



3.0 TIER 1 SCREENING

3.1 Tier 1 Measures of Effectiveness

As described in Section 1, the Tier 1 Screening was a preliminary evaluation intended to rule out those alternatives which rated poorly so that the remaining alternatives could be subject to a detailed screening in Tier 2. Therefore, only a limited number of evaluation criteria and MOEs were selected for use in the Tier 1 Screening. Tier 1 MOEs are summarized in **Table 3-1**. For a detailed explanation of all evaluation criteria and MOEs, please refer to the *Evaluation Framework Report*.

Table 3-1: Tier 1 Screening

Goal 1: Increase Mobility and Accessibility		
Evaluation Criteria	Measure of Effectiveness	Tools/Resources
Travel Times	Transit Travel Times from Stonecrest to Five Points Station	Travel Demand Model output
Goal 2: Provide Improved Transit Service within the Corridor		
Evaluation Criteria	Measure of Effectiveness	Tools/Resources
Transit System Ridership	Total Transit Boardings	Travel Demand Model output
	New Transit Riders	Travel Demand Model output
Goal 3: Support Land Use and Development Goals		
Evaluation Criteria	Measure of Effectiveness	Tools/Resources
Proximity of Underutilized Land	Acres of vacant or underutilized land within ½-mile of transit stations/stops	<ul style="list-style-type: none"> • GIS spatial analysis • Land use maps • Aerial photography
Goal 4: Promote Cost Effective Transit Investments		
Evaluation Criteria	Measure of Effectiveness	Tools/Resources
Cost and Cost Effectiveness	Capital costs (Stations, transitways, tracks, vehicles, and maintenance facilities) and right-of-way costs in \$millions	<ul style="list-style-type: none"> • Capital unit costs for similar transportation investments • National and local transportation projects • Existing land use and parcel-level tax data for estimated right-of-way costs
Goal 5: Preserve Natural and Built Environment		
Evaluation Criteria	Measure of Effectiveness	Tools/Resources
Impact to community, cultural, and natural resources	Total residential and commercial displacements	<ul style="list-style-type: none"> • GIS spatial analysis • Aerial photography • GIS based property line information for DeKalb and Fulton Counties
Goal 6: Achieve a High Level of Community Support		
Evaluation Criteria	Measure of Effectiveness	Tools/Resources
Maintain compliance with stakeholder guidance	Compliance with SAC Guiding Principles	<ul style="list-style-type: none"> • SAC guiding principles
Achieve a high level of public support	Degree of Public Support	<ul style="list-style-type: none"> • % of votes for Mainline, Downtown Connectivity, and Panola Road Alternatives from public meetings and online survey

3.2 Alternatives Evaluation Ratings and Scores

In the Tier 1 Screening, each alternative was rated for its performance under a series of MOEs selected to assess the alternative’s ability to meet the project goals. For each MOE, alternatives were given a rating of zero, one, or two based on how well that alternative performed. In order to assign each alternative a rating of zero, one, or two, rating thresholds were developed for each MOE. In most cases there were natural breaks in the performance data that established logical thresholds to provide differentiation among alternatives. Generally the rating thresholds were based on the range of MOE results for all alternatives. For example, if transit boardings for all alternatives ranged from 15,000 to 42,000, the thresholds and associated ratings would breakdown as shown in **Table 3-2**.

Table 3-2: Sample MOE Ratings

Measure of Effectiveness	Ratings		
	2	1	0
Total Transit Boardings	>40,000	20,000 – 40,000	< 20,000

For scenarios where the variance was very small among the performance of all alternatives, the thresholds were not based purely on the range of results. Rather, the thresholds were assigned based on how well the alternatives addressed the specific evaluation criterion. For example, when evaluating the amount of underutilized land that would be available for redevelopment at station areas, if all alternatives were shown to have between 800 and 900 acres of land for redevelopment, it would not be appropriate to rate one alternative with a zero and another at two considering there was so little difference between their results, and the fact that all alternatives address this evaluation criterion well. In this case the ratings and thresholds would be as in **Table 3-3**.

Table 3-3: Sample MOE Ratings

Measure of Effectiveness	Ratings		
	2	1	0
Acres of vacant or underutilized land within ½-mile of transit stations/stops	>800 acres	400-800 acres	<400 acres

For certain MOEs, the performance measures were more qualitative, and thresholds were not based on quantitative performance results but were based on the range of qualitative findings. One example of this is the MOE that evaluated whether the alternatives were consistent with the adopted local and regional land use plans. In this case, a review of the local and regional land use plans revealed if the alternatives were completely consistent with, partially consistent with, or inconsistent with these land use plans. Thus, the rating for this MOE is as in **Table 3-4**.

Table 3-4: Sample MOE Ratings

Measure of Effectiveness	Ratings		
	2	1	0
Consistency with adopted local and regional plans	Complete	Partial	Inconsistent

These MOE scores are the foundation for the alternatives’ goal scores, and finally, for their overall scores. For each alternative, the ratings for each MOE were averaged and then



rounded to the nearest whole number to obtain a project goal score. In this way, each alternative was evaluated for how well it addressed each project goal. Project goal ratings were then summed for each alignment to produce overall ratings. Within each category of alignment, Mainline, Panola Road Area, and Downtown Connector, overall ratings led to the elimination of some alignments and the promotion of others into the Tier 2 Screening. The remainder of this section describes each evaluation criteria, MOE, and the evaluation results.

3.3 Goal 1: Increase Mobility and Accessibility

The first stakeholder identified goal of the I-20 East Transit Initiative is: Increase Mobility and Accessibility. As detailed in the *Purpose and Need Report*, traffic congestion and limited transportation options have led to increasingly long travel times which constrain mobility and accessibility within the corridor. To address this issue, the objective of improved travel times for east-west travel was identified. The ability of each alternative to meet this project goal was measured in the Tier 1 Screening in terms of comparative travel times.

3.3.1 MOE: Transit Travel Times from Stonecrest to Five Points Station

This MOE measured the total transit travel time between the Mall at Stonecrest and the Five Points Station in downtown Atlanta in 2030 for each alternative. This measure compiled travel time spent on transit, whether on a transit vehicle, time spent transferring from one transit mode to another, or wait times associated with the given trip. The travel demand model served as the source for all values.

3.3.2 Goal 1 Performance Ratings

As can be seen in **Table 3-5**, alternatives were rated two points for trip times below 45 minutes, one point for trips between 45 and 60 minutes and zero points for trips longer than 60 minutes.

Table 3-5: Performance Ratings for Goal 1 MOE

Measure of Effectiveness	Ratings		
	2	1	0
Transit Travel Times to Five Points Station	<45 minutes	45-60 minutes	> 60 minutes

3.3.3 Goal 1 Evaluation Results

Mainline Alternatives

For purposes of the evaluation of Mainline Alternatives, all alternatives were paired with the highest performing Panola Road Area Alternative, which was the Parallel I-20 Sub-Alignment, and Downtown Connectivity Alternative, which was the Connection to Garnett and Five Points Stations. Among Mainline Alternatives, the Parallel I-20 Alignment had the fastest travel time of 37.2 minutes, followed by the Connection to Edgewood Station, and then the Heavy Rail Extension from Indian Creek (**Table 3-6**). As travel times for each alternative were all less than 45 minutes, they were all rated two points for the MOE and thus for the Goal 1 Summary Rating.



Table 3-6: Goal 1 Evaluation of Mainline Alternatives

	Transit Travel Times to Five Points Station, in minutes	Travel Time Rating	Goal 1 Summary Rating
1. Parallel I-20 Alignment	37.2	2	2
2. Connection to Edgewood Station	38.6	2	2
3. Heavy Rail Extension from Indian Creek	39.9	2	2

Panola Road Area Alternatives

For purposes of the evaluation of Panola Road Area Alternatives, all alternatives were paired with the highest performing Mainline Alternative, which was the Parallel I-20 Alignment, and Downtown Connectivity Alternative, which was the Connection to Garnett and Five Points Stations. The Parallel I-20 Sub-Alignment had the fastest travel time of the Panola Road Area alignments with 37.2 minutes (**Table 3-7**), and thus earned two points. The Snapfinger Road Alternative travel time was 48.2 minutes, which earned this alternative one point.

