spirit, environment, and history of the place.

James Corner Field Operations will lead the team, process and design for the Chouteau Greenway, establishing an overall vision and providing landscape architecture, urban design, project management, and placemaking services. As the Prime Firm, Field Operations brings a high level of leadership, creativity and expertise relevant to the challenges, goals and aspirations for the Chouteau Greenway. We have extensive experience in leading large, multi-disciplinary, complex teams, with the ability to skillfully build consensus and synthesize multiple and often conflicting ideas into a cohesive and strong design. Even more, we are skilled and practiced at translating these big visions into implementable, maintainable built projects.

For the Chouteau Greenway Competition, we have engaged a strong team with deep local knowledge and experience of the Chouteau

Corridor and its surrounding communities, as well as national expertise. For our full consultant team, we have carefully selected an interdisciplinary group of renowned experts known for excellence in their respective fields, with established track records of delivering highly innovative solutions on time and on budget.

DTLS will provide local landscape architecture services, local horticultural and ecological expertise, sustainable design, and a deep knowledge of St. Louis as a whole, as well as the various central corridor communities;

WSP is an international firm with a strong St. Louis presence, and will provide the project's core engineering services, including civil, utilities, structural, bridge, and traffic/transportation engineering;

Atelier3 is a St. Louis-based architecture and planning firm with significant experience across multiple sectors, including educational, health care, residential, commercial, and urban design projects;

HR&A Advisors is a nationally-recognized leader in the economic planning and stewardship of public open space. Our collaborations together go back to the beginning to of the High Line, and include Memphis' Shelby Farms Park, Seattle's Central Waterfront, Miami's Underline, Washington D.C.'s C&O Canal, and many more;

Cbabi Bayoc is a nationally-recognized, St. Louis-based artist and curator whose work focuses on children and family, and on the strength and inspiration found in people's connection to nature – themes which

deeply resonate with the idea of the Social and the Green Lines in our proposal.

Cheeraz Gormon is a St. Louis-based poet, author, and activist with a national profile, whose work incorporates intergenerational perspectives, St. Louis history, and many other topics. In addition to her powerful poetry and writing, Cheeraz’s strong reputation for working intergenerationally, with both community elders and emerging new voices, has the ability to bring the full spectrum of the existing communities together. Her work on a book about the history and plight of Millcreek Valley, previously located where I-64 and parts of Saint Louis University are now, lends a deep knowledge of the parts of St. Louis’ history that are not well-known outside of the black community.

Lord Cultural Resources is an internationally-recognized leader in cultural resources planning, and marries this leadership with deep knowledge of the Chouteau Greenway corridor’s west end from their recent work on the Forest Park Strategic Planning Process;

Sherwood Design Engineers is a national leader in sustainable infrastructure, known for their innovative solutions for water and energy infrastructure in particular, and has been a frequent collaborator with Field Operations in the past few years;

MIC is an international leader in mobility planning, and will provide the vision for an innovative approach to traffic, transportation, and ped/bike planning for the Greenway;

CBB is a St. Louis-based traffic engineering firm with extensive experience within the Chouteau Greenway corridor;

L’Observatoire is another longtime collaborator with Field Operations, and will provide lighting design for the corridor; and

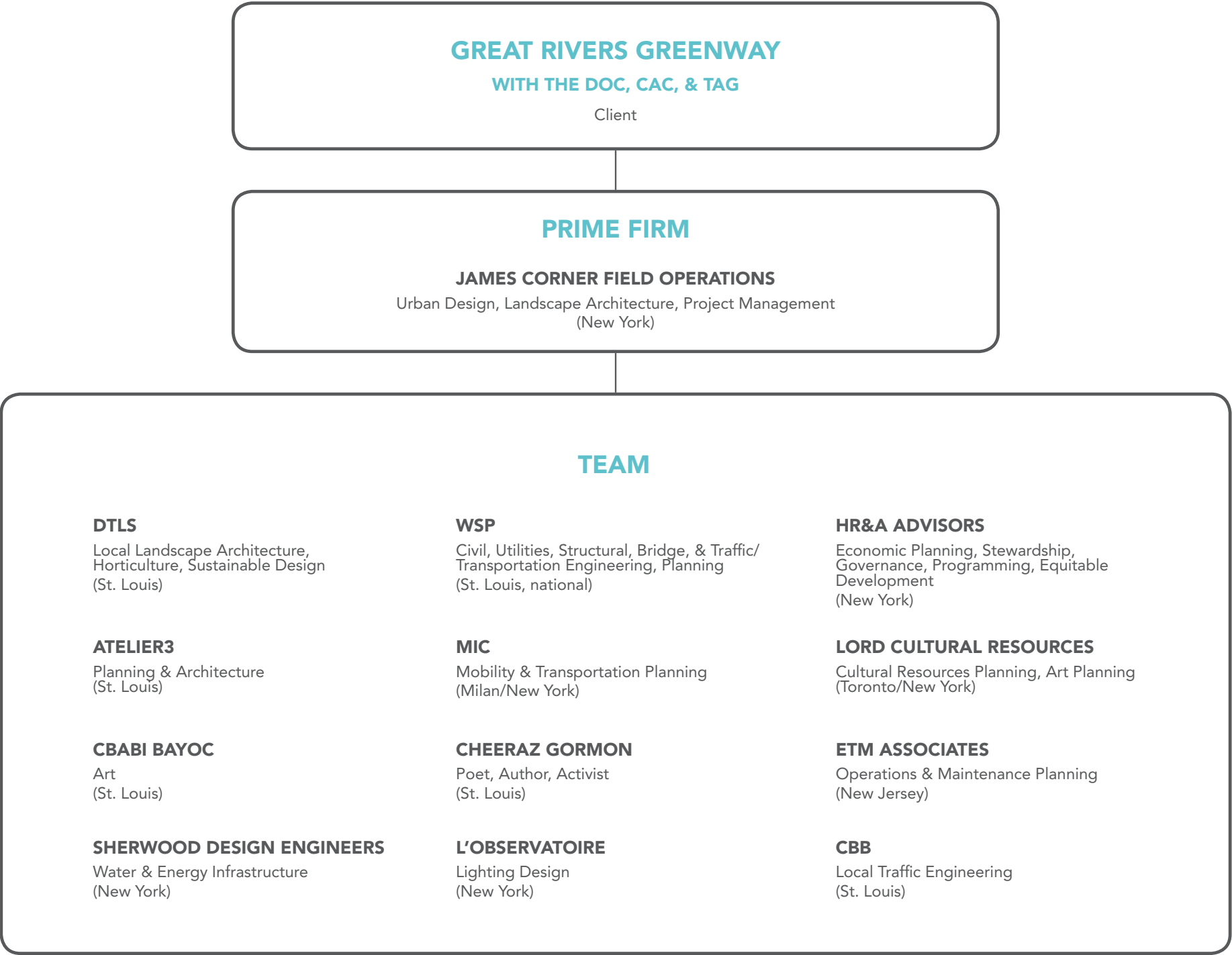
ETM Associates is a longtime collaborator and has deep experience in operations and maintenance planning;

We believe that we are the right team for the project: we have a deep respect for St. Louis’s rich history, we are dedicated to making world-class and sustainable open spaces that represent their communities, and we are committed to creating energetic and inclusive public places that attract a diverse range of users and serve as a catalyst for economic investment. Drawing on our team’s ability to transform big ideas into constructed reality, we will strive to make the Chouteau Greenway the signature component of the Greenway system – a vibrant recreational destination, a connector of neighborhoods, and a beloved place for all.

For all of us on the team, this project represents an extraordinary and important opportunity for the City of St. Louis and the local community in the creation of a world-class greenway for all.

If we are successful in moving forward and create the winning design, we anticipate that additional fields of expertise will likely be necessary, such as community engagement for each neighborhood along the

ORG CHART



TEAM BIOS

JAMES CORNER FIELD OPERATIONS

Founded in 1999, James Corner Field Operations is a leading-edge landscape architecture and urban design practice based in New York City. The practice is renowned for strong contemporary design across a variety of project types and scales, from large urban districts and complex post-industrial sites, to small well-crafted, detail design projects. In all of the work, there is a special commitment to the design of a vibrant and dynamic public realm, informed by the ecology of both people and nature.

Major projects in our portfolio include the design of the High Line in New York City; Tongva Park and Ken Genser Square in Santa Monica; Miami Beach's Lincoln Road; Chicago's newly redesigned Navy Pier; Cleveland's Public Square; the Master Plan and subsequent site design of Seattle's Central Waterfront; the Domino Sugar Factory Waterfront in Brooklyn; the Cornell Tech Campus in New York; Hong Kong's Tsim Sha Tsui Waterfront; and the Presidio Master Plan and Tunnel Tops and Rebuild by Design's Bay Area Challenge in San Francisco.

Field Operations' work has been recognized by both peer groups and those outside the field of landscape architecture, receiving multiple awards from the ASLA, the AIA, the ULI, the BALI Awards, Architizer, and the APA; as well as the Smithsonian's Cooper-Hewitt National Design Museum 2010 National Design Award, the American Academy of Arts and Letters Award for Design, the Daimler-Chrysler Award for Design Innovation; the Architectural League of New York Design Award.



DTLS

DTLS is a landscape architectural design and urban design firm focused on delivering innovative, imaginative and environmentally sustainable projects. As Landscape Architects and Urban Designers, they are committed to a holistic approach; they thrive as part of an interdisciplinary effort that integrates the Client and Consultants into one focused project team. DTLS leads by providing imaginative designs, outstanding technical documentation and constructible solutions to meet the Client’s scope, budget and schedule. DTLS is a Women-Owned Business Enterprise based in the City of St. Louis.

DTLS will provide local landscape architecture services, local horticultural and ecological expertise, sustainable design, and a deep knowledge of St. Louis as a whole, as well as the various downtown communities. Based in St. Louis, DTLS has committed themselves to creating beautiful, well-designed spaces that are sensitive to their communities and improve the lives of those around them. They are personally invested in seeing the Chouteau Greenway come to fruition and have been eagerly awaiting this opportunity for the past several years.

ROLE: local landscape architecture, horticulture, sustainable design

WSP

WSP USA, formerly WSP | Parsons Brinckerhoff, is the U.S. operating company of one of the world’s leading engineering and professional services firms—WSP. Dedicated to serving local communities, we are engineers, planners, technical experts, strategic advisors and construction management professionals. We believe in the power of communities to take control of their future and helping them to find the tool and resources critical to achieve their vision.

Drawing on 130 years of technical excellence, we offer a comprehensive, integrated approach to the planning, design, and management of myriad forms of transportation. We bring the latest technologies and a culture of innovation to the development of transportation infrastructure that meets community needs for mobility, connectivity, sustainability, and resiliency.

We view transportation as a means to improve the communities in which we live and work, and wherever possible, we apply the latest concepts in sustainable development to improve social, economic, and environmental conditions. We help our clients find the right solutions to their challenges through innovative planning and design, a deep knowledge of the federal and local regulatory environments, and an understanding of the alternative project delivery methods available.

ROLE: civil, utilities, structural, bridge, & traffic/ transportation engineering; planning; cost estimation

ATELIER3 / CHARLES BROWN

Established in 2010, Atelier3 Design is a vibrant partnership of St. Louis-based design professionals who have spent over 19 years each in the corporate environment, honing our respective crafts as planners, designers, and construction managers. While previously working as employees at other architectural design firms, our team members acquired experience with short/long term facility master planning, full architectural design services and construction management. Our combined experience involves educational, health care, residential, commercial, and urban design projects.

Over the last 8 years, Atelier3 Design has worked with a variety of clients and with various project types including but not limited to health care (BJC CHNE 10 Floor Renovation and Casa De Salud Expansion), commercial (St. Louis Economic Development Partnership), mixed-used development (McCormack Baron Salazar), and urban design (Beyond Housing).

Charles Brown is a co-founder and partner of Atelier3 Design with 15 years' experience in architectural planning & design, urban planning, facility assessment, and graphic design.

ROLE: architecture & planning

HR+A ADVISORS

HR&A Advisors is at the leading edge of a movement to design, operate, program and fund the development of new and revitalized urban open spaces.

HR&A is an economic and real estate consultancy with more than three decades of experience contributing to the planning and development of parks, plazas, streetscapes, and other urban spaces. We view these spaces as both public amenities and catalysts of economic development. Our approach helps communities create value by making strategic connections among parks, other civic assets, and privately owned real estate.

Our work products quantify the value of those connections using robust, data-driven analysis, and demonstrate how that new value can be used to fund open space revitalization, programming, and maintenance. We have 90 full-time employees in offices in New York, Dallas, Los Angeles, and Washington, D.C., and over the past 35 years, we have served more than 115 proposed and existing urban open spaces, parks, and park systems, including New York City's High Line, London's Queen Elizabeth Olympic Park, Cincinnati's Fountain Square, Boston's Lawn On D, and the Dallas Parks system.

ROLE: economic planning, stewardship, governance, equitable development

MIC

MIC is an international transport planning firm founded in 2009 by Davide Boazzi, Federico Cassani and Federico Parolotto. The firm is based in Milan, Moscow and New York City and operates on international level, with works spanning from the States to China and from Europe to Africa.

MIC is founded on the belief that mobility influences the way we live and the quality of our lives, and was created with the ambition of improving the quality of our lives through a profound understanding of how we move. In line with previous professional experience, the MIC team is strongly focused on international work, providing transport consultancy to developers, masterplanners and public bodies all around the world.

MIC introduces a new innovative and sustainable vision for mobility, a vision that is based upon understanding the need of the client and focused on both functional matters and urban quality. For the above reasons MIC team has been working with the best architects and developers on the market, supporting and consulting professional teams all over the world, working with architects like Foster+Partners, OMA, SOM, Sasaki and many others as well as developers such as Portland, Westfield or Emaar.

ROLE: mobility & transportation planning

CBABI BAYOC

Cbabi (pronounced Kuh-bob-bi) Bayoc, born Clifford Bernard Miskell, Jr., lived at several Air Force bases around the globe until his father was stationed at Scott Air Force Base and the family settled in Illinois. While attending Belleville Area College (now Southwestern Illinois College-SWIC) the flame of Art began to flicker. After attending BAC for two years, he traveled south, to Grambling State University in Louisiana, taking advantage of connections between the two schools, from which he graduated in 1995 with a Bachelor’s Degree in Art.

In 1997 he legally changed his name to Cbabi, which is an acronym for Creative Black Artist Battling Ignorance, but it was while at Grambling that he formulated the idea of waiting until he found his life partner and together creating a last name that would symbolize their union and give their children a name that spoke to the attributes of both Mom and Dad. Thus Bayoc: Blessed African Youth of Creativity.

Commissioned to do a mural in 1996, Cbabi returned briefly to his hometown before moving to downtown St. Louis. During a stint working as a caricature artist, Cbabi developed a love for the art form and wanted to develop a full-time career as an illustrator.

ROLE: artist & curator

L'OBSERVATOIRE

L'Observatoire International is a lighting design firm, created in 1993 by Hervé Descottes. The firm is comprised of skilled lighting designers, architects, interior designers, engineers, and artists.

Emphasizing a collaborative effort, L'Observatoire provides lighting design to a range of spatial expressions including museums, performing arts centers, concert halls, airports, universities, towers, landscapes, hotels, private residences, commercial properties, retail stores, and art direction for international luxury brands. To account for such a cross-section of programmatic and geographically specific requirements, we have developed a rigorously contextual and individualized approach to lighting design.

As architectural lighting designers, our role is to leverage light as a medium through which architectural intentions can be heightened and spaces transformed. With light as our tool, we reveal the aesthetic qualities of a space and accentuate the experience of an environment, creating a bespoke ambiance. We have a unique knowledge of how to combine light with architecture to create an unparalleled immersive atmosphere.

ROLE: lighting design

ETM ASSOCIATES

Formed in 1997, ETM Associates, LLC specializes in Public Space Management, including management setup, operations and maintenance projections and planning, and site programming.

ETM exercises consistent, accountable leadership in the creation, planning and implementation of a growing number of significant public space projects. We have earned a solid reputation as a firm for practical and creative solutions to public space management issues. In our commitment to develop workable approaches to public space management issues, we are focused on what we call “Gap Analysis.” This process involves a systematic approach to investigating, identifying, interpreting, recommending, and implementing potential operations and maintenance costs, along with programming opportunities.

The process illuminates ways to bridge the “gap” of ever-present differences between existing resource levels and the total needed for optimum delivery of services. We accept the challenge to go beyond articulating the resources needed for optimal service delivery, by identifying opportunities for realistic, creative solutions and by acting in the spirit of partnership.

ROLE: operations & maintenance planning

CBB

Established in 1973, CBB is a regional leader in the highly specialized fields of traffic engineering and transportation planning. Through our integrity, innovation, and reliability, we are dedicated to raising the standards of the industry while achieving client satisfaction. Our corporate headquarters is located in St. Louis, Missouri, with satellite offices in St. Charles, the City of St. Louis, and Collinsville, Illinois.

CBB’s staff includes engineers, planners and designers with extensive transportation experience. This includes several engineers with post-graduate degrees in transportation engineering and planning, Professional Traffic Operations Engineers (PTOE), Professional Transportation Planners (PTP), and licensed Professional Engineers. CBB has established a committed core of employees who are responsible, energetic, and passionate about improving our clients’ communities. Our longstanding success can be attributed to our outstanding reputation, the quality and responsiveness of our service, and attentiveness to our clients.

ROLE: traffic engineering

CHEERAZ GORMON

Cheeraz Gormon is a visual storyteller, poet, author, and award-winning advertising copywriter, two-time TEDxGatewayArch speaker, 2017-2019 Storytelling Fellow at InPower Institute a division of Emerging Wisdom, 2018 St. Louis Visionary Awards, Outstanding Working Artist, honoree, and every bit a native daughter of St. Louis, Missouri.

As a poet, Gormon has opened for scholars Cornell West, Dr. Dennis Kimbrow, MacArthur Genius educator and curator Dr. Deborah Willis, Hip-Hop impresario Russell Simmons, and has performed on stages nationally, and internationally. Her poetry has been featured on Ebony Magazine online, Huffington Post, St. Louis Public Radio, and on-air in London, England and Portland, Oregon. She is a member of St. Louis-based Screwed Arts Collective, founding committee member of the St. Louis Brick City Poetry Festival, founder and co-executive director of Sonic Arts United, a S.T.E.A.M. based nonprofit, founder and executive director of Sibling Support Network, a nonprofit dedicated to supporting people who have lost siblings to violence.

ROLE: poet, author, activist, consultant

SHERWOOD DESIGN ENGINEERS

Sherwood Design Engineers is a site civil engineering practice committed to the optimal integration of ecology, infrastructure, and design. We specialize in water management strategies, green building design, and urban planning. We document site infrastructure as well as master plan engineering solutions at a campus, neighborhood, and district scale. Important to our engineering practice is our ability to span building and landscape. Our recommendations minimize the consumption of all site resources—carbon, energy, water, and waste.

