



3.0 SCENARIO DEVELOPMENT

This section highlights the scenario development approach utilized as part of the Northside Drive corridor planning process. Scenarios represent potential combinations of urban design, roadway, transit and pedestrian improvements. In addition to the “No-Build” scenario, which consisted of improvements for Northside Drive programmed in the Atlanta Regional Commission’s 2030 Regional Transportation Plan, the study process identified two other long-term scenarios, an “Urban Boulevard” scenario and a “Primary Thoroughfare” scenario. These are discussed later in this section.

Public involvement and input was a significant factor in the scenario development. A public workshop was held early on to seek input regarding the types of land use, urban design, and transportation strategies most acceptable to the residents and stakeholders along the corridor. The public workshop activities included a mapping exercise that allowed meeting participants to specify the types and location of improvements they would like to see implemented. Input from the workshop served as the starting point in developing the scenarios to be analyzed during the corridor planning process.

3.1 Baseline Elements of the Model

3.1.1 Year 2030 Population and Employment Projections

Year 2030 population projections were developed so that travel demand modeling could be performed. *It should be noted that these projections are significantly higher than the ARC projections for the 2030 RTP.* The market analysis that was executed as part of this study and is described in Chapter 2 showed *extremely strong development pressure* in the corridor over the next ten years, particularly around Atlantic Station in the 10th Street and Deering Street Zones. These projections and the methodology with which they were derived were reviewed with the ARC demographic analysis staff for technical merit. No problems with the technical approach that was used were found, and ARC staff indicated that it was highly likely that numbers developed specifically for this project were more reflective of development trends, particularly in areas undergoing infill and redevelopment activity.

Subsequently, the land use plan developed for the corridor reflects higher densities than shown in the ARC projections. Based on this analysis the demographic projections used for the long term scenarios were as shown in Table 3-1. For more information on the demographic projections, please see Appendix B.

Table 3-1: 2030 Demographic Projections

	Population	Employment	Households
ARC	60,080	61,326	29,889
Northside Drive Corridor Study	73,000	86,000	35,000
Percentage Difference	+21%	+40%	+17%



3.1.2 Land Use Plan

The long-term future land use plan focused on increasing the intensity of land use in the Northside Drive Corridor in coordination with the corridor transportation packages. The same land use plan was used for both corridor transportation packages and is detailed in the Final Recommendation section.

3.1.3 Primary Activity Nodes

Based on public involvement activities and a series of Core Team meetings, the following primary activity nodes were identified:

- Bellemeade Street
- 17th Street
- 14th Street
- Marietta Street
- Donald Lee Hollowell Parkway
- Simpson Road
- Vine City MARTA Station
- Fair Street
- McDaniel Street

3.1.4 Short Term Improvements

The study process calls for the development of a set of short-term improvements that can be implemented quickly (i.e., by 2010) and at fairly low-cost. These projects are identified in Chapter 5, and cost estimates are given in the Implementation Plan in Chapter 6. The set of short-term improvements was included in all of the scenarios that were modeled.

3.2 Long Term Corridor Transportation Scenarios

The primary emphasis of long-term scenarios is to provide a framework for testing future improvement visions for the corridor through the planning horizon 2030. The long-term scenarios also represent points of reference that can provide measurable variances in performance with respect to the study's purpose and need. Performance variance across the scenarios was used to inform decision-making as to which improvement strategies and policy suggestions move forward in the final corridor recommendations. Ultimately, improvements and policies that best met corridor travel and community development needs were recommended for implementation.

The corridor transportation scenarios are multi-modal transportation strategies that were tested for their ability to meet the study's goals, including serving the future travel needs through the year 2030. Each transportation scenario includes the short-term improvement recommendations discussed earlier in this section. Additionally, the scenarios reinforce livable corridor principals that focus on pedestrian-friendly corridor enhancements such as wider sidewalks, crosswalks, and improved streetscapes.



3.2.1 “Urban Boulevard” Scenario

This scenario brings together a vision of improved localized trip making with modest throughput capacity for regional vehicular movement. The scenario assumes a continuous six general purpose lane roadway throughout the corridor with intensive access management treatments centered on a controlled “green” landscaped median and shared driveway access to residential and commercial parcels along the corridor. Figure 3-1 presents an example of a typical section. The package does not assume new direct access or an interchange from Northside Drive to I-20. As mentioned, pedestrian components include wider sidewalks, pedestrian signalization, and other safety recommendations identified as part of the short-term improvement strategy.

The transit components of this scenario were centered on the introduction of local bus service along the length of the corridor. Transit was modeled in mixed traffic and transit vehicles would be accessible at stop location every 6-8 minutes. The scenario also assumes transit signal priority systems incorporated at major intersections to allow buses preferential movements at congested queues providing travel timesavings and operation efficiencies. Additionally, 18 station stops spaced approximately ¼-mile apart would traverse the length of the corridor. The station locations would include shelters, benches, and various other amenities. Bus routing would consist of new routes beyond the existing and planned transit service for the area. The routes that were modeled were:

- Bellemeade Avenue to West End MARTA station on 20 minute headways
- Northside Parkway/Paces Ferry to Northside Drive to West End MARTA station on 20 minute headways
- Northside Parkway to Howell Mill Road, across Bellemeade Avenue and down Northside Drive to West End on 20 minute headways
- Cobb County to Arts Center MARTA Station – I-75 to Northside Drive to 17th Street terminating at Arts Center Station on 15 minute headways (Cobb County #10 Express)



