



## 4.0 SCENARIO EVALUATION

This chapter details the tools and methodology used to evaluate the transportation scenarios detailed in Chapter 4, and documents the results of that evaluation.

### 4.1 Methodology

In order to assess the performance of each scenario with regard to the Study Purpose and Need (Section 2.6), a quantitative and qualitative approach was developed. An evaluation matrix was prepared to quantitatively compare the performance of each scenario. The qualitative approach compares the two scenarios against the City Development Policies included in the recently adopted *2004 – 2019 Comprehensive Development Plan* (CDP) to ascertain how well each scenario supports the CDP.

#### 4.1.1 Evaluation Matrix

Analysis areas of mobility, accessibility, land use, and cost are included in the evaluation matrix. For each analysis area, several performance measures have been selected as a means of evaluating the efficiency and effectiveness of the transportation and land use strategies incorporated in the scenarios.

Two key sources of data were used to evaluate scenarios. The ARC travel demand model provided performance data for the mobility and accessibility analysis areas. Geographic Information Systems (GIS) were used to produce performance data for the accessibility and land use analysis areas. In addition to these sources, transit cost estimates were produced using the GRTA Transit Cost Estimation Methodology included in the *Regional Transit Action Plan*.

Within the evaluation matrix, an ordinal rating was assigned to each performance measure. Ratings across all performance measures in each analysis area were aggregated and a composite rating was determined for each scenario. Table 4-1 summarizes performance measures, descriptions, data sources, and methodology by evaluation area.



**Table 4-1: Evaluation Matrix - Methodology**



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#### **4.1.2 Comparison to the City Development Policies**

As part of the recently adopted *2004 – 2019 Comprehensive Development Plan (CDP)*, the City of Atlanta has enumerated several Development Policies. Each scenario was compared to these policies in order to determine how well it supported them. A qualitative rating of very supportive, supportive, or not supportive was assigned to each scenario.

### **4.2 Results**

This section presents the quantitative analysis in the evaluation matrix and the qualitative analysis in table format. Finally, implications of the results with regard to the formulation of a final recommendation are reviewed.

#### **4.2.1 Evaluation Matrix**

Results of both scenarios with regard to the previously described performance measures are summarized in the following table. Ratings of good, fair, or poor were assigned based on the previously discussed methodology. In addition, results for a No Build Scenario are included for comparison purposes. The No Build Scenario is simply the adopted ARC RTP projects. The evaluation matrix is shown in Table 4-2.





**Table 4-2: Evaluation Matrix – Results**



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## Evaluation Matrix Results Page 3



#### **4.2.2 Comparison With City Development Policies**

Table 4-3 compares the two scenarios against the City Development Policies. Each scenario is assigned a rating along with reasons for the assigned rating. Ratings of supportive or very supportive are more desirable.



**Table 4-3: Comparison With City Development Policies**



## Comparison With CDP Page 2



### **4.2.3 Implications Of Results**

Based on the evaluation matrix, both scenarios have similar results for 22 of the 30 performance measures. However, key differences between the facilities were evident with regard to impacts and cost. The Urban Boulevard Scenario will have a lower impact on neighborhoods and businesses. In contrast, impacts of the Primary Thoroughfare Scenario are higher due to the space required for the exclusive transit facility. In addition, costs are 3 to 4 times greater for the Primary Thoroughfare Scenario because of the exclusive transit facility and a new collector distributor facility connecting Northside Drive to I-20. Overall, the Urban Boulevard Scenario addresses many of the study goals by providing increased mobility through a multimodal transportation system that serves future travel demand with lower impacts and costs.

A key result of the travel demand modeling process that seems counterintuitive is the relatively minor benefits provided by a new collector distributor facility that increases access to I-20. In the travel demand model, access points to I-20 are within half a mile of Northside Drive via McDaniel Street and Joseph P. Lowery Boulevard. Currently, the routes to access I-20 from Northside Drive are not signed very well and are not intuitive to drivers unfamiliar with the area. However, the travel demand model assigns traffic to the network without regard to poor signage or other psychological conditions. Finally, due to numerous operational, engineering, right-of-way, and land access constraints, a new interchange or a collector distributor facility will be cost prohibitive.

With regard to City Development Policies, the Urban Boulevard Scenario was very supportive of 8 of the 13 policies. In comparison, the Primary Thoroughfare Scenario was very supportive of 7 policies. The Urban Boulevard Scenario was supportive of 3 policies, while the Primary Thoroughfare was supportive of 4 policies. Both scenarios were not supportive of 1 policy. Therefore, the Urban Boulevard Scenario is slightly more supportive of the City Development Policies.

## **4.3 Agency and Public Input**

Public and agency input were critical to the evaluation process. During the development of the evaluation process and the scenarios, the general public were involved through a series of meetings. These included a kickoff meeting and a public workshop held on December 7, 2004. The study was also guided by two steering committees. The Core Team, made up of stakeholders within the study area, met regularly to provide input and feedback to the City of Atlanta. The Agency Team, which consisted of affected agencies, also met and provided regular input.

After completing the evaluation matrix and the comparison with the CDP, the results were presented to the Core and Agency teams, as well as the public at the following meetings:

- Core Team meeting on March 1, 2005 at Atlanta City Hall;
- Public meetings on March 10 and 30, 2005 at the Senior Services Center; and
- Joint Core/Agency Team meeting on March 17, 2005 at Atlanta City Hall.



Through these meetings and other input efforts, such as comment forms, several areas of consensus were determined, which included:

- A dedicated transit facility serving the length of Northside Drive;
- Median and streetscape improvements; and
- Additional travel lanes to provide a continuous six-lane section on Northside Drive.

Transit improvements were envisioned as high frequency service with stops every quarter mile focused on the corridor and urban core markets. Median and streetscape improvements included a green median and wider sidewalks with streetscapes. Roadway improvements included six general purpose travel lanes throughout the corridor, with turn lanes at key intersections. These areas of consensus were used to craft a final recommendation.