Table 3-7: Goal 1 Evaluation of Panola Road Area Alternatives

	Transit Travel Times to Five Points Station, in minutes	Travel Time Rating	Goal 1 Summary Rating
1. Parallel I-20 Sub-Alignment	37.2	2	2
2. Snapfinger Woods Drive Sub-Alignment	48.2	1	1

Downtown Connectivity Alternatives

For purposes of the evaluation of Downtown Connectivity Alternatives, all alternatives were paired with the highest performing Mainline Alternative, which was the Parallel I-20 Alignment, and Panola Road Area Alternative, which was the identical Parallel I-20 Sub-Alignment. If a given Downtown Connectivity Alternative did not provide a direct connection, the transit trip assumed a transfer onto the existing rail system to reach Five Points Station. Among Downtown Connectivity Alternatives, the Connection to Garnett and Five Points Stations had the fastest travel time of 37.2 minutes, followed by the Connection to MMPT/Five Points (40.4 minutes) and the Connection to King Memorial Station (41.8 minutes) (**Table 3-8**). These three alignments were rated two points each. The remainder of the Downtown Connectivity Alternatives had travel times between 45 minutes and one hour and were rated one point each.

Table 3-8: Goal 1 Evaluation of Downtown Connectivity Alternatives

	Transit Travel Times to Five Points Station, in minutes	Travel Time Rating	Goal 1 Summary Rating
1. Connection to King Memorial Station via Memorial drive	47.5	1	1
2. Connection to King Memorial Station and Downtown via Streetcar Alignment	47.1	1	1
3. Connection to King Memorial Station	41.8	2	2
4. Connection to Downtown via Streetcar	49.3	1	1
5. Connection to Garnett and Five Points Stations	37.2	2	2
6. Connection to MMPT/Five Points Stations	40.4	2	2
7. Connection to West End Station/Atlanta University Center/Ashby Station	48.5	1	1
8. Connection to Inman Park Station and Midtown via BeltLine Alignment	45.0	1	1



3.4 Goal 2: Provide Improved Transit Service within the Corridor

In order to evaluate how well the alternatives would meet Project Goal 2: Provide Improved Transit Service within the corridor, they were assessed in terms of their ability to provide transit service with sufficient capacity to accommodate growing demand. This ability was measured by the total transit riders and the number of new transit riders projected for each alternative.

3.4.1 MOE: Total Transit Boardings

This MOE measured the total boardings onto the new transit service proposed by each alternative. While some alternatives would serve multiple existing stations, only boardings onto the proposed transit line are counted as part of this MOE. The travel demand model served as the source for all values.

3.4.2 MOE: New Transit Riders

This MOE measured how well each alternative attracts corridor residents to use transit. The measure indicated how well the given alternative would capture new transit trips that would otherwise be made by automobile or ped/bike modes. The travel demand model served as the source for all values.

3.4.3 Goal 2 Performance Ratings

The number of total boardings and new riders among the alternatives was compared in order to formulate relative performance ratings for Goal 2 MOEs. As can be seen in **Table 3-9**, alternatives with total transit boardings greater than 20,000 riders were rated two points, boardings between 15,000 and 20,000 were rated one point, and those with fewer than 15,000 were rated zero. Similarly, those alignments with greater than 6,000 new transit riders were awarded a rating of two, between 3,000 and 6,000 were awarded one, and those with fewer than 3,000 were awarded zero points.

Table 3-9: Performance Ratings for Goal 2 MOEs

Measures of Effectiveness	Ratings		
	2	1	0
Total Transit Riders	>20,000	15,000-20,000	<15,000
New Transit Riders	>6,000	3,000-6,000	<3,000

3.4.4 Goal 2 Evaluation Results

Mainline Alternatives

Among Mainline Alternatives, the Parallel I-20 Alignment was projected to attract 27,000 total transit boardings, significantly more than the other alternatives, which attracted 15,100 and 11,300 total boardings (**Table 3-10**). In accordance with the performance ratings, the Parallel I-20 Alignment was rated two points for total transit riders, the Connection to Edgewood Station was rated one point, and the Heavy Rail Extension from Indian Creek was rated zero points.

In terms of new transit riders, the Connection to Edgewood Station was projected to attract 7,100 new riders; the Parallel I-20 Alignment, 6,600 new riders; and the Heavy



Rail Extension from Indian Creek, 6,300 new riders. Thus, all Mainline Alternatives were rated two points based on the performance rating structure.

The Goal 2 Summary Rating, which is a rounded average of the MOE ratings, was two for the Parallel I-20 Alignment and the Connection to Edgewood Station and one for the Heavy Rail Extension from Indian Creek.

Table 3-10: Goal 2 Evaluation of Mainline Alternatives

Measures of Effectiveness	Total Transit Riders	Total Transit Riders Rating	New Transit Riders	New Transit Riders Rating	Goal 2 Summary Rating
1. Parallel I-20 Alignment	27,000	2	6,600	2	2
2. Connection to Edgewood Station	15,100	1	7,100	2	2
3. Heavy Rail Extension from Indian Creek	11,300	0	6,300	2	1

Panola Road Area Alternatives

The Parallel I-20 Sub-Alignment was the better performing Panola Road Area Alternative in terms of both total transit boardings, 27,000, and new riders, 6,600, and was rated a two in each MOE (**Table 3-11**). The Snapfinger Woods Drive Sub-Alignment was projected to attract 22,500 total transit riders and so was also rated a two for that MOE. With a projected 4,300 new transit riders, it was rated one point for that MOE. Since the Goal 2 Summary Rating is based on an average of the MOE ratings, both Sub-Alignments received a Summary Rating of two for Goal 2.

Table 3-11: Goal 2 Evaluation of Panola Road Area Alternatives

Measures of Effectiveness	Total Transit Riders	Total Transit Riders Rating	New Transit Riders	New Transit Riders Rating	Goal 2 Summary Rating
1. Parallel I-20 Sub-Alignment	27,000	2	6,600	2	2
2. Snapfinger Woods Drive Sub-Alignment	22,500	2	4,300	1	2

Downtown Connectivity Alternatives

As shown in **Table 3-12**, among Downtown Connectivity Alternatives, the Connection to Garnett and Five Points Stations and the Connection to the MMPT/Five Points Stations were projected to attract 27,000 and 23,200 total passengers, respectively, and both were rated a two for the MOE. The Connection to West End Station/Atlanta University Center/Ashby Station and the Connection to Inman Park Station and Midtown via BeltLine Alignment were projected to attract 17,300 and 18,100 riders respectively. Thus, both were rated a one for the MOE, while the remaining alignments were projected to attract fewer than 15,000 riders and all received a rating of zero.

The Connection to Garnett and Five Points Stations was projected to attract 6,600 new riders, and so rated a two for that MOE. The Connection to MMPT/Five Points Stations was projected to attract 5,300 new riders and received a one for the MOE. All other alternatives, with the exception of the Connection to King Memorial Station via Memorial Drive Alternative, were projected to attract from 3,000 to 6,000 new riders and were awarded a one for the MOE. The Connection to King Memorial via Memorial Drive was projected to attract 2,900 new riders and was rated a zero for the MOE.



Based on the average of the ratings each received under the Goal 2 MOEs, the Connection to Garnett and Five Points Stations and the Connection to MMPT/Five Points Stations each received a Goal 2 Summary Rating of two. All other alignments were rated a one, with the exception of the Connection to King Memorial Station via Memorial Drive, which was rated a zero.

