



# IMAGINE MEMORIAL

A planning partnership with Councilwoman Natalyn Archibong,  
Atlanta residents, and Georgia Tech's School of City and Regional Planning

**DRAFT**  
**2/12/15**

# Connectivity – Transit, Bicycles and Pedestrians

## Suggested topics for comment:

What are your thoughts on the bike lanes and multi-use trails presented in the Connectivity Vision? Would you recommend different locations for bike lanes and trails?

What are your thoughts on the proposed alignment of the transit routes?

Should the proposed Beltline/Streetcar share a route with the proposed MARTA bus rapid transit/light rail line? Should the proposed public transit have a dedicated lane on Memorial Drive with no automobile traffic allowed?

Should the proposed public transit have more frequent and closer stops or fewer stops and express service?

Should car share and bike share services be located on the corridor near transit stops?

Do you have any thoughts on transit, bicycle and pedestrian connectivity that were not included in the study?

## Access Management Plan

Extensive access to and from Memorial Drive is essential to the efficiency of the corridor and provides adequate transportation service to the surrounding communities. This considered, points of access should be selective and preferential to the corridor's nature as an arterial route. Using an existing network of collector roads can facilitate more continuous and safe traffic flow. This concern is highest where small commercial and residential lots have numerous driveways onto the arterial corridor. These create an unsafe environment for users of all transportation modes as the infrequent use of these smaller, more numerous curb cuts force vehicles to react to incoming and outgoing vehicles at significantly different speeds. The balance of too few or too many access points along Memorial Drive would be most adequately handled through existing collector roads and the further development of the hierarchal roadway network that supports the east Atlanta communities.

### *Implement Rapid Transit Options*

The study area is bordered to the north by the Blue and Green MARTA Lines, which all local bus routes feed into. The implementation of high-capacity rapid transit around the prospective areas of development will add another level of rapid access to Downtown Atlanta and points beyond from the Memorial Drive Corridor. This will also infuse a focus on transit-oriented development along the corridor in distressed areas. The Atlanta BeltLine has proposed two alignment options for the Atlanta Streetcar extension from Downtown. One alignment option will take it through Inman Park along the currently-proposed Eastside Trail extension to Memorial Drive. It will require tunneling under CSX's Husley Intermodal Rail Yard to Wylie Street in Reynoldstown. It will follow Wylie to the Eastside Trail east

of Chester Avenue and follow south and use Bill Kennedy Way across Interstate 20 to Glenwood Park. Another alignment option will send the existing streetcar from the Edgewood Avenue and Jackson Street. There will be two tracks, one coming south on Hilliard Street and another going south on Jackson. Both will merge on Grant Street providing access to the King Memorial MARTA Station, and then proceed east on Memorial to Bill Kennedy Way.

The Metropolitan Atlanta Rapid Transit Authority (MARTA) has proposed a 12-mile bus rapid transit (BRT) line along Interstate 20. The BRT line will utilize the High Occupancy Vehicle (HOV) lane in the center of the freeway, with a small arterial run along Memorial Drive, Bill Kennedy Way, Moreland Avenue, Capitol Avenue, and Martin Luther King Jr. Drive. The BRT line will empty into a future extension of the Blue Line that will continue to the Mall at Stonecrest in Lithonia. The BRT Line will cut through the western portion of the study area starting at the Five Points MARTA Station, and following surface streets down to Interstate 20. There will be an instance where the vehicle will utilize the surface streets along Bill Kennedy Way, Memorial Drive, and Moreland Drive, where there will be two stations on Bill Kennedy Way and Moreland Avenue.

The implementation of transit in this project focuses on the connectivity of both of these new high-capacity lines with the existing high-capacity lines with our proposed bike and pedestrian improvements. Transit lines do not meet their purpose if there is no walkable environment surrounding a transit stop. With the addition of three new premium transit stops along the Memorial Drive Corridor, a new focus on transit-oriented development and a more pedestrian-friendly environment would be required.

To anticipate the feasibility of these initiatives to the proposed bike and pedestrian connections, there will need to be analyses conducted:

- A Transit Level of Service (LOS) on existing bus stops to anticipate changes in service
- Transit Demand Analyses of the proposed transit stops
- Comparison of possible stop locations

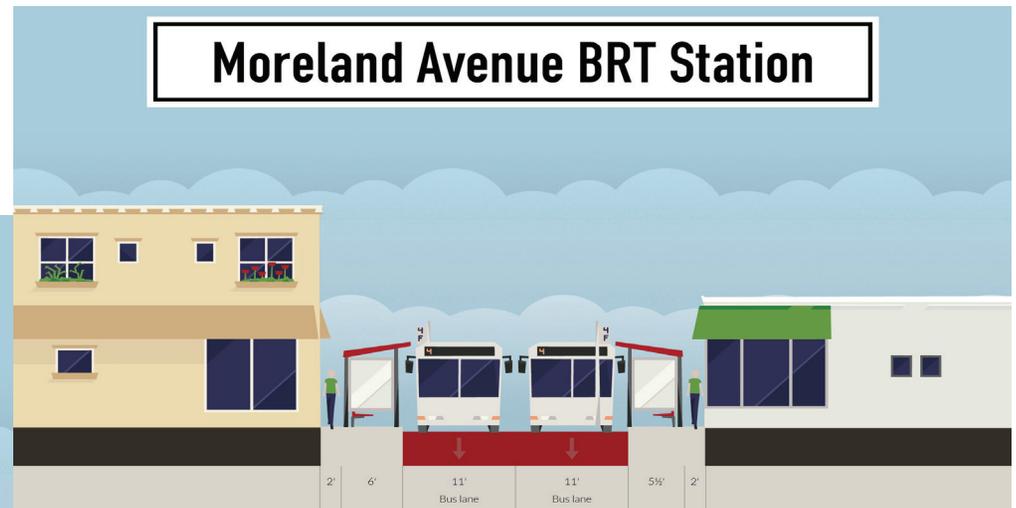
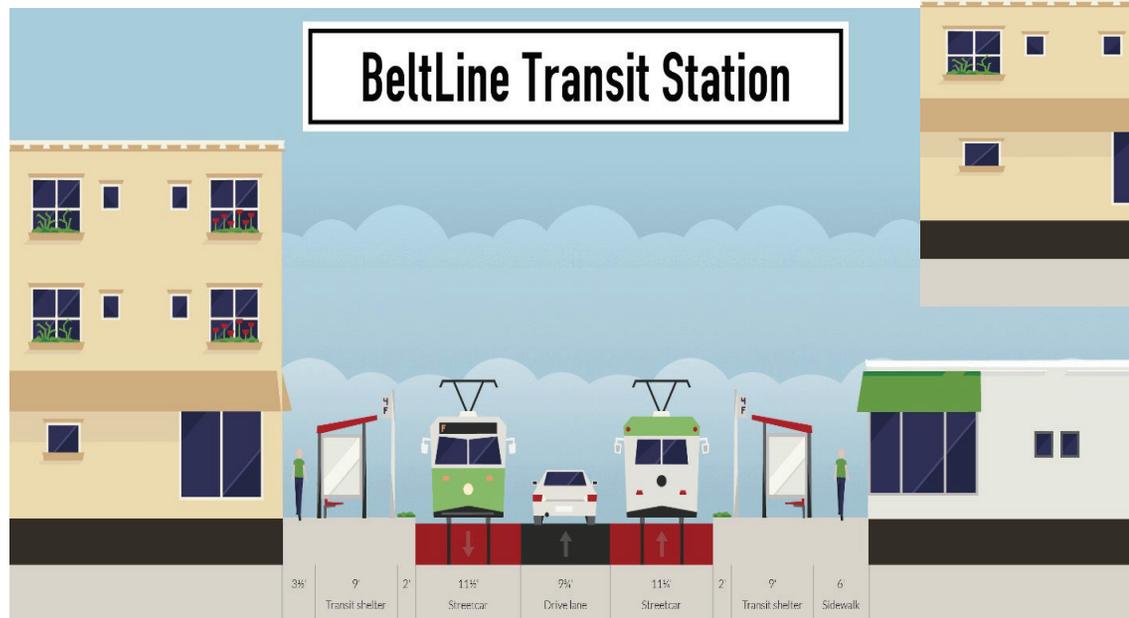
### Bike Connectivity to Transit