Sherwood works collaboratively with project teams and institutions to find ways to maximize efficiencies through an integrated and ecological approach that results in high performance buildings and landscapes recognized for function as well as aesthetics and user experience.

Sherwood is a creative practice. Studied in civil engineering, landscape architecture, and urban planning, we are committed to helping clients and fellow design practitioners understand holistic system relationships: watershed, ecosystem, and carbon/energy nexus. This greatly impacts the design and reach of a project and cultivates true sustainability.

ROLE: water & energy infrastructure

LORD CULTURAL RESOURCES

Founded in 1981 in response to an emerging need for specialized planning services in the museum, cultural and heritage sector, Lord Cultural Resources is now the world’s largest cultural professional practice. We’ve helped create iconic cultural destinations in more than 460 cities, in 57 countries on six continents. Our projects include museums, mixed-use developments, cultural centers, art galleries, science centers, world expositions, visitor centers, heritage sites, festivals, theaters, archives, libraries and gardens.

Our clients — leaders at private and public corporations, foundations, governments and non-profit institutions — are interested in creating places, programs and resources that build cultural capital and serve society. We offer a comprehensive range of integrated services, collaborating with clients’ visioning, planning and implementing projects. At our network of offices in Toronto, New York, London, Beijing and Mumbai, we place priority on respecting local context, cultural diversity and collaboration.

ROLE: cultural resources planning, art planning, community engagement

MULTIDISCIPLINARY PROCESS

Throughout the three-month-long Stage II Competition phase, our team has worked collaboratively to research, understand, analyze, and strategically plan a design for Chouteau Greenway that is transformative for the individuals and communities in downtown St. Louis, and for the city as a whole.

The core of our collaboration is our belief that complex projects such as this require and deserve a wide range of professional input. Our team has a wealth of experience in design, planning, engineering, anchored in St. Louis' rich culture and history, and our priority through this competition process has been to honor and capitalize on this experience. From the beginning, our work had progressed through weekly team meetings where core ideas are presented and discussed as a team. We have also held regular in-person worksessions together, where we have been able to push ideas forward in a more in-depth way than simply by phone.

These regular meetings and worksessions are supported by continuous communication individually, through calls, emails, and sketches, resulting in a rich and truly enjoyable team experience.

We expect our team to retain this collaborative approach once beyond the competition stage, and greatly look forward to maintaining a strong collaborative approach to this project.



TECHNICAL ADVISORY GROUP MEMBER COMMENTS



ONE-ON-ONE INTERVIEWS

LOCAL EXPERTISE

While our original team featured two St. Louis-based firms as our primary collaborators ([dtls] and WSP), in response to general feedback we have continued to expand our team to include more and more local expertise.

Since the Stage I Submission in late 2017, we have welcomed several additional St. Louis-based team members:

- Charles Brown, co-founder and managing partner at Atelier 3 (architecture and planning)
- Cbabi Bayoc, artist and founder of 365 Days with Dad
- Cheeraz Gormon, poet, author, and activist
- Mike Dolde, Senior Traffic Engineer at CBB

Their expertise and creativity has played a critical role in forming this proposal for Chouteau Greenway.



DTLS'S MATT SNELLING PLOTTING GREENWAY ALIGNMENTS

CBABI BAYOC SELECTED WORK



Cbabi (pronounced Kuh-bob-bi) Bayoc, born Clifford Bernard Miskell, Jr., lived at several Air Force bases around the globe until his father was stationed at Scott Air Force Base and the family settled in Illinois. While attending Belleville Area College (now Southwestern Illinois College-SWIC) the flame of Art began to flicker. After attending BAC for two years, he traveled south, to Grambling State University in Louisiana, taking advantage of connections between the two schools, from which he graduated in 1995 with a Bachelor's Degree in Art.

In 1997 he legally changed his name to Cbabi, which is an acronym for Creative Black Artist Battling Ignorance, but it was while at Grambling that he formulated the idea of waiting until he found his life partner and together creating a last name that would symbolize their union and give their children a name that spoke to the attributes of both Mom and Dad. Thus Bayoc: Blessed African Youth of Creativity.

Commissioned to do a mural in 1996, Cbabi returned briefly to his hometown before moving to downtown St. Louis. During a stint working as a caricature artist, Cbabi developed a love for the art form and wanted to develop a full-time career as an illustrator.





CHEERAZ GORMON

SELECTED WORK



Cheeraz Gormon is a visual storyteller, poet, author, and award winning advertising copywriter, two-time TEDxGatewayArch speaker, and every bit a native daughter of St. Louis, Missouri.

As a poet, Gormon has opened up for scholars Cornell West, Dr. Dennis Kimbrow, MacArthur

Genius educator and curator Dr. Deborah Willis, Hip-Hop impresario Russell Simmons, and has performed on stages nationally, and internationally. Her poetry has been featured on Ebony Magazine online, Huffington Post, St. Louis Public Radio, and on-air in London, England and Portland, Oregon.

She is founder and co-executive director of Sonic Arts United, a S.T.E.A.M. based nonprofit, founder and executive director of Sibling Support Network, a nonprofit dedicated to supporting people who have lost their siblings to violence, founder of STLNightWriters, a writers workshop and reading series, one of the founding committee members of the St. Louis Brick City Poetry Festival, and a member of the Screwed Arts Collective.

In 2016, Cheeraz was named one of Delux Magazine's Power 100. That same year, she was an apexart 2016 International Fellow. Gormon is the author of, "In The Midst of Loving," a collection of poems, and selected writings released in March 2015. In September 2015, Cheeraz was named by ALIVE Magazine as one of the Top 20 Young STL Artists You Need to Know, and appeared as the cover girl for the re-launch of the publication in December 2015.

At the top of 2017, Cheeraz appeared on VICELAND's highly rated show, Abandoned, which focused on closed and neglected schools in St. Louis. She served as advising committee member for the #1 in Civil Rights exhibit currently on display at the Missouri History Museum, and is currently 2017-2019 Storytelling Fellow at InPower Institute- A Division of Emerging Wisdom located in St. Louis, MO. Cheeraz has been named, 2018 St. Louis Visionary Awards, Outstanding Working Artist Honoree.



ARTIST’S STATEMENT

I am a love poet. Each piece I write pulls from the many lives I’ve lived and worlds I’ve walked. In my work, I invite my reader, my listener to be present, to witness, to remember, and to feel as I explore life’s complexities. I work with both the written and spoken word, at times accompanied by musicians, and dancers to create an emotional and intellectual connection with my audience giving them something to relate to, laugh with, ponder over, and hold on to.

My work explores a variety of subjects. From pulling back the layers on the socio-political issues of our time to investigating the erotic. The form is always tailored to fit the content. This also includes turning some of my works into visual art pieces as I seek to take my words beyond the page.

In my verbal delivery, I submit to the emotion, energy, and message that emerge from each piece. I embrace possession, and the relationship my body has to the words I’m delivering, and how my audience receives them. Poetry is a natural way for me to reflect and express my response to humanity. It is the medium I have graciously chosen to be a doorway, mirror, and conduit.

As a word artist and collaborator, I am a keeper of tradition where the poet is also an instrument in a larger choir of musicians, and at times a narrator who provides a story for the symbolic movement of dance. These partnerships between sound and movement create space for my words to reach even deeper into the depths of the meaning they hold.

In my craft of poetry, I am a storyteller; steeped in the oral tradition of the griot where the legacies of the Black Artist Movement intersects with all that is the here-and-now, giving birth to a truth telling that’s personal, vulnerable, reflective, and welcoming to all who care to share in the journey.



TEDxGatewayArch, St. Louis Central Library, July 16, 2014



Produced, Directed, & Edited by Katina Parker for Amnesty International
Filmed on Location in St. Louis, MO.



CHARLES BROWN / ATELIER 3

SELECTED WORK



Established in 2010, Atelier3 Design is a vibrant partnership of St. Louis-based design professionals who have spent over 19 years each in the corporate environment, honing our respective crafts as planners, designers, and construction managers. While previously working as employees at other architectural design firms, our team members

acquired experience with short/long term facility master planning, full architectural design services and construction management. Our combined experience involves educational, health care, residential, commercial, and urban design projects.

Over the last 8 years, Atelier3 Design has worked with a variety of clients and with various project types including but not limited to health care (BJC CHNE 10 Floor Renovation and Casa De Salud Expansion), commercial (St. Louis Economic Development Partnership), mixed-used development (McCormack Baron Salazar), and urban design (Beyond Housing).

Charles Brown is a co-founder and partner of Atelier3 Design with 15 years' experience in architectural planning & design, urban planning, facility assessment, and graphic design. His professional experience covers a spectrum of building types including educational, commercial, and healthcare. Charles' skill level has afforded him with the opportunity to work collaboratively at all phases of master planning, design and construction admin processes for new construction and renovation projects. He excels at the front end of projects when consensus-building is necessary

among stakeholders, and is equally capable of developing clear and legible architectural instruments of service. He is a good listener, effective collaborator with the client, stakeholders, and subconsultants, and is capable of facilitating programmatic development and planning exercises to ensure that stakeholder and end user needs are heard, understood, and validated.

Charles Brown's approach to personal, professional and civic excellence can be summarized in 3 words: Translate < Transact < Transform. Charles is a native of Saint Louis and has over 16 years of experience as a design professional and 8 years of experience as a lecturer his alma mater, Washington University School of Architecture (B.ARCH '96) (M.ARCH '98). Charles was among the first cohort of young executives to complete a rigorous 12 month professional leadership training program through the prestigious Consortium For Leadership Development (CLD).

Relevant work includes:

Urban League Empowerment Center | Ferguson, MO, 2015

Developed conceptual rendering, provided planning and design leadership for 8,000 SF job training center. Facilitates meetings with all consultants and Owner's representative.

St. Charles Rock Road Transit-Oriented Development Master Plan | St. Louis, MO 2013

Designed site strategy for mixed-use development at an existing mass transit stop. Transformed massive parking lot hub into a pedestrian-oriented destination for commerce, residential scale retail and the arts along with mixed-income housing. Another prominent feature of the design involved incorporating a greenway trail system serving as a connector to other unique neighborhood hubs.



MLK Drive Strategic Growth Master Plan | St. Louis, MO 2013

Developed strategic growth master plan for the second phase of project with the main goal of creating a mixed-use neighborhood design that would catalyze walk-ability, active design and sustainability.

Casa De Salud (St. Louis University) Clinic Expansion Renovation | St. Louis, MO, 2012

Developed planning and design support for the expansion of clinic primarily for immigrants. Functional planning and lean design saved the client over 100K in construction cost.

CBB / MIKE DOLDE SELECTED WORK



CBB is a leader in the fields of traffic engineering and transportation planning. Established in 1973, we consistently work to improve industry standards through our integrity, innovation and reliability. Several of our staff are recognized for advanced professional accomplishments including post-graduate degrees in transportation engineering and planning, licensure as Professional Engineers (PE), and certifications as Professional Traffic Operations Engineers (PTOE) and Professional Transportation Planners (PTP).

CBB has a detailed level of understanding within the City of St. Louis having served as their on-call traffic engineer since 2010, and completing several recent projects within the City. We are currently working on a Downtown Multimodal Study for the City of St. Louis, that will develop a plan for the City to prioritize future transportation infrastructure investments, and leverage federal funds as well public-private partnerships. This project has developed a modal hierarchy for Downtown that prioritizes routes for specific modes of transportation, so the City can provide safe and accessible routes for bicycles, pedestrians, transit and vehicles. We recently completed the roadway improvements at Kiener Plaza, in conjunction with the City+Arch+River project.

CBB's expertise with traffic, signals, ITS, and Smart City components within the City of St. Louis will be critical when looking at greenway alignment and functioning with the existing roadway network. CBB is

currently assisting with analysis and development of options for critical intersections. During the design stage, CBB will be available for design of intersection and signal improvements as well as implementation of these improvements.

Mike Dolde, PE, PTOE has over 15 years of experience in the traffic engineering field and manages the only full time staff in the region dedicated purely to signal operations projects. His main areas of expertise include the design and implementation of new traffic signals ITS devices and smart city applications, the optimization and implementation of new signal timing plans (utilizing Synchro, and Time-Space Platoon-Progression Diagram, TSPPD), the development of construction mitigation timing plans, the development of grant applications and contract documents.

He has implemented new timing plans at over 1000 intersections and performed new signal cabinet turn-on's (including signal controller and ITS devices) at hundreds of intersections. He manages the CBB operations staff, which includes oversight of their day-to-day workload on projects related to the design of traffic signals and ITS devices, optimization of signal timings, field implementations of proposed timing, mitigation of construction traffic and traffic signal turn-ons.

Relevant Work includes:

I-70 Park Over the Highway Project | St. Louis, MO

This project consisted of the reconstruction of Memorial Drive and various streets surrounding the Gateway Arch Grounds in Downtown St. Louis, MO. CBB’s involvement in the project consisted of fulfilling MoDOT’s “traffic signal programming and on-call services” special provision. Specifically, CBB prepared and implemented timing plans to accommodate the various traffic switches during the numerous stages of construction and was responsible for addressing public complaints related to traffic circulation within the project area. In addition, CBB prepared and implemented detour plans for multiple I-70 weekend closures.

Traffic Management Enhancements Phase 3 | St. Louis, MO

CBB recently started work on this Congestion Mitigation Air Quality Improvement (CMAQ) program project for the City of St. Louis. The phase 3 work is a continuation of previous work done within the City of St. Louis, and focuses to make necessary updates as a result of recent changes to the grid network, including the City+Arch+River project, as well as the new Stan Musial bridge. The on-going project includes three major components including (1) Downtown Multimodal Study & Signal Timing, (2) Fiber optic network enhancements and (3) Traffic Information Center Operations Staffing. The project limits are generally bounded by Jefferson on the west, Cass on the north, Mississippi river on the east, and Chouteau on the south.

Gravois Greenway | St. Louis, MO

The Gravois Greenway is planned to connect the eastern terminus of the Grant’s Trail with the River Des Peres Greenway. CBB assisted the design team with trail crossings at Bayless Avenue and Carondelet Blvd. Specifically, CBB analyzed the effects of trail crossings at these signalized intersections and gained approval from MoDOT for each crossing. The Bayless crossing was ultimately designed with an elevated walkway while the Carondelet crossing was designed as an at grade crossing. CBB designed signal improvements necessary for a safe trail crossing.

Kiener Plaza Renovations | St. Louis, MO

CBB designed traffic signal improvements at five signals surrounding the park including new signal controllers, ADA upgrades—curb ramps and sidewalks, and updated signal infrastructure to replace the current hardware. The signal arms along Chestnut and a portion of Broadway were designed with the ability to swivel away from the road to accommodate parades and other special events. As a part of the sidewalk improvements, CBB designed curb “bulb outs,” where appropriate, to enhance pedestrian visibility and shorten crossing distances. CBB’s plans include medians and midblock crossings, in addition to new bicycle facilities—a parking protected bicycle lane on Chestnut and the City’s first bike signal at 6th and Chestnut, as well as wireless detection for bicycles. Mr. Dolde was the engineer of record for the signal and ITS improvements.

"I place a high value in improving the safety and accessibility of neighborhoods where our children and families live and work - for many areas addressed in this proposal, it is long overdue. Your environment and surroundings play such a crucial role in your everyday mindset and art has the ability to transform spaces in super powerful and positive ways. It would be a great point of pride to have St. Louis talent collaborate to show that we are stronger together than we are divided and be the leaders of this community change. The Chouteau Greenway project will be a step towards improving people's lives in our city today and for generations to come."

Cbabi Bayoc
Artist, Founder of 365 Days with Dad



"Inspired by St. Louis, its people, its history, its culture and its potential, our vision uses the greenway as a conduit for change. This project has the great opportunity and responsibility to unlock potential, to create value, to enrich lives, to link and connect people to one another and to nature, and therefore to heal and to mend."

Lisa Switkin
Senior Principal, Field Operations



"In this moment, we are in a position to reshape the City's narrative, bridge between our past and future, and eviscerate the divides that have fragmented us for so long. A collective and equitable path forward is the only true path forward, and we must use this project to connect people to transit, expand access to opportunities, empower citizenry, and re-wealth our Communities"

Bryan Robinson



"Our city has some great cultural institutions, neighborhoods and destinations. Chouteau Greenway is the missing link to connecting all of them in a way that celebrates equitable transportation, people, and the greatness that our city is built on."

Jennifer Pangborn
Transportation Engineer/ Planner, WSP



"The great joy of this effort has been the opportunity to forthrightly grapple with the historic challenge of the Delmar Divide. By focusing on specific intersections where market conditions and the actions of landowners suggest there may be opportunities, the city can eradicate the long-standing barrier between north St. Louis and the downtown core, enhancing the quality of life in the neighborhoods, while maintaining their character and creating a stronger, more unified city."

Candace Damon
Vice Chairman, HR+A



"I started working on Chouteau Lake and Greenway in 1999, at the beginning of my career. This competition has greatly expanded my hopes and expectations of what this project can mean for all St. Louisans."

Matt Snelling
Principal, DTLS

"The design and construction of the Chouteau Greenway can uniquely address the public open space needs of the City of St. Louis – we have the opportunity and responsibility to offer a unique vantage of our great city for all users. It is an honor to help begin the conversation!"

Michelle Ohle
Principal, DTLS



"The Chouteau Greenway is an amazing opportunity to connect park to arch while correcting the physical and social connections from north to south. If the success of Forest Park's reconstruction, City Garden's development, and the City Arch River project are indicators of how the region gets behind major public investment in our city's future then the Chouteau Greenway project promises to be a huge success."

Tom Brooks- Pilling
Principal-in-Charge / Project Manager, WSP



"As a St. Louis native, most specifically, a native of North St. Louis City, it's reaffirming and healing to know that my lived experience, and voice is included in this project. For I do not only speak and represent myself through my participation in this project. I have the opportunity to honor, and make visible those beautiful voices and lived experiences from my neighborhood, and neighborhoods like mine. To introduce a more holistic framing of the people, the places, our histories, our present, our hopes, dreams, visions, and plans for the future that so many of us are working for, and willing to work even harder for."

Cheeraz Gormon
Poet, Author, Activist



James Corner
CEO and Founding Partner, Field Operations

"This is an extraordinarily significant and important project for St Louis – a city of diverse neighborhoods that can only be made stronger through connection and interwoven greenways. Inspired by community input and ideas, the "Chouteau Greenway Braid" is about bringing new life, social equity, ecological resiliency and health and wellbeing to all residents, businesses and visitors. The vision suggests a rich variety of experiences, programs and investments that add immense value and new opportunities for the city as a whole."



Charles Brown
Co-Founder and Managing Partner, Atelier 3

"Saint Louis is longing for connectivity. Using the the greenway to align our city's rich history as well as its aspirant future, our design team has courageously surpassed the the design prompt guidelines in an attempt to make our city's most important resources, destinations, and landmarks accessible to more neighborhoods; especially to those with residents who need them the most."