Table 3-12: Goal 2 Evaluation of Downtown Connectivity Alternatives

	Total Transit Riders	Total Transit Riders Rating	New Transit Riders	New Transit Riders Rating	Goal 2 Summary Rating
1. Connection to King Memorial Station via Memorial Drive	11,800	0	2,900	0	0
2. Connection to King Memorial Station and Downtown via Streetcar Alignment	14,200	0	3,100	1	1
3. Connection to King Memorial Station	13,800	0	3,300	1	1
4. Connection to Downtown via Streetcar	13,800	0	3,000	1	1
5. Connection to Garnett and Five Points Stations	27,000	2	6,600	2	2
6. Connection to MMPT/Five Points Stations	23,200	2	5,300	1	2
7. Connection to West End Station/Atlanta University Center/Ashby Station	17,300	1	3,900	1	1
8. Connection to Inman Park Station and Midtown via BeltLine Alignment	18,100	1	3,800	1	1

3.5 Goal 3: Support Land Use and Development Goals

In order to evaluate how well the alternatives would meet Project Goal 3: Support Land Use and Development Goals, they were assessed for their potential to attract economic development and revitalization. This ability was measured in terms of the acreage of vacant or underutilized land within one-half mile of the proposed stations associated with each alternative. Underutilized land includes areas that are clearly not operating to their highest and best use. This includes areas with significant parking, large parcels with only a small percentage of the land area improved, and developed areas with a large percentage of vacant or abandoned structures. These areas represent prime locations in which redevelopment could occur. The existing MARTA stations to which these connect are not considered in the analysis since this evaluation is focused on the proposed alternatives rather than the existing transit system.

The Downtown Connectivity Alternatives were developed and evaluated for the purposes of identifying the most efficient transit connection into downtown Atlanta. Since the areas surrounding downtown Atlanta were not identified by stakeholders as needing redevelopment, the Downtown Connectivity Alternatives were assigned an equal rating for Goal 3 based on Mainline Alternative 1, the Parallel I-20 alignment, since it is the only Mainline Alternative that connected to the Downtown Connectivity Alternatives.

3.5.1 MOE: Land Available for Development or Redevelopment

Transit stations have the potential to act as catalysts for development and redevelopment of the lands around them, particularly for the redevelopment of low-density uses or vacant lands into transit-oriented development (TOD). In order to weigh each alternative’s potential to meet Goal 3, the vacant and underutilized lands within a one-half mile radius of each proposed station was calculated, and then summed by alternative. Vacant and underutilized lands were determined through GIS analysis and field survey. The proposed new stations associated



with each Mainline Alternative and Panola Road Area Alternative are listed in **Tables 3-13** and **3-14**. These stations are also mapped in **Figure 3-1**.

Table 3-13: Potential New Stations Associated with Tier 1 Mainline Alternatives

	Mall at Stonecrest	Panola Road	Wesley Chapel	Covington Highway	Candler Road	Gresham Road	Glenwood Park
1. Parallel I-20 Alignment	x	x	x		x	x	x
2. Connection to Edgewood Station	x	x	x		x	x	
3. Heavy Rail Extension from Indian Creek	x	x	x	x			

Table 3-14: Potential New Stations Associated with Tier 1 Panola Road Area Alternatives

	Mall at Stonecrest	Panola Road	DeKalb Medical Center	Wesley Chapel	Candler Road	Gresham Road	Glenwood Park
1. Parallel I-20 Sub-Alignment	x	x		x	x	x	x
2. Snapfinger Woods Drive Sub-Alignment	x	x	x	x	x	x	x

The vacant and underutilized lands for each proposed new station are reported in **Table 3-15**.

Table 3-15: Acreage of Vacant and Underutilized Land within One-Half Mile of Proposed Stations

Station Area	Acreage
Turner Field	97.01
Glenwood Park	48.83
Gresham Road	147.96
Candler Road	158.64
Wesley Chapel	104.7
DeKalb Medical	52
Panola Road	137.79
Mall at Stonecrest	144.56
Covington Highway	26.52

3.5.2 Goal 3 Performance Ratings

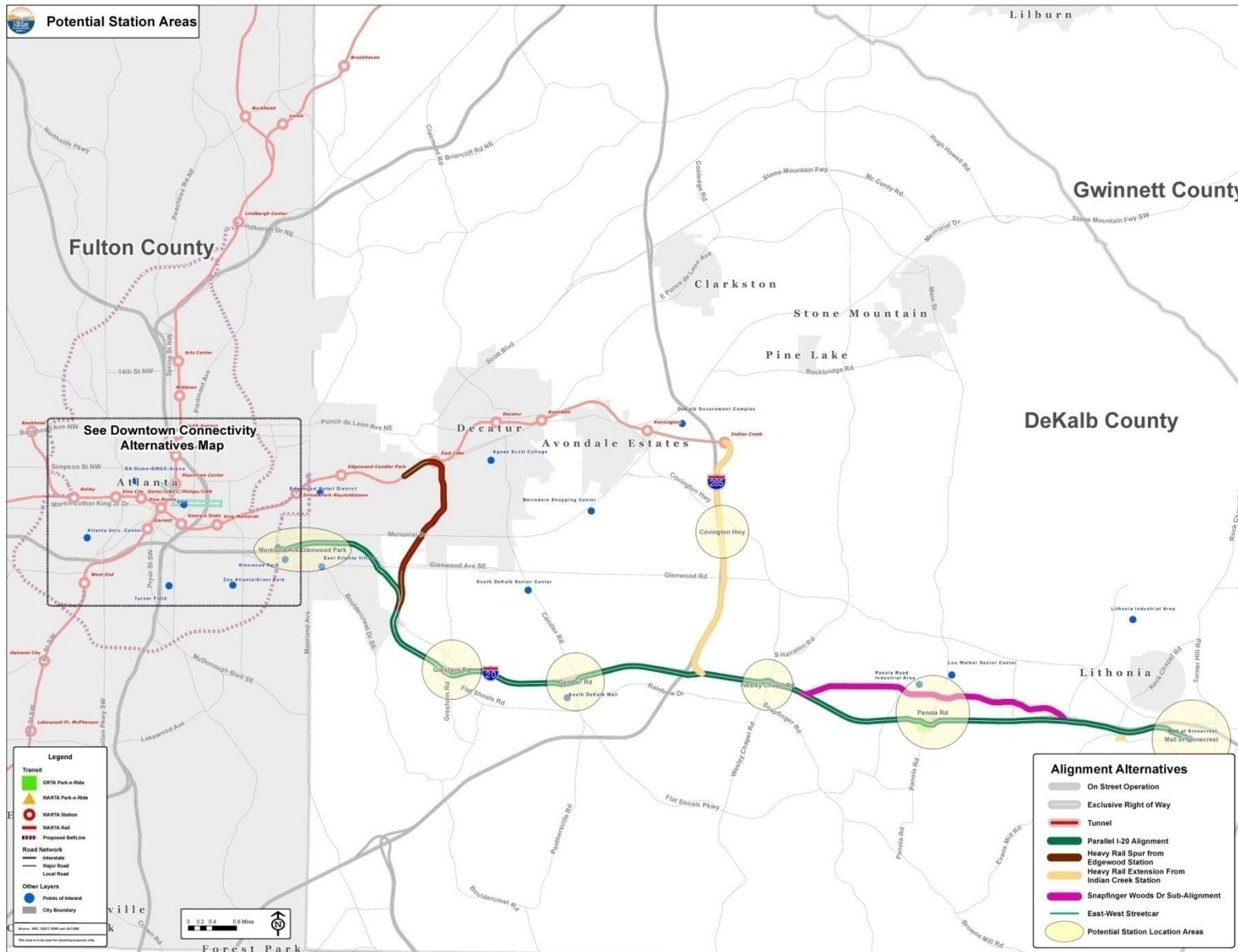
As can be seen in **Table 3-16**, alternatives were rated a two if there were 500 or more acres of developable or redevelopable land within one half mile of the stations along their alignments. They were rated a one for 250 to 500 acres, and a zero for fewer than 250 acres. As Goal 3 contains just one Tier 1 MOE, the MOE rating is also the Goal 3 Summary Rating for all alignments.