With the addition of several additional bike lanes, sidewalks

and bikeways in the future, there lies an idea to connect all of the paths for the sake of enhancing transportation along Memorial Drive. It helps to recognize bike travel in a transit network, no matter how big or small. The bike and pedestrian paths will serve as a last-mile connectivity route to the existing and proposed stations, while forming their own network in their respective mode. The recommended maximum distance for cyclists to travel to a rapid transit station is 2.5 miles. Every proposed route as well as the existing routes fit the maximum distance given the existing MARTA heavy rail and the proposed MARTA BRT line. It is easy to bike from a rapid transit station to an activity center, school, or a park within the recommended 2.5 mile route distance.

**Figure 44: Illustration of a potential BeltLine transit stop cross-section**

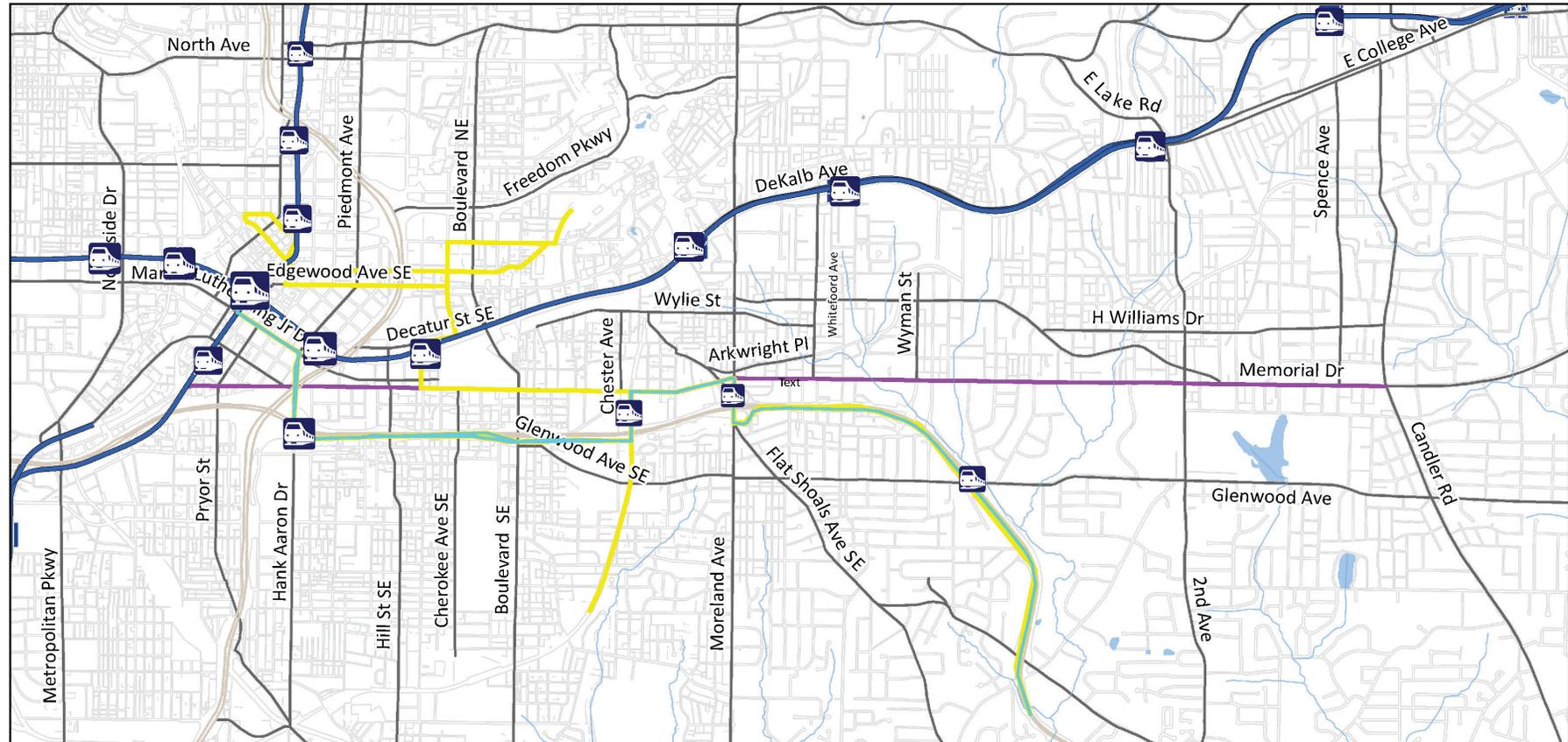
*The crossing of the BeltLine corridor at Bill Kennedy Way will offer new opportunities for last-mile connectivity and street design. The BeltLine Subarea 4 Master Plan calls for denser uses around the node and infrastructure for multimodal users.*



**Figure 45: Illustration of a potential MARTA Bus Rapid Transit (BRT) stop at Moreland Avenue**

*Above: Design concept for a BRT station bordered by existing or new mixed-use buildings along the Flat Shoals Avenue spur that currently dead-ends at Moreland Avenue.*

## HIGH CAPACITY TRANSIT ALIGNMENTS



### EXISTING INFRASTRUCTURE

-  MARTA Rail
-  Memorial Corridor
-  MARTA Rail Stops

### PROPOSED ENHANCEMENTS

-  Atlanta Streetcar Alignment
-  BRT Line
-  MARTA Rail Stops

**Figure 46: Map of proposed high-capacity transit alignments near Memorial Drive**

Planning continues for a Bus Rapid Transit (BRT) route for the I-20 East corridor. Such a network could reduce the traffic volume on Memorial Drive and offer better connectivity to job centers downtown and elsewhere in the metro area. Proposed stops include Glenwood Avenue, Moreland Avenue, and Bill Kennedy Way/BeltLine. City of Atlanta planners also want to explore a stop at Maynard Terrace.