BRT is a part of both scenarios



Figure 3-1: Urban Boulevard Typical Section

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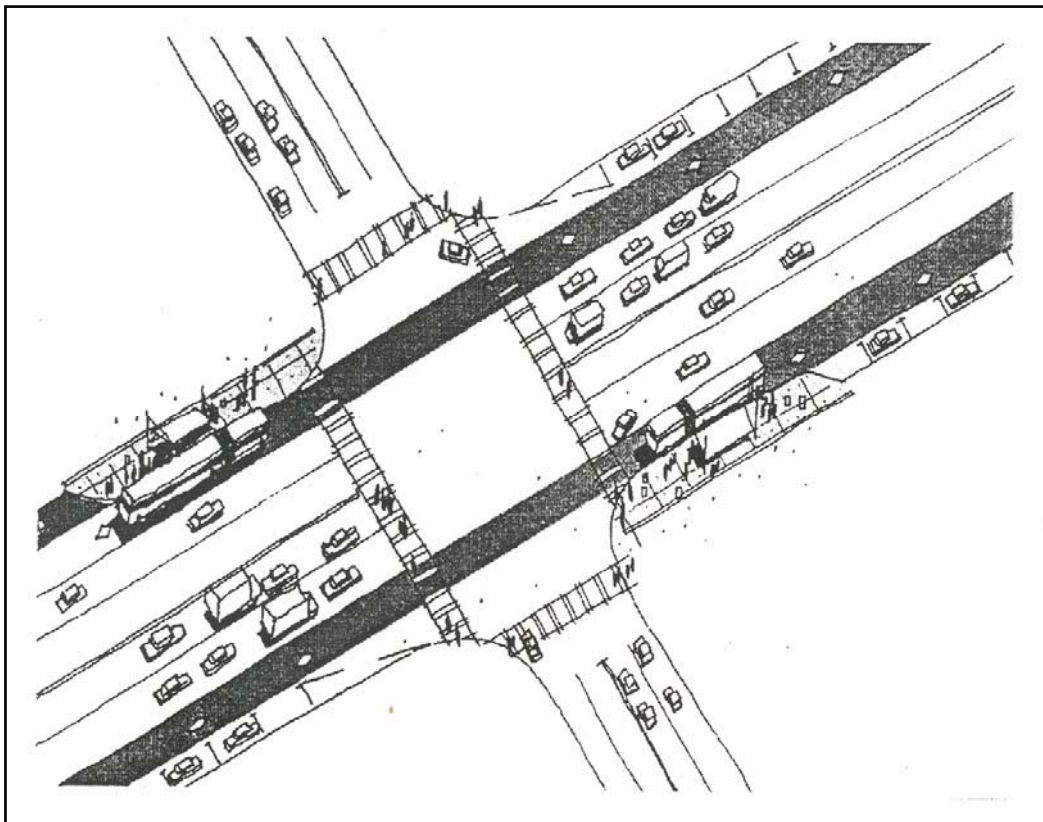


3.2.2 “Primary Thoroughfare” Scenario

The Primary Thoroughfare scenario focused more on regional movement and connectivity, coupled with improved localized mobility along the corridor. This scenario built upon the Urban Boulevard scenario to include an eight-lane roadway section (6 lanes general purpose, plus two dedicated transit lanes) with a new collector-distributor system at I-20.

Access management features including the “green” median and shared driveways would be a significant design element. Pedestrian components would include wider sidewalks, pedestrian signalization, and safety recommendations identified as part of the short-term improvement strategy. The actual physical lane configuration and layout could vary, but generally would include six lanes devoted to general purpose vehicular traffic, and two lanes dedicated for Bus Rapid Transit (BRT) and/or High Occupancy Vehicle (HOV) operations. Figure 3-2 presents an example of a potential typical section for this package.

The modelled collector-distributor system consisted of elevated access roads running parallel to I-20 that connected Northside Drive to the existing interchanges at Joseph E. Lowery Blvd., Lee Street and McDaniel Street. It did not include a new interchange on I-20 at Northside Drive. These connections would provide improved interstate access to and from Northside Drive.



An example sketch of BRT in exclusive lanes. This example shows four general-purpose lanes, whereas the scenario modeled six general purpose lanes, plus two dedicated to transit.



The transit components for this scenario included a higher capacity BRT system along the corridor. The BRT facility modeled was fully integrated into the Northwest Connectivity system as well as other planned regional express bus operations. Buses would be low floor vehicles to allow for level boarding from the busway median and/or curbside stations. These types of transit enhancements improve accessibility for the elderly and disabled. Station spacing was modeled at approximately every ¼-mile and included prepaid boarding, shelters, benches and other amenities. Local bus services shared travel lanes with regular cars, while regional transit utilized exclusive lanes. Park-and-ride stations were provided at either end of the corridor in proximity to the Interstate corridors I-20 and I-75.

The BRT facility concept included feeder bus services to provide access to major nodes such as Atlantic Station, MARTA rail, downtown/midtown, and adjacent neighborhoods. Headways ranged from 6 to 8 minutes during peak periods.

Transit was modeled to serve the regional areas connecting into downtown Atlanta running along Northside Drive. One-half of all express routes operated by GRTA traveling I-20 and I-75 were modeled as re-routed via Northside Drive into downtown and/or mid-town locations. The express routes along I-20 were modeled to travel Northside to Martin Luther King Drive and proceed into downtown. Express routes currently on I-75 were modeled to utilize Northside Drive to Jones/Simpson/Alexander into downtown. The Primary Thoroughfare scenario included new regional bus routes in addition to the local routing defined in the Urban Boulevard scenario.



Figure 3-2: Primary Thoroughfare Typical Section

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available as a separate file.)



3.2.3 “No Build” Scenario

The No Build scenario consisted only of improvements for Northside Drive programmed in the Atlanta Regional Commission’s 2030 Regional Transportation Plan, which are listed in this report in Section 2. It assumed no land use or urban design changes, and no change to the current pedestrian or bicycle infrastructure.