Table 3-16: Performance Ratings for Goal 3 MOEs

Measures of Effectiveness	Ratings		
	2	1	0
Acres of vacant or underutilized land within ½-mile of transit stations/stops	>500 acres	250-500 acres	<250 acres



Figure 3-1: Proposed Stations for Tier 1 Mainline and Panola Road Area Alternatives





3.5.3 Goal 3 Evaluation Results

Mainline Alternatives

The acreage of undeveloped or underutilized land within one-half mile of the stations proposed along each Mainline Alternative was summed for this assessment (**Table 3-17**). There were approximately 740 acres of undeveloped or underutilized land within a one-half mile radius of the stations along the Parallel I-20 Alignment and 690 acres within one-half mile of the stations along the Connection to Edgewood Station, and so both were rated a two for this MOE in accordance with the tiered ratings presented in Table 3-13. The Heavy Rail Extension from Indian Creek would only provide access to 410 such acres and so it was rated a one.

Table 3-17: Goal 3 Evaluation of Mainline Alternatives

Measures of Effectiveness	Total Acreage of Undeveloped or Underutilized Land within ½ mile of Proposed Station Areas	Total Development Rating	Goal 3 Summary Rating
1. Parallel I-20 Alignment	740	2	2
2. Connection to Edgewood Station	690	2	2
3. Heavy Rail Extension from Indian Creek	410	1	1

Panola Road Area Alternatives

There were approximately 740 acres of undeveloped or underutilized land within a one-half mile radius of the stations along the Parallel I-20 Alignment and 690 acres within one-half mile of the stations along the Snapfinger Woods Drive Sub-Alignment, and so both were rated a two for this MOE (**Table 3-18**).

Table 3-18: Goal 3 Evaluation of Panola Road Area Alternatives

Measures of Effectiveness	Undeveloped or Underutilized Land within ½ mile of Proposed Station Areas	Total Development Rating	Goal 3 Summary Rating
1. Parallel I-20 Sub-Alignment	740	2	2
2. Snapfinger Woods Drive Sub-Alignment	690	2	2

Downtown Connectivity Alternatives

All Downtown Connectivity Alternatives were assumed to operate in conjunction with the Parallel I-20 Alignment from the Mainline Alternatives. Since no additional station areas were associated with the Downtown Connectivity Alternatives for redevelopment analysis, all Downtown Connectivity Alternatives rated equally. Accordingly, there were approximately 740 acres of undeveloped or underutilized land within a one-half mile radius of the stations along each of the Downtown Connectivity Alternatives, as can be seen in **Table 3-19**. Thus each alternative was rated a two for this MOE.



Table 3-19: Goal 3 Evaluation of Downtown Connectivity Alternatives

	Undeveloped or Underutilized Land within ½ mile of Proposed Station Areas	Total Development Rating	Goal 3 Summary Rating
1. Connection to King Memorial Station via Memorial Drive	740	2	2
2. Connection to King Memorial Station and Downtown via Streetcar Alignment	740	2	2
3. Connection to King Memorial Station	740	2	2
4. Connection to Downtown via Streetcar	740	2	2
5. Connection to Garnett and Five Points Stations	740	2	2
6. Connection to MMPT/Five Points Stations	740	2	2
7. Connection to West End Station/Atlanta University Center/Ashby Station	740	2	2
8. Connection to Inman Park Station and Midtown via BeltLine Alignment	740	2	2

3.6 Goal 4: Promote Cost Effective Transit Investments

Alternatives were evaluated on their ability to meet Project Goal 4: Promote Cost-Effective Transit Investments, and specifically their ability to provide transit service that can be implemented with available resources. The Total Costs MOE was composed of capital costs and right-of-way acquisition costs. As mentioned previously, all alternatives were cost estimated as LRT transit investments with the exception of the Heavy Rail Extension from Indian Creek Station Mainline Alternative. This is due to the fact that HRT was the only feasible transit mode for this alternative.

3.6.1 MOE: Total Cost

Given the fiscal constraints facing transportation investments in the Atlanta region, total project cost was utilized to evaluate the cost effectiveness of alternatives relative to each other.

3.6.2 Goal 4 Performance Ratings

The ratings for Goal 4 are presented in **Table 3-20**. Accordingly, alignments with projected costs of under \$2,000M were rated a two; projects with total costs between \$2,000M and \$2,500M were rated a one; and projects with projected costs over \$2,500M were rated zero. As Goal 4 contains just one Tier 1 MOE, the MOE rating is also the Goal 4 Summary Rating for all alignments.

Table 3-20: Performance Ratings for Goal 4 MOE

Measures of Effectiveness	Ratings		
	2	1	0
Total Costs - Capital costs (Transitways, tracks, structures) and right-of-way costs in \$millions.	<\$2,000M	\$2,000M-\$2,500M	>\$2,500M

3.6.3 Goal 4 Evaluation Results

Mainline Alternatives

As shown in **Table 3-21**, the Heavy Rail Extension from Indian Creek had the lowest projected total cost of the mainline alternatives, at \$1,750M, and was rated a two. The Parallel I-20 Alignment had projected cost of \$2,421M and was rated one, while the Connection to Edgewood Station was rated a zero for the projected costs of \$2,856M.



Concept level cost estimates were developed using FTA standard cost categories for reporting, estimating and managing capital costs for New Starts projects. For more information on how capital costs and right-of-way costs were developed, please see the *I-20 East Definition of Alternatives Report* and its appendices.

Table 3-21: Goal 4 Evaluation of Mainline Alternatives

Measures of Effectiveness	Total costs - Capital costs (Transitways, tracks, structures) and right-of-way costs in \$millions.	Total Costs Rating	Goal 4 Summary Rating
1. Parallel I-20 Alignment	\$2,421	1	1
2. Connection to Edgewood Station	\$2,856	0	0
3. Heavy Rail Extension from Indian Creek	\$1,750	2	2

Panola Road Area Alternatives

As can be seen in **Table 3-22**, the Parallel I-20 Sub-Alignment and the Snapfinger Woods Drive Sub-Alignment were projected to cost \$2,421M and \$2,098M respectively and, thus, were both rated a one for costs between \$2,000M and \$2,500M.

Table 3-22: Goal 4 Evaluation of Panola Road Area Alternatives

Measures of Effectiveness	Total costs - Capital costs (Transitways, tracks, structures) and right-of-way costs in \$millions.	Total Costs Rating	Goal 4 Summary Rating
1. Parallel I-20 Sub-Alignment	\$2,421	1	1
2. Snapfinger Woods Drive Sub-Alignment	\$2,098	1	1

Downtown Connectivity Alternatives

Two Downtown Connectivity Alternatives, the Connection to King Memorial Station via Memorial Drive and the Connection to King Memorial Station and Downtown via Streetcar Alignment had projected costs under \$2,000M and were rated a two for this MOE (**Table 3-23**). The remaining alternatives had projected costs between \$2,000M and \$2,500M and were rated a one for the MOE.



Table 3-23: Goal 4 Evaluation of Downtown Connectivity Alternatives

	Total costs - Capital costs (Transitways, tracks, structures) and right-of-way costs in \$millions.	Total Costs Rating	Goal 4 Summary Rating
1. Connection to King Memorial Station via Memorial Drive	\$1,952	2	2
2. Connection to King Memorial Station and Downtown via Streetcar Alignment	\$1,962	2	2
3. Connection to King Memorial Station	\$2,194	1	1
4. Connection to Downtown via Streetcar	\$2,162	1	1
5. Connection to Garnett and Five Points Stations	\$2,421	1	1
6. Connection to MMPT/Five Points Stations	\$2,346	1	1
7. Connection to West End Station/Atlanta University Center/Ashby Station	\$2,331	1	1
8. Connection to Inman Park Station and Midtown via BeltLine Alignment	\$2,072	1	1

3.7 Goal 5: Preserve Natural and Built Environment

Alternatives were assessed under Project Goal 5: Preserve Natural and Built Environment in terms of their impacts to community. This evaluation was based on the estimated number of residential and commercial displacements each alignment would incur.