Kate Rodgers
Lead Designer, Field Operations



St. Louis has the unique opportunity to reconfigure the public realm in a way that reflects and celebrates its incredible diversity."

TAG MID-COURSE REVIEWS

Over the course of the competition, there were two midreviews with the Technical Advisory Committee (TAG). Our team approached these as opportunities to show our research and design thinking to date, as well as to gather feedback from the TAG as to feasibility and overall resonance with each agency's goals.

Our first midreview involved a series of interactive sessions in which we asked TAG members in attendance to begin by filling out a survey about their personal thoughts about and experiences with St. Louis's public spaces, and then to draw a "mental map" of the city between the Arch and Forest Park. We presented our initial research and findings, ending with a breakout into three groups to chart different types of maps across the city: Connections, Activation, and Places. This in-person research helped to anchor our thinking in real-life experiences, and provided a forum for the TAG members to begin highlighting their respective agencies' goals and priorities – as well as red flags.

Our second midreview presented the result of the TAG's initial surveys and mental maps, and delved deeper into our team's design proposal and selected greenway alignments. During this session we gathered more specific feedback about

our proposal's feasibility and continued to vet the design for potential technical complications. After this second review, there were no red flags – only green and yellow, the latter of which received support for pushing the City forward into new challenges that are worthy of pursuit.



- Describe St. Louis in three words
attainable (size), affordable, accessible
- What makes St. Louis special?
BRICK, Mississippi River, the Arch, & its location - center of U.S.
- Where do you live and what is the best thing about your neighborhood?
Tower Grove East - friendly, inviting, & culturally diverse in ethnicity, age, background...
- What is the most welcoming public place in St. Louis and what makes it a place for everyone?
Forest Park - everyone is welcome, relaxed & encouraged to play
- What's your favorite thing to do outside in the City or in your neighborhood?
Is there something missing that you wish you had?
Walk in a park! I hear the birds sing
need more light rail transit & greenways (away from streets)

- Describe St. Louis in three words
Historic Humble Humid
- What makes St. Louis special?
The neighborhoods
Ease / affordability
Access to quality academics & health & entrepreneurship
- Where do you live and what is the best thing about your neighborhood?
Central West End: gorgeous homes with charm on leafy streets and proximity to Forest Park and vibrant retail opportunities
- What is the most welcoming public place in St. Louis and what makes it a place for everyone?
City Garden - scale is manageable; easy to enjoy
Forest Park - something for everyone; grand } free
- What's your favorite thing to do outside in the City or in your neighborhood?
Is there something missing that you wish you had?
Experience the natural parts of Forest Park
Wish: nature center with healthy smoothie station



- Describe St. Louis in three words
Diverse, Cultural, Opportunities for Growth
- What makes St. Louis special?
So many cultural opportunities to enjoy zoo, MoBOT, Arboretum, Grant Parks, Art Museum, Festivals
- Where do you live and what is the best thing about your neighborhood?
Holly Hills - Carondelet Park
- What is the most welcoming public place in St. Louis and what makes it a place for everyone?
Forest Park - So many programmed events and major cultural institutions
- What's your favorite thing to do outside in the City or in your neighborhood?
Is there something missing that you wish you had?
Bike Ride, Festivals
Missing: Full Connections of Greenway to establish Network

- Describe St. Louis in three words
Beautiful, Challenging, Home
- What makes St. Louis special?
Its neighborhoods, civic and cultural institutions, parks and the rivers
- Where do you live and what is the best thing about your neighborhood?
Southampton in South St. Louis. Architectural, great parks and close to a lot of amenities.
- What is the most welcoming public place in St. Louis and what makes it a place for everyone?
Tower Grove Park - it is a local, community and city/regional park for all sorts of events
- What's your favorite thing to do outside in the City or in your neighborhood?
Is there something missing that you wish you had?
Jazz Festivals @ No potential burden
More density, more peace and more greenways!

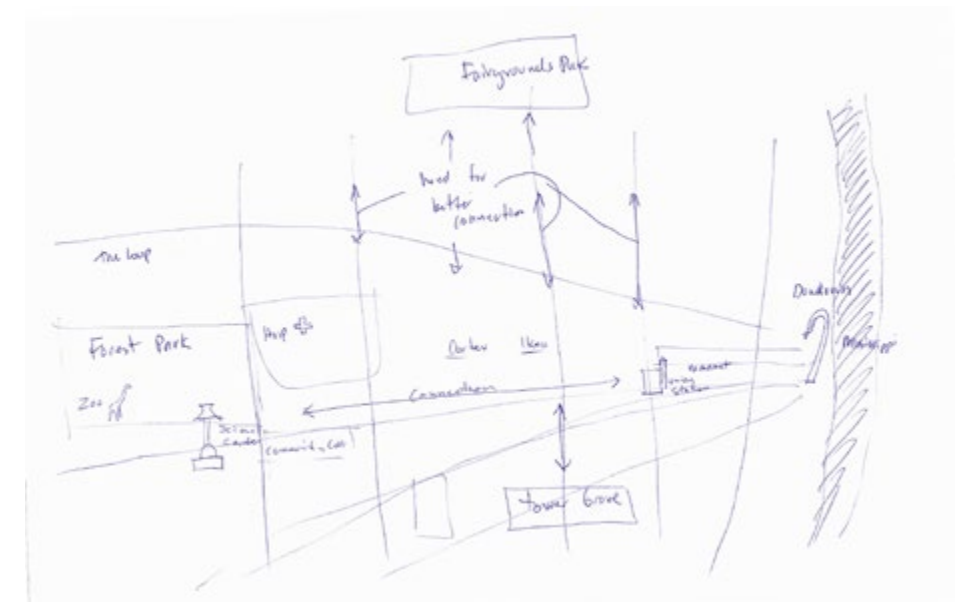
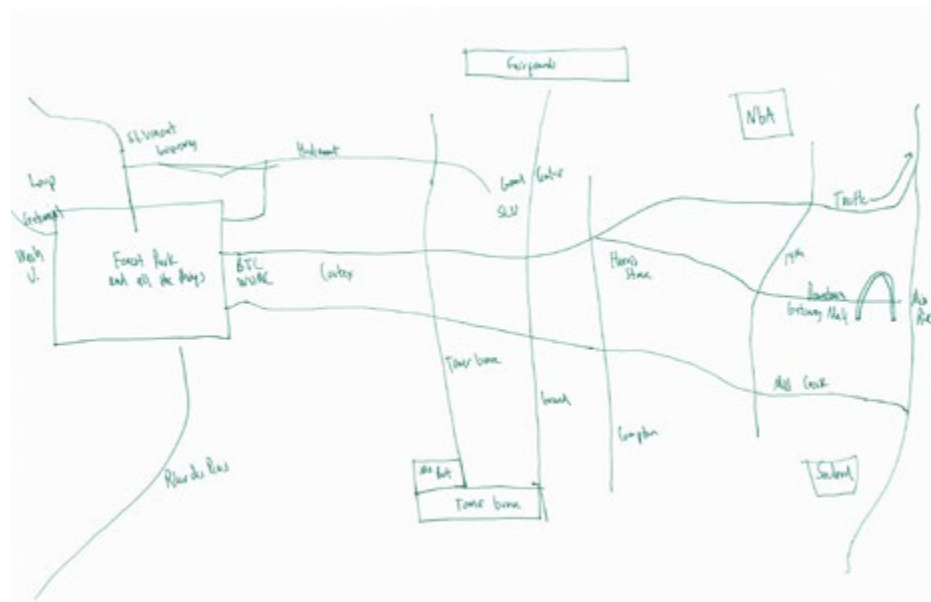
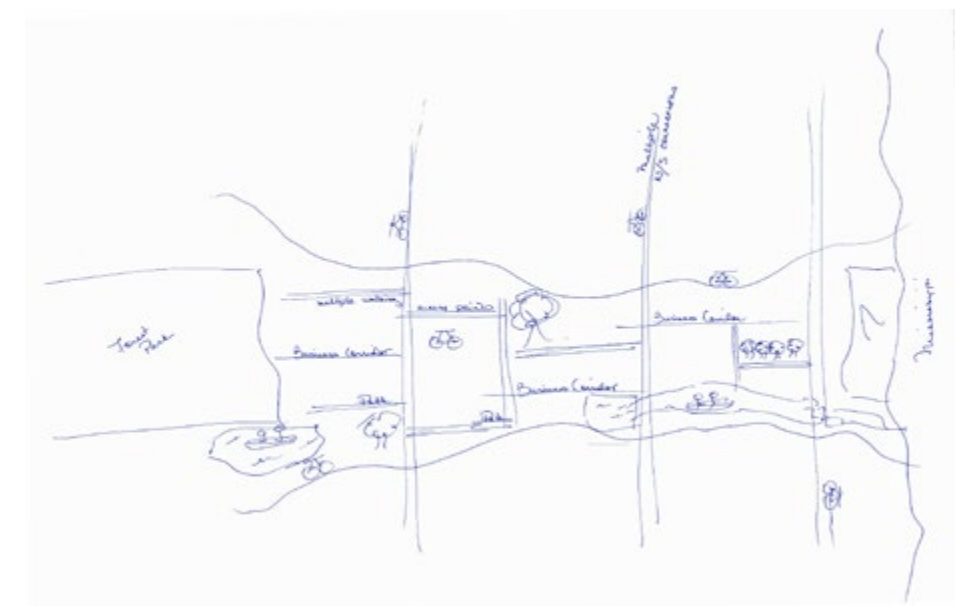
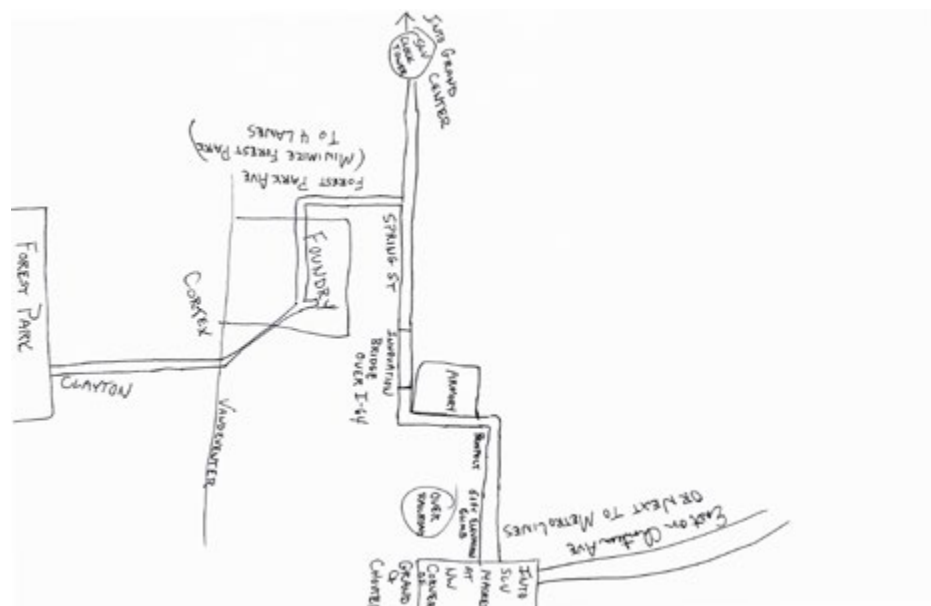
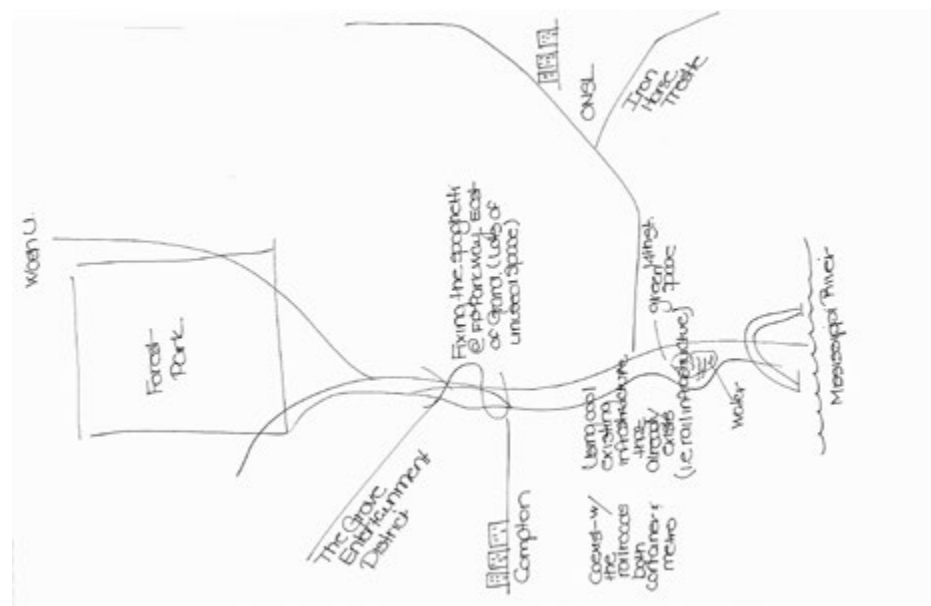
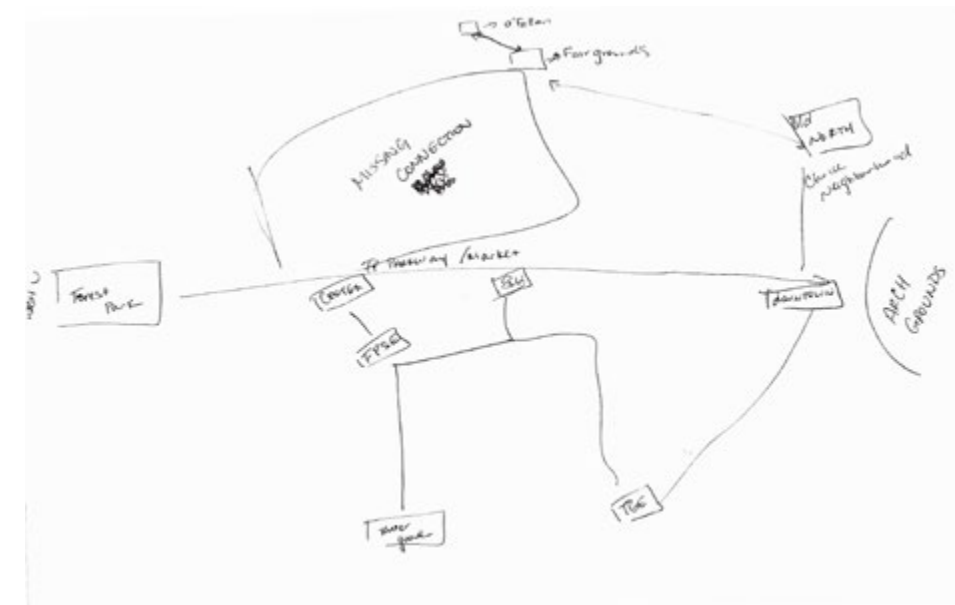
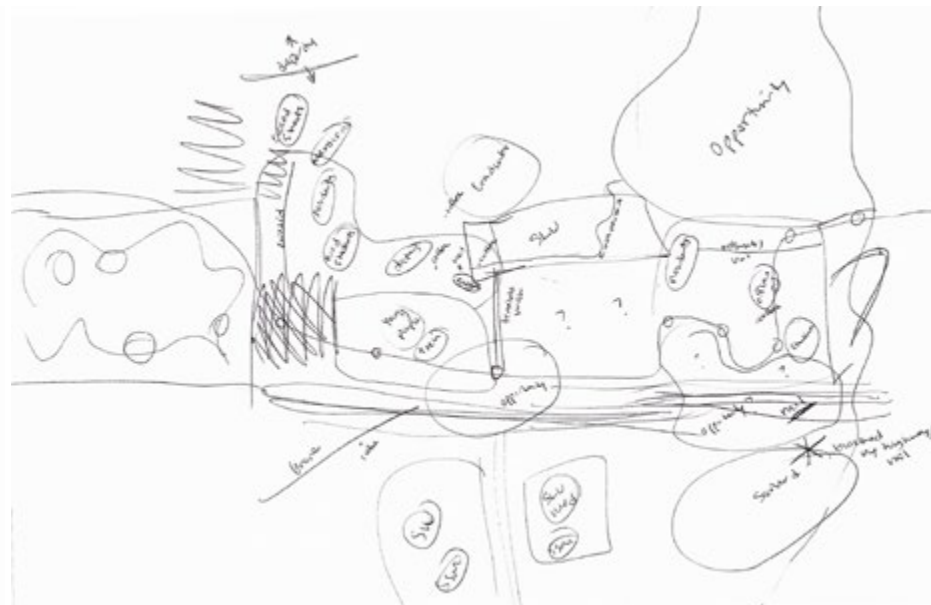
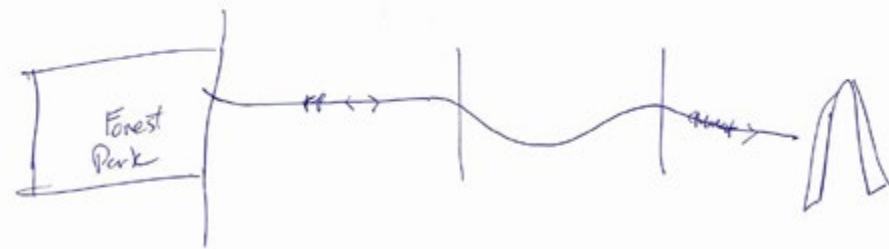
- Describe St. Louis in three words
Changing, Innovative, Distressed/Exciting
- What makes St. Louis special?
Not often said we have lost more than some towns have ever had or will have. And we still have so much to offer. We are culturally East Coast, North, South. We are the Gateway to the New Information Age - but we are a very old city.
- Where do you live and what is the best thing about your neighborhood?
Southeast St. Louis. Close to everything
- What is the most welcoming public place in St. Louis and what makes it a place for everyone?
Forest Park. So many diverse, free institutions and amenities
- What's your favorite thing to do outside in the City or in your neighborhood?
Is there something missing that you wish you had?
Explore. A rediscovery of a four soul & destiny more widely shared.