# IMAGINE MEMORIAL - CONNECTIVITY VISION

By Corentin Auguin, GA Tech MCRP 2014



**Figure 47: Map of existing alternative mode routes in the study area**

The main theory behind the Connectivity plan is to identify existing and planned routes that allow users to get between key activity centers without driving. These routes will not necessarily use Memorial Drive directly, but will offer safe alternatives along its length. There are already several elements in place, thanks to the City's Connect Atlanta plan, the PATH Foundation, the BeltLine, Atlanta Bicycle Coalition, and others.

## VII. CONNECTIVITY

Connectivity is a primary measure of the success of a transportation network. As a comprehensive plan, the Imagine Memorial study focused heavily on future connectivity among the neighborhoods and activity centers. Major existing and future activity centers, current and proposed bicycle and pedestrian networks, and current and proposed transit were considered.

This connectivity plan was compiled through stakeholder and public input, collaboration with public and private entities, spatial analysis, and field work. Assessment began with an activity center analysis to determine where there were a large number of trip origins and destinations. Then potential alternative routes for non-automobile modes were devised through review of existing plans, public input, and consideration of ideal project designs from other locations in the United States and abroad.

### Activity Center Analysis

Activity centers can be defined as areas which serve as local nodes for transportation, commercial, and public activities. They may be public parks, schools, local retail corridors, or large commercial developments where multi-modal transportation users are likely to gather. Spatial GIS analysis was used to map these areas, and public feedback was used to add additional areas identified by local residents. Once the final activity centers were identified, the presence of existing multimodal networks was considered in order to identify centers lacking safe or effective non-automobile access routes, as shown in Figure 46.

### Bicycle and Pedestrian Connectivity Plan

Bicycle and pedestrian modes are critical transportation alternatives for individuals who wish to avoid automobile use. These individuals choose alternative transportation for both voluntary and involuntary reasons. In order to promote the economic security, health, well-being, and happiness of Memorial Drive area residents, an expanded multi-modal connectivity network is proposed. A full bicycle and pedestrian network such as the one developed in this Imagine Memorial plan offers local residents a healthy, inexpensive and safe alternative to automobile use, as well as a valuable recreational resource.

### Connectivity Network

The final draft bicycle and pedestrian connectivity network for the Imagine Memorial plan is displayed in Figure 49. The full list of proposed projects needed to complete the connectivity network is available in Figure 47 with cost estimates and project details. Cost estimates were developed from the Costs for Pedestrian and Bicyclist Infrastructure Improvements from the UNC Highway Safety Research Center. Only projects for which reasonably accurate estimates could be produced, primarily point improvements such as crosswalks and barriers, were assigned costs. More complicated and lengthy projects involving varying design requirements were not estimated in order to prevent inaccurate representations. The proposed network prioritizes areas with the greatest needs. These include the East Lake and East Lake Park area, the area surrounding Alonzo Crim High School, and the East Atlanta area. Large scale future pedestrian developments such as the BeltLine trail and the Battle of Atlanta Trail are the foundation of the future network. Department of Public Works projects along Memorial, including the removal of a lane for a sidewalk expansion along the five lane portion of Memorial Drive

east of Oakland Cemetery in three phases, were also considered. High-visibility crossings are proposed to improve north-south mobility and safety across Memorial Drive. East Lake Park, currently without sidewalk access or a high-visibility crossing, is proposed to receive a sidewalk extension and a PAB signal crossing Memorial Drive at Daniel Street (project C-09). Stakeholders expressed a strong desire for this project. Curb extensions, barriers and painted school zone and crossing markings are proposed at Clifton Street alongside Crim High School to slow traffic and prevent students from cutting through the busy intersection. The crossing will also support the proposed bike lane along Clifton St (project P-03).

An additional PAB signal is proposed at the crossing of the Battle of Atlanta trail (project C-05). This signal will allow safe access to the new trail for residents on both sides of Memorial Drive. Crossings will also be integrated into the “ovalabout” roadway design proposed for the Memorial Drive, Memorial Terrace, and Whitefoord intersection (project C-03). These crossings will provide access to the proposed pedestrian bridge across I-20 at Memorial Terrace.

New Multi-Use pathways are proposed along the Sugar Creek right of way. A large portion of this pathway is designated as the Battle of Atlanta Trail and is scheduled for construction in upcoming years. The trail is designed to provide increased north-south connectivity and connect the McPherson Monument to the Walker Monument for recreational users (project T-02). An additional possible trail alternative is proposed along Doolittle Creek south of the East Lake Golf Club (project T-01).

Proposed bike lanes and bike lane upgrades were chosen to complement the existing bike infrastructure. Total mileage for the final bike network is 25.61 miles after completion, including 20 miles of newly proposed infrastructure. Only fully painted and marked bike lanes were considered as existing and meeting

desired standards for recreational and casual bicyclists. The most fully featured bicycle improvements are proposed along Arkwright Place and Flat Shoals Avenue. Existing pavement from an old trolley right-of-way is designated for use as a full two-way bicycle and pedestrian boulevard (projects B-12 and B-13). Woodward Avenue just south of Oakland Cemetery is also designated as a bike boulevard to provide access to the Grant Park area without being forced onto Memorial Drive (project B-02).

This route will also be enhanced by a large green painted bike and pedestrian crosswalk at Boulevard (project C-01). Additional painted and marked bike lanes are proposed along Clifton St, Bill Kennedy Way, Cherokee Ave, Whitefoord Ave, and East Lake Drive. The primary east-to-west bicycle routes are placed along Glenwood Ave and Hosea Williams Drive, which already feature bike lanes along part of their extents (projects B-09, B-20). These routes run parallel to Memorial Drive to both the north and south, diverting bicyclists away from the more dangerous speeds along the central corridor.

Major bicycle and pedestrian upgrades are proposed at several crossings over Interstate 20 to further enhance connectivity. These include complete sidewalks and bike lanes along Clifton Street, a new bicycle and pedestrian bridge connection between Monument Avenue and Memorial Terrace in the central study area, and bike and pedestrian improvements along Bill Kennedy Way, Cherokee Ave, and Maynard Terrace. Additional long-term improvements include the introduction of complete streets and shared space designs at major bicycle and pedestrian intersections such as the intersection of Oakview and Cottage Grove, the Oakhurst Park area, the extent of Memorial Drive along Oakland Cemetery to the BeltLine crossing, and the intersection of Hosea Williams and Whitefoord. The potential closure of the Flat Shoals stubs along Memorial Drive may also be used to create a pedestrian hub and gateway to Reynoldstown.