3.7.1 MOE: Total Potential Residential and Commercial Displacements

The estimated number of residential and commercial displacements was identified for all Tier 1 Alternatives. This MOE was utilized to evaluate the direct community impact of each alternative.

3.7.2 Goal 5 Performance Ratings

Tiered ratings for Goal 5 are listed in **Table 3-24**. Alternatives with fewer than 15 projected displacements were rated a two; alternatives with 15 to 30 displacements were rated a one, and those alternatives with greater than 30 projected displacements were rated a zero for this MOE. As Goal 5 contains just one Tier 1 MOE, the MOE rating is also the Goal 5 Summary Rating for all alignments.

Table 3-24: Ratings for Performance under Goal 5 MOEs

	Ratings		
Measures of Effectiveness	2	1	0
Total residential and commercial displacements	<15	15-29	>30

3.7.3 Goal 5 Evaluation Results

Mainline Alternatives

The Heavy Rail Extension from Indian Creek had six projected displacements, the fewest among Mainline Alternatives (**Table 3-25**). The Connection to Edgewood Station had a projected 27 displacements and the Parallel I-20 Alignment had 34. Therefore, the alternatives were rated two, one and zero, respectively for this MOE.



Table 3-25: Goal 5 Evaluation of Mainline Alternatives

Measures of Effectiveness	Total Displacements	Commercial Displacements	Residential Displacements	Displacements Rating	Goal 5 Summary Rating
1. Parallel I-20 Alignment	34	16	18	0	0
2. Connection to Edgewood Station	27	9	18	1	1
3. Heavy Rail Extension from Indian Creek	6	2	4	2	2

Panola Road Area Alternatives

In order to realistically evaluate the impacts stemming from the implementation of either Panola Road Area Sub-Alignment, both were paired with Downtown Connectivity Alternative 5 to create a full alignment. Both Panola Road Area Sub-Alignments in these combinations had 30 or more projected displacements, as can be seen in **Table 3-26**. Thus both received a rating of zero for the MOE.

Table 3-26: Goal 5 Evaluation of Panola Road Area Alternatives

Measures of Effectiveness	Total Displacements	Commercial Displacements	Residential Displacements	Displacements Rating	Goal 5 Summary Rating
1. Parallel I-20 Sub-Alignment	34	16	18	0	0
2. Snapfinger Woods Drive Sub-Alignment	30	12	18	1	1

Downtown Connectivity Alternatives

Three of the Downtown Connectivity Alternatives had 28 projected displacements, Connection to King Memorial Station via Memorial Drive, the Connection to King Memorial Station and Downtown via Streetcar Alignment, and the Connection to King Memorial Station and Downtown via Streetcar Alignment. These alternatives all were rated one for the MOE. The remainder of the Downtown Connectivity Alternatives had more than 30 projected displacements a piece and were rated a zero for this MOE. The results of this analysis for the Downtown Connectivity Alternatives are presented in **Table 3-27**.



Table 3-27: Goal 5 Evaluation of Downtown Connectivity Alternatives

	Total residential and commercial displacements	Commercial Displacements	Residential Displacements	Displacements Rating	Goal 5 Summary Rating
1. Connection to King Memorial Station via Memorial Drive	27	9	18	1	1
2. Connection to King Memorial Station and Downtown via Streetcar Alignment	27	9	18	1	1
3. Connection to King Memorial Station	30	12	18	0	0
4. Connection to Downtown via Streetcar	30	12	18	0	0
5. Connection to Garnett and Five Points Stations	34	16	18	0	0
6. Connection to MMPT/Five Points Stations	34	16	18	0	0
7. Connection to West End Station/Atlanta University Center/Ashby Station	34	16	18	0	0
8. Connection to King Memorial Station and Downtown via Streetcar Alignment	27	9	18	1	1

3.8 Goal 6: Achieve a High Level of Community Support

In order to evaluate how well the alternatives would meet Project Goal 6: Achieve a High Level of Community Support, they were assessed in terms of their ability to provide transit investments that are supported by local stakeholders and the general public. This support was quantified in terms of each alternative’s compliance with SAC Guiding Principles, the support each received in an on-line public survey, and any stated community or stakeholder opposition.

3.8.1 MOE: Compliance with SAC Guiding Principles

The I-20 East SAC identified six primary functional and operational characteristics that a new transit service in the corridor should have. This MOE evaluates how well each alternative addresses these Guiding Principles for Transit Service in the I-20 East Corridor. These Guiding Principles are:

- Transit should be a rapid service to downtown Atlanta serving commuters with few stops.
- There should be dedicated transitway for length of project. No, or very limited, transit operation on surface streets in mixed traffic.
- A new transit line in the corridor must have direct connection to MARTA heavy rail system.
- There must be a way for riders to transfer to/from the Atlanta BeltLine.
- It is important to limit number of transfers to reduce travel times.
- The most desirable connection to downtown would be at the Five Points/MMPT since it would provide a connection to the north-south and east-west MARTA rail lines without additional transfers.



Each alternative in the Tier 1 Screening was reviewed for compliance with these principles, receiving two points for full compliance, one point for partial compliance, and zero points when it failed to comply. The degree to which each alternative in each category complies with the SAC Guiding Principles can be found in **Table 3-28**. These six scores were then summed for each alternative to create a SAC Guiding Principle compliance score.

3.8.2 MOE: Degree of Public Support

The MOE evaluated the general public support for each of the Tier 1 Alternatives. This was done through voting at public meetings and through an online survey. The public was asked to select the most appropriate Mainline, Downtown Connectivity and Panola Road Area alternatives. This MOE reflects the results of this voting.

3.8.3 Goal 6 Performance Ratings

Table 3-29 presents the tiered ratings for Goal 6 MOEs. Under the first MOE, Compliance with SAC Guiding Principles, an alternative was rated a two if it scored 11-12 points, it was rated a one if it scored an 8-10, and rated a zero if it scored less than an eight.

For the second MOE, Degree of Public Support, the Mainline, Downtown Connectivity, and Panola Road Area Alternatives were rated based on the percentage of public support. Public support was determined by voting at public meetings and on online surveys. Voters were asked which alternative would be the “most appropriate to provide improved transit service to the I-20 East Corridor” in its category (e.g., Mainline Alternatives.) Since voting at the public meetings and on the online survey only allowed the public to select one alternative for each category, the tiered ratings for each category are different. Since the Downtown Connectivity Alternatives were comprised of eight choices, it is unlikely that one alternative would garner a significant percentage of votes. Thus the rating thresholds for each category are different to reflect the performance of each alternative relative to the alternatives considered for that category.

The Mainline Alignment Alternatives contained three choices. Therefore, an alternative receiving more than 50 percent of the votes received a rating of two, alternatives that received a rating between 25 percent - 50 percent received a one, and alternatives with less that 25 percent received a zero.

The Panola Road Area Alternatives contained two alternatives. Therefore, an alternative that received greater than 75 percent of the votes received a score of two, alternatives that received between 25 percent-75 percent received a one, and alternatives with less that 25 percent received a zero. The

As there are eight Downtown Connectivity Alternatives, those alternatives that received greater than 25 percent received a score of two, alternatives that received between 15 percent and 25 percent received a one, and alternatives with less that 15 percent received a zero.

