



Chapter Four

NEEDS ASSESSMENT

Active Transportation Corridor Analysis

Target Corridors

Feasibility Review

4 Needs Assessment

In the needs assessment phase of the planning process, the study team developed and applied a set of criteria to determine the suitability of corridors within the City for bicycle, pedestrian, and trail investment. Following this assessment, a series of ‘target corridors’ were developed in which further analysis was conducted to determine the feasibility of different types of investments.

Active Transportation Corridor Analysis

Using a variety of pre-existing data, the study team prepared an analysis to determine the suitability of all corridors within the City of Brookhaven in order to ascertain their relative and objective merits for bicycle, pedestrian, and trail investment. This process was developed to set some initial criteria for considering different corridors and help facilitate discussion with the community about where investments would be appropriate. Nonetheless, the criteria developed were intended to be holistic and comprehensive to include considerations of what would attract people to certain corridors (Attraction Analysis), conditions within the community that could likely create more local demand (Demand Analysis), and miscellaneous conditions that could affect the quality of any investments along the corridor (Character Analysis).

Attraction Analysis

The attractions analysis set criteria for the amenities, facilities, and other locations that people might choose to walk or bike to within

the community. This included focusing on areas with:

- Concentrations of retail
- Educational facilities
- Parks and recreational facilities
- Cultural and civic locations
- Access to transit
- Concentrations of employment

Based on these locations and the layout of Brookhaven’s roadway network, areas of propensity for travel were defined. For walking, this is equivalent to approximately one quarter and one half mile, and for bicycling, it is equivalent to approximately one half and one mile, respectively. Spatial analysis mapping was developed for each of the criteria (as shown in **Appendix H**) and combined to create a distinct ‘Attraction Analysis’ result as shown in **Figure 4.1**.

Demand Analysis

The demand analysis was developed to consider where people live, with emphasis on populations who may be more likely to take advantage of bicycling and walking opportunities. In order to do this, US Census data was used to determine the following:

- Population density of aging population (55+)
- Population density of children (<19)
- Households who do not own a car
- General population density
- Residents who bike to work
- Residents who walk to work
- Residents who take transit to work

Spatial analysis mapping was developed for each of the criteria (as shown in **Appendix H**) and combined to create a distinct ‘Demand Analysis’ result as shown in **Figure 4.2**.