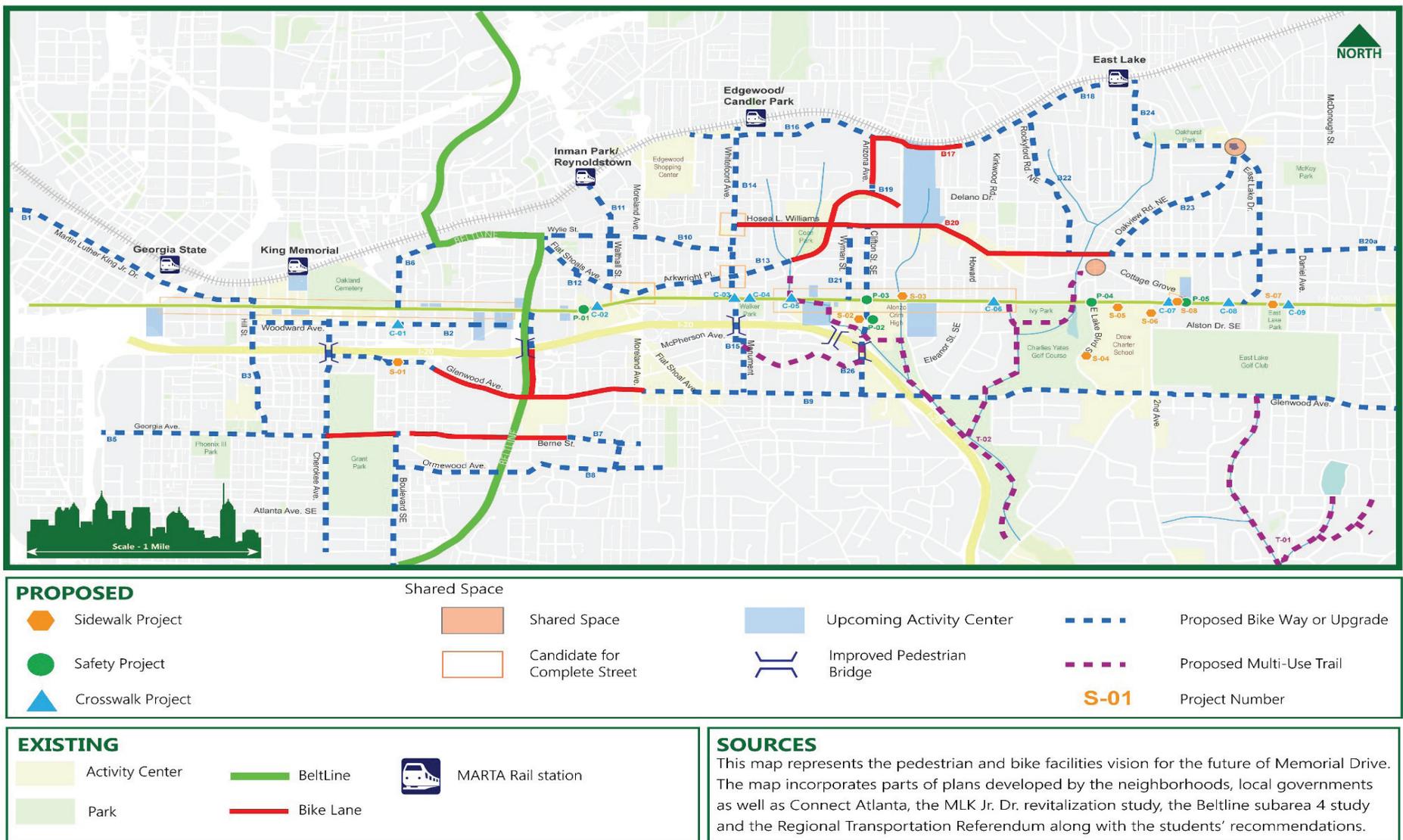
**FIGURE 48: Bicycle and Pedestrian Alternatives**

<b>ID</b>	<b>LOCATION</b>	<b>TYPE</b>	<b>STATUS</b>	<b>ESTIMATED COST (\$)</b>
<b>B-01</b>	MLK Jr. Dr.	Bike Lane	Proposed	
<b>B-02</b>	Woodward between Kelly and Chastain	Bike Boulevard	Proposed	
<b>B-03</b>	Hill St between MLK and Georgia Ave.	Bike Lane	Proposed	
<b>B-04</b>	Memorial Dr. between downtown and Cherokee	Bike Lane	Proposed	
<b>B-05</b>	Georgia Ave. between connector and Grant Park	Bike Lane	Proposed	
<b>B-06</b>	Boulevard between memorial and Beltline	Bike Lane	Proposed	
<b>B-07</b>	Berne St between Glenwood Pl. and Moreland	Bike Lane	Proposed	
<b>B-08</b>	Ormewood between Grant Park and Brownwood park	Bike Lane	Existing	
<b>B-09</b>	Glenwood a between Cherokee and Candler Rd.	Bike Lane	Incomplete	
<b>B-10</b>	Wylie between beltline and Whitefoord	Shared Lane	Proposed	
<b>B-11</b>	Walthall between Caroline and flat shoals	Shared Lane	Proposed	
<b>B-12</b>	Flat Shoals Ave between Wylie and Moreland	Bike Boulevard / Ped Path	Proposed	
<b>B-13</b>	Arkwright/Woodbine between Moreland and Gilliam park	Bike Boulevard / Ped Path	Proposed	
<b>B-14</b>	Whitefoord between rail and Memorial Dr.	Shared Lane	Proposed	
<b>B-15</b>	Monument Ave between memorial and Glenwood	Bike Lane	Proposed	
<b>B-16</b>	La France between Marion Pl. and Arizona	Bike Lane	Proposed	
<b>B-17</b>	Pullman bike path to Locust St.	Bike path	Existing	
<b>B-18</b>	College Ave to E. Lake Dr.	Bike Lane	Proposed	
<b>B-19</b>	Arizona Ave. between La France and Gilliam park	Bike Lane	Incomplete	
<b>B-20</b>	Hosea L. Williams Dr. to Oakview	Bike Lane	Existing	
<b>B-20A</b>	Hosea L. Williams Dr. from Oakview to Candler	Bike Lane / Shared Lane	Proposed	
<b>B-21</b>	Wyman between Hosea L. Williams dr. and memorial.	Bike Lane	Proposed	
<b>B-22</b>	Rockyford Rd between college Ave and Hosea L Williams Dr.	Bike Lane	Proposed	
<b>B-23</b>	Oakview Rd. between Hosea L. Williams Dr and E. Lake Dr.	Bike Boulevard	Proposed	
<b>B-24</b>	E. Lake Dr. between College Ave and Memorial Drive	Bike Lane	Proposed	
<b>B-26</b>	Clifton St between Hosea and Glenwood	Bike Lane	Proposed	
<b>C-01</b>	Woodward @ Boulevard	Crossing	Proposed	26,850