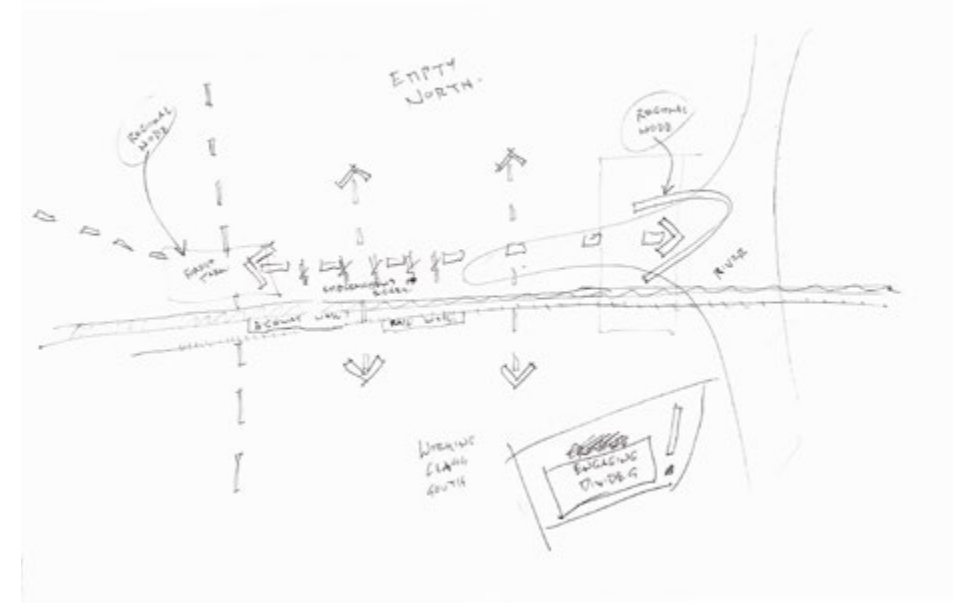
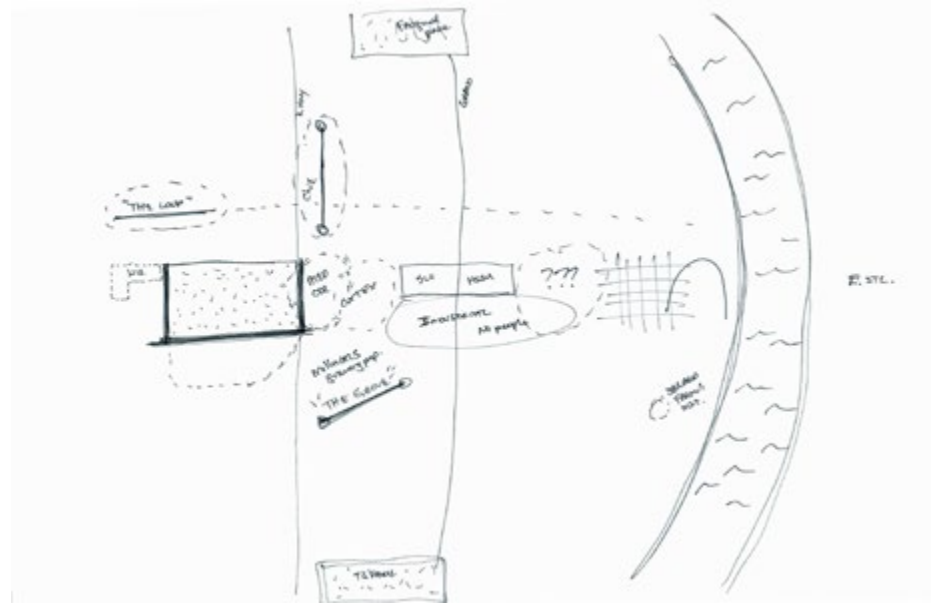
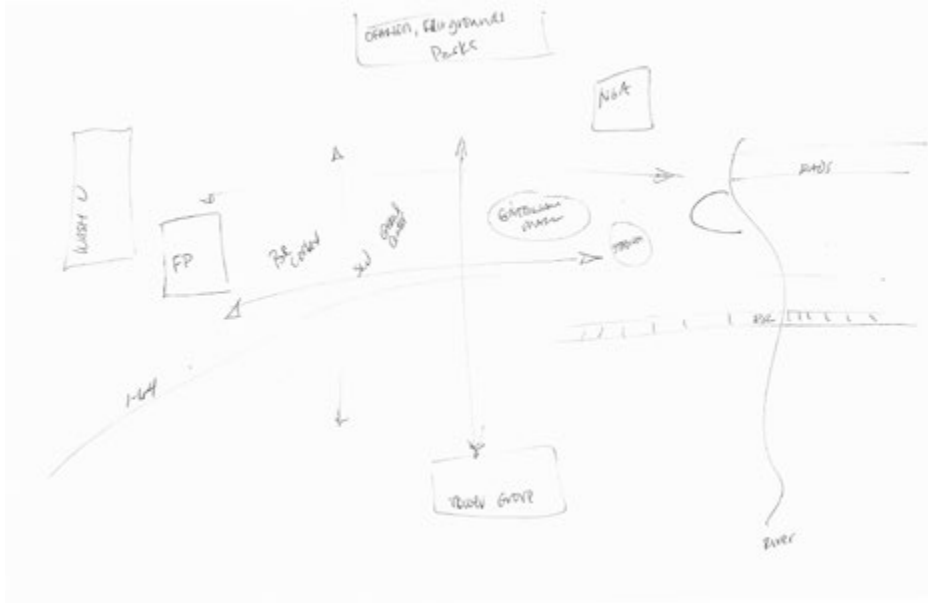
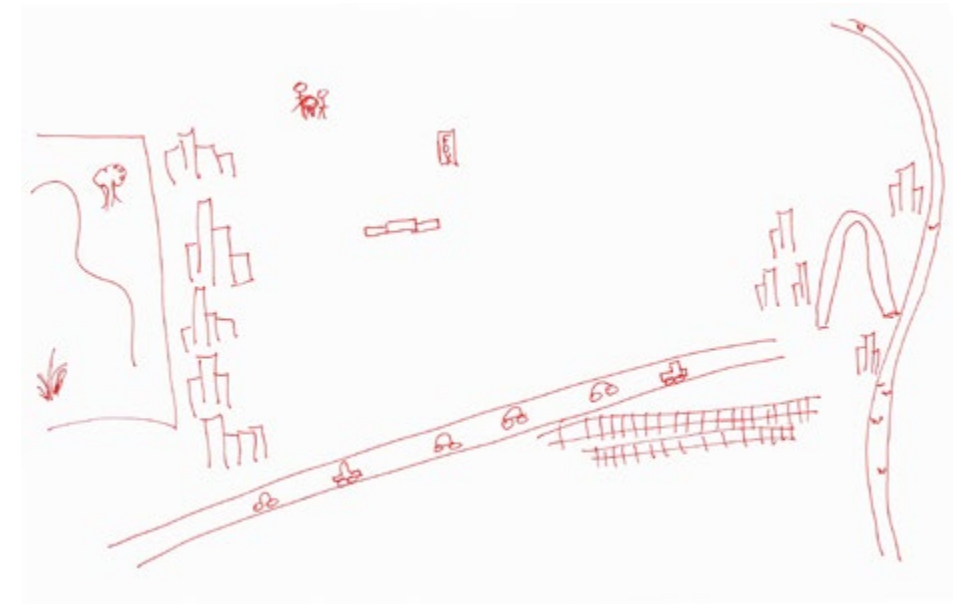
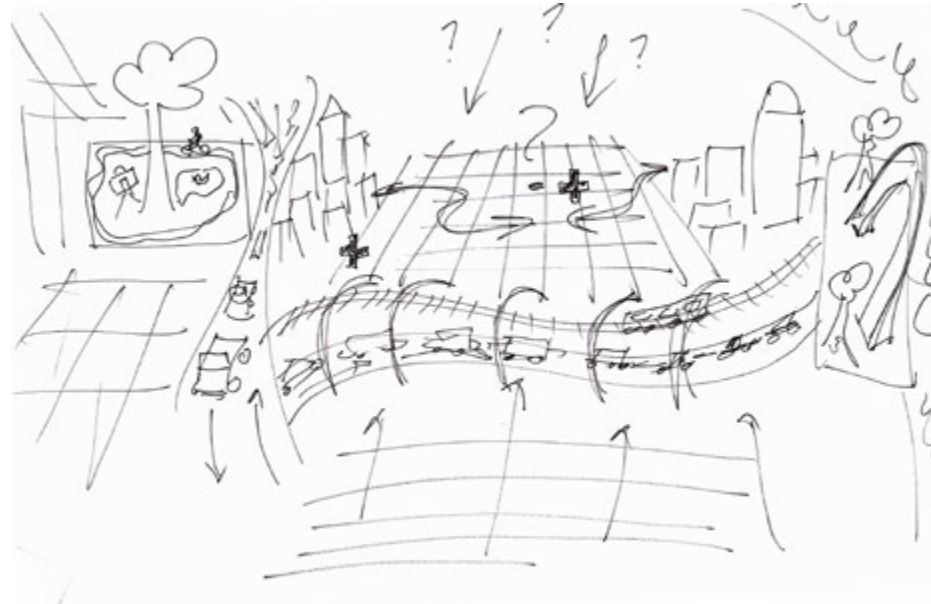
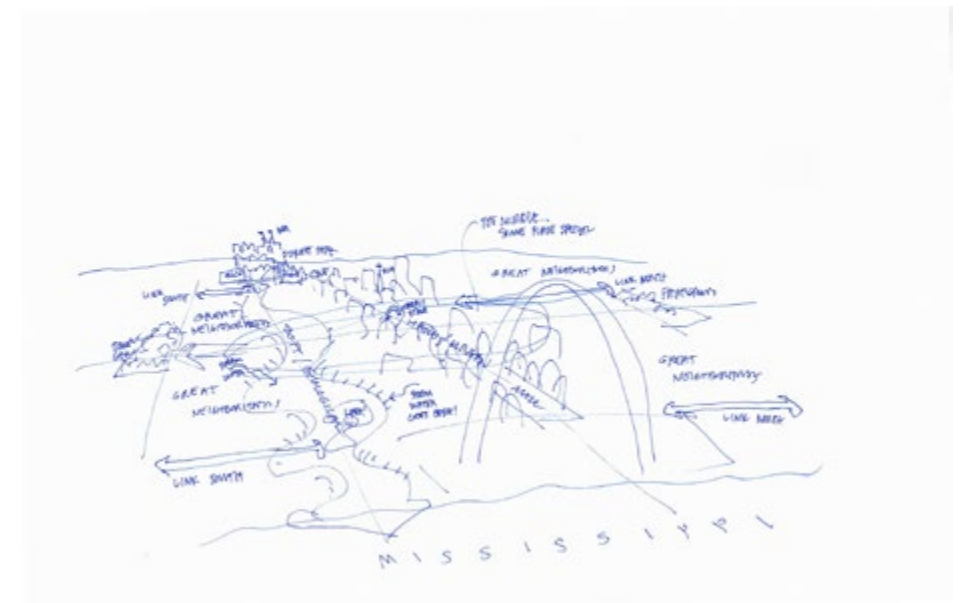
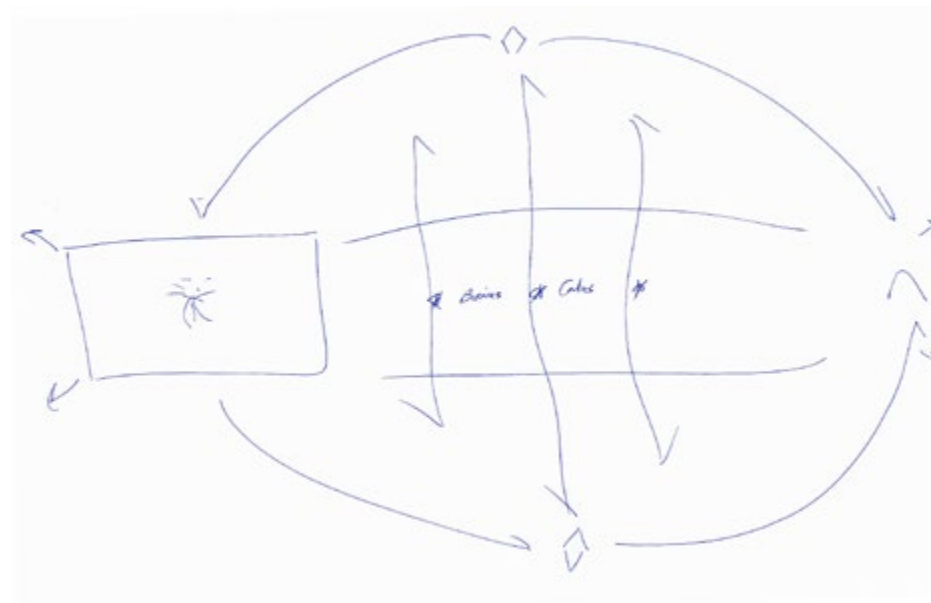
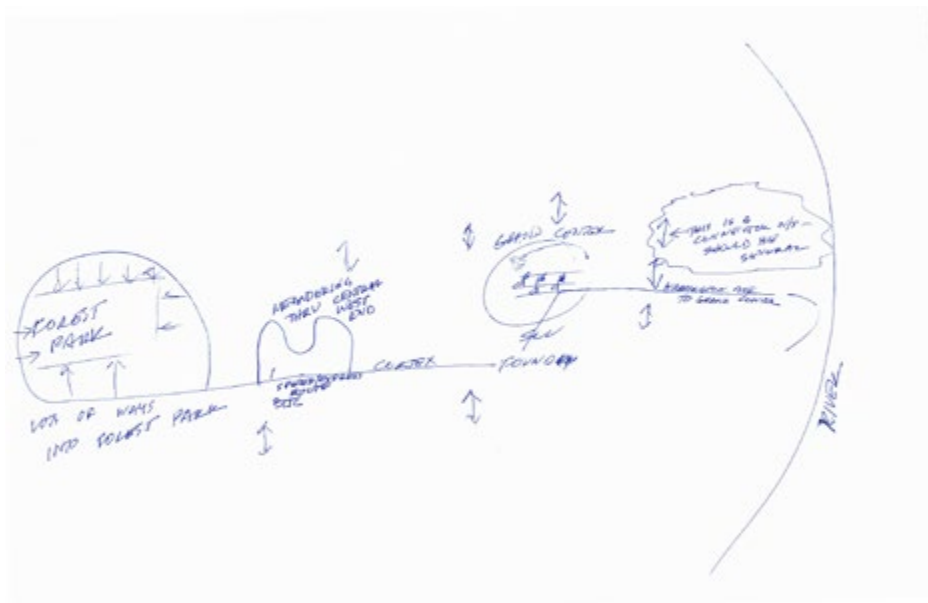


- Describe St. Louis in three words
Segregated, contentious, opportunity
- What makes St. Louis special?
Diversity (though not integrated) of cultures and backgrounds
Affordability. Opportunity to make change.
Green butter cake, T-ravs, and proud.
- Where do you live and what is the best thing about your neighborhood?
Tower Grove East - Diversity (rare in St. Louis)
- What is the most welcoming public place in St. Louis and what makes it a place for everyone?
The zoo - free & brings joy to people.
- What's your favorite thing to do outside in the City or in your neighborhood?
Is there something missing that you wish you had?
Walk my dog. ~~Infrastructure~~ more infrastructure to make walking safe (from traffic)

- Describe St. Louis in three words
A hidden gem
- What makes St. Louis special?
Great bones - architecture, neighborhoods & infrastructure
- Where do you live and what is the best thing about your neighborhood?
Skinker DeBorjere (near Delmar Loop). Great diversity of people & close to Loop, Forest Park & Metrolink
- What is the most welcoming public place in St. Louis and what makes it a place for everyone?
Cibola Garden - open, welcoming & a treat to all ages & types of
- What's your favorite thing to do outside in the City or in your neighborhood?
Is there something missing that you wish you had?
Walk the neighborhoods. Wish we had better connections between our great neighborhoods (e.g. crossing busy roads, etc.)

↑
NTS





THE CASE FOR DELMAR



MEMORANDUM

To:	Field Operations
From:	HR&A Advisors, Inc.
Date:	March 29, 2018
Re:	Choteau Greenway Design Competition – Redevelopment Considerations

Delmar Boulevard, with its rich African American history, proposed future MetroLink stops, and proximity to the downtown core and future NGA site, is primed for further investment and development. Change has come to many other areas in St. Louis, particularly along central corridors like Washington Avenue and neighborhoods where there has been investment in cultural districts and employment centers. Delmar Boulevard presents an opportunity to catalyze growth to the north of those sites that have historically received the bulk of development attention and recent increased investment.

Any kind of development along Delmar Boulevard will provide opportunity for the most economically challenged residents of St. Louis. The population along Delmar Boulevard has experienced a 15% decline in population over the past 17 years; current median household income is approximately \$20,000, just at the Federal Poverty Guideline for a family of three and well below the \$25,100 threshold for a family of four; and unemployment is 20%. The housing stock in this area is poorly maintained, with 45% of units built before 1979 and 23% vacant. Strengthening the neighborhoods north of Delmar by developing housing and amenities (including open space and retail) as well as local jobs will provide great quality of life benefits to the current population.

The team proposes a strategy for investment in bike/pedestrian path, recreation, transit, open space, and economic development along Delmar that is cognizant of both micro-market conditions and land ownership. The strategy, as detailed below, focuses on particular intersections as places to concentrate efforts as opportunities arise.

DELMAR & SPRING

With proximity to the VA Medical Center, this node could support senior housing and amenities such as ground floor gardens, retail, and food and beverage for hospital workers, visitors, and residents. In addition, with the Contemporary Art Museum of St. Louis located nearby, this node could be enhanced by artist studios, residences, and galleries (indoor and/or outdoor). Acknowledging that the federal government is both a likely-to-be-sympathetic but also slow-moving partner, the parcels south of the VA Medical Center, owned by the US Government, could be ideal sites for the senior housing component. The numerous sites further south, owned by Grand Center, Inc., the entity supporting the Grand Center Arts District, might be nearer term opportunities to host artist studios, residences, and galleries, as well as hospital amenities and related retail.

DELMAR & COMPTON

To complement existing residential developments, neighborhood parks and recreational facilities, and churches, this node could be further developed to include neighborhood amenities such as a grocery store, restaurants, and health and fitness uses. In addition, with the addition of recent residential development, this node could be supported by additional recreational facilities such as playscapes, basketball courts/facilities, and a skate park. The parcels owned by the Land Reutilization Authority (LRA), the governmental agency that receives title to all tax delinquent properties not sold at a Sheriff’s sale, and Kim’s Kids, the local daycare facility, would be ideal for the developments discussed.

DELMAR & JEFFERSON

To support and grow existing office and manufacturing tenants, development within this node should include additional office and fabrication space as well as ground floor retail to support area workers. Redevelopment should include renovation of existing buildings to ensure that the layouts and technology are sufficient to meet the needs of the modern-day workforce. This node appears to be the site of recent immigrant investment, which should be supported. With the abundance of vacant and undeveloped land, this node could also be host to flexible performance spaces to encourage the growth of the creative sector of St. Louis. The three large, vacant lots owned by the Department of Natural Resources are ideal locations for this type of pop-up redevelopment.

DELMAR & 14TH

With proximity to Washington Avenue and downtown St. Louis, this area could be strengthened by newly constructed creative space and contemporary multi-story housing. To further support existing and new tenants and users of this node, development should include additional ground floor food and beverage uses and potentially an indoor/outdoor food market and roofscape with urban agriculture. The numerous large surface parking lots owned by Star Park II LLC and Seven Brothers LLC are ideal locations for this development. Experience in other cities suggest that current ownership is likely either family-based parking operators who might be induced to partner to advance a redevelopment containing replacement parking or an assembler of land for redevelopment, suggesting existing, if nascent, market interest. The timing of redevelopment of these sites could emerge from conversations with current owners.