Figure 4.1
Attraction Analysis

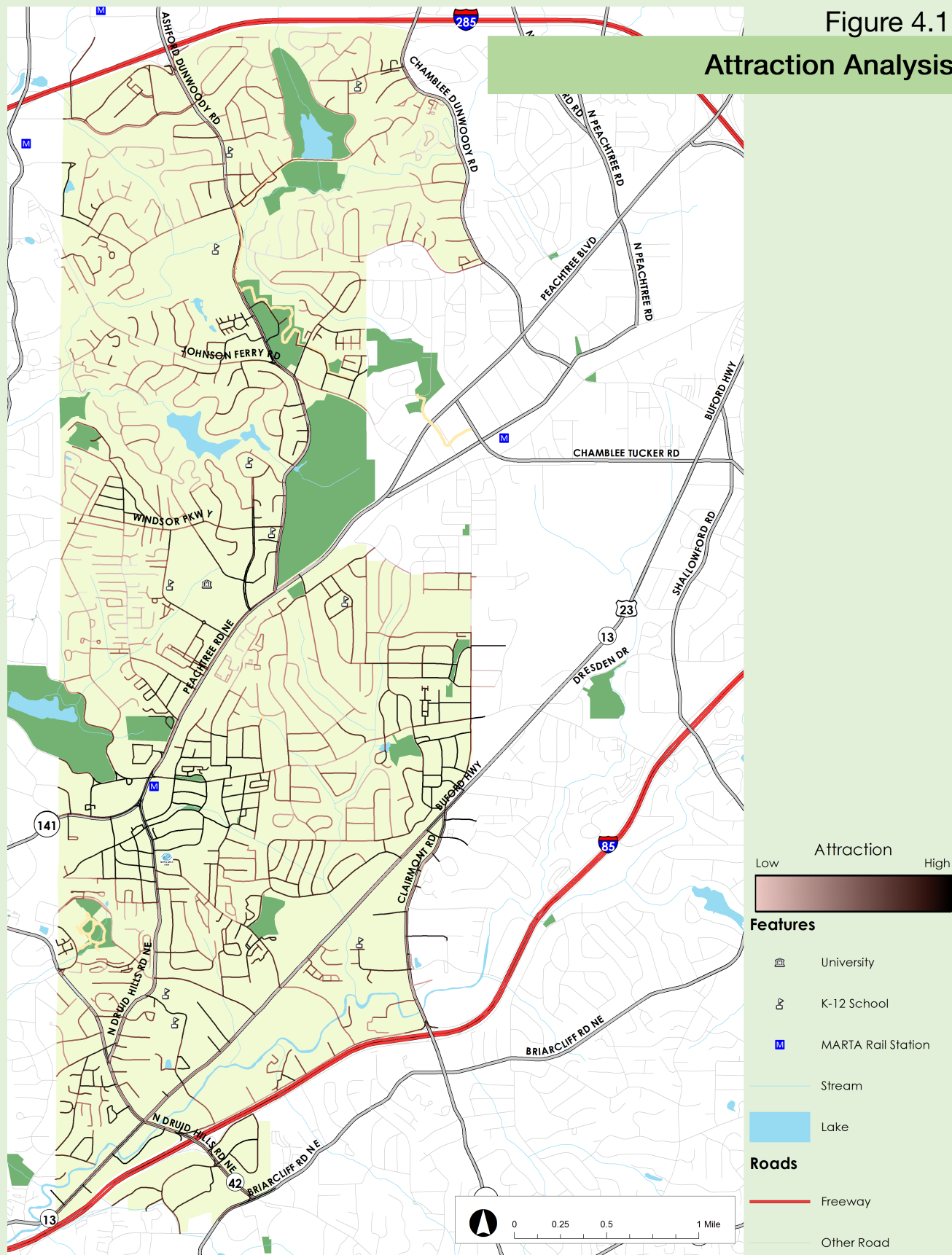