<b>S-01</b>	Woodward @ Glenwood	Sidewalk	Proposed	4,420
<b>P-01</b>	Memorial Dr. @ Stovall	Barriers	Proposed	7,100
<b>C-02</b>	Wilbur @ Memorial Drive	Crosswalk / Barriers	Proposed	12,000
<b>C-03</b>	Memorial Dr. @ Memorial Terrace	Crosswalk / Barriers	Proposed	
<b>C-04</b>	Memorial Drive @ walker park	Crossing	Proposed	3,000
<b>C-05</b>	Memorial Dr. across new creation church	Crosswalk	Proposed	26,850
<b>S-02</b>	Clifton St , across Alonzo Crim High	Trail Crossing and PAB	Proposed	34,000
<b>P-02</b>	Clifton St , across Alonzo Crim High	Sidewalk	Proposed	18,840
<b>P-03</b>	Memorial Dr. @ Clifton St	Barriers	Proposed	20,910
<b>S-03</b>	Memorial Dr. between Clifton and clay.	Barriers / Curb Extension	Proposed	11,680
<b>C-06</b>	Memorial Dr. @ Shy Temple CME Church	Sidewalk	Proposed	3,000
<b>S-04</b>	E. Lake Blvd south of Memorial	Improved Crossing	Proposed	32000
<b>S-05</b>	Memorial Dr. south side along Drew charter high	Sidewalk	Proposed	206,250
<b>P-04</b>	Memorial Drive @ E. Lake Blvd, south east corner	Sidewalk	Proposed	3,650
<b>S-06</b>	2nd Ave south of Memorial	Barriers	Proposed	21,750
<b>C-07</b>	Memorial Dr. @ 3rd Ave	Sidewalk	Proposed	3,000
<b>P-05</b>	Memorial Dr. @ Cottage Grove	Crosswalk	Proposed	
<b>C-08</b>	Memorial @ Club place	Barrier	Proposed	3,000
<b>S-07</b>	Memorial Dr. at East Lake Park	Crosswalk	Proposed	98,100
<b>C-09</b>	North east corner of East Lake Park	Sidewalk	Proposed	70,680
<b>S-08</b>	Memorial drive @ 3rd Ave, north east corner	Crosswalk and PAB	Proposed	21,450
<b>T-01</b>	Doolittle Creek Trail	Sidewalk	Proposed	
<b>T-02</b>	Battle of Atlanta Trail / Sugar Creek Trail	Multi-Use Path	Proposed	

# IMAGINE MEMORIAL - CONNECTIVITY VISION

By Corentin Auguin, GA Tech MCRP 2014



**Figure 50: Map of proposed Connectivity Vision for Memorial Drive**

This plan incorporates existing, proposed, and planned bikeways and multi-use trails from previous planning efforts, with some new additions based on updated analysis and development activity. It recommends pedestrian and bicycle enhancements to several bridges to link neighborhoods on either side of I-20. If fully implemented, it would offer parallel multimodal networks to the north and south of Memorial Drive and I-20.

Shared Space Intersection, Poynton, UK



# SHARED SPACE

Increased pedestrian safety  
 Slower traffic speeds  
 Easy pedestrian and bike crossings  
 Walkable urban design



Shared Space, Savannah, GA

Multi-modal accessibility  
 All modes use same pavement  
 Shared travelways increase alertness  
 Autos yield to pedestrians and transit



Shared Space, Netherlands



Transit Right of Way Shared Space, Nantes, France

Cars

Trucks

Bicycles

Transit

People



# COMPLETE STREETS

## Increased accessibility

Accommodates all travel modes  
Accessible for limited mobility individuals  
Transit and alternative modes improved



## Increased safety

Visible bike lanes and boxes  
Sidewalks with barriers and trees  
Slower travel speeds



Complete Streets Bike Boxes, New Haven

## Neighborhood-friendly environment

Gathering place for community  
Commercial and activity hub  
Public landmark opportunity

# PEDESTRIAN FACILITIES

Reconnect neighborhoods

Shorten travel times

Increase walkability

Promote neighborhood collaboration



*Hazel St Pedestrian Bridge, Macon, GA*

Increase safety

Separate peds from high speed roads

Provide safe access for children, elderly

Promote healthy activity



*Pedestrian path, creek right-of-way, Japan  
See DeKalb County Shoal Creek Trail*

Low-impact designs

Affordable implementation

Maintain neighborhood character

Enhance existing travelways

Cars

Trucks

Bicycles

Transit

People

S



*Hazel St Pedestrian Bridge, Macon, GA*



04/22/2010

## *Ideal Project Designs*

The images on previous pages display a variety of projects types which fit with the Imagine Memorial plan priorities and goals. These example projects were chosen due to their commitment to bicycle and pedestrian safety and accessibility. In order to generate awareness of alternative design types, several non-traditional designs uncommon in the United States were chosen to reflect the possibilities of a commitment to a pedestrian and bicycle oriented transportation network.

## *Connectivity Plan Methodology*

The Imagine Memorial bicycle and pedestrian connectivity plan was developed through the previously mentioned activity center analysis, stakeholder and public input, collaboration with local agencies, and review of previous plans and programmed projects. Gaps in the existing bicycle and pedestrian network were identified through these resources and alternatives were developed according to accepted bicycle and pedestrian planning priorities. These priorities include safety, accessibility, and plausibility for implementation. Stakeholder input indicated that the north to south crossing of Memorial Drive, particularly within the Dekalb County portion of the study area, was in the greatest need of increased connectivity. Full painted and marked bike lanes were prioritized over shared lanes which are much less safe and comfortable for casual bicyclists. Roadways with limited traffic and available right of way were prioritized for bicycle improvements.

Pedestrian improvements were prioritized near schools, public gathering places, parks, and areas without existing sidewalk infrastructure. High visibility crossings were prioritized near intersections with high pedestrian potential and unsafe crossing conditions due to the speed of traffic and limited visibility.

Memorial Drive was avoided when possible for new bicycle and multi-use infrastructure due to the increased safety potential of parallel routes. Designated truck routes were also avoided for bicycle improvements due to the danger of truck and bicycle interactions. Direct routes between activity centers were chosen wherever possible.

## *Complete Streets and Shared Space Intersections*

The complete streets design mentality is steadily gaining traction throughout the United States. The “complete streets” terminology refers to streetscape design which allows for the safe and comfortable passage of all travel modes, with an emphasis on walkability, reduced traffic speeds, and access to multiple travel modes. Design features of complete streets include:

- **Bike lanes:** Full width, striped, marked, and colored bike lanes are the ideal complete streets bike facility. These highly visible facilities provide bicyclists with safe and comfortable travelways which minimize conflict with other vehicles and pedestrians.
- **Bike boxes:** Bike boxes are painted boxes at intersections which allow bicyclists to pull in front of traffic at red lights, allowing them to continue before automobiles can begin right turns and avoiding right turn conflicts between modes.
- **Curb extensions:** Curb extensions temporarily narrow roadway width and force cars to slow down at intersections and pedestrian and bicycle crossings. They work well with highly visible painted crossings to provide safe routes for pedestrians. They can also provide additional waiting space for transit users at corner bus stops.
- **Pedestrian barriers:** These barriers create a slowing effect on traffic which passes alongside them. They also prevent pedestrians from falling into the street or crossing outside of designated crosswalks.

- Pedestrian Activated Hybrid Beacons (PAB) Beacons: Commonly known as High-Intensity Activated Crosswalk Beacons (HAWK), these hand-activated beacons force traffic to stop and yield to pedestrians at major crossings, such as those found near parks or transit stops. They can also be used for bicycle crossings along multi-use trails.

