

Peachtree Place Corridor Plan and Multimodal Connection

Multimodal Analysis
Executive Summary

April 2022



Acknowledgements

Midtown Alliance

Dan Hourigan, LEED GA
Julie Harlan
Forrest Rose
Cladie Washburn, RLA

City of Atlanta

Chris Rome, P.E., P.T.O.E.

Toole Design

Addie Weber, AICP
Meghan McMullen
Chris Puglisi, RSP1, P.E.
Matt Moffitt

Jacobs

Geoff Warr, RSP1, P.E.

Thank you to the Midtown neighbors, property owners, employees, and visitors who participated in the planning process and to partners at MARTA for their support and coordination.

Geographic and mapping information presented in this document is for informational purposes only, and is not suitable for legal, engineering, or surveying purposes. Mapping products presented herein are based on information collected at the time of preparation. Toole Design Group, LLC makes no warranties, expressed or implied, concerning the accuracy, completeness, or suitability of the underlying source data used in this analysis, or recommendations and conclusions derived therefrom.

Peachtree Place Corridor Plan and Multimodal Connection

Multimodal Analysis Executive Summary

Peachtree Place is an ideal corridor to provide a safe and comfortable east-west pedestrian and multi-modal connection in Midtown. The corridor connects several north-south transportation initiatives, Midtown's residential districts, the Atlanta BeltLine, Piedmont Park, MARTA's Midtown Station, Georgia Tech, and a growing number of apartments and retail destinations. The Peachtree Place Corridor Plan was first identified in the 2017 Midtown Transportation Plan (project BK-03) as a lower-stress alternative to a 10th Street facility which provides a broader regional vehicular connection across Interstates 75/85 to Monroe Drive. The Peachtree Place Corridor Project also aligns with the City of Atlanta's Vision Zero policy, which aims to reduce traffic-related fatalities and serious-injury crashes to zero.

The study area includes the broader area surrounding the Peachtree Place corridor to consider potential alternative alignments, identify destinations with a high volume of users, and examine multimodal traffic patterns within the greater Midtown network. The study area extends from Williams Street to the west to the intersection of Myrtle Street and 10th Street.

What is a Multimodal Analysis?

A multimodal traffic analysis provides insight into how all modes are using the streets today and identifies critical locations (such as intersections) where the bicyclists and pedestrians may be particularly vulnerable. This analysis identified potential routes based on project goals, safety, directness, connectivity, and comfort. **More detailed information is available in the full report.**





Study Purpose

Improve safety, comfort, and access for pedestrians.

Identify a safe, comfortable east-west connection for cyclists and scooter riders between the 10th Street Cycle Track and the proposed 10th Street Bridge Enhancement project.

Identify opportunities for placemaking.

Enhance the pedestrian and ground floor retail experience.

Support the City of Atlanta's Vision Zero policy.