Table 3-29: Ratings for Performance under Goal 6 MOEs

Measures of Effectiveness		Ratings		
		2	1	0
Compliance with SAC Guiding Principles		11-12	8-10	<8
Degree of Public Support	Mainline Alternatives	>50%	25-50%	<25%
	Panola Road Area Alternatives	>75%	25-75%	<25%
	Downtown Connectivity Alternatives	>25%	15-25%	<15%



Table 3-28: Alternatives' Compliance with SAC Guiding Principles

SAC Guiding Principles	Mainline Alignment Alternatives			Panola Road Area Alts		Downtown Connectivity Alternatives							
	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 Gamett and Five Points Stations	6. Connection to MMPT/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
Transit should be a rapid service to downtown serving commuters with few stops.	2	2	2	2	1	2	1	2	1	2	2	1	1
Dedicated transitway for entire length of project. None, or very limited, operation on surface streets in mixed traffic	2	2	2	2	0	1	0	1	0	2	1	0	1
System must have direct connection to MARTA heavy rail system	2	2	2	2	2	2	2	2	2	2	2	2	2
There must be a way for riders to transfer to/from the BeltLine	2	2	2	2	2	2	2	2	2	2	2	2	2
Important to limit number of transfers to reduce travel times	2	1	2	2	2	1	1	1	2	2	2	2	2
The most desirable connection to downtown would be at the 5-Points/MMPT since it would provide a connection to the north-south and east-west MARTA rail lines without additional transfers	2	0	2	2	2	0	0	0	0	2	2	0	0
Score	12	9	12	12	9	8	6	8	7	12	11	7	8



3.8.4 Goal 6 Evaluation Results

Mainline Alternatives

Among Mainline Alternatives, the Parallel I-20 Alignment and the Heavy Rail Extension from Indian Creek both complied with all of the SAC Guiding Principles and were given a rating of two (**Table 3-30**). The Connection to Edgewood Station only partially complied and was rated one point.

From the public meetings and online survey, the Parallel I-20 Alignment had the most support, receiving 58 percent of the votes and thus received a rating of two. The Heavy Rail Extension from Indian Creek received 28 percent of the votes and thus received a rating of one. The Connection to Edgewood Station received 14 percent of the votes and thus received a rating of one.

The Goal 6 Summary Rating is a rounded average of the two Goal 6 MOEs. Therefore, Parallel I-20 Alignment and the Heavy Rail Extension from Indian Creek received overall Goal 6 ratings of two while the Connection to Edgewood Station received a rating of one.

Table 3-30: Goal 6 Evaluation of Mainline Alternatives

	Compliance with SAC Guiding Principles	Principles Rating	Degree of Public Support	Support Rating	Goal 6 Summary Rating
1. Parallel I-20 Alignment	12	2	58%	2	2
2. Connection to Edgewood Station	9	1	14%	0	1
3. Heavy Rail Extension from Indian Creek	12	2	28%	1	2

Source: I-20 East Transit Initiative Online Survey, Summer 2011

Panola Road Area Alternatives

Between the two Panola Road Area Alternatives, the Parallel I-20 Sub-Alignment complied with all of the SAC Guiding Principles and was given a rating of two, while the Snapfinger Woods Drive Sub-Alignment only partially complied with all principles and was rated one point (**Table 3-31**).

From the public meetings and online survey, the Parallel I-20 Sub-Alignment found far more support than the Snapfinger Woods Drive Sub-Alignment and received 82 percent of the votes. It therefore received a rating of two. The Snapfinger Woods Drive Sub-Alignment received only 18 percent of the votes and thus received a zero rating.

Table 3-31: Goal 6 Evaluation of Panola Road Area Alternatives

	Compliance with SAC Guiding Principles	Principles Rating	Degree of Public Support	Support Rating	Goal 6 Summary Rating
1. Parallel I-20 Sub-Alignment	12	2	82%	2	2
2. Snapfinger Woods Drive Sub-Alignment	9	1	18%	0	1

Source: I-20 East Transit Initiative Online Survey, Summer 2011

Downtown Connectivity Alternatives

Among Downtown Connectivity Alternatives, the Connection to Garnett and Five Points Stations and the Connection to MMPT/Five Points Stations most fully complied with the



SAC Guiding Principles and were given ratings of two (**Table 3-32**). Three alignments, the Connection to King Memorial Station via Memorial Drive, Connection to King Memorial Station, and the Connection to Inman Park Station and Midtown via BeltLine Alignment, met most of the principles and were given ratings of one. The final three alignments, the Connection to King Memorial Station and Downtown via Streetcar Alignment, the Connection to Downtown via Streetcar, and the Connection to West End Station/Atlanta University Center/Ashby Station, had the least compliance with the principles and were given ratings of zero.

Table 3-32: Goal 6 Evaluation of Downtown Connectivity Alternatives

	Compliance with SAC Guiding Principles	Principles Rating	Degree of Public Support	Support Rating	Goal 6 Summary Rating
1. Connection to King Memorial Station via Memorial Drive	8	1	6%	0	1
2. Connection to King Memorial Station and Downtown via Streetcar Alignment	7	0	7%	0	0
3. Connection to King Memorial Station	8	1	4%	0	1
4. Connection to Downtown via Streetcar	7	0	6%	0	0
5. Connection to Garnett and Five Points Stations	12	2	26%	2	2
6. Connection to MMPT/Five Points Stations	11	2	32%	2	2
7. Connection to West End Station/Atlanta University Center/Ashby Station	7	0	3%	0	0
8. Connection to Inman Park Station and Midtown via BeltLine Alignment	8	1	17%	1	1

Source: I-20 East Transit Initiative Online Survey, Summer 2011

From the public meetings and online survey, the Connection to MMPT/Five Points Station and Connection to Garnett and Five Points Station each garnered greater than 25 percent of the votes and were both rated a two. The Connection to Inman Park Station and Midtown via BeltLine Alignment received 17 percent of the vote and was rated a one. All other Downtown Connectivity Alternatives received 7 percent or less of the votes and were all rated zero.

The Goal 6 Summary Ratings were based on the rounded average of the MOE ratings. As such, the Connection to Garnett and Five Points Stations and the Connection to MMPT/Five Points Stations were given Goal 6 Summary Ratings of two. The Connection to King Memorial Station via Memorial Drive, Connection to King Memorial Station, and Connection to Inman Park Station and Midtown via BeltLine Alignment all received Summary Ratings of one. All other Downtown Connectivity Alternatives were given Summary Ratings of zero.

3.9 Cumulative Tier 1 Evaluation Results

Cumulative results for the Tier 1 Screening are a sum of the Goal Summary Ratings for each alternative. The Cumulative Tier 1 Evaluation of Alternatives, including the results and ratings of all alternatives under each MOE and project goal ratings, and the cumulative score for each alternative, can be found in **Table 3-33**.