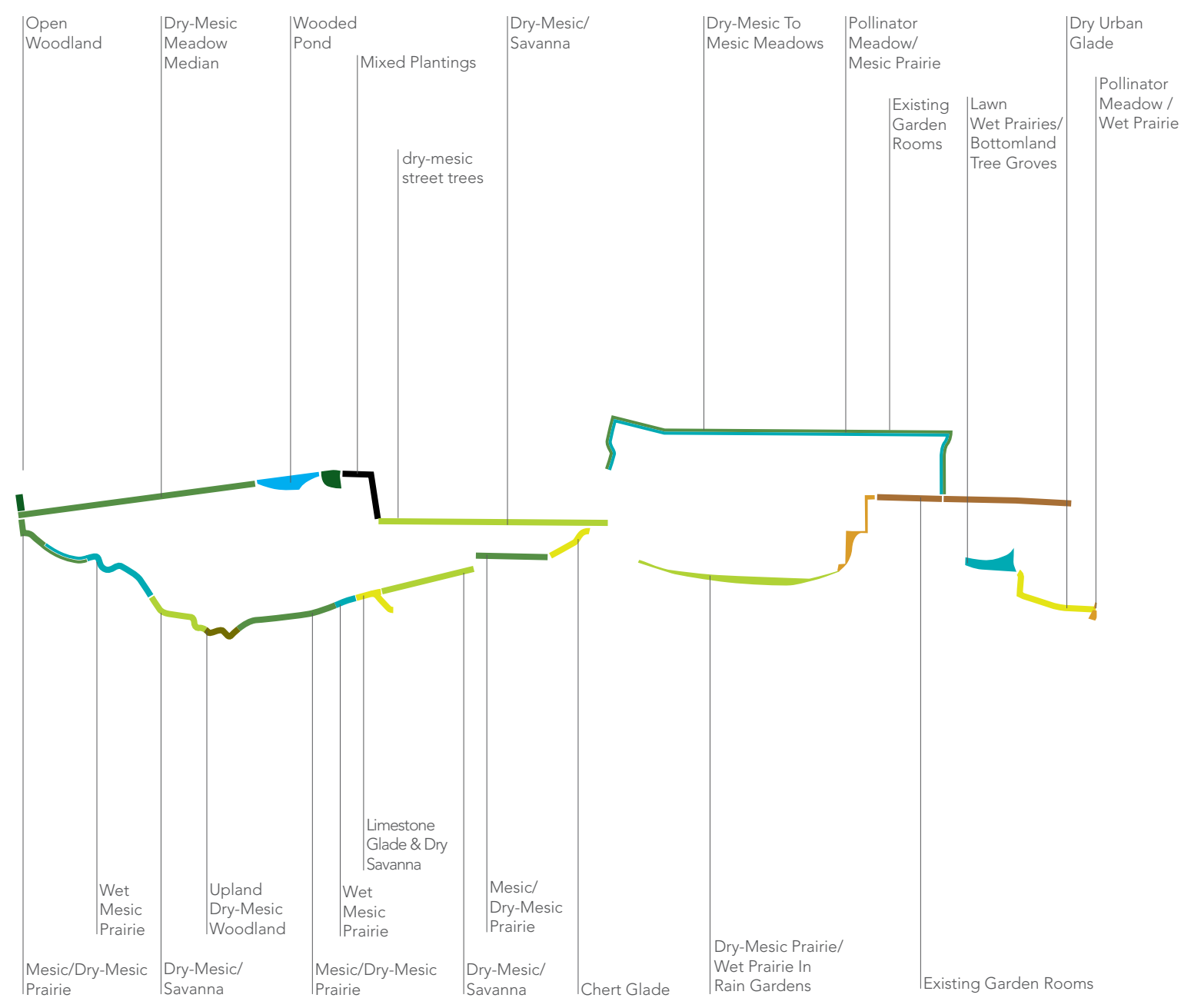
IMPLEMENTATION

With the goal of giving area residents a reason to stay in the community and take pride in their neighborhood, the focus should be to enhance the character of the area. Keeping this goal in mind, there are a variety of public incentives available to subsidize the cost of development and attract investment to the nodes, including:

- City and State tax incentives to businesses investing within Enhanced Enterprise Zones;
- Targeted Employment Areas for EB-5 projects that lower the required foreign investment threshold;
- New Market Tax Credits;
- Special sales taxes through Transportation Development Districts; and,
- Tax Increment Financing (TIF) and Payment in Lieu of Taxes (PILOTS).

PLANT COMMUNITIES


















































































































A restored prairie meadow is envisioned along the entire length of the Green Line and wherever possible; as planted buffers and medians, new gardens and parks and in large swaths along inaccessible lands adjacent to the rail tracks and highway. This new landscape provides enormous ecological benefit and links the entire braided greenway with the qualities of vivid color, seasonal change and a tactile sense of nature. Planting is based on indigenous Missouri plant communities, transitioning from upland dry-mesic forest and dry-mesic prairie to wet-mesic prairie and bottomland forest, moving from Forest Park to the Mississippi River.



Chouteau Greenway Braid
Plant Communities

PLANTING MATRIX

DTLS

PLANTING MATRIX		DTLS		SELECT REGIONAL SPECIES																							
DRY URBAN GLADE		Andropogon gerardii			Bouteloua-curtipendula**			Schizachyrium scoparium*			Sporobolus heterolepis			Calamintha arkansana*			Echinacea paradoxa*			Oenothera macrocarpa*			Symphyotrichum sericeum**			Rudbeckia missouriensis	
		Schizachyrium scoparium*			Bouteloua-curtipendula**			Manfreda virginica*			Asclepias verticillata*			Opuntia compressa*			Rudbeckia missouriensis			Erysimum capitatum			Glandularia canadensis			Sedum pilchellum*	
CHERT/ LIMESTONE GLADE		Schizachyrium scoparium*			Bouteloua-curtipendula**			Manfreda virginica*			Asclepias verticillata*			Opuntia compressa*			Rudbeckia missouriensis			Erysimum capitatum			Glandularia canadensis			Sedum pilchellum*	
		Andropogon gerardii			Sorghastrum nutans**			Sporobolus heterolepis			Silphium lancinatum*			Ratibida pinnata			Silphium perfoliatum			Veronicastrum virginianum*			Baptisia bracteata*			Phlox pillosa*	
LOW-PROFILE MEADOW - DRY		Andropogon gerardii			Sorghastrum nutans**			Sporobolus heterolepis			Silphium lancinatum*			Ratibida pinnata			Silphium perfoliatum			Veronicastrum virginianum*			Baptisia bracteata*			Phlox pillosa*	
		Hydrangea arborescens			Monarda fistulosa			Pycnanthemum tenuifolium			Lobelia siphilitica*			Asclepias incarnata			Symphyotrichum oblongifolium*			Penstemon digitalis*			Solidago drummondii*			Parthenium integrifolium*	
POLLINATOR MEADOW - MESIC		Hydrangea arborescens			Monarda fistulosa			Pycnanthemum tenuifolium			Lobelia siphilitica*			Asclepias incarnata			Symphyotrichum oblongifolium*			Penstemon digitalis*			Solidago drummondii*			Parthenium integrifolium*	
		Andropogon gerardii			Panicum Northwinds			Amsonia illustris			Eryngium yuccifolium*			Physostegia virginiana*			Liatris pycnostachya			Helenium flexuosum*			Penstemon digitalis*			Carex bicknellii**	
LOW-PROFILE PRAIRIE - WET		Andropogon gerardii			Panicum Northwinds			Amsonia illustris			Eryngium yuccifolium*			Physostegia virginiana*			Liatris pycnostachya			Helenium flexuosum*			Penstemon digitalis*			Carex bicknellii**	
		Sorghastrum nutans**			Schizachyrium scoparium*			Sporobolus heterolepis			Silphium lancinatum*			Amorpha canescens**			Liatris spicata			Helianthus mollis*			Echinacea simulata			Parthenium hispidum*	
LOW-PROFILE PRAIRIE - DRY		Sorghastrum nutans**			Schizachyrium scoparium*			Sporobolus heterolepis			Silphium lancinatum*			Amorpha canescens**			Liatris spicata			Helianthus mollis*			Echinacea simulata			Parthenium hispidum*	
		Sorghastrum nutans**			Schizachyrium scoparium*			Sporobolus heterolepis			Silphium lancinatum*			Amorpha canescens**			Liatris spicata			Helianthus mollis*			Echinacea simulata			Parthenium hispidum*	

DRY MESIC
SAVANNA



Quercus macrocarpa *



Quercus stellata *



Schizachurium scoparium *



Andropogon gerardii



Cornus drummondii *



Crataegus spp. *



Prunus serotina *



Silphium lanciniatum *



Amorpha canescens **

CHERT SAVANNA



Quercus marilandica *



Juniperus virginiana



Rhamnus caroliniana *



Cotinus obovatus *



Sorghastrum nutans **



Schizachurium scoparium *



Andropogon gerardii



Bouteloua curtipendula **



Helianthus mollis *

BOTTOMLAND
WOODLAND



Quercus bicolor *



Quercus palustris *



Carpinus caroliniana *



Cornus racemosa *



Carya laciniosa *



Cinna arundinacea *



Hymenocallis occidentalis *

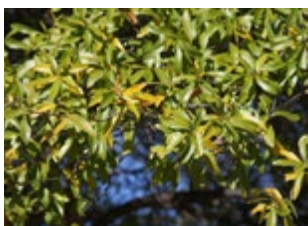


Onoclea sensibilis *

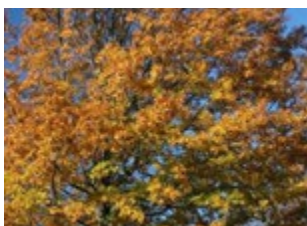


Impatiens capensis *

OPEN WOODLAND



Quercus phellos *



Quercus palustris *



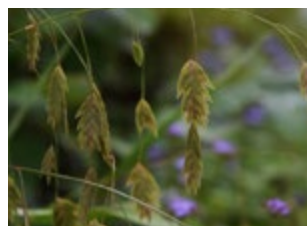
Quercus lyrata *



Quercus bicolor *



Quercus stellata *



Chasmanthium latifolia



Cinna arundinacea *



Juncus tenuis *

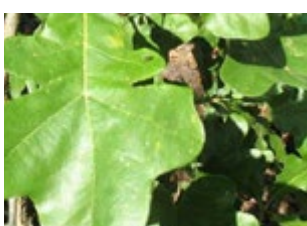


Carex vulpinoidea

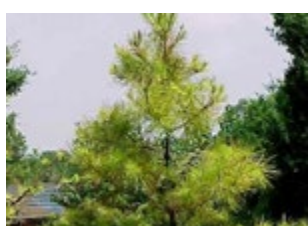
UPLAND DRY
MESIC WOODLAND



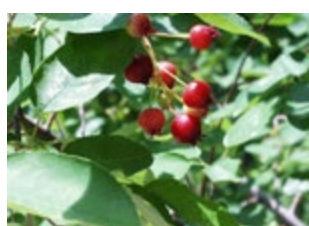
Nyssa sylvatica *



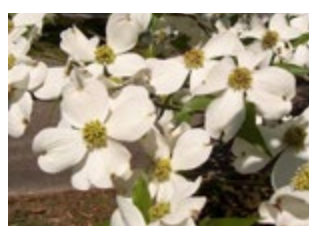
Quercus stellata *



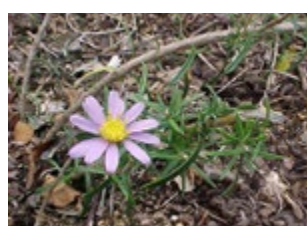
Pinus echinata *



Amelanchier arborea *



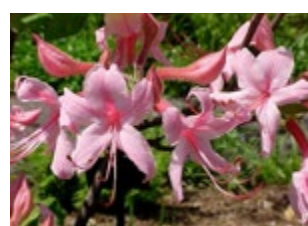
Cornus florida *



Lonactis linariifolius *



Pteridium aquilinum *



Rhododendron prinophyllum *

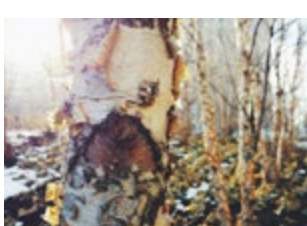


Tradescantia virginiana

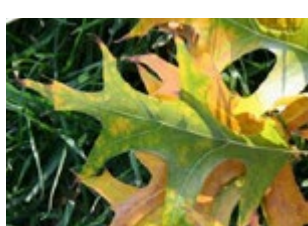
WOODED POND



Taxodium distichum



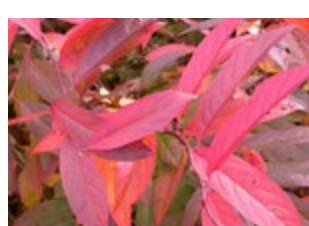
Betula nigra



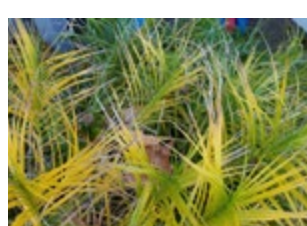
Quercus palustris *



Ilex decidua *



itea virginica *



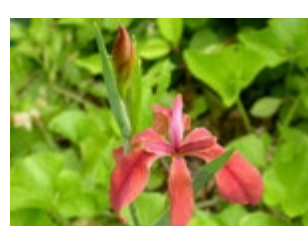
Carex muskingumensis



Carex grayii *



Saururus cernuus *



Iris fulva *

WETLAND



Pyncanthemum tenuifolium



Rudbeckia fulgida



Castilleja coccinea **



Silphium terebinthinaceum *



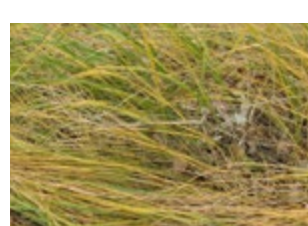
Helianthus mollis *



Silphium integrifolium *



Sorghastrum nutans **



Spartina pectinata *



Veronicastrum virginianum *

TRAFFIC & INTERSECTIONS: ROAD DIET ANALYSIS CBB / WSP

The armature for the Chouteau Greenway Braid connects a large portion of our beloved downtown; it thus overlaps with a lot of other studies and traffic analyses that has been completed in recent years. Traffic data from these studies, the regional Travel Demand Model from East-West Gateway, and current March 2018 counts completed by the team were used for this high level analysis to help determine where the greenway would work within existing roadway geometrics.

Our team used traffic data from the Washington University Medical Campus/BJC traffic study, counts from the 2012 Washington University Transportation Plan, Route 100 signal optimization study, Forest Park Connectivity Study, Northside Southside Transit Study, and the Downtown St. Louis Mobility Study. In areas where current data was not available, the team went out and conducted peak hour traffic counts in March 2018. The regional travel demand model was used to supplement the data with high level annual daily traffic volumes for conceptual analyses on roadways with additional capacity.

Our team took the armature, and existing roadway capacity, and compared traffic volumes from the identified sources. We used best practices from the Federal Highway Administration, Institute

of Transportation Engineer's (ITE) Traffic Engineering Handbook and the NACTO Urban Streets Design Manual. These guidelines suggest capacity thresholds for roadways compared to the number of lanes and daily traffic volumes. The table at right shows the conceptual summary of the roadway segments on the green line, pink line, and the north and south connectors compared to the number of lanes and existing annual daily traffic. As can be seen in this table, all the roadways identified have capacity for the proposed greenway.



The following is a table that provides a segment-based assessment of the armature to identify pertinent characteristics for the roadway that lend themselves toward a road diet

Road	between	between	Existing No of Lanes	Average Annual Daily Traffic	parking	median	Proposed No of Lanes	Suitable for road diet
Green Line								
Lindell	Skinker	Kingshighway	4	15,000	yes	no	3	yes
Lindell	Kingshighway	Euclid	5	17,000	yes	no	4	yes
Euclid	Lindell	Kingshighway	2	12,000	yes	no	0	yes
FPP	Euclid	Spring	6	30,000	yes	yes	4	yes
20th Street	Clark	Market	2	7,000	no	no	2	na
Market	20th	Arch	6	10,000	yes	no	5	yes
14th	Market	Spruce	5	20,000	no	no	4	with ROW
Spruce	14th	Tucker	2	7,000	yes	no	2	yes
Tucker	Market	Chouteau	6	14,000	yes	no	4 or 5	yes
Social Line								
Clayton	Kingshighway	Boyle	4	7,000	no	no	3	yes
Spring	Forest Park Parkw	Laclede	2	5,000	yes	no	2	yes
Spring	Lindell	Delmar	5	5,000	yes	no	2 or 3	yes
Market	20th	Arch	6	10,000	yes	no	5	yes
Delmar	Spring	Compton	4	5,000	yes	no	2	yes
Delmar	Compton	14th	5	4,000	yes	no	2 or 3	yes
14th	Delmar	Market	5	15,000	yes	no	3 or 4	yes
North South Connections								
Tucker	Chouteau	Park	4	10,000	yes	yes	4	yes

TRAFFIC & INTERSECTIONS: EUCLID AVENUE

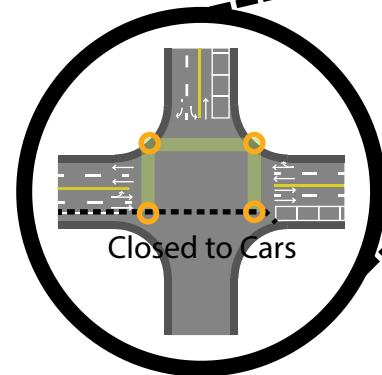
We utilized the traffic signal modeling software, Synchro, to evaluate the traffic operational output. Current signal timin was utilized in the existing conditions scenario.Using the 2018 peak hour counts conducted by our team in March, the PM peak hour was determined to have more traffic and pedestrian conflicts. The following table shows the improvement for operations at Euclid and Forest Park Parkway, with the number of pedestrian/vehicle conflict movements tallied for each scenario:

PM	Overall LOS	Overall Delay	EB Green Time(s)	WB Green Time(s)	Combined Time for Side Street(s)	No Vehicle and Pedestrian Conflict Movements
Existing	C	22.9	55	61	65	8
Scenario 1	B	10.4	70	91	50	4
Scenario 2	A	9	58	78	25*	0
	*Includes 37 seconds for a pedestrian scramble					

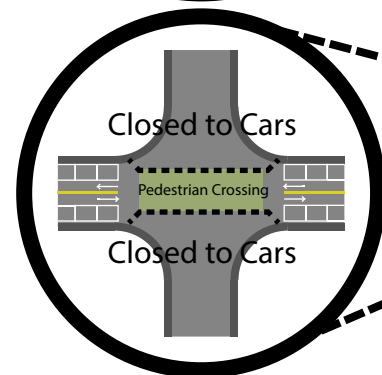
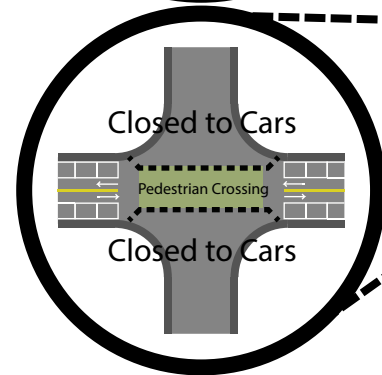
In addition the queues and vehicle stops per hour will decrease due to this more efficient timing, while still providing safer movements for pedestrians and bicyclists.