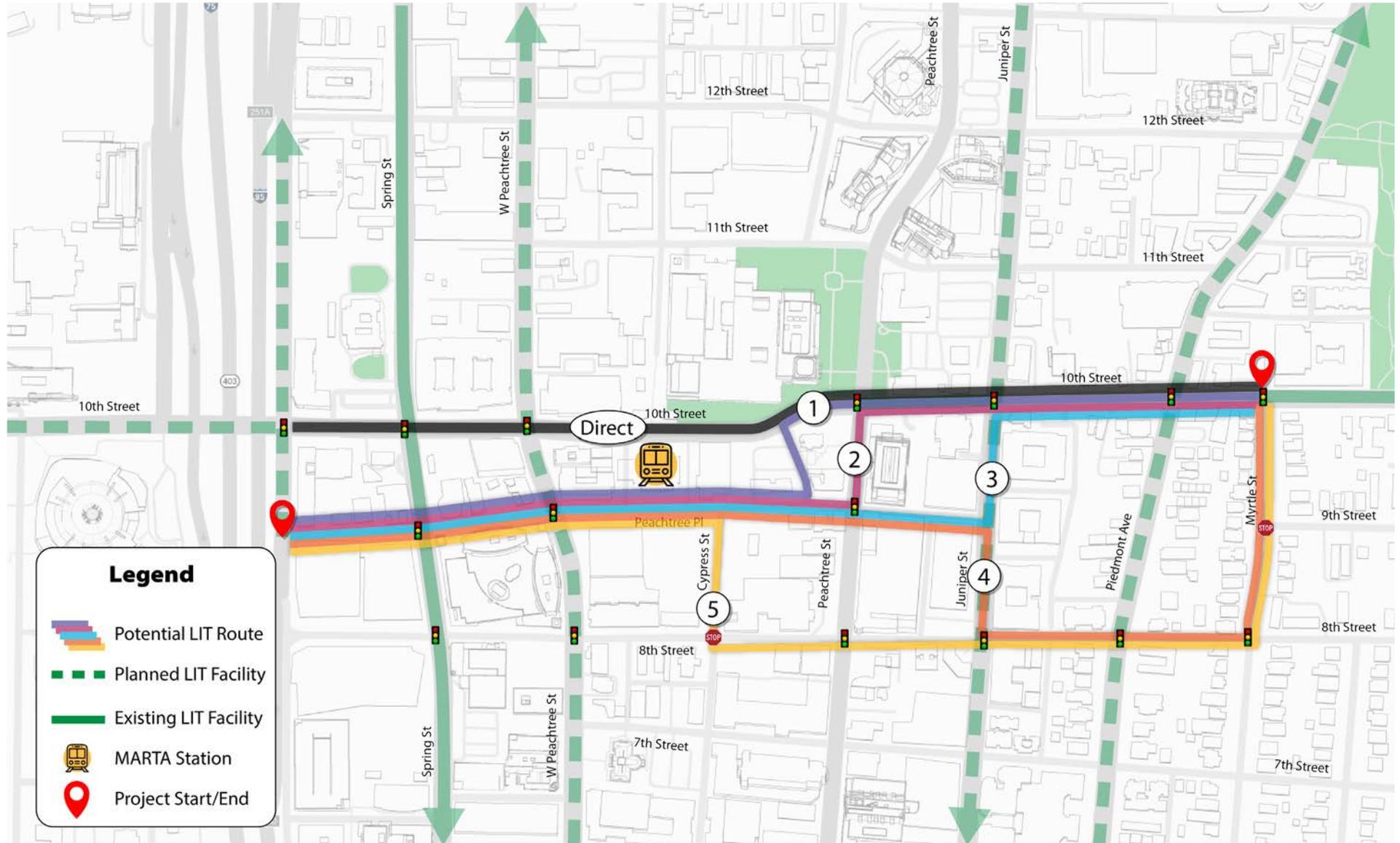
Six routes were evaluated to create a safe and comfortable east-west facility for cyclists and scooter riders. The five alternatives are:

- Alternative 1: 10th Street to Crescent Avenue to Peachtree Place
- Alternative 2: 10th Street to Peachtree Street to Peachtree Place
- Alternative 3: 10th Street to Juniper Street to Peachtree Place
- Alternative 4: Myrtle Street to 8th Street to Juniper Street to Peachtree Place
- Alternative 5: Myrtle Street to 8th Street to Cypress Street to Peachtree Place
- Alternative 6: 10th Street direct connection

The direct connection along 10th Street was ruled out following discussions with the City of Atlanta, due to the following constraints:

- A bicycle facility on 10th Street west of Peachtree Street would require physical separation and the repurposing of multiple vehicular travel lanes. This would result in gridlock conditions (>20,000 AADT).
- The Cycle Atlanta 1.0 Plan (2011) proposed east-west connections along 8th Street and 12th Street.
- A major capital project would be required to address grading, drainage, landscaping, and utility issues.

Figure 1. Alternatives



Process

Existing Policies and Planned Projects

A great deal of work has been completed and planned for Midtown that provides the guiding principles for the project. The following plans and projects were reviewed to help identify a preferred alternative that was connected and safe.

Policy Documents

- **Midtown Transportation Plan** (2017) – This plan communicates projects, policies, and programs for the Midtown Improvement District. The plan states that “Midtown has an opportunity to create a “low stress” bike network that would appeal to the vast “interested but concerned” cohort and become a bicycling mecca.” The Peachtree Place Buffered Bike Lanes, project BK-03, was identified to provide a safe alternative to 10th Street.
- **City of Atlanta Vision Zero Policy** (2020) - The policy identifies safety as the top priority, ensuring city streets are safe for everyone. In keeping with this policy, the Atlanta Department of Transportation (ATLDOT) is focused on eliminating crashes that result in serious injuries and fatalities.
- **Atlanta’s Transportation Plan** (2018) - This document is a blueprint for, “a transportation network that reduces automobile reliance and offers alternative travel solutions that are convenient, affordable and safe”. Several technical memorandums relevant to expanding and maintaining

safe bicycle infrastructure were adopted as part of Atlanta’s Transportation Plan, including: Asset management, Bicycle Facilities, Safer Streets, Streets Atlanta, and Map Book and Project List.