Table 3-33: Cumulative Tier 1 Evaluation of Alternatives

Objective	Evaluation Criteria	Measures of Effectiveness	Mainline Alternatives			Panola Road Area Alternatives		Downtown Connectivity Alternatives							
			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
Goal 1: Increase Mobility and Accessibility			2	2	2	2	1	1	1	2	1	2	2	1	2
Improve East-West Travel Times	Travel Times	Transit Travel Times to Five Points Station from Mall at Stonecrest	37.2	38.6	39.9	37.2	48.2	47.5	47.1	41.8	49.3	37.2	40.4	48.5	45.0
		Rating	2	2	2	2	1	1	1	2	1	2	2	1	2
Goal 2: Provide Improved Transit Service within the Corridor			2	2	1	2	2	0	1	1	1	2	2	1	1
Provide Transit Service with Sufficient Capacity to Accommodate Growing Demand	Transit System Ridership	Total Transit Riders	27,000	15,100	11,300	27,000	22,500	11,800	14,200	13,800	13,800	27,000	23,200	17,300	18,100
		Rating	2	1	0	2	2	0	0	0	0	2	2	1	1
		New Transit Riders	6,600	7,100	6,300	6,600	4,300	2,900	3,100	3,300	3,000	6,600	5,300	3,900	3,800
		Rating	2	2	2	2	1	0	1	1	1	2	1	1	1
Goal 3: Support Land Use and Development Goals			2	2	1	2	2	2	2	2	2	2	2	2	2
Promote Economic Development and Revitalization	Proximity of Underutilized Land	Acres of vacant or underutilized land within ½-mile of transit stations/stops	740	690	410	740	690	740	740	740	740	740	740	740	740
		Rating	2	2	1	2	2	2	2	2	2	2	2	2	2
Goal 4: Promote Cost Effective Transit Investments			1	0	2	1	1	2	2	1	1	1	1	1	1
Provide Transit Service that Can be Implemented, Operated, and Maintained with	Cost and Cost Effectiveness	Total costs - Capital costs (Transitways, tracks, structures) and ROW costs in \$millions.	\$2,421	\$2,856	\$1,750	\$2,421	\$2,098	\$1,952	\$1,962	\$2,194	\$2,162	\$2,421	\$2,346	\$2,331	\$2,072
		Rating	1	0	2	1	1	2	2	1	1	1	1	1	1
Goal 5: Preserve Natural and Built Environment			0	1	2	0	0	1	1	0	0	0	0	0	1
Minimize Impacts to Environmental Resources	Impact to community, cultural and natural	Total residential and commercial displacements	34	27	6	34	30	28	28	31	30	34	34	34	28
		Rating	0	1	2	0	0	1	1	0	0	0	0	0	0
Goal 6: Achieve a High Level of Community Support			2	1	2	2	1	1	0	1	0	2	2	0	1
Provide Transit Investments that are Supported by Local Stakeholders and the General Public	Maintain compliance with stakeholder guidance	Compliance with SAC Guiding Principles	12	9	12	12	9	8	7	8	7	12	11	7	8
		Rating	2	1	2	2	1	1	0	1	0	2	2	0	1
	Achieve a high level of public support	Degree of Public Support	58%	14%	28%	82%	18%	6%	7%	4%	6%	26%	32%	3%	16%
		Rating	2	0	1	2	0	0	0	0	0	2	2	0	1
Cumulative Alternative Rating			9	8	10	9	7	7	7	7	5	9	9	5	8
Advanced to Tier 2 Screening			YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	NO	YES



Among Mainline Alternatives, the Heavy Rail Extension from Indian Creek received a cumulative score of 10 points. The Parallel I-20 Alignment received a score of nine points and the Connection to Edgewood Station received a score of eight points.

Of the Panola Road Area Alternatives, the Parallel I-20 Sub-Alignment received a score of nine points, while the Snapfinger Woods Drive Sub-Alignment scored seven points.

Among Downtown Connectivity Alternatives, the Connection to Garnett and Five Points Station and the Connection to MMPT/Five Points Station were the highest scoring alternatives, each receiving a score of nine points. The Connection to Inman Park Station and Midtown via BeltLine Alignment scored eight points, and all other alternatives scored seven points or fewer.

3.10 Summary of Tier 1 Screening

Tier 1 Screening compared the Tier 1 Alternatives across select MOEs to determine which alternatives would advance to Tier 2 Screening. In summary, the performance of the Mainline Alternatives across a series of key metrics is presented in **Table 3-34**; of Panola Road Area Alternatives, **Table 3-35**; and Downtown Connectivity Alternatives, **Table 3-36**.

Table 3-34: Summary Comparison of Mainline Alternatives

	Projected Travel Time from Mall at Stonecrest to Five Points	Projected Daily Boardings	Projected New Riders	Capital Costs and ROW	Projected Residential and Commercial Displacements
1. Parallel I-20 Alignment	37.2 minutes	27,000	6,600	\$2.42B	34
2. Connection to Edgewood Station	38.6 minutes	15,100	7,100	\$2.86B	27
3. Heavy Rail Extension from Indian Creek	39.9 minutes	11,300	6,300	\$1.75B	6

Table 3-35: Summary Comparison of Panola Road Area Alternatives

	Projected Travel Time from Mall at Stonecrest to Five Points	Projected Daily Boardings	Projected New Riders	Capital Costs and ROW	Projected Residential and Commercial Displacements
1. Parallel I-20 Sub-Alignment	37.2 minutes	27,000	6,600	\$2.42B	34
2. Snapfinger Woods Drive Sub-Alignment	48.2 minutes	22,500	4,300	\$2.10B	30



Table 3-36: Summary Comparison of Downtown Connectivity Alternatives

	Projected Travel Time from Mall at Stonecrest to Five Points	Projected Daily Boardings	Projected New Riders	Capital Costs and ROW	Projected Residential and Commercial Displacements
1. Connection to King Memorial Station via Memorial Drive	47.5 minutes	11,800	2,900	\$1.95B	28
2. Connection to King Memorial Station and Downtown via Streetcar Alignment	47.1 minutes	14,200	3,100	\$1.96B	28
3. Connection to King Memorial Station	41.8 minutes	13,800	3,300	\$2.19B	31
4. Connection to Downtown via Streetcar	49.3 minutes	13,800	3,000	\$2.16B	30
5. Connection to Garnett and Five Points Stations	37.2 minutes	27,000	6,600	\$2.42B	34
6. Connection to MMPT/Five Points Stations	40.4 minutes	23,200	5,300	\$2.35B	34
7. Connection to West End Station/Atlanta University Center/Ashby Station	48.5 minutes	17,300	3,900	\$2.33B	34
8. Connection to Inman Park Station and Midtown via BeltLine Alignment	45.0 minutes	18,100	3,100	\$2.07B	28

The relative performance of the Tier 1 Alternatives in these metrics translates into a series of advantages and disadvantages among the alternatives in the case of their implementation. The advantages and disadvantages of Mainline Alternatives are presented in **Table 3-37**; of Panola Road Area Alternatives, **Table 3-38**; and Downtown Connectivity Alternatives, **Table 3-39**.



Table 3-37: Advantages and Disadvantages of Mainline Alternatives

	Advantages	Disadvantages
1. Parallel I-20 Alignment	<ul style="list-style-type: none"> Serves areas along I-20 inside I-285, including South DeKalb Mall/Candler Road, Gresham Road/Flat Shoals Road, East Atlanta Village, and Glenwood Park 	<ul style="list-style-type: none"> Initial construction phase unlikely to extend past South DeKalb Mall, not serve areas outside I-285 Significant construction and environmental constraints associated with connection into downtown Atlanta Higher total costs associated with implementation of 18+ miles of new transit line Potential for significant impacts to historic districts inside I-285 Potential for higher number of displacements
2. Connection to Edgewood Station	<ul style="list-style-type: none"> Serves areas along I-20 inside I-285, including South DeKalb Mall/Candler Road and Gresham Road/Flat Shoals Road Avoids construction and cost issues associated with connecting directly into downtown 	<ul style="list-style-type: none"> Community and environmental impacts associated with connection through Kirkwood neighborhood would require a subsurface (tunnel) alignment Potential for community opposition Associated capital costs resulting from the introduction of a new transit technology, such as LRT. These costs would include new maintenance facilities.
3. Heavy Rail Extension from Indian Creek	<ul style="list-style-type: none"> Initial construction phase could extend MARTA rail from Indian Creek Station to Wesley Chapel Road, thus providing rapid transit service to areas outside I-285 Potential for lower total costs associated with implementation of 12+ miles of new transit line Cost savings associated with the use of existing heavy rail vehicles and maintenance facilities 	<ul style="list-style-type: none"> Would not serve areas along I-20 inside I-285, including South DeKalb Mall/Candler Road, Gresham Road/Flat Shoals Road, East Atlanta Village, and Glenwood Park Potential for longer travel times to downtown Atlanta due to numerous stations along East-West line