Additional components of complete streets design may include limited building setbacks to promote pedestrian activity, roundabouts and other traffic slowing measures, and tree plantings to reduce speeds and promote pedestrian safety. Visual examples of the improvements mentioned above can be found in preceding pages.

Shared space intersections are an extension of the complete streets design mentality. These intersections remove all signalization and limit signage. They make use of a flat pavement, often in a roundabout configuration, which is shared by all travel modes, from pedestrians to bicycles to trucks and cars. Changes in pavement texture are used to indicate crossings, roundabout centers, and other features. The lack of signals and signage forces traffic to slow dramatically, creating a safer environment for all users. It also allows throughput of vehicles to remain constant as cars and trucks navigate at a slow but steady speed through the roundabout intersection. Heavy trucks are able to pass directly across the intersection, avoiding the narrow turn radii often imposed by more typical roundabouts.

The shared space example represents a formerly signalized intersection in the city of Poynton, United Kingdom, that handles upwards of 30,000 vehicles per day while demonstrating a reduction in safety incidents and throughput consistent with a traditional intersection. The shared space design, while uncommon in the United States, is widely used throughout Europe and proven

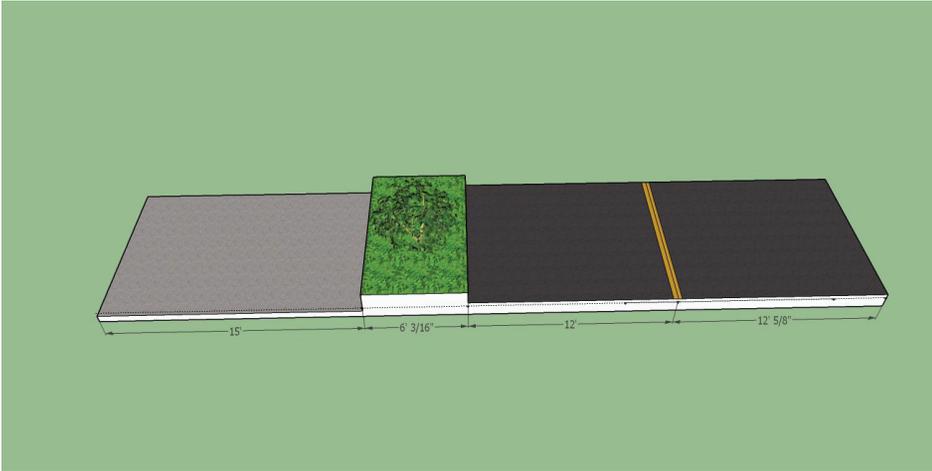
to force vehicles to slow and respect alternative travel modes while creating the economic potential for the growth of a popular town or neighborhood center.

### *Bicycle/Pedestrian Improvement Designs*

A series of cross-sections of major proposed bicycle and pedestrian routes were created to display the before and after configuration of key elements of the connectivity plan. Pedestrian and bicycle enhancements at I-20 bridge crossings were designed for the Clifton St, Maynard Terrace, Bill Kennedy Way, and Cherokee St bridges. Major bicycle improvements designed to capitalize on existing unused right of way along Arkwright Place were also designed. Figures 51 through 62 display cross sections of potential improvement designs.

The Flat Shoals/Arkwright Place redesign, as seen in Figure 54, makes use of a former trolley right of way as a fully featured, bidirectional bicycle and pedestrian boulevard. Removed entirely from traffic, this design feature is highly safe and accessible for pedestrian and bicyclists. Proposed along Arkwright Place and Flat Shoals Avenue, this feature will greatly enhance connectivity in adjacent neighborhoods.

In addition to the Arkwright facilities, proposed designs are available for multiple bridges across I-20, a major dividing force in the study area. These bridge are currently only moderately accessible to bicyclists and pedestrians. Improvement of these crossing points will greatly enhance north to south connectivity in the study area. The cross sections below demonstrate the feasibility of implementing fully marked, separated, and colored bike lanes at the indicated bridge locations. These designs allow bicyclists and pedestrians to cross I-20 with the same ease as automobiles.



**Figure 51: Current design of Flat Shoals Avenue in Reynoldstown, from Stovall Street heading east to Moreland Avenue**

*Broadly, Flat Shoals and Arkwright offer a safe multimodal east-west route across Moreland, largely because of an existing trolley bed that could be repurposed.*

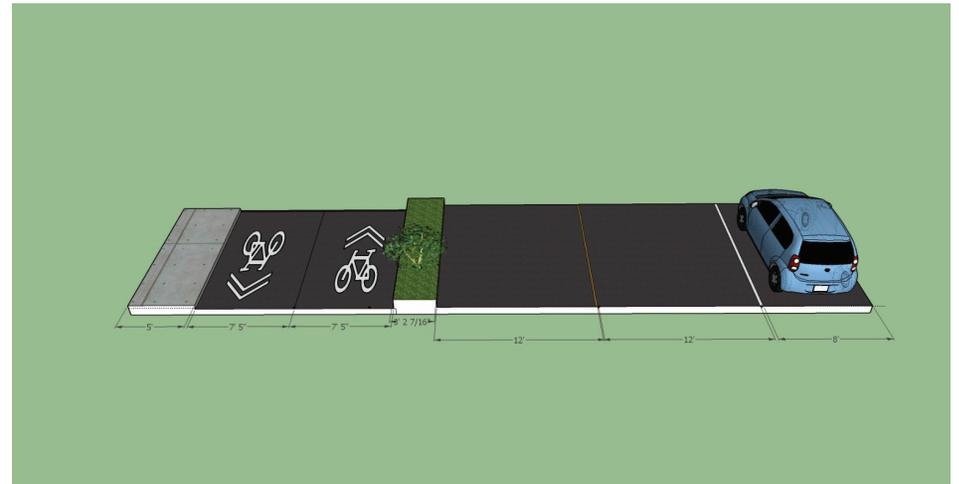


**Figure 52: Current design of Arkwright Place in Edgewood, from Moreland Avenue heading toward Vannoy Street**

*The trolley bed is currently being used as an access road and parking for local residents and offers a wide right-of-way for alternative uses on an under-capacity street.*