- **The One Atlanta Strategic Plan** (2019) - Organized around the Mayor’s One Atlanta pillars, this plan explains the City’s goals, strategies, and milestones. One of the benchmark goals of this plan is to “Make bicycling and micromobility a safe transportation option for more Atlantans”. Relevant strategies listed in this plan include “Expand the on-street bike lane network”, “Improve livability and mobility through more multimodal streets”, and “Set and track goals for increasing walking, biking, and transit use”.

Adjacent Planned Projects

- Midtown Art Walk
- Spring Street Quick-Build Light Individual Transportation (LIT) Lane
- West Peachtree Street Quick-Build LIT Lane
- Last Mile Intersection Improvements
- Commercial Row Commons
- Piedmont Avenue Complete Street
- Juniper Street Complete Street
- 10th Street Bridge Enhancement

Screening

The process of refining the LIT facility route followed a process that identified potential routes, screened based on the project goals, developed sketch plans, analyzed and ranked based on performance and safety, and concluded with the recommended configuration.

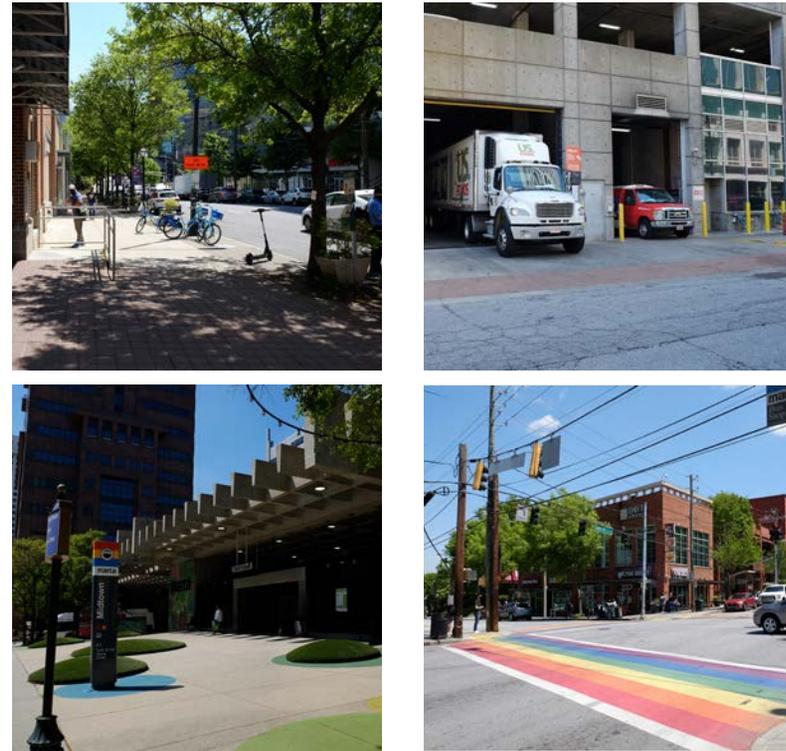
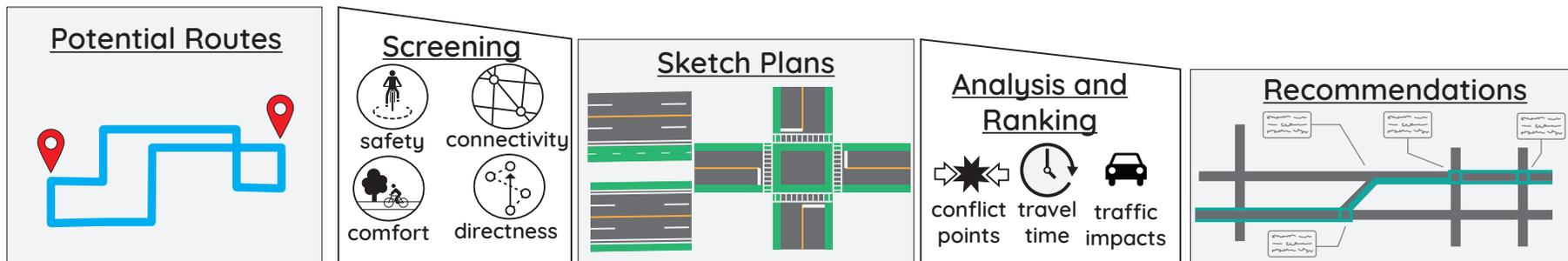