Table 3-38: Advantages and Disadvantages of Panola Road Area Alternatives

	Advantages	Disadvantages
1. Parallel I-20 Sub-Alignment	<ul style="list-style-type: none"> Reduced and more reliable travel times due to dedicated transitway Convenient park and ride access for commuters on I-20 	<ul style="list-style-type: none"> Lack of direct access to DeKalb Medical Hillandale campus and the Panola Road Industrial Area Higher costs associated with dedicated transitway
2. Snapfinger Woods Drive Sub-Alignment	<ul style="list-style-type: none"> Better serves the DeKalb Medical Hillandale campus Better access to the Panola Road Industrial Area Lower costs due to in-street operation 	<ul style="list-style-type: none"> Longer and unreliable travel times resulting from on-street operation on Snapfinger Woods Dr



Table 3-39: Advantages and Disadvantages of Downtown Connectivity Alternatives

	Advantages	Disadvantages
1. Connection to King Memorial Station via Memorial Drive	<ul style="list-style-type: none"> • Lower costs due to in-street operation • Lower costs due to limited elevated structures • Shorter travel distance to MARTA East-West line 	<ul style="list-style-type: none"> • Potential for delay due to congestion on surface streets • No direct access to MARTA North-South rail line
2. Connection to King Memorial Station and Downtown via Streetcar Alignment	<ul style="list-style-type: none"> • Lower costs due to in-street operation • Provides a connection to the Atlanta Streetcar, which is expected to be operational by 2013 • Serves major points of interest along the Streetcar alignment • Shorter travel distance to MARTA East-West line • Connection to MARTA North-South and West-West rail lines 	<ul style="list-style-type: none"> • Potential for delay and unreliable travel times due to congestion on surface streets • Longer travel times to MARTA North-South rail
3. Connection to King Memorial Station	<ul style="list-style-type: none"> • Shorter travel distance to MARTA East-West line 	<ul style="list-style-type: none"> • Potential for delay due to congestion on surface streets • Higher costs due to elevated structures along I-20 • No direct access to MARTA North-South rail line
4. Connection to Downtown via Streetcar	<ul style="list-style-type: none"> • Serves major points of interest along the Streetcar alignment • Provides direct connection to MARTA North-South rail line 	<ul style="list-style-type: none"> • No direct access to MARTA East-West rail line • Potential for delay due to congestion on surface streets • Longer travel times to access MARTA North-South rail line via Streetcar alignment
5. Connection to Garnett and Five Points Stations	<ul style="list-style-type: none"> • Direct connection to MARTA North-South and East-West rail lines • Reliable travel times due to no in-street operation • Potential station at Turner Field 	<ul style="list-style-type: none"> • Higher costs associated with significant elevated structure through downtown
6. Connection to MMPT/Five Points Stations	<ul style="list-style-type: none"> • Direct connection to MARTA North-South and East-West rail lines • Reliable travel times due to no in-street operation • Potential station at Turner Field 	<ul style="list-style-type: none"> • Higher costs associated with significant elevated structure through downtown • Potential for delay and unreliable travel times due to congestion on surface streets
7. Connection to West End Station/Atlanta University Center/Ashby Station	<ul style="list-style-type: none"> • Connection to Atlanta University Center • Connection to MARTA North-South and East-West rail lines • Potential Station at Turner Field 	<ul style="list-style-type: none"> • Longer travel times to access the MARTA North-South rail line • Potential for delay and unreliable travel times due to congestion on surface streets
8. Connection to Inman Park Station and Midtown via BeltLine Alignment	<ul style="list-style-type: none"> • Lower costs due to in-street operation and use of Beltline right-of-way • Connection to points of interest along the Beltline alignment • Shorter travel distance to MARTA East-West rail line 	<ul style="list-style-type: none"> • Transit for this segment of BeltLine is not funded yet, so construction costs on the BeltLine alignment would have to be incurred by the I-20 East project • Longer travel times to access the MARTA North-South rail line • Potential for delay due to congestion on surface streets



3.11 Tier 1 Alternatives Advanced to Tier 2 Screening

The identification of Tier 1 Alternatives to be advanced to the Tier 2 (detailed) Screening was based primarily on the evaluation results presented in the previous sections. Additionally, the Tier 1 Alternatives were presented to the SAC and other corridor stakeholders including DeKalb County and the City of Atlanta for input and feedback. The following discussion identifies how some feedback from these stakeholders was utilized in the identification of which alternatives would be advanced to the Tier 2 Screening and which alternatives would be dropped from further consideration.

3.11.1 Mainline Alternatives

Alternatives Advanced to Tier 2 Screening

Based on the results of the Tier 1 Screening and feedback from corridor stakeholders, the **Parallel I-20 Alignment**, the **Connection to Edgewood Station**, and the **Heavy Rail Extension from Indian Creek** were all promoted to Tier 2 Screening for further analysis. As all three Mainline Alternatives performed well in Tier 1 Screening, none warranted removal from consideration at this point in the DCA. It was determined that all three of the Mainline Alternatives would benefit from further, more detailed evaluation in combination with appropriate transit technologies, or modes in the Tier 2 Screening.

Alternatives Dropped from Further Consideration

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

3.11.2 Panola Road Area Alternatives

Alternatives Advanced to Tier 2 Screening

As it performed well throughout the Tier 1 Screening, the **Parallel I-20 Sub-Alignment** was advanced to the Tier 2 Screening for further evaluation. This Sub-Alignment performed well in the evaluation and received overwhelming public support.

Alternatives Dropped from Further Consideration

Based on poor performance in the Tier 1 Screening, the Snapfinger **Woods Drive Sub-Alignment** was dropped from further consideration. The Snapfinger Woods Drive Sub-Alignment had lower projected daily ridership and new riders than the Parallel I-20 Sub-Alignment, and longer travel times from Mall at Stonecrest to Five Points. This alternative also garnered very strong opposition from residents along its alignment. For these reasons, this alternative was dropped from further consideration.

3.11.3 Downtown Connectivity Alternatives

Alternatives Advanced to Tier 2 Screening

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. Both alignments performed well in the Tier 1 Screening. The Connection to Garnett and Five Points Stations had the shortest travel time with the highest projected ridership and high public support. The Connection to Inman Park Station and Midtown via BeltLine Alignment had short travel times, with moderate projected ridership, costs, and public support. Moreover, the City of Atlanta



staff supported the advancement of these two alternatives to the Tier 2 Screening since the Connection to Garnett and Five Points Stations represented a direct connection into downtown and the Connection to Inman Park Station and Midtown via BeltLine Alignment would take advantage of and support the planned BeltLine investment. For these reasons, these two alternatives were advanced.

Alternatives Dropped from Further Consideration

Despite rating well in the Tier 1 Screening, the **Connection to MMPT/Five Points Station** was not promoted to Tier 2 Screening. This alternative was not evaluated further because for two reasons. First, this alternative would be virtually identical to the Connection to Garnett and Five Points Station alternative, but was projected to incur longer travel times and attract fewer daily riders as well as fewer new riders. Second, the MMPT is in its initial planning stages, and there are far too many unknowns about the actual facility, thus it is not prudent 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 for several reasons. First, these alternatives did not perform well in the Tier 1 evaluation. Secondly, based on input from the City of Atlanta, the Atlanta Streetcar alignment and service, which these alternatives would follow, has been identified as only appropriate for single car transit vehicles, rather than multi-car consists. Since the ridership and operating characteristics of the I-20 East transit service would require multi-car rail consists, rather than single car, operation on the Atlanta Streetcar alignment was ruled out. For these reasons, these two alternatives were dropped from further consideration.

The **Connection to King Memorial Station via Memorial Drive** was dropped from further consideration. 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. This alignment had relatively short travel times, but it also 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 due to poor performance in the Tier 1 Screening. The alternative was projected to attract relatively low ridership, have longer travel times, and higher costs than other Downtown Connectivity Alternatives.