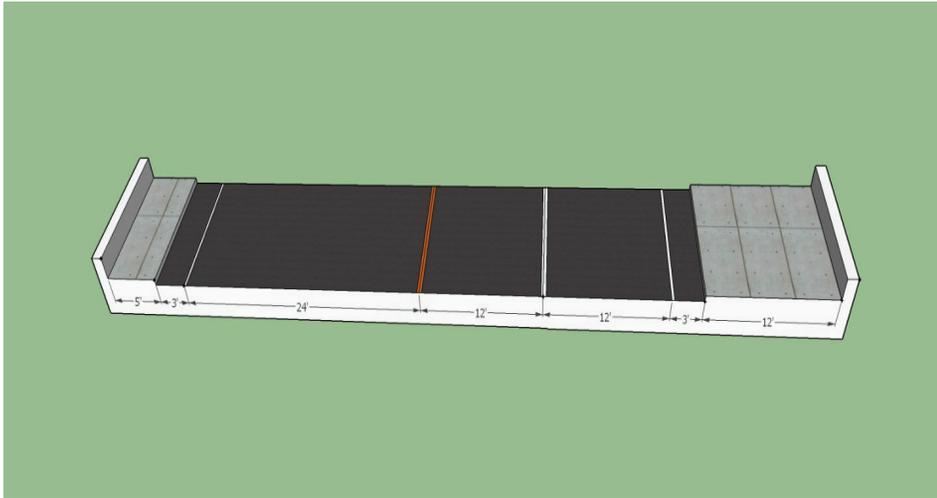


**Figure 53: Current design of Arkwright Place in Edgewood, looking west from Vannoy Street**



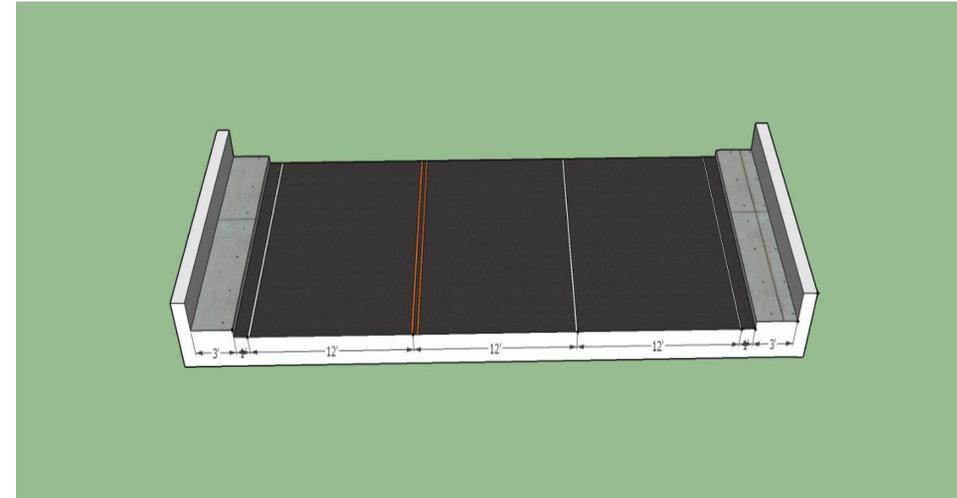
**Figure 54: Proposed redesign concept for Flat Shoals and Arkwright Place, from Stovall Street in Reynoldstown to Hosea Williams in Kirkwood**

*A fully protected two-way bike route is possible in the trolley bed, while still allowing for two-way auto traffic and on-street parking for residents on most segments.*



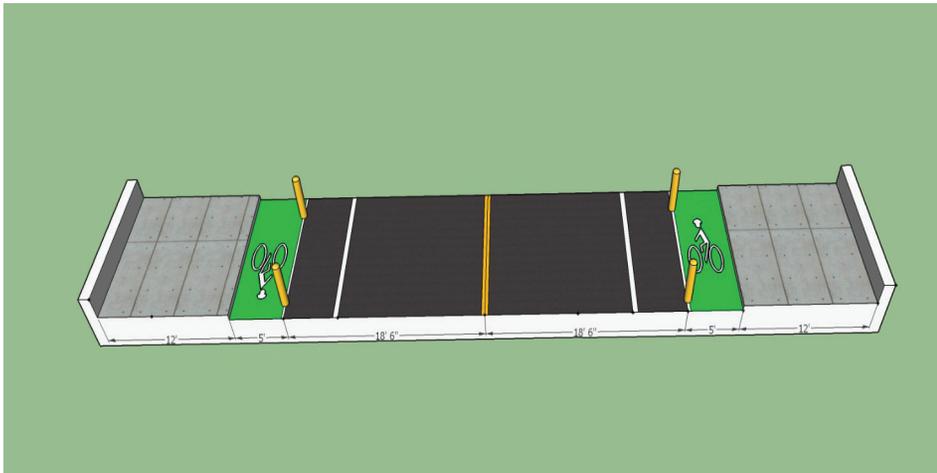
**Figure 55: Current design of Cherokee Avenue bridge over I-20 in Grant Park, looking north**

*The bridge is wider than needed for current traffic volume. The sidewalk on the east side is adequate, but the west side is too narrow. This is a key connection between two historic neighborhood commercial centers.*



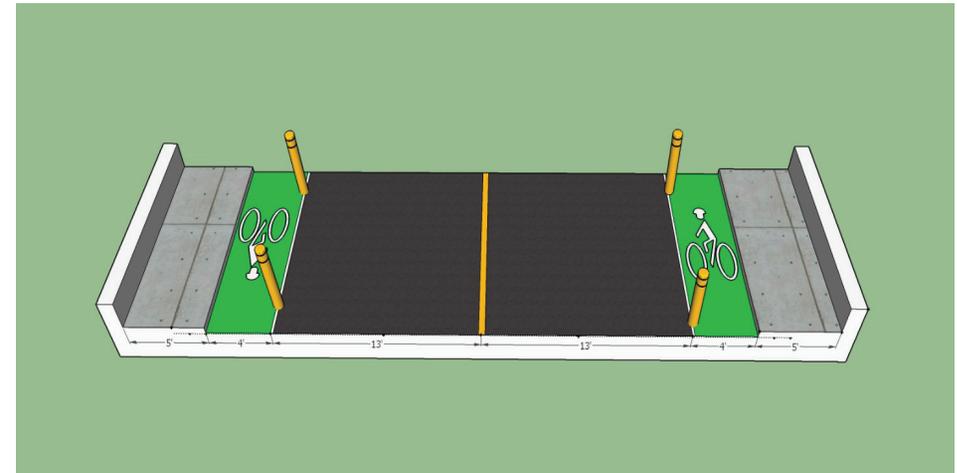
**Figure 56: Current design of Bill Kennedy Way bridge over I-20 between Reynoldstown and Glenwood Park**

*It has a left-turn lane for the I-20 on-ramp. Bike lanes end abruptly. As part of the Atlanta BeltLine corridor, long-term design plans must consider future trail and transit capacity. But interim improvements are recommended.*