Figure 2. Screening Process



Alternative Route Screening

Preliminary screening of the alternative routes was completed through measures that compliment principles from the **Federal Highway Administration’s Bikeway Selection Guide** (FHWA, 2019). Alternatives 1 and 3 (Figure 1) were the top routes to achieve the project goal of providing a comfortable facility that would appeal most to the vast “interested but concerned” user group, with feasible ways to separate users from high-speed traffic to produce a “low stress” route. These routes offer lower instances of vehicle conflict at driveways and uncontrolled intersections and are **less than 800 feet** longer than a direct route along 10th Street.

Principle	Measure
 safety	Bicycle-Vehicle Conflicts
 comfort	Level of Traffic Stress (LTS)
 connectivity	Bicycle Travel Time
	Distance Along Route

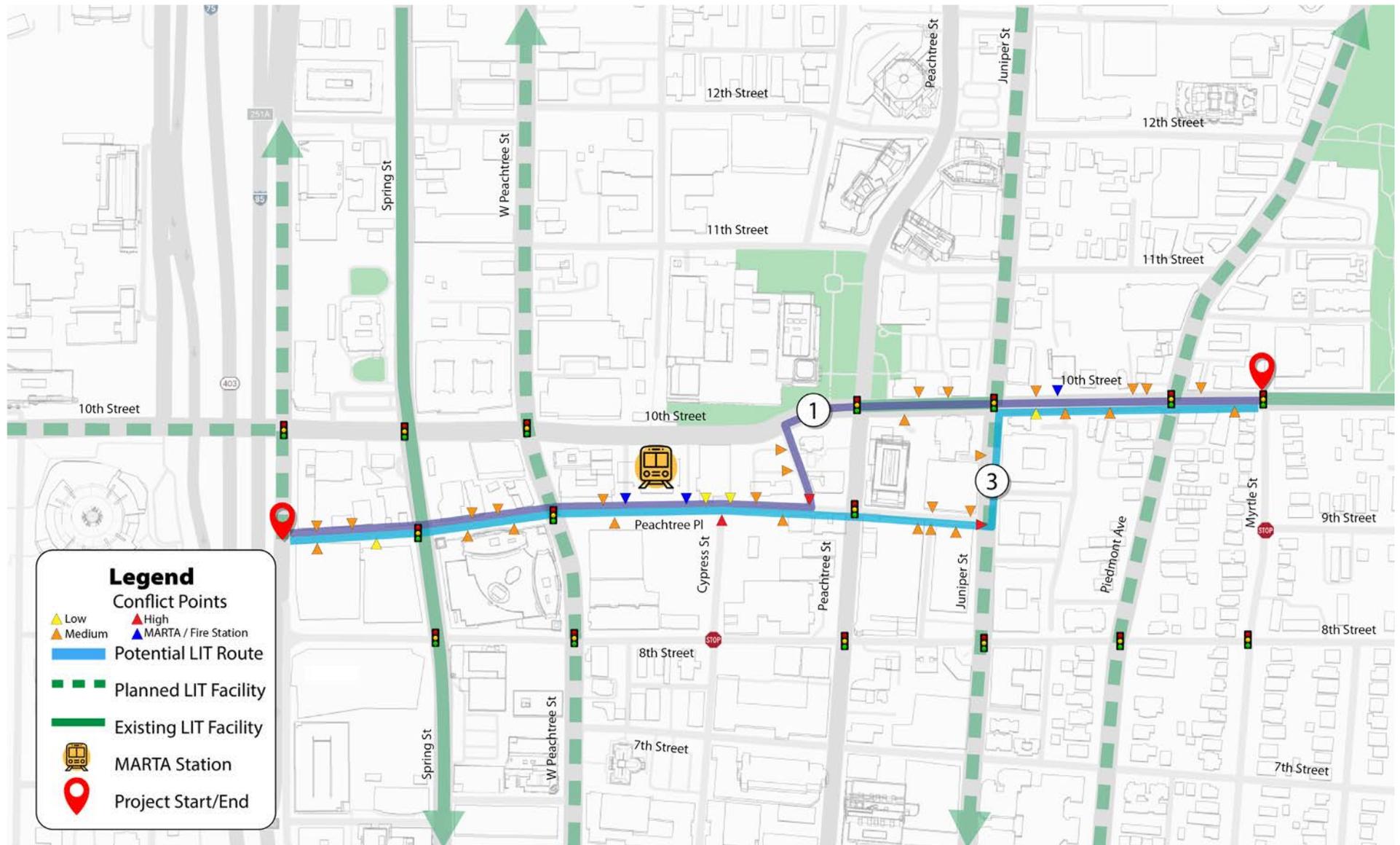
The remaining alternative routes were screened-out based on the following findings:

