

4.0 TIER 1 SCREENING

4.1 Development of Tier 1 Alternatives

The first step in the alternatives development and screening process was the identification of feasible alternatives. Using the final transit alternatives identified in the previous Alternatives Analysis (2004) as a starting point, the SAC was tasked with identification of transit alignments that would connect activity centers throughout the I-20 East Corridor with central Atlanta and the existing MARTA heavy rail system. Tier 1 Alternatives were developed to identify all feasible transit alignments in the corridor and connections to central Atlanta. Transit technologies, or transit modes, were deferred to the identification of the Tier 2 Alternatives.

4.2 Description of Tier 1 Alternatives

Stakeholder-identified alternatives were divided into three distinct groups: Mainline Alternatives, Panola Road Area Alternatives, and Downtown Connectivity Alternatives. Please refer to the *Definition of Alternatives Report* for more detail on each alternative. The Tier 1 Alternatives are presented in **Table 4-1** below.

Alternative Type **Alternative Name** 1. Parallel I-20 Alignment 2. Connection to Edgewood Station Mainline 3. Heavy Rail Extension from Indian Creek Alternatives 1. Parallel I-20 Sub-Alignment Panola Road Area Alternatives 2. Snapfinger Woods Drive Sub-Alignment 1. Connection to King Memorial Station via Memorial drive 2. Connection to King Memorial Station and Downtown via Streetcar Alignment 3. Connection to King Memorial Station 4. Connection to Downtown via Streetcar 5. Connection to Garnett and Five Points Stations 6. Connection to Multi-Modal Passenger Terminal/Five Points Stations Downtown 7. Connection to West End Station/Atlanta University Center/Ashby Station Connectivity 8. Connection to Inman Park Station and Midtown via BeltLine Alignment Alternatives

Table 4-1: Tier 1 Build Alternatives

4.2.1 Mainline Alternatives

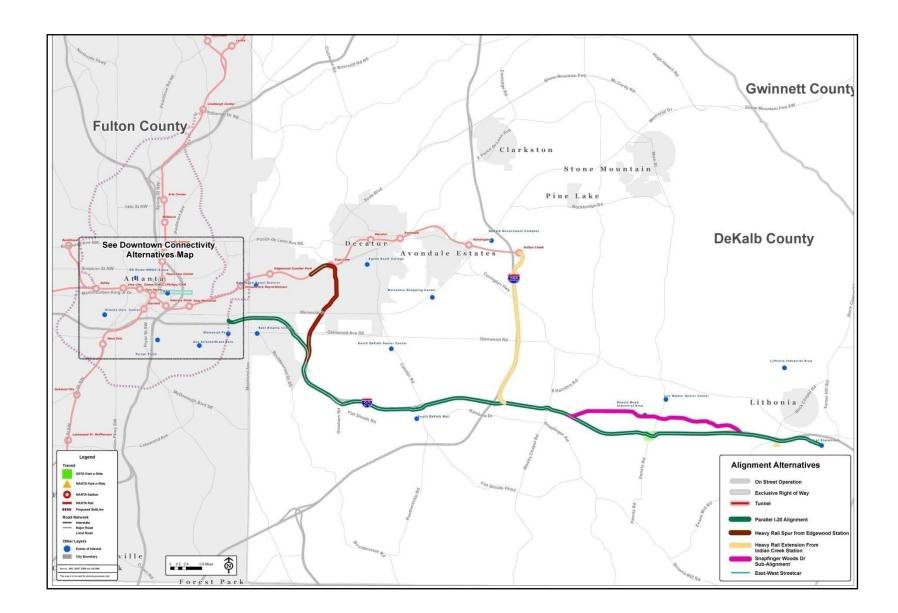
Mainline Alignment Alternatives represent the corridor-level alignment alternatives identified to provide a transit connection between Mall at Stonecrest and central Atlanta. **Figure 4-1** on page 4-2 presents the Mainline Alternatives.

Parallel I-20 Alignment

The Parallel I-20 Alignment would run adjacent to I-20 from the Mall at Stonecrest to Downtown Atlanta and has the potential to connect to the MARTA rail system at various locations in central Atlanta. These potential connections make up the Downtown Connectivity Alternatives. The Parallel I-20 Alignment would generally be located immediately adjacent I-20; however, within the City of Atlanta, it would be located on a structure in the middle of the interstate median, in order to avoid impacts to multiple historic neighborhoods within the City.