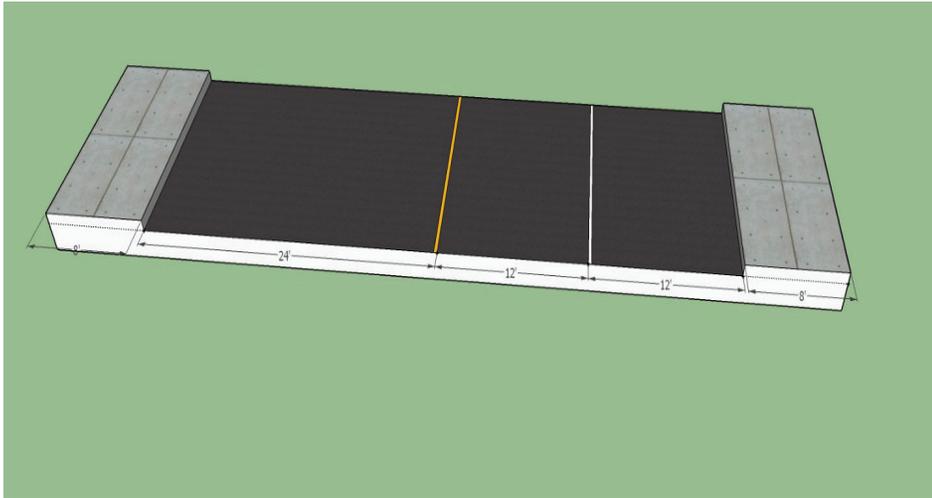
**Figure 57: Proposed redesign of Cherokee Avenue bridge with painted and semi-protected bike lanes**

*There is room for painted and protected bike lanes in each direction, along with improved sidewalks on both sides and an additional buffer from auto traffic.*

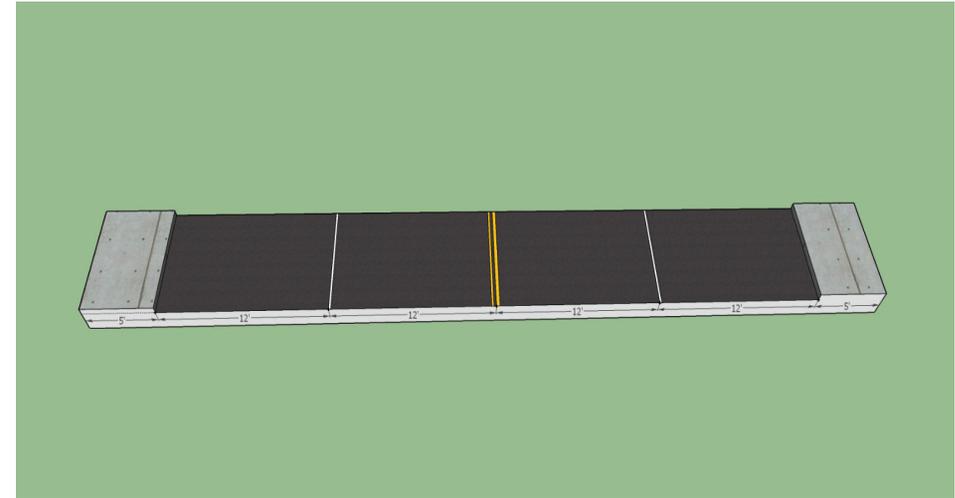


**Figure 58: Proposed redesign for Bill Kennedy Way bridge over I-20**

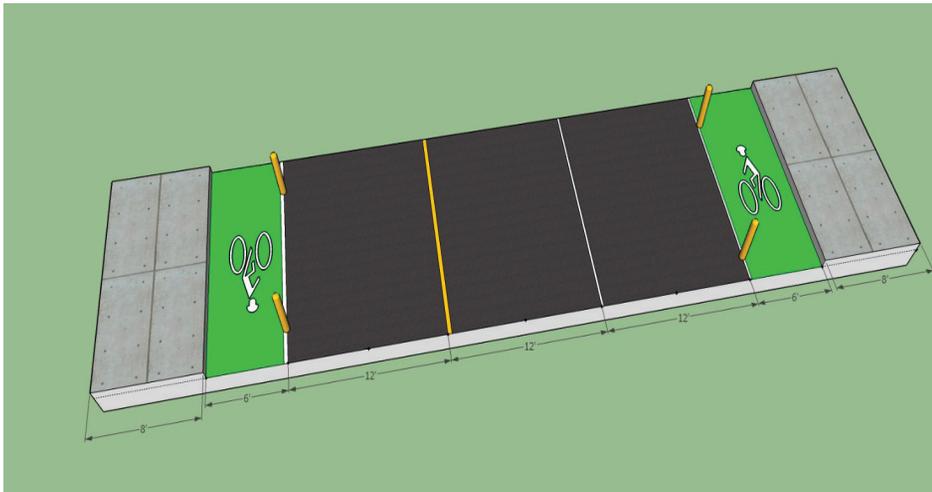
*A painted and semi-protected bike lane in each direction, with improved sidewalks. This will be a key walking and biking connection for thriving communities south of I-20 to reach the new terminus of the Eastside Trail at Memorial Drive, well before the BeltLine continues southward.*



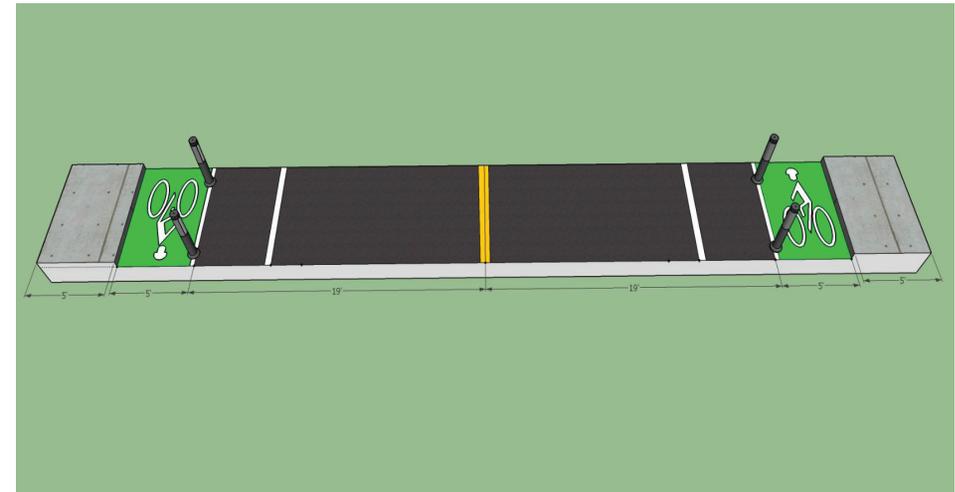
**Figure 59: Current design of Maynard Terrace bridge over I-20 between East Atlanta and Kirkwood, looking northeast**  
*The bridge is wider than needed for current traffic volume. The sidewalks on the bridge are adequate, but there is no crosswalk where it meets the off-ramp.*



**Figure 60: Current design of Clifton Street bridge over I-20 between East Atlanta and Kirkwood**  
*The four-lane bridge is currently painted for two lanes and is under capacity. It's an important route for students at Alonzo Crim High School to the north. The eastern side has a narrow continuous sidewalk. The western side does not.*



**Figure 61: Proposed redesign of Maynard Terrace bridge with painted and semi-protected bike lanes**  
*There is room for painted and protected bike lanes in each direction, while maintaining a left-turn lane for morning peak traffic using the on-ramp for westbound I-20.*



**Figure 62: Proposed redesign for Clifton Street bridge over I-20**  
*A painted and semi-protected bike lane is possible in each direction, along with improved sidewalks. There is further room for an additional buffer from car traffic.*