Alternative 2: 10th Street – Peachtree Street – Peachtree Place - This alternative would have a high level of traffic stress along Peachtree Street, where designs would require bicycles mixing with vehicular traffic in the same lane.

Alternative 4: Myrtle Street – 8th Street – Juniper Street – Peachtree Place - This alternative would increase travel distance by 50% over a direct route along 10th Street and has significantly longer travel times compared to the selected alternatives.

Alternative 5: Myrtle Street – 8th Street – Cypress Street – Peachtree Place - This alternative would increase travel distance by 50% over a direct route along 10th Street and has significantly longer travel times

Figure 3. Conflict Points Along Alternatives 1 and 3



Sketch Plan Layouts

Sketch plans were developed for each of the routes to determine various configurations for:

- Reconfiguration of remaining travel lanes
- Signal retiming and bike-only signal heads
- One-way directional lanes versus two-way cycle track
- Crossing strategies at traffic signals

These plans included consideration of how the facility would interact with future bike lane projects along Piedmont Avenue and Juniper Street.

Figure 4. Sketch Plan Alternatives

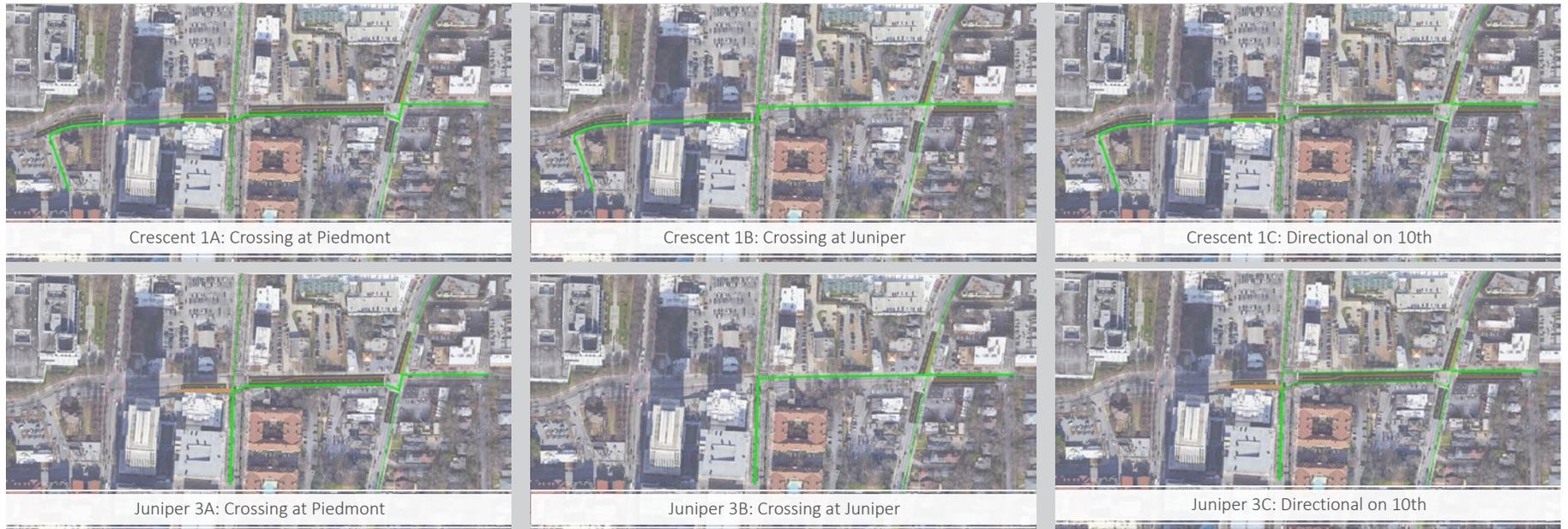


Figure 5. Route Alternatives

Route	Scenario	Facility along 10th Street	10th Street Crossing
Alternative 1 (10th Street - Crescent Avenue - Peachtree Place)	Alternative 1A	Two-way cycle track along south side of 10th Street	Two-stage crossing on east leg and south leg of Piedmont Avenue
	Alternative 1B	Two-way cycle track along north side of 10th Street	Two-stage crossing on west leg and north leg of Juniper Street
	Alternative 1C	Directional bike lanes on 10th Street between Piedmont Ave and Juniper St	Eastbound: two-stage crossing on west leg and north leg of Juniper Street; Westbound: two-stage crossing on east leg and south leg of Piedmont Avenue
Alternative 3 (10th Street - Juniper Street - Peachtree Place)	Alternative 3A	Two-way cycle track along south side of 10th Street	Two-stage crossing on east leg and south leg of Piedmont Avenue
	Alternative 3B	Two-way cycle track along north side of 10th Street	Two-stage crossing on west leg and north leg of Juniper Street
	Alternative 3C	Directional bike lanes on 10th Street between Piedmont Ave and Juniper St	Eastbound: two-stage crossing on west leg and north leg of Juniper Street; Westbound: two-stage crossing on east leg and south leg of Piedmont Avenue

Detailed Analysis

Each of the alternative layouts was analyzed to reassess potential conflict points, rider travel times, and traffic impacts.

Measure	2016