TRAFFIC & INTERSECTIONS EUCLID AVENUE+

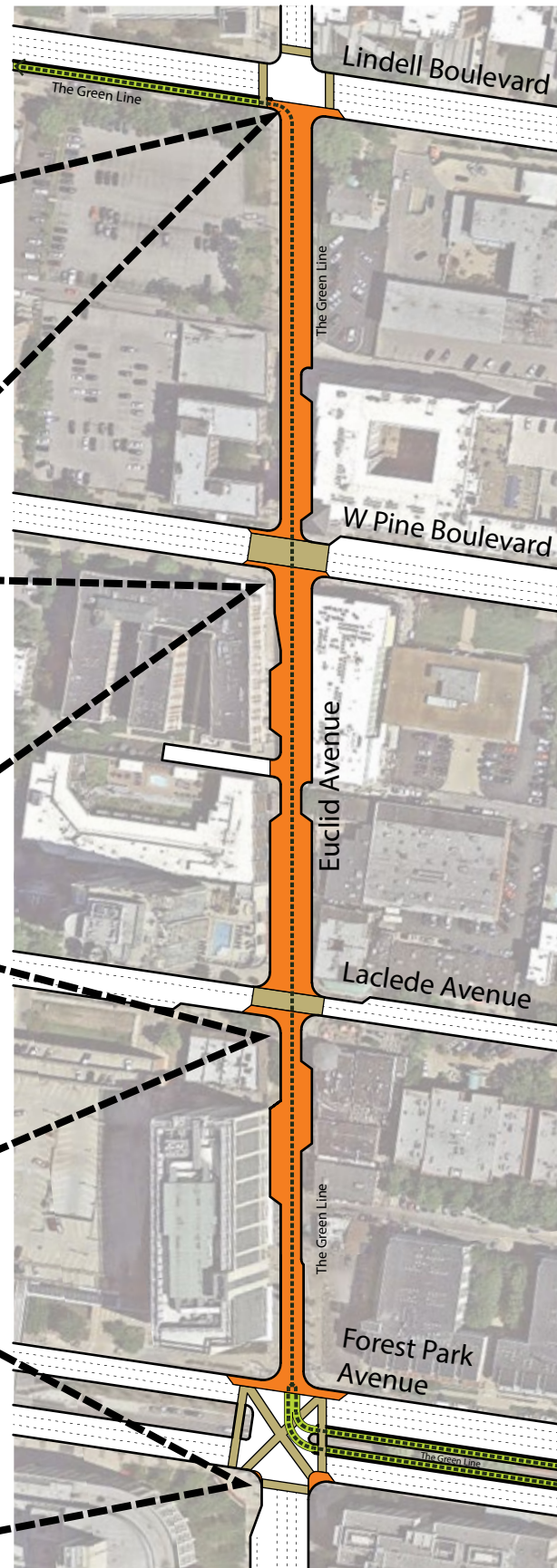
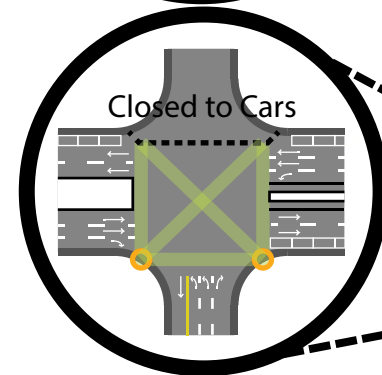
Existing No. Phases: min 6
Proposed No. Phases: min 4



Existing Ped. N/S Crossing
Distance: 50'
Proposed Ped. N/S Crossing
Distance: min 24'

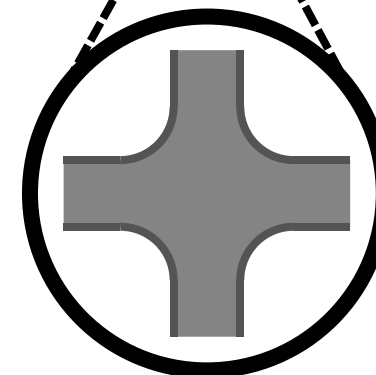
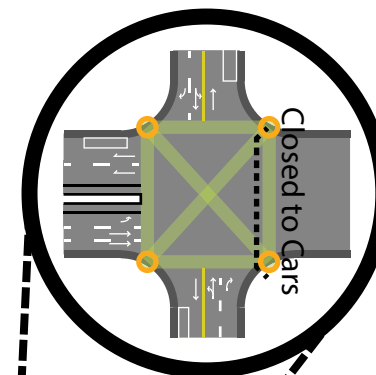


Existing LOS AM(PM): C (C)
Proposed LOS AM(PM):
Scenario 1: B (B)
Scenario 2: B (A)

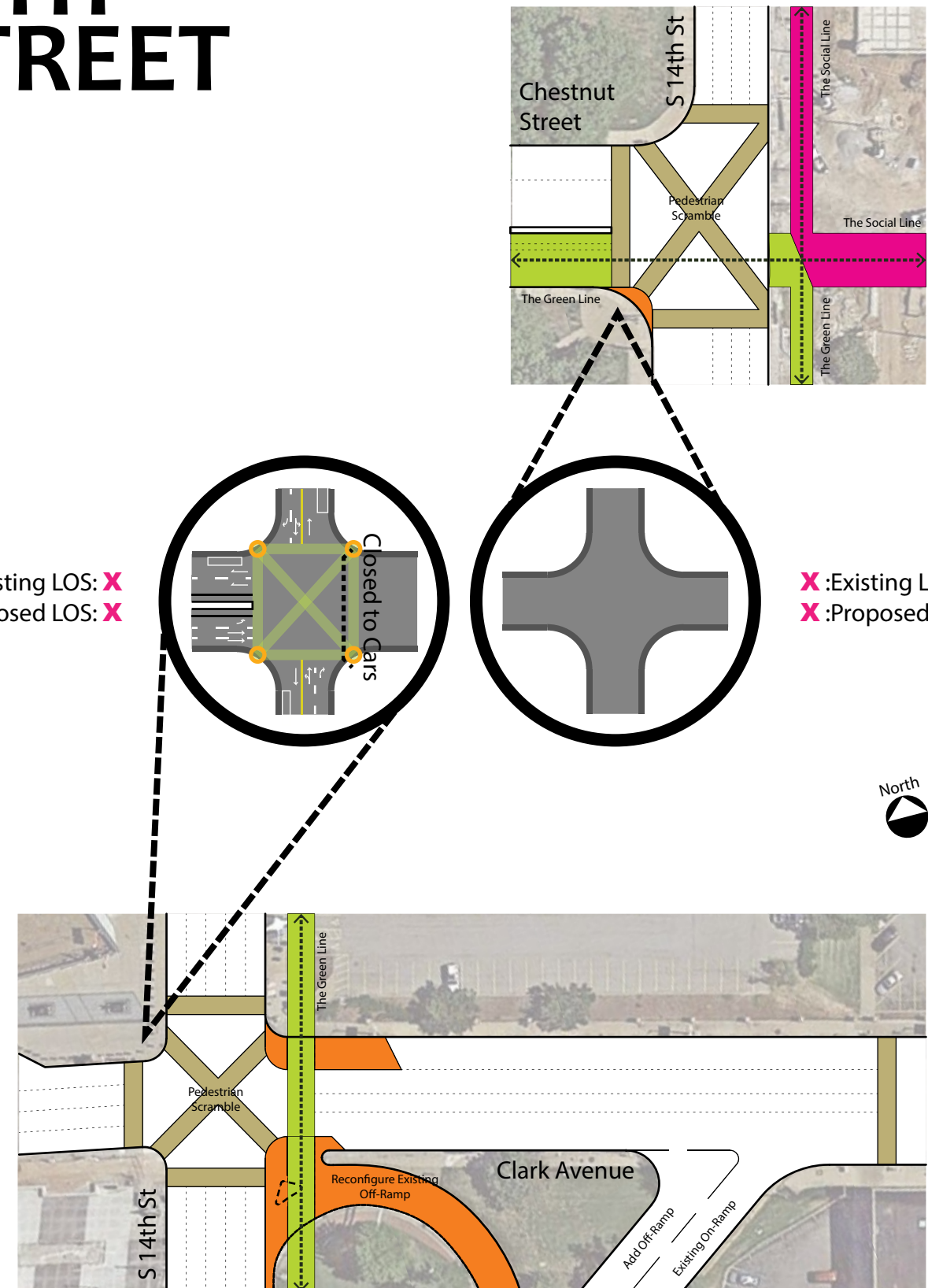


TRAFFIC & INTERSECTIONS 14TH STREET

Existing LOS: X
Proposed LOS: X



X:Existing LOS
X:Proposed LOS

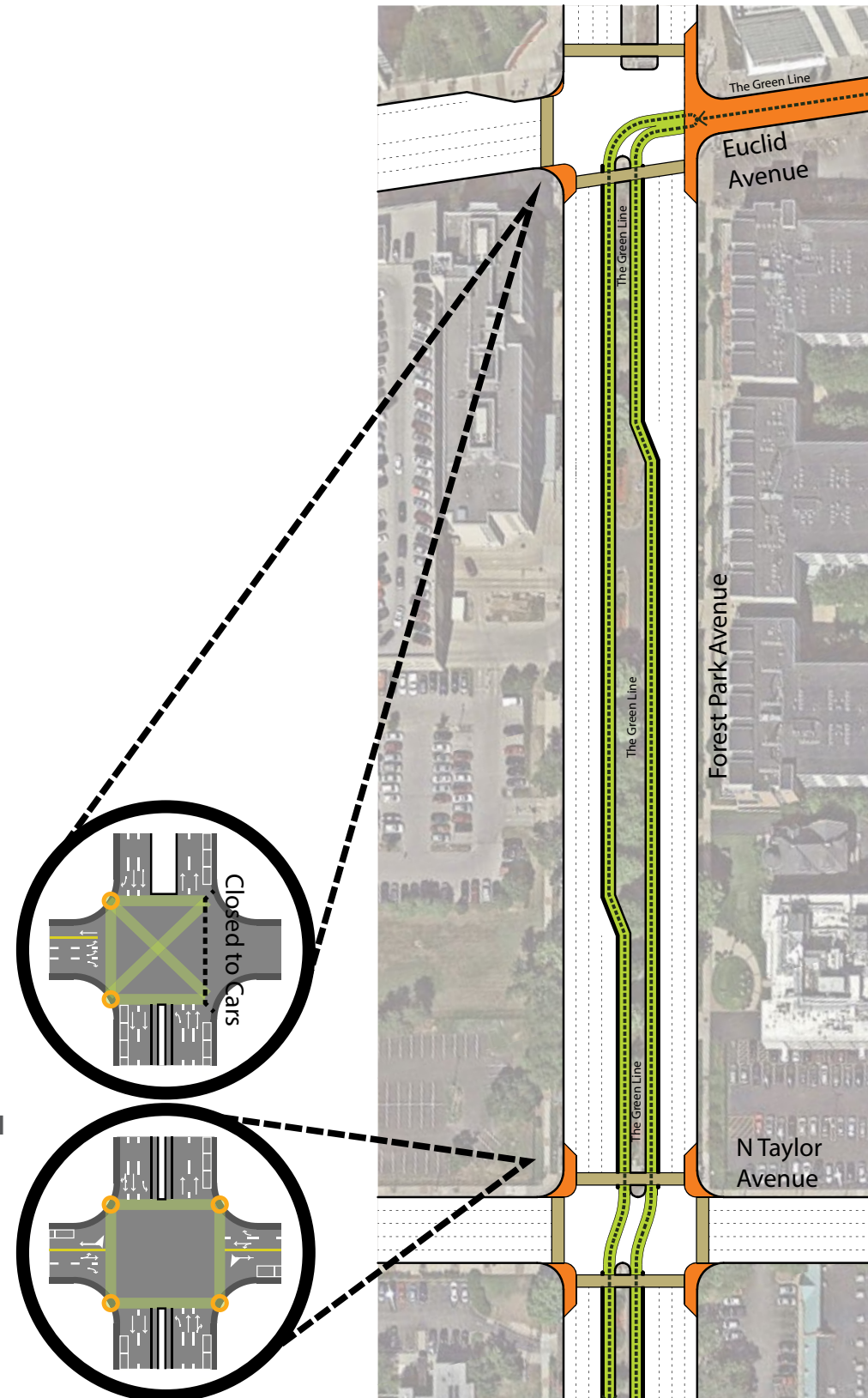


TRAFFIC & INTERSECTIONS: FOREST PARK AVE.

Putting the greenway down the center of Forest Park Parkway provides a unique experience that maximizes the beautiful trees and existing median. The excess capacity on the roadway meshes well with the concept. Using the March 2018 traffic counts and Synchro, we evaluated the signal operations at Euclid and Taylor to ensure the roadway would operate efficiently. Not only does the operations look favorable, but also the crossing distances for pedestrians is shorter, the lane reduction should show cars, and the signal timing can be more efficiently utilized for these changes.

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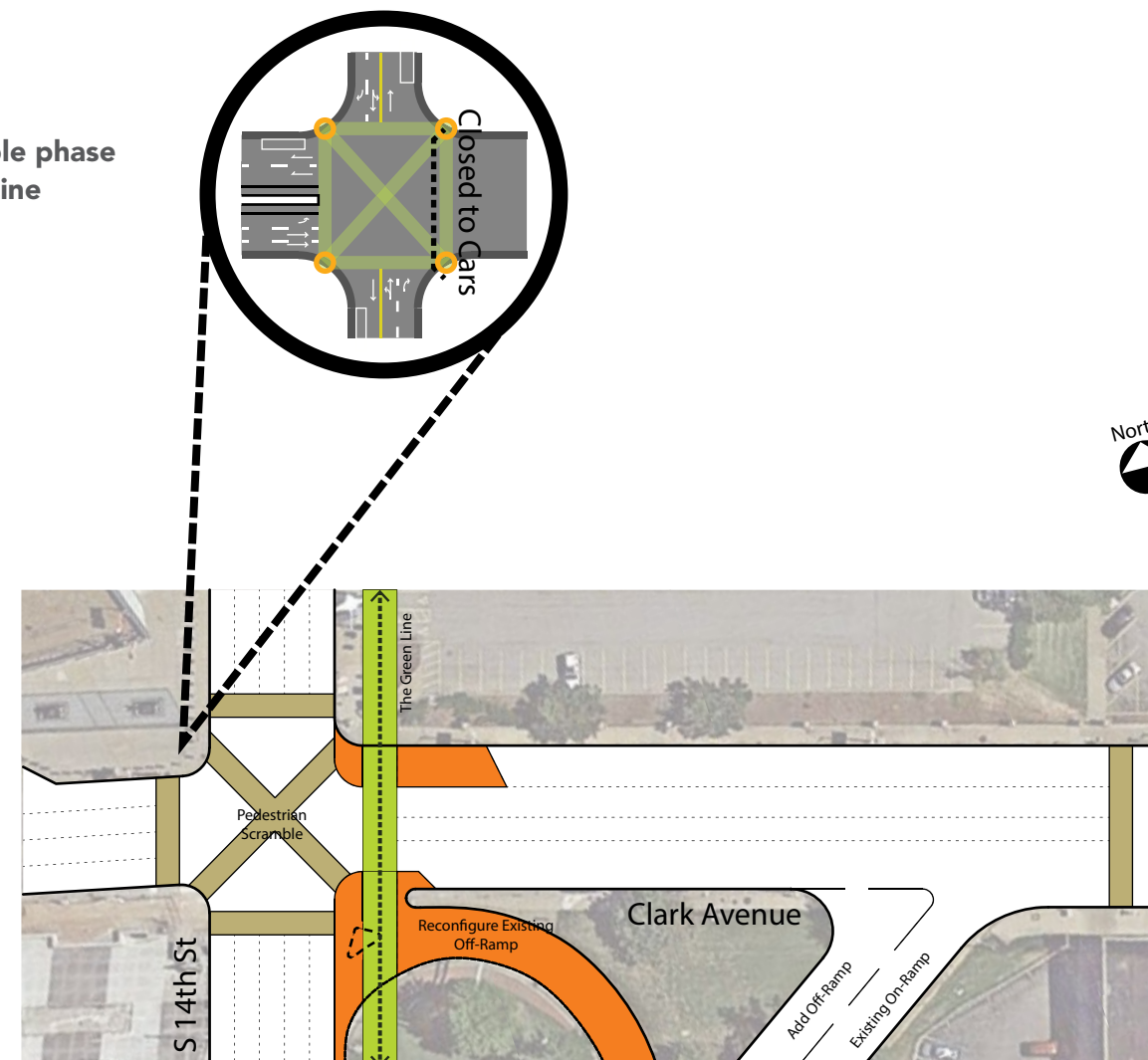
Existing LOS AM (PM): C (D)
Proposed LOS AM (PM): C (D)
(Reduction of vehicle lanes and
pedestrian crossing distance)



TRAFFIC & INTERSECTIONS: 14TH. STREET

We see at least two opportunities to enhance pedestrian and cyclist movement through the urban intersections with a pedestrian scramble. These areas have other geometric complexities that this scramble will help improve safety. Pedestrian scramble phase can be for green line movement also.

**Pedestrian Scramble phase
can be for Green Line
movement too**



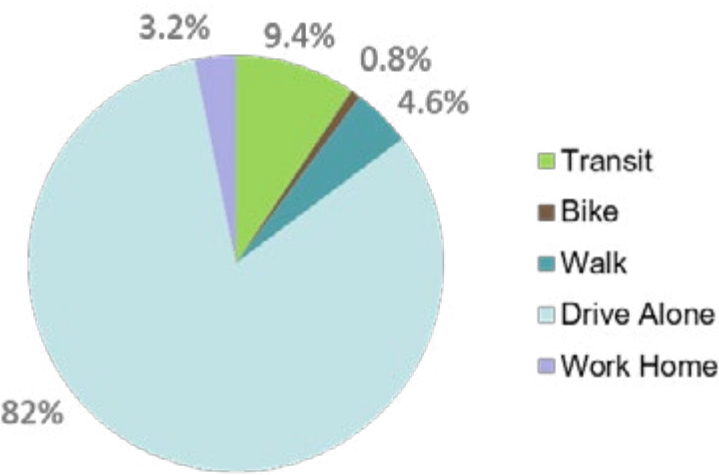
TRANSIT TRENDS MIC

Over the previous decade, in developed countries around the world, the broad trend in personal mobility has been a shift away from private car ownership, towards the use of alternative modes such as transit, bikes, and shared mobility. This is due to a range of economic and cultural factors, and cities are capitalizing on this trend by investing in infrastructure to support these alternative modes. With the emergence of autonomous vehicles (AVs) it seems highly likely that this trend will continue, and may even accelerate due to the high cost of the technology, and the increasing densification of the urban environment.