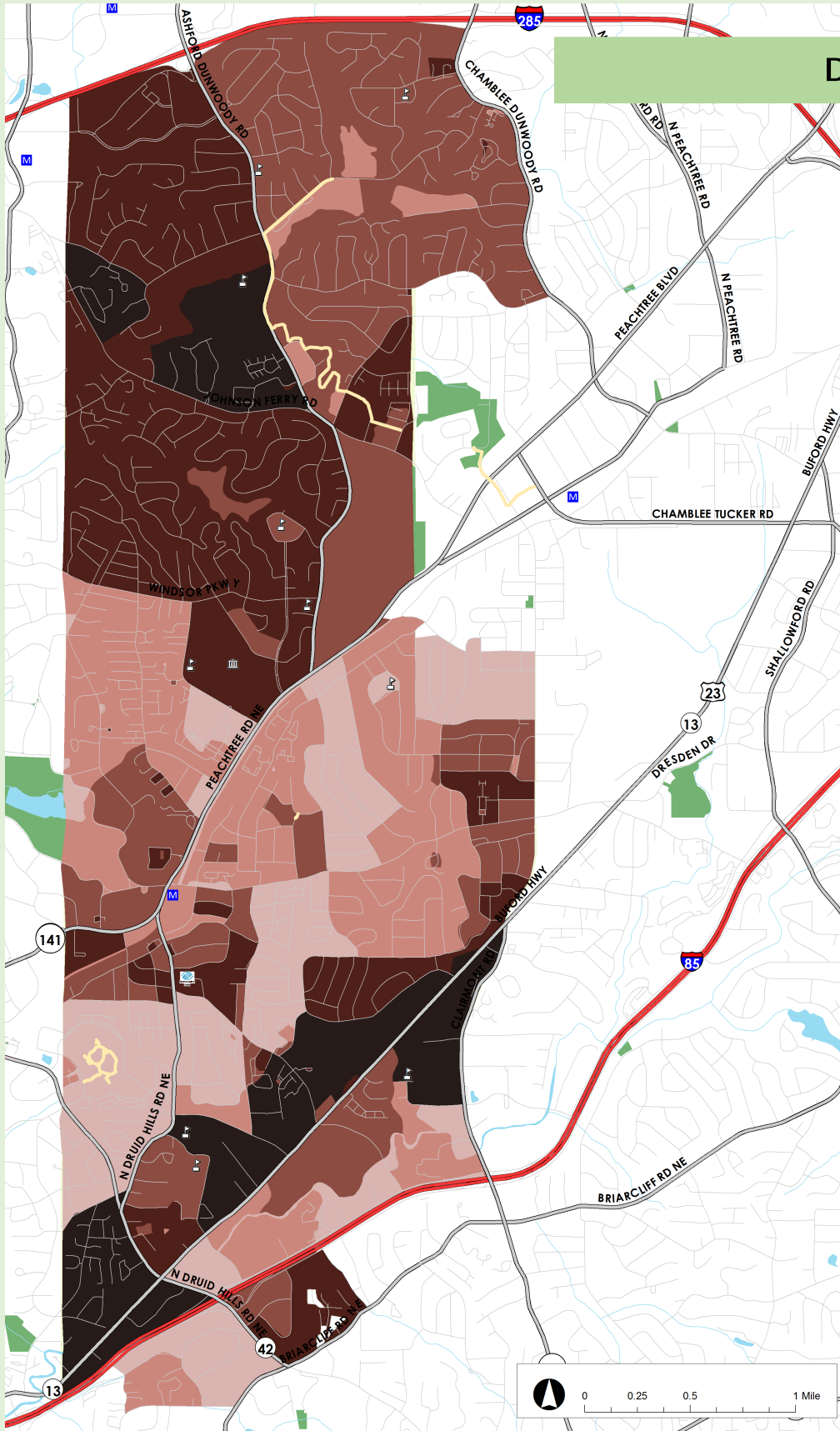