 <p>conflict points</p>	<p>Driveway conflict points were tallied along the routes. The severity of conflict was weighted based on estimated traffic volumes. Bicyclist comfort and safety are impacted by how well potential conflicts with motor vehicles are managed, and design recommendations for the selected route will include strategies to improve conditions at these conflict points.</p>
 <p>travel time</p>	<p>Bicycle delays result from signal delay, congestion-based delay, indirectness of routes, and traffic gap acceptance. Delays for bicyclists at an intersection were calculated using methodologies from the most recent version of the Highway Capacity Manual (HCM6), assuming random arrivals, cycle length, and time allocated to the desired movement.</p>
 <p>traffic impacts</p>	<p>Rather than traditional level-of-service "A" through "F", this study tabulated the amounts of added vehicle delay for each of the alternative routes. A queuing analysis was also used to evaluate block storage ratios, which considers whether or not cars are likely to fill-up a given block through the next upstream intersection.</p>

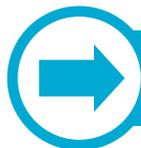
Ranking and Recommendations

Based on the final rankings, the top three preferred alternatives are 1A, 1C, and 3A. In line with project safety goals, these alternatives are amongst those with the fewest vehicle-conflicts, leading to the selection of Alternative 1A and 1C. Alternative 1C was selected based on further review of the bike-lane movements and the anticipated safety benefits of the directional lanes along 10th Street. Some of the conclusions used to narrow these alternatives are listed below:

- Alternative 3B was removed from consideration due to this alternative having the highest number of driveway conflicts.
- Alternative 3C was removed from consideration due to this alternative having the highest bike delays.
- Alternative 1B was removed from consideration due to this alternative having the highest number of driveway conflicts.

Figure 6. Final Rankings

Route	Scenario	Vehicle Conflicts	Bike Delay		Added Vehicle Delay		Block Storage	
			AM	PM	AM	PM	AM	PM
Alternative 1 (10th Street - Crescent Avenue - Peachtree Place)	Alternative 1A	#1	#1	#3	#1	#5	#3	#3
	Alternative 1B	#3	#1	#1	#4	#5	#5	#1
	Alternative 1C	#1	#3	#3	#6	#5	#1	#3
Alternative 3 (10th Street - Juniper Street - Peachtree Place)	Alternative 3A	#3	#4	#6	#1	#3	#3	#5
	Alternative 3B	#5	#4	#1	#1	#1	#5	#1
	Alternative 3C	#3	#6	#5	#4	#3	#1	#5



For more detailed information, the full Multimodal Analysis Report can be found here: <https://www.midtownatl.com/project/peachtree-place-corridor-study>.



Alliance

999 Peachtree Street, Suite 730

Atlanta, Georgia 30309

404-892-0050

MidtownATL.com