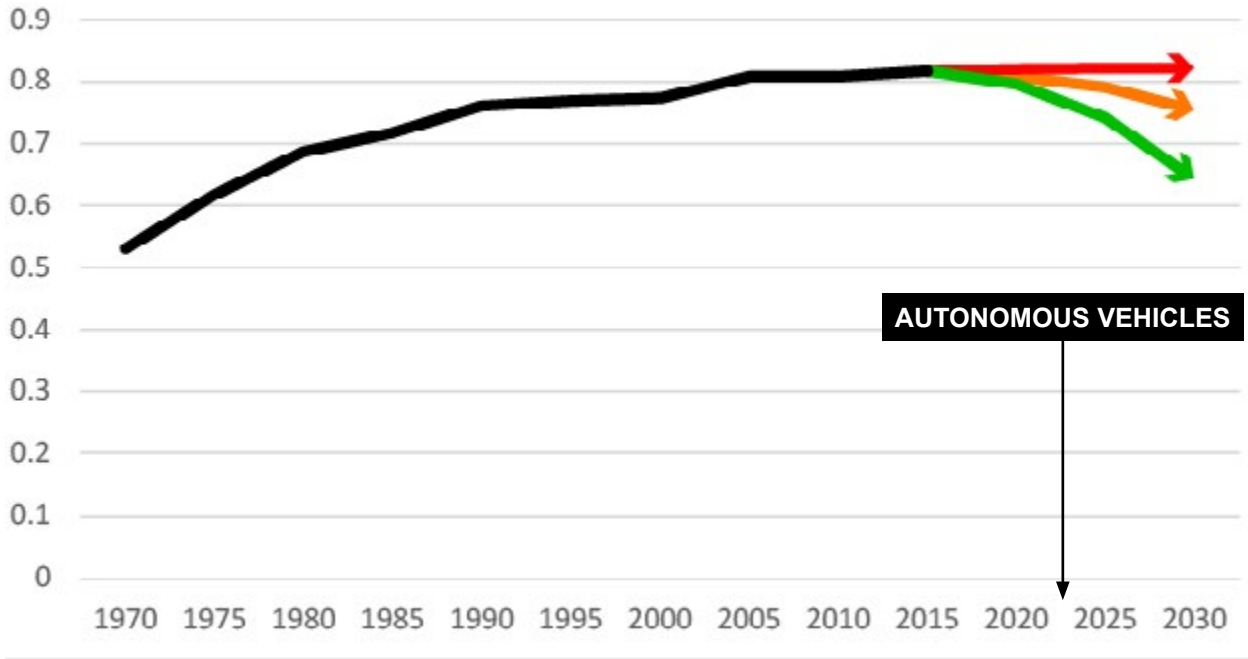
St. Louis appears to be following this trend, and with the introduction of the planned infrastructure like North-South MetroLink Corridor and the Chouteau Greenway, St. Louis is likely to become a multi-modal metropolis. In multi-modal cities, it is more attractive for citizens to use public transit, bicycles, or ridesharing services compared to the demanding requirements of private car ownership such as paying for parking, insurance, fuel, and the vehicle itself, which remains unused for 95% of the day.

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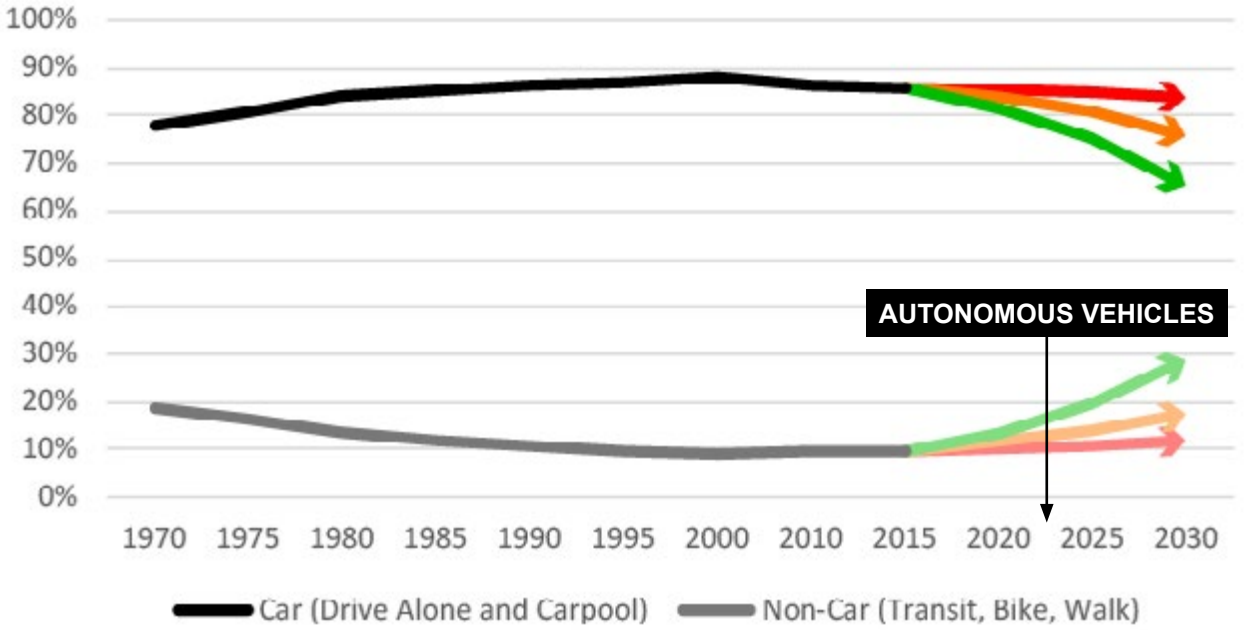
St. Louis Modal Split 2012

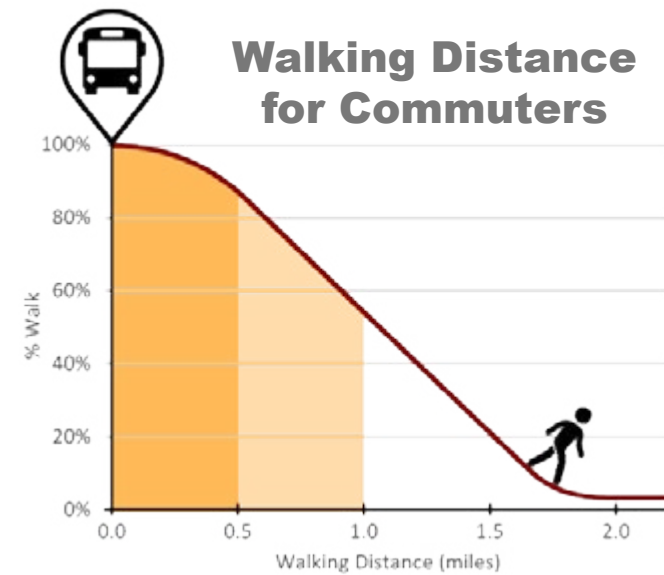


U.S. Passenger Cars per Person

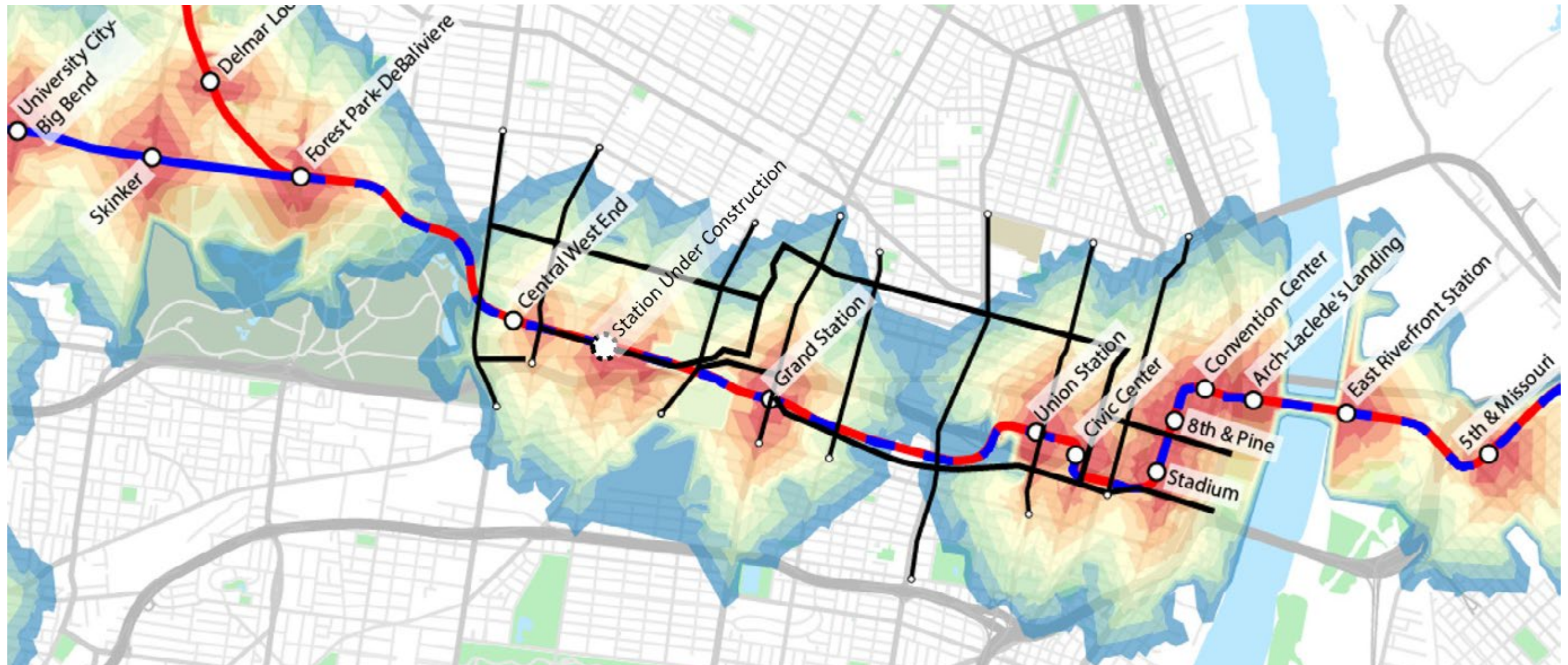


U.S. Commuter Modal Share



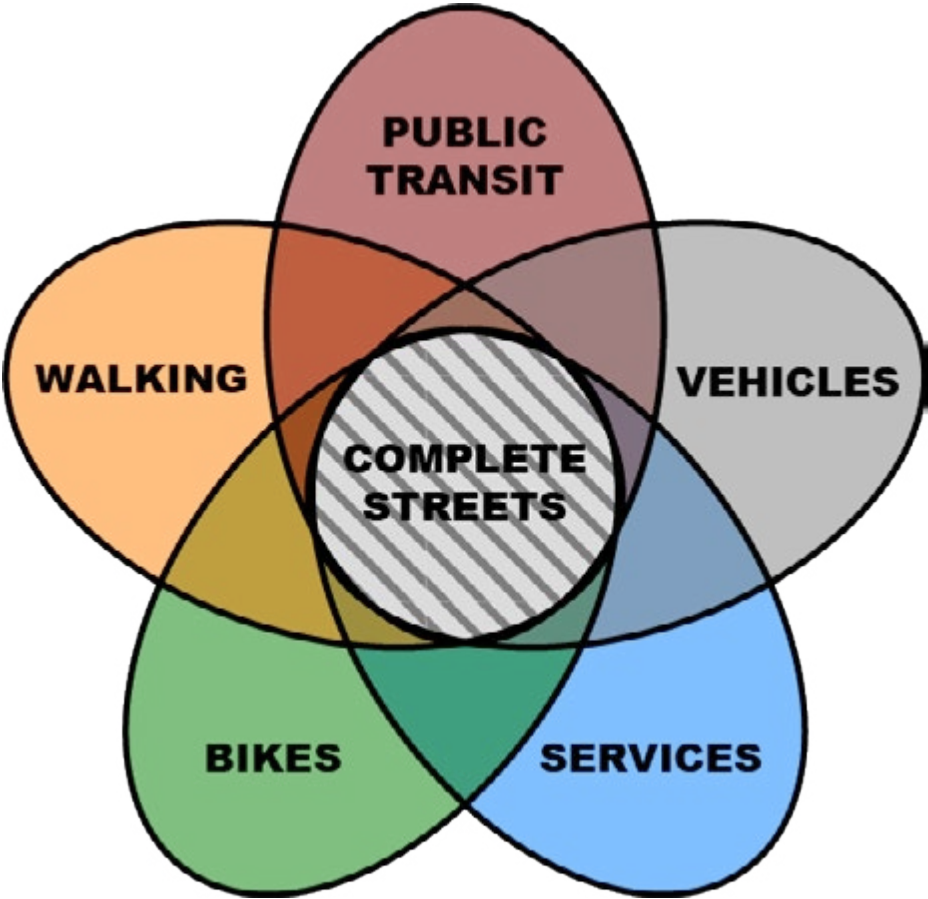
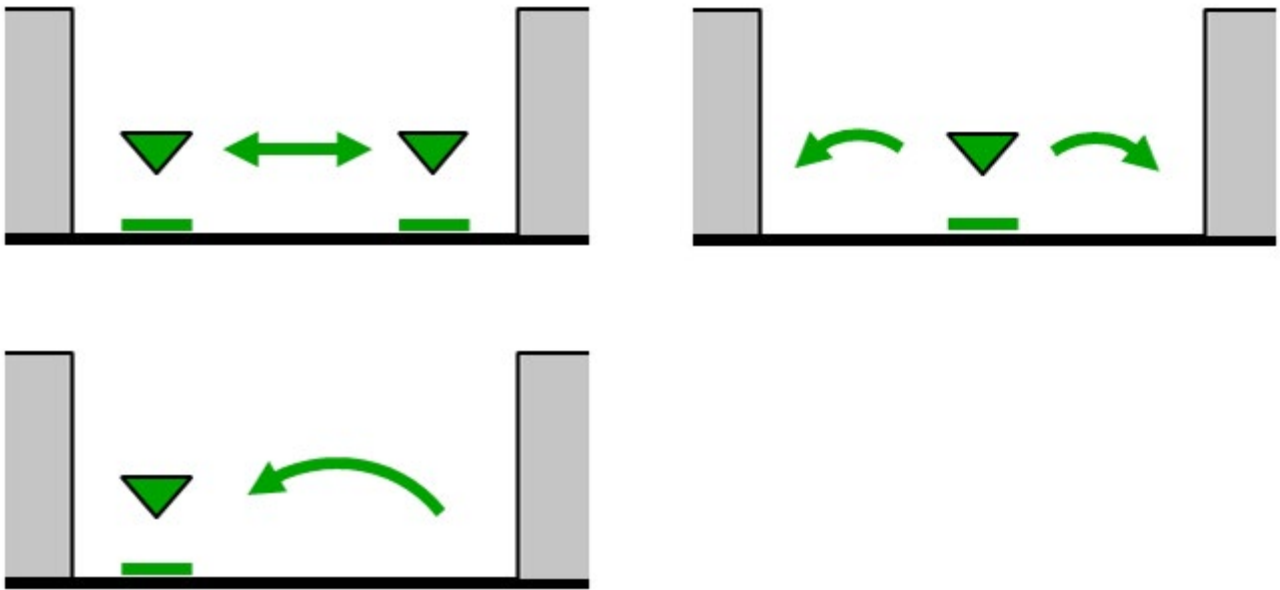


Public transit is an especially attractive option when it is easily accessible by foot. Studies have shown that 80% of commuters are willing to walk half a mile to reach the nearest mass transit stop (about 12 minutes), although that figure decreases sharply after that distance. The travel time analysis below illustrates the potential of the MetroLink Red and Blue lines to capture riders, and reveals that there are two reasonable locations for new stations to be added (one between Forest Park-DeBaliviere and Central West End, and the other between Grand and Union stations). As a general rule, when transit is more attractive there is growth in other virtuous modes (e.g. bicycles, walking, and shared mobility) because they are effective means for passengers to travel the first and last miles of their journey to and from transit.



THE POWER OF MULTI-MODAL BOULEVARDS

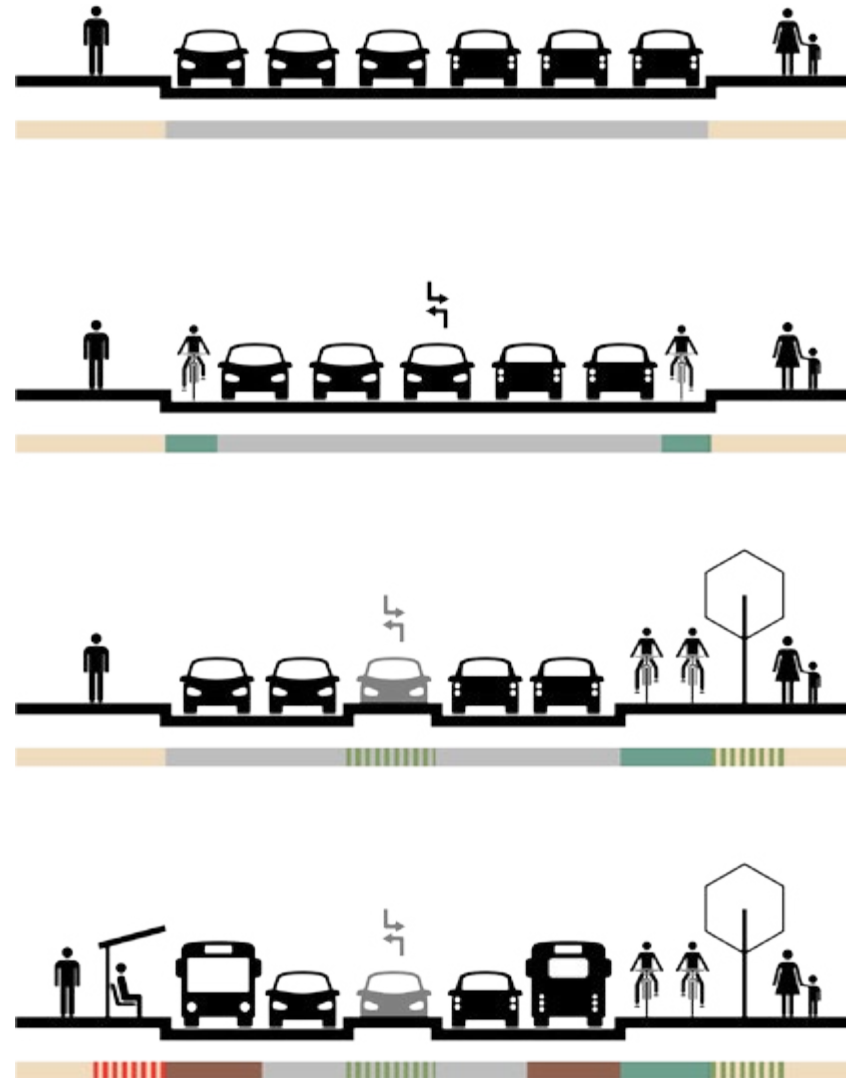
In the current car-centric transportation landscape of St. Louis pedestrians are often relegated to narrow sidewalks, and forced to cede the right-of-way to vehicles. However, with continued investment in urban infrastructure for other categories of users (e.g. cyclists, transit, pedestrians, and services), streets will become more dynamic and active, thereby pursuing the notion of turning urban boulevards into complete streets. It is equally important to capture space that currently belongs to cars, and redistribute that space among the other user groups in the form of bike lanes, wider sidewalks, transit priority lanes, and flexible urban space. Investments in transit are particularly effective at moving more people in fewer vehicles, releasing valuable urban space from the paved dominion of cars.