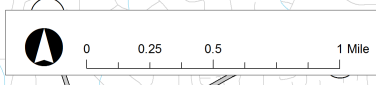
Figure 4.2
Demand Analysis



- Features**
- University
 - K-12 School
 - MARTA Rail Station

- Stream
- Lake

- Roads**
- Freeway
 - Other Road



Character Analysis

While the previous two categories considered the state of Brookhaven's residents, community facilities, and workplaces, this category considered the 'character' of the different corridors to ascertain the relative quality and ease in which walking or biking would be possible along these corridors. This category considered the following attributes:

- Average Daily Traffic (ADT) volumes
- Block size
- Topography
- Posted or measured vehicle speeds

Spatial analysis mapping was developed for each of the criteria (as shown in **Appendix H**) and combined to create a distinct 'Character Analysis' result as shown in **Figure 4.3**.

Overall Active Transportation Corridor Analysis

Using additional spatial analysis, the three categories (Attraction, Demand, and Character) were combined to develop an overall suitability result for the community as shown in **Figure 4.4**. It is important to note that this suitability results in the overall desirability of the corridor for additional pedestrian and bicycle facilities. This is contrasted with an assessment of suitability for on-street cycling on the road as that type of analysis is commonly referred to as a suitability analysis.

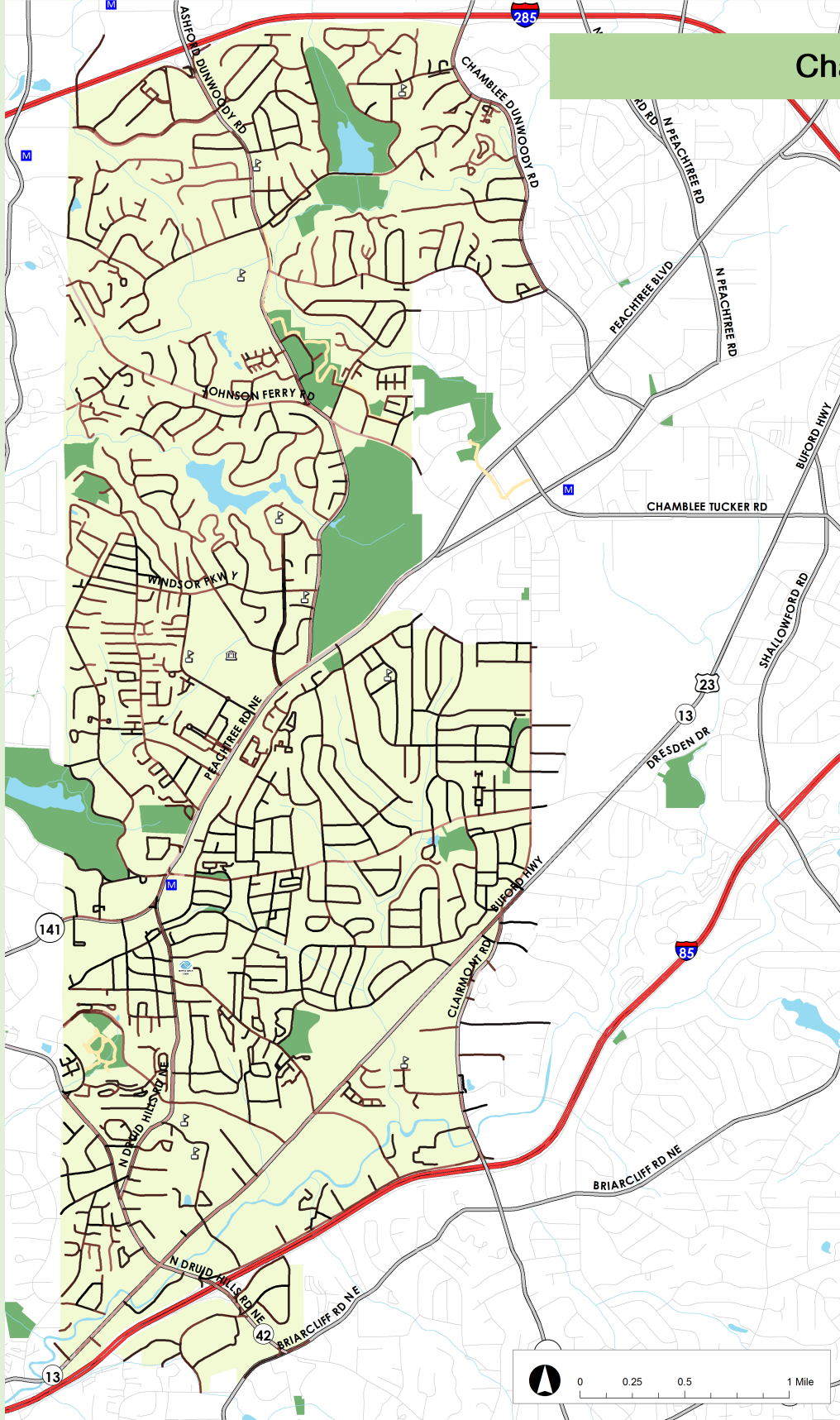
The highest areas of suitability are present in the area immediately around the Brookhaven MARTA Station, in the areas near the city's western boundary around Peachtree Road. High suitability extends from this node along Dresden Drive and North Druid Hills Road into adjacent neighborhoods. This area is close to a number of parks and schools, is well served by transit, and includes multiple retail hubs.

There is another high-suitability area in the eastern part of the city, around the parks near the intersection of Clairmont Road and Dresden Drive. Higher than average suitability also exists throughout the Drew Valley neighborhood (which is between the two aforementioned nodes and north of Buford Highway) thanks to numerous parks, a dense roadway network and relative proximity to retail hubs.

Additionally, high suitability is present near Lanier Boulevard and Windsor Parkway (north of Peachtree Road near the center of the city), around the junction of Ashford Dunwoody Road and Johnson Ferry Road, and further north near Murphy Candler Park. These areas are driven by schools, retail an aging population and residents who already use alternative modes to commute.

Contrastingly, the neighborhoods along Osborne and Mabry Roads, as well as those along Harts Mill Road typically have less overall suitability, due to challenging terrain and poor network connectivity. Stretches of Buford Highway and the northern reaches of Peachtree Road also fared similarly, likely due to their heavy traffic and high driving speeds.