Figure 4-1: Mainline Alternatives and Panola Road Alternatives





Connection to Edgewood Station Alignment

Within most of DeKalb County, the Connection to Edgewood Station Alignment would be identical to the Parallel I-20 Alignment. It would diverge from the parallel alignment near the City of Atlanta, turn north, and enter a tunnel beneath several historic neighborhoods, and then connect to the Edgewood-Candler Park Station. By utilizing a tunnel and connecting to the existing east-west line, this alternative would avoid the costly and complicated connection directly into downtown Atlanta.

Heavy Rail Extension from Indian Creek

The Heavy Rail Extension from Indian Creek Alignment would include the extension of the MARTA east-west rail line. This extension would run south adjacent to I-285 and then run east adjacent to I-20 to the Mall at Stonecrest. By utilizing the existing east-west line to connect into downtown Atlanta, this alternative would avoid the costs and construction challenges of connecting to downtown Atlanta alongside I-20 west of I-285.

4.2.2 Panola Road Area Alternatives

Due to a relatively large employment area north of I-20 near Panola Road, two alignment alternatives were identified to serve this area. These two alternatives comprise the Panola Road Area Alternatives presented in Figure 4-1.

Parallel I-20 Sub-Alignment

This sub-alignment would run parallel to I-20 through the Panola Road Area and would feature a station at Panola Road. This alignment would operate in a dedicated transitway with no surface street operation or at-grade street crossings.

Snapfinger Woods Drive Sub-alignment

Between the Wesley Chapel Road and Panola Road Interchanges, this sub-alignment would deviate from I-20 to operate in-street on Snapfinger Woods Drive to east of Panola Road, where it would return to the I-20 alignment.

4.2.3 Downtown Connectivity Alternatives

The Downtown Connectivity Alternatives are the specific transit connections into downtown Atlanta. These alternatives are presented in **Figure 4-2** on page 4-4.

Alternative 1 – Connection to King Memorial Station via Memorial Drive

This alternative deviates from the Parallel I-20 Alignment to follow Bill Kennedy Way north to Memorial Drive. It would run in-street along Memorial Drive to the west, then travel north along Grant Street to connect with the King Memorial Transit Station.

Alternative 2 – King Memorial Station and Downtown via Streetcar

This alternative has the same alignment as Downtown Connectivity Alternative 1, but it would continue north along Grant Street to a connection with the Atlanta Streetcar. It would then follow the streetcar alignment, which includes a stop at the Peachtree Center MARTA Station.



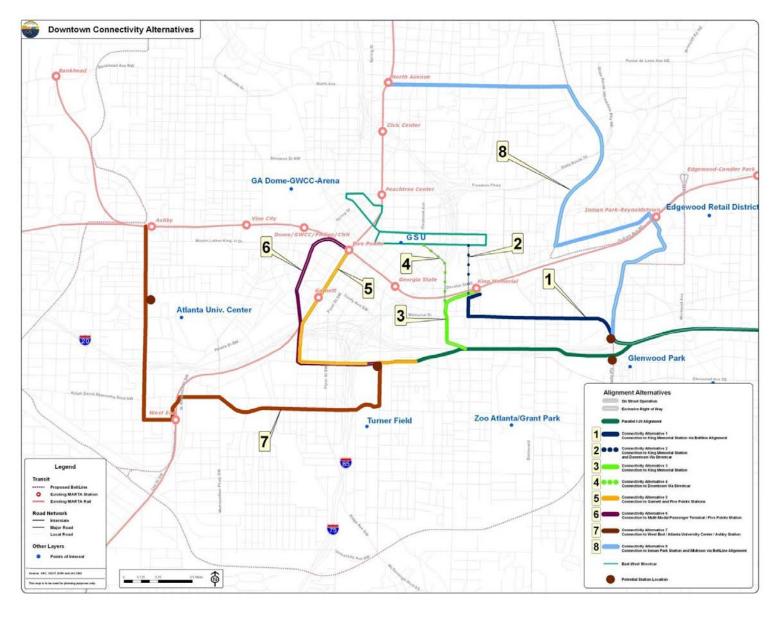


Figure 4-2: Downtown Connectivity Alternatives



Alternative 3 – King Memorial via Hill Street

This alternative would diverge from I-20 to run north in-street along Hill Street. It would turn east from Hill Street in exclusive right-of-way and connect with the King Memorial Station.