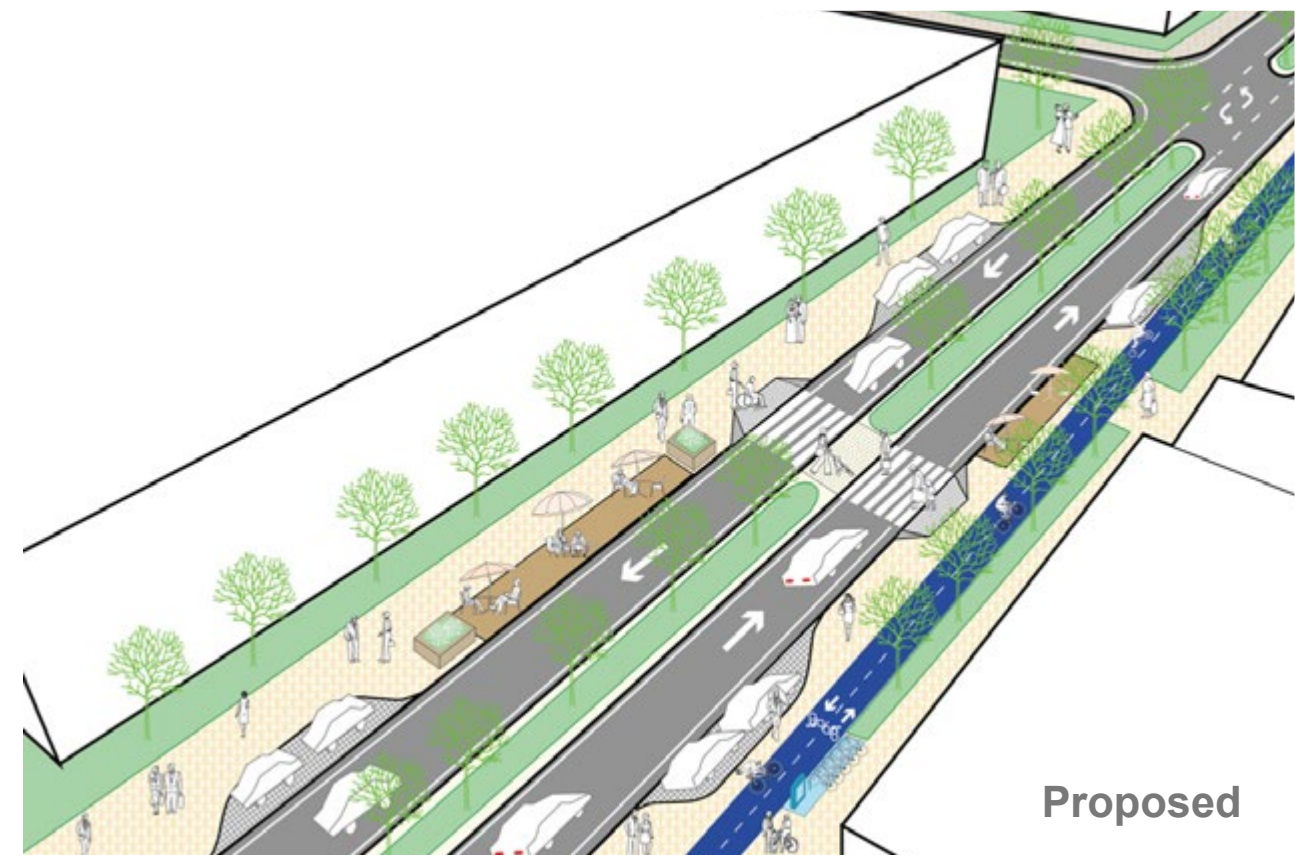
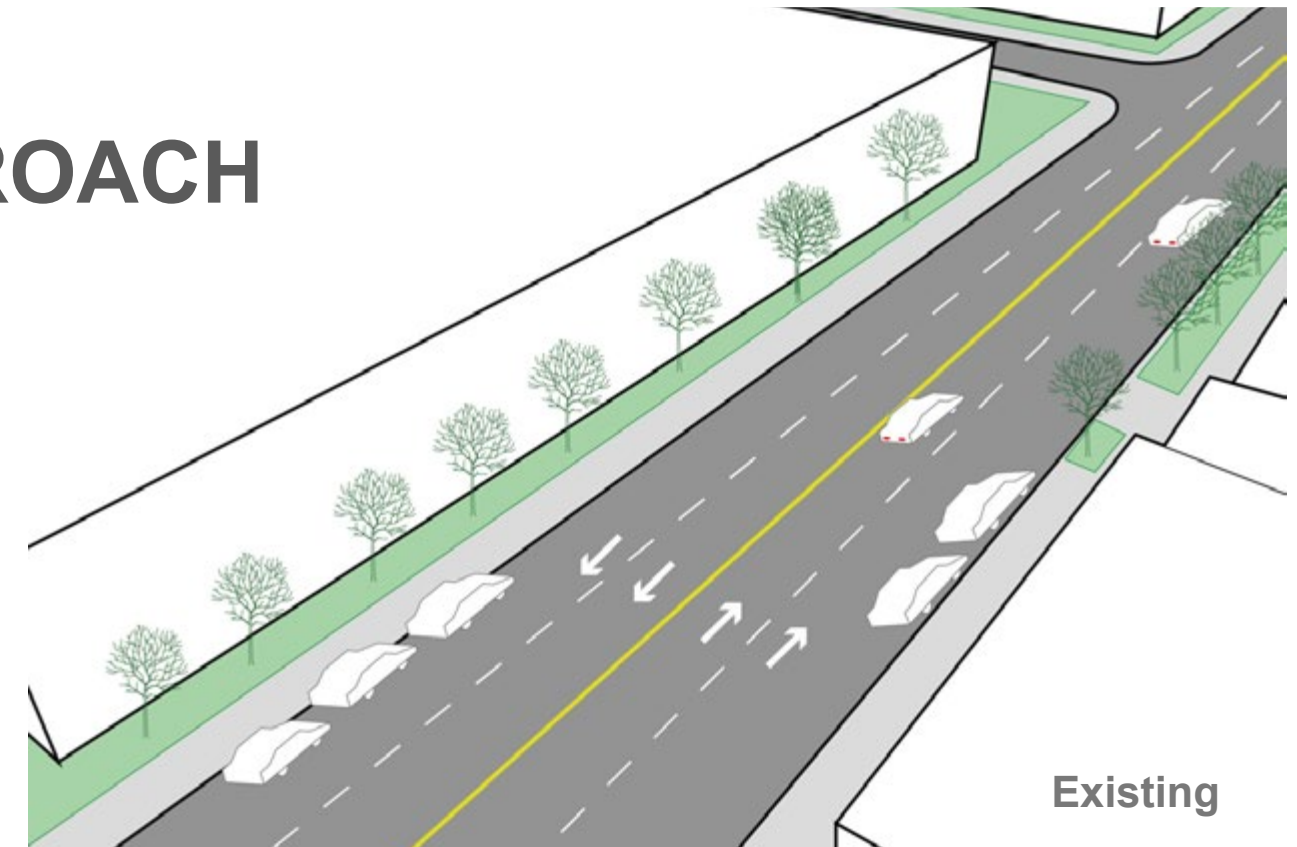
Vibrant urban spaces such as multi-modal boulevards emphasize sustainable and economically productive pedestrian movement and activities over other modes of such as cars. A key feature to achieve this goal is to make intersections permeable, and facilitate interaction between the two sides of a street.

For the Chouteau Greenway, that means creating frequent opportunities for pedestrians and cyclists to access the greenway in every configuration of the street section. Good strategies to increase pedestrian permeability include conservative moves like reducing the crossing distance with medians, only making pedestrians cross one direction of traffic at a time, using signals with short cycles, and also more radical approaches such as replacing signalized junctions with roundabouts, replacing vehicular streets with shared surfaces, and installing raised intersections.

DELMAR BOULEVARD APPROACH

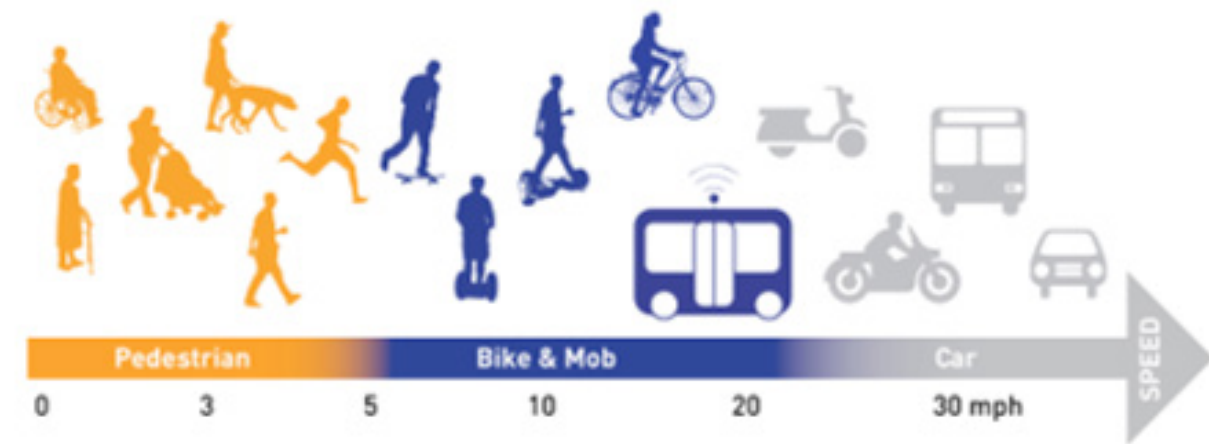


Evolution from Car-Centric Streets to People-Centric Streets



INNOVATIVE TECHNOLOGIES

The emergence of driverless technologies is bound to make our streets safer, more equitable, and more sustainable. Encouraging shared mobility will reduce dependence on private cars, and make owning a car less attractive for a broad swathe of citizens. One class of AV that is particularly promising is Group Rapid Transit (GRT) vehicles that are well suited to urban environments, and able to transport approximately 12-14 people at a time in one of three modes of operation. A major projected benefit of AVs is to move more people in fewer vehicles, thereby facilitating the redistribution of public space.



Transit Mode
The vehicle follows a fixed route with a set timetable. Passengers board and alight at defined transit stops.



Shuttle Mode
Instead of following a fixed route the vehicle picks up passengers from defined transit stops when a ride is requested by a user-to-vehicle communication system.



Taxi Mode
The vehicle operates without any predefined constraints. Rides may be requested by users on a smartphone app, and are distributed according to ridesharing algorithms.

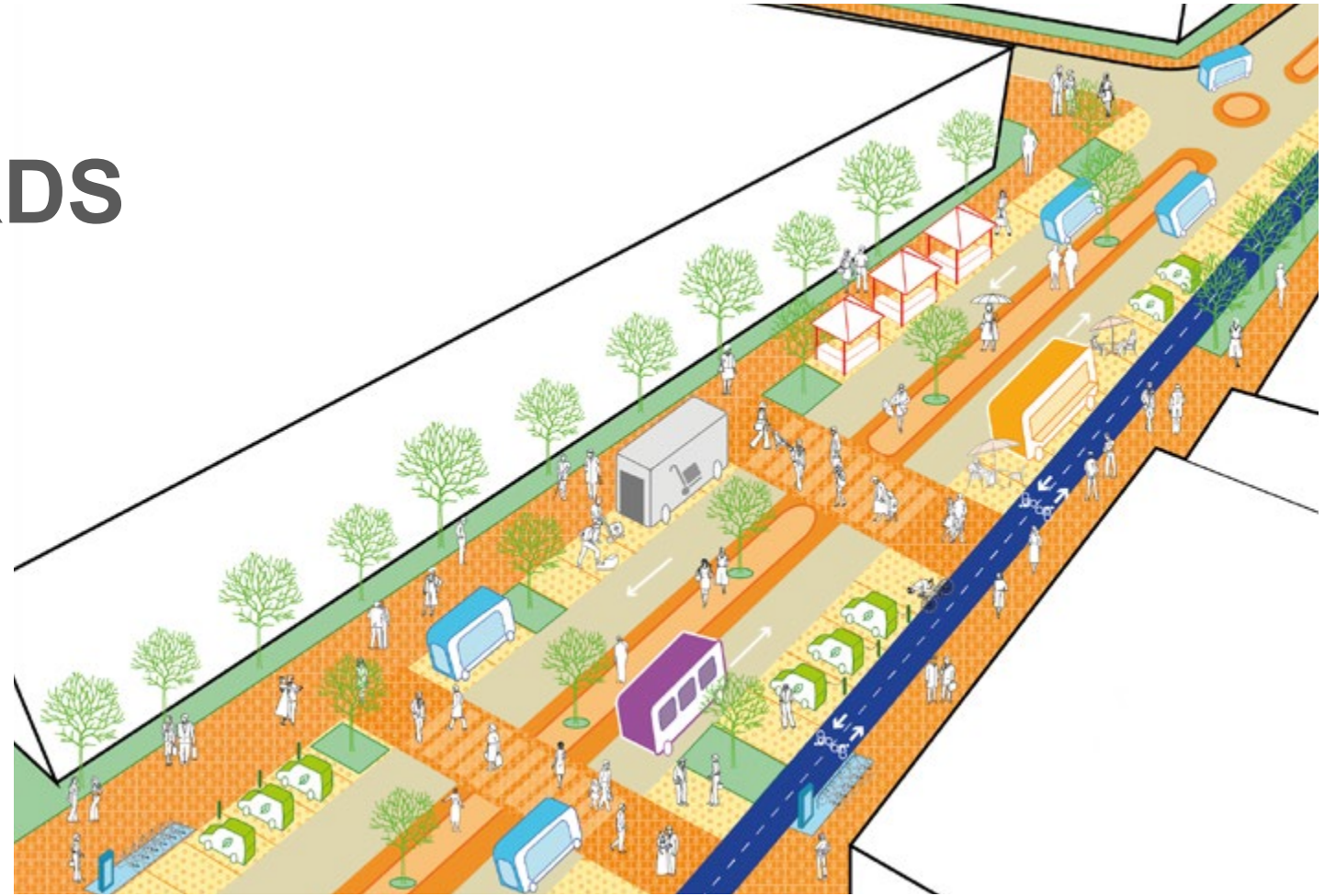
EasyMile EZ10 Specification
Capacity: 12 persons (6 seating and 6 standing)
Battery: Lithium-ion (LiFePO4) 14 hours duration
Cruising Speed: 20 km/h
Length: 3.9 m (154.6')
Width: 1.9 m (74.8')
Height: 2.7 m (108.3")

FUTURE URBAN BOULEVARDS

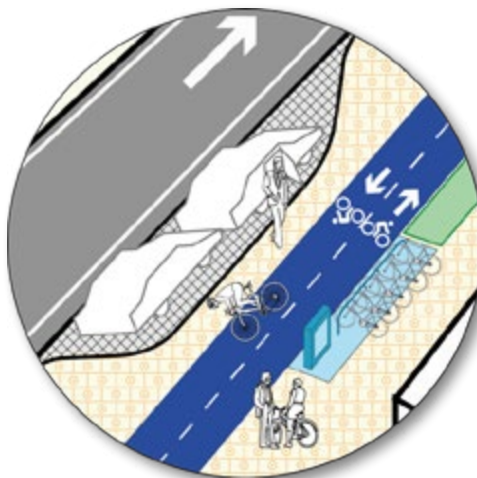
Bikeshare and Carshare



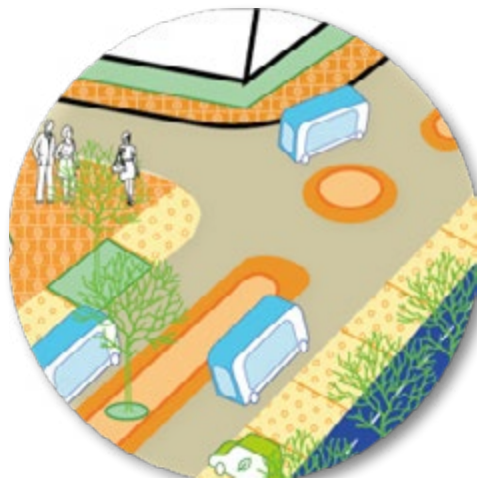
Formal and Informal Crossings



Bike Lane Buffers



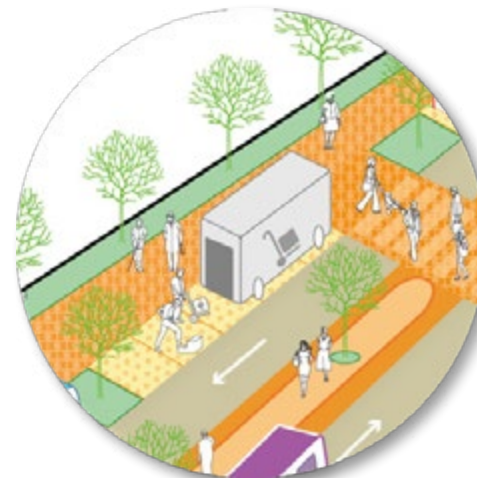
Roundabout Intersections



Low Medians



Flex Space for Deliveries



Flex Space for Vendors



*We are in the homeland of the Osage Nation,
Missouria, Otoe, Iowa people, and Sac and
Fox Nation. Born visitors upon a land many
of us have only known, and call home.*

*Where the Mississippi runs through, so bridges
were built to ensure our connection. Just as
the winds blow from the north, south, east,
and west, we must now create and cross-new
paths to celebrate our past, present, and
what's to come.*

*Allow movement to flow us into one another's
histories. Hold in our hands, nature native
to this space, the culture created within and
throughout, interwoven with a spirit growing.*

Cheeraz Gorman

JAMES
CORNER
FIELD
OPERATIONS

with
HR&A
DTLS
WSP
A3
CBB
MIC

Cbabi Bayoc

Cheeraz Gormon

L'Observatoire

Sherwood Engineers

Lord Cultural Resources