Figure 4.3
Character Analysis



Character

Low High

Features

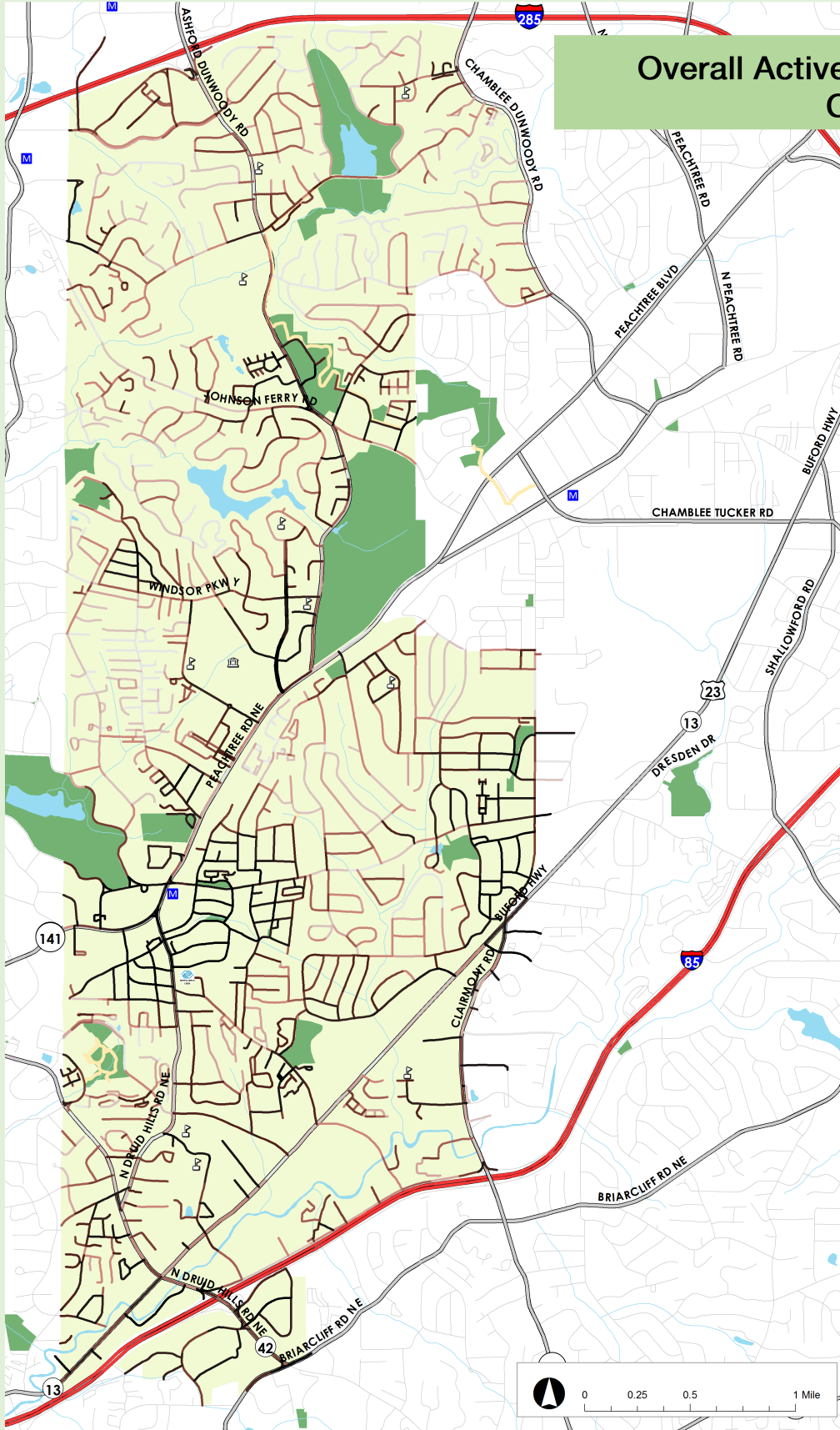
- University
- K-12 School
- MARTA Rail Station
- Stream
- Lake