Alternative 4 - Downtown via Streetcar

Alternative 4 deviates from I-20 to run north in-street along Hill Street and then tie into the Atlanta Streetcar alignment at Edgewood Avenue. It would then follow the streetcar alignment which includes a stop at the Peachtree Center MARTA Station.

Alternative 5 – Garnett and Five Points

Alternative 5 would exit the I-20 right-of-way at Hill Street and travel along Glenwood Avenue to Fulton Street in exclusive right-of-way. At Windsor Street it would turn north, cross over I-20 and connect to Garnett Station then Five Points Station.

Alternative 6 - Multi-Modal Passenger Terminal/Five Points

The Alternative 6 alignment is almost identical to Alternative 5, but it continues on Windsor Street north, where it becomes Spring Street, and bypasses the Garnett Station. This alternative runs in-street for a short time on Spring Street. This alternative ties into the proposed MMPT, which would have direct connection into the Five Points Station.

Alternative 7 – West End Station/Atlanta University Station/Ashby

Alternative 7 would deviate from I-20 and follow Glenwood Avenue until it turns into Fulton Street. The alignment would then turn south to run in-street along Capitol Avenue and turn west along Ralph David Abernathy Boulevard, which it would follow to a connection with the West End MARTA Station. The alignment would continue west to Joseph Lowery Boulevard where it would turn north to serve the Atlanta University Center before terminating at the Ashby Station.

Alternative 8 – Inman Park Station and Midtown via BeltLine

This alignment of this alternative would diverge from I-20 at Bill Kennedy Way and follow the proposed BeltLine alignment north to North Avenue. It would then turn west, running in-street along North Avenue to a connection with the North Avenue Station.

4.3 Tier 1 Alternatives Cost Estimates

The Tier 1 Alternatives cost estimates were high level conceptual cost estimates. Because Tier 1 Alternatives were mode-neutral, all cost estimates were originally prepared assuming LRT as a common transit mode for all alternatives. However, as the alternatives were developed, Mainline Alignments 2 and 3 were identified as being feasible only as extensions of the existing MARTA HRT system. Thus, cost estimates for these mainline alignments were assumed as HRT alternatives and all others were assumed as LRT alternatives. **Table 4-2** on page 4-6 presents the concept level cost estimates for the Tier 1 Alternatives.

4.4 Tier 1 Findings and Evaluation

The Tier 1 Screening utilized a limited number of evaluation criteria and MOEs to evaluate which alternatives best addressed the identified project goals and objectives. The results of the Tier 1 Screening are presented in **Table 4-3** on page 4-7.



Table 4-2: Tier 1 Concept Level Cost Estimates

Alternative #	Alternative Name	Right-of- Way Cost	Capital, Professional, Finance, & Contingency Costs	Total Cost		
	Mainline Aligr	nment Alternati	ves			
Mainline Alternative 1	Connection Directly to Downtown Atlanta	\$199.8M	\$2,221M	\$2,421M		
Mainline Alternative 2	Connection to Edgewood Station	\$78.6M	\$2,777M	\$2,856M		
Mainline Alternative 3	Heavy Rail Extension from Indian Creek	\$53.3M	\$1,697M	\$1,750M		
	Downtown Conr	nectivity Alterna	atives			
DCA 1	Connection to King Memorial Station via Memorial Drive	\$80.8M	\$1,871M	\$1,952M		
DCA 2	Connection to King Memorial Station and Downtown via Streetcar Alignment	\$80.8M	\$1,881M	\$1,962M		
DCA 3	Connection to King Memorial Station	\$186.4M	\$2,008M	\$2,194M		
DCA 4	Connection to Downtown via Streetcar	\$143.8M	\$2,018M	\$2,162M		
DCA 5	Connection to Garnett and Five Points Stations	\$199.8M	\$2,221M	\$2,421M		
DCA 6	Connection to Multi-Modal Passenger Terminal/Five Points Stations	\$197.5M	\$2,148M	\$2,346M		
DCA 7	Connection to West End Station/Atlanta University Center/Ashby Station	\$187.2M	\$2,144M	\$2,331M		
DCA 8	Connection to Inman Park Station and Midtown via BeltLine Alignment	\$83.7M	\$1,988M	\$2,072M		
	Panola Road	Area Alternativ				
Panola Road Service Option 1	Parallel I-20 Sub-Alignment	\$199.8M	\$2,221M	\$2,421M		
Panola Road Service Option 2	Snapfinger Woods Drive Sub-Alignment	\$165.1M	\$1,933M	\$2,098M		