Roads

- Freeway
- Other Road

Figure 4.4

Overall Active Transportation Corridor Analysis



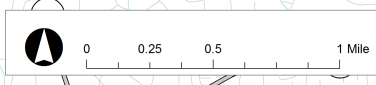
Suitability Low High

Features

- University
- K-12 School
- MARTA Rail Station
- Stream
- Lake

Roads

- Freeway
- Other Road



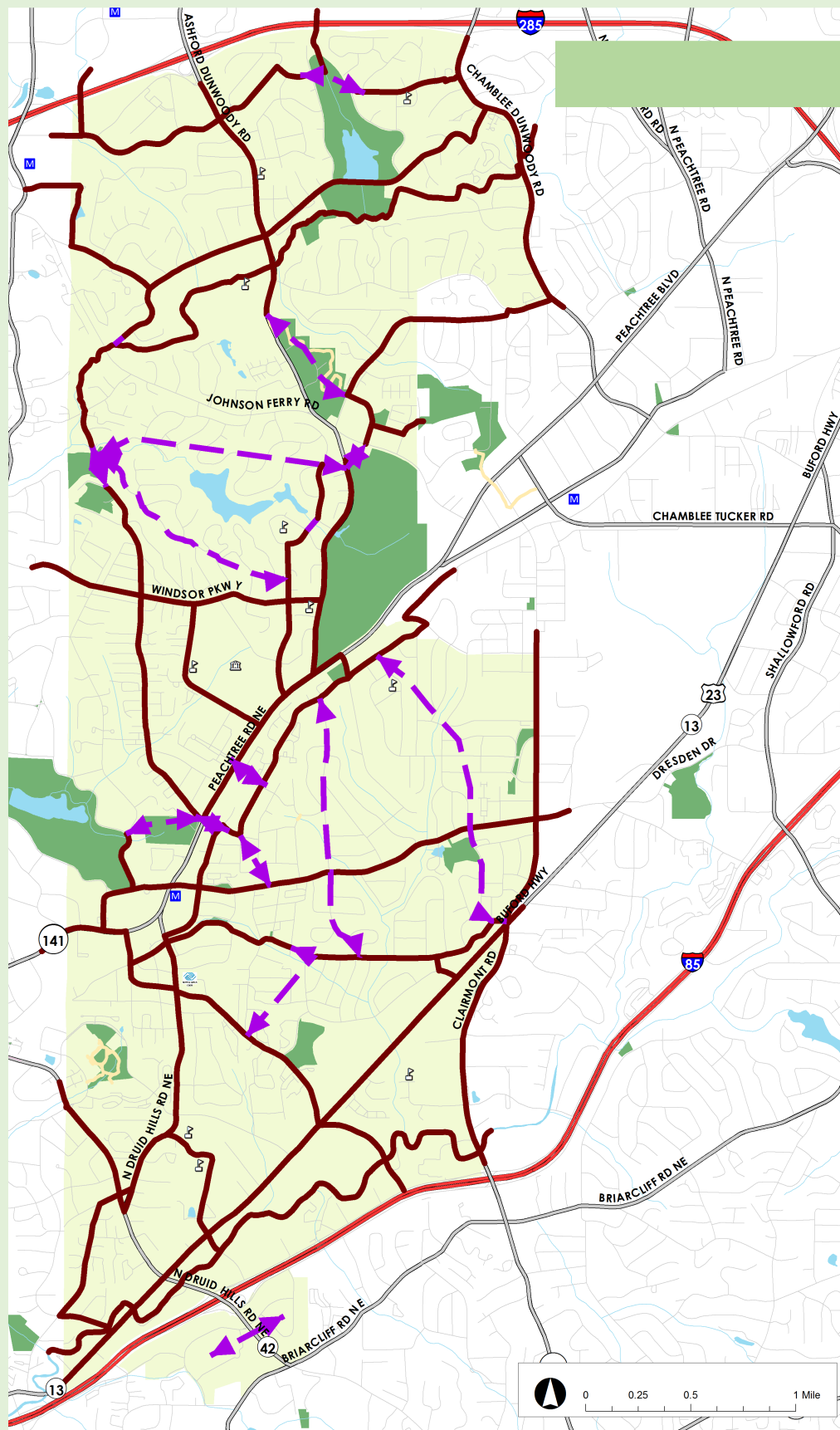
Target Corridors











Using the suitability analysis as a general guide, the study team held an internal work session to develop a series of ‘target corridors’ to investigate further for possible implementation initiatives. Following this work session, coordination with City staff, and feedback from the study’s stakeholder committee, an official ‘target corridors’ map, provided in **Figure 4.5** was developed to help guide the additional research.

Feasibility Review

Based on the ‘target corridors’ map, the study team conducted a series of specific field reviews and research to determine the relative ‘opportunities’ and ‘limitations’ along the identified corridors. This process was far-reaching and included a variety of different considerations as disparate as identifying likely right-of-way lines to consideration of physical space including landscaping, utilities, and roadway width. An in-depth documentation of this effort is provided in **Appendix I**.

Figure 4.5
Target Corridors



-  Target Corridors
-  Target Connection
- Features**
-  University
-  K-12 School
-  MARTA Rail Station
-  Stream
-  Lake
- Roads**
-  Freeway
-  Major Road
-  Other Road