Source: HDR Engineering



Table 4-3: Tier 1 Screening Results

	Mainline Alternatives			Panola Road Area Alternatives		Downtown Connectivity Alternatives							
Project Goal	1. Connection Directly to Downtown Atlanta	2. Connection to Edgewood Station	3. Heavy Rail Extension from Indian Creek	1. Parallel I-20 Sub-Alignment	2. Snapfinger Woods Drive Sub-Alignment	1. Connection to King Memorial Station via Memorial drive	2. Connection to King Memorial Station and Downtown via Streetcar Alignment	3. Connection to King Memorial Station	4. Connection to Downtown via Streetcar	5. Connection to Garnett and Five Points Stations	6. Connection to Multi-Modal Passenger Terminal/Five Points Stations	7. Connection to West End Station/ Atlanta University Center/Ashby Station	8. Connection to Inman Park Station and Midtown via Beltline Alignment
ncrease Mobility and Accessibility					0	0	0		0			0	
Provide Improved Fransit Service within the Corridor			0			•	0	0	0			0	0
Support Land Use and Development Goals			0										
Promote Cost Effective Transit nvestments	0			0	0			0	0	0	0	0	0
Preserve Natural and Built Environment		0				0	0						0
Achieve a High evel of Community Support		0				0	0	0	0			0	0
dvanced to Tier 2 creening	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	NO	YES

Legend Performed well Performed moderately well Performed poorly



4.5 Alternatives Advanced into Tier 2 Analysis

Alternatives were identified for advancement into the Tier 2 Screening based on the evaluation results presented above and with input and feedback from corridor stakeholders.

4.5.1 Alternatives Advanced to Tier 2 Screening

Mainline Alternatives

As all three Mainline Alternatives performed well in Tier 1 Screening, the **Parallel I-20 Alignment**, the **Connection to Edgewood Station**, and the **Heavy Rail Extension from Indian Creek** were all advanced to the Tier 2 Screening for further analysis.

Panola Road Area Alternatives

The **Parallel I-20 Sub-Alignment** performed well in the evaluation and received overwhelming public support, and so was advanced to the Tier 2 Screening.

Downtown Connectivity Alternatives

The Connection to Garnett and Five Points Stations and the Connection to Inman Park Station and Midtown via BeltLine Alignment were advanced for further evaluation in the Tier 2 Screening because both alignments performed well in the Tier 1 Screening, were supported by the City of Atlanta staff, and had short travel times, with moderate to high projected ridership, costs, and public support.

4.5.2 Alternatives Dropped from Further Consideration

Mainline Alternatives

None of the Mainline Alternatives were dropped from further consideration at this point in the DCA.

Panola Road Area Alternatives

The **Snapfinger Woods Drive Sub-Alignment** was dropped from further consideration due to lower projected daily ridership and longer travel times from Mall at Stonecrest to Five Points than the Parallel I-20 Sub-Alignment. This alternative also garnered very strong opposition from residents along its alignment.

Downtown Connectivity Alternatives

Despite rating well in the Tier 1 Screening, the **Connection to Multi-Modal Passenger Terminal/Five Points Station** was not promoted to Tier 2 Screening. It is all but identical to the Connection to Garnett and Five Points Station Alternative, but with longer travel times and fewer daily riders and new riders. Also, there are too many unknowns about the proposed MMPT facility to pursue a connection at this time.

The Connection to King Memorial Station and Downtown via Streetcar Alignment and the Connection to Downtown via Streetcar were dropped from further consideration because these alternatives did not perform well in the Tier 1 evaluation and because Atlanta Streetcar alignment and service would be appropriate for single car transit vehicles, rather than the multi-car consists that these alternatives would require.



The **Connection to King Memorial Station via Memorial Drive** was dropped from further consideration because, despite its relatively low projected costs, this alternative performed poorly and had low public support.

The **Connection to King Memorial Station** was dropped from further consideration despite its relatively short travel times, because it had relatively high projected costs, low ridership and low public support.

The Connection to West End Station/Atlanta University Center/Ashby Station was dropped from further consideration because it was projected to attract relatively low ridership, have longer travel times, and higher costs than other Downtown Connectivity Alternatives.