Ashford Dunwoody Road Corridor Study

VISIONING REPORT

FINAL REPORT | APRIL 2017

This document is the **final** report as approved and adopted by the City of Brookhaven Mayor and City Council on April 25, 2017.

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Ashford Dunwoody Corridor Study

Visioning Report

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EXECUTIVE SUMMARY

The Ashford Dunwoody Corridor Study Visioning Report is the culmination of a year-long process to develop an overarching vision for Ashford Dunwoody Rd based on a context-sensitive and Complete Streets approach. Recognizing the need to plan comprehensively for the future, in 2014 the City of Brookhaven adopted its first-ever Comprehensive Transportation Plan (CTP), which called for a series of corridor studies to establish visions for key roadways throughout the City, including Ashford Dunwoody Rd. The CTP was incorporated by reference into the City's 2034 Comprehensive Plan, which was also developed in 2014. Then, in 2016, the City adopted its first Bicycle, Pedestrian, and Trail Plan, providing hundreds of recommended projects to establish a cohesive network of biking and walking facilities. This visioning report builds upon these plans; it incorporates and expands upon their recommendations for Ashford Dunwoody Rd, setting the stage for a context-sensitive corridor that will support all modes of travel.

With substantial input from citizens, community stakeholders, and City staff, together with the Mayor and City Council, the study outlines a big-picture vision for a multi-modal corridor that serves the needs of all users; is sensitive to the context of existing development and future growth along the corridor; minimizes negative impacts to property owners and neighborhoods; is cost-effective and implementable; and has broad support from citizens, stakeholders, and partners. Over a period of 12 months, the project team facilitated four community events attended by nearly 350 people, conducted an online survey to which 377 people responded, and received hundreds of comments via email. In addition to corridor-specific recommendations, the resulting visioning report includes overarching and city-wide recommendations to strengthen bicycle and pedestrian connectivity, improve safety, reduce neighborhood cut-through traffic, and create an enhanced streetscape. The overall vision establishes the desired typical cross-section for four segments of the corridor, largely in keeping with the character of the road as it exists today, and it identifies potential improvements at seven key intersections along the corridor. In total, there are 17 recommended projects, which may be undertaken in phases over time, according to the City's priorities and available resources. It is important to note that this visioning report presents high-level conceptual recommendations that require further refinement and a detailed concept development process to determine the final configuration and alignments of components of projects.

Ashford Dunwoody Corridor Study By the Numbers

Process
12 months
4 events
346 in-person attendees
377 online questionnaires
173 email comments

Visioning Report
10 overarching recommendations
3 city-wide recommendations
17 recommended projects

In keeping with the City's standard process and with the principles of context-sensitive design, the design details of individual projects will be developed in coordination with property owners, residents, and other community stakeholders. The process to develop and refine concepts for each individual project that is advanced will include public involvement. As a first step of the design and implementation phase, City representatives will engage property owners and other stakeholders to provide input. It is critical that the final designs reflect the character of the surrounding community and can be broadly supported.

The visioning study establishes a baseline vision for a multi-modal corridor that serves as a template for development of concepts for the recommended future projects that will enhance the safety of all users.

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1. INTRODUCTION

1.1 STUDY OVERVIEW

Ashford Dunwoody Rd has been a vital transportation corridor for present-day Brookhaven since its inception. In the early part of the 20th century, the road served as a path between rural and primarily agricultural communities. The construction of the interstate highway system was the impetus for the construction of suburban homes in present-day Brookhaven and surrounding areas. In 1971, Perimeter Mall opened amidst cow pastures and open fields. The success of the mall spurred the development of office buildings, hotels, restaurants, and retail development into the 1980s and 1990s. Meanwhile, the Peachtree Rd corridor urbanized as the City of Atlanta expanded outward. As population in the area has grown and development has continued, Ashford Dunwoody Rd has become a key travel corridor for residents, workers, and visitors to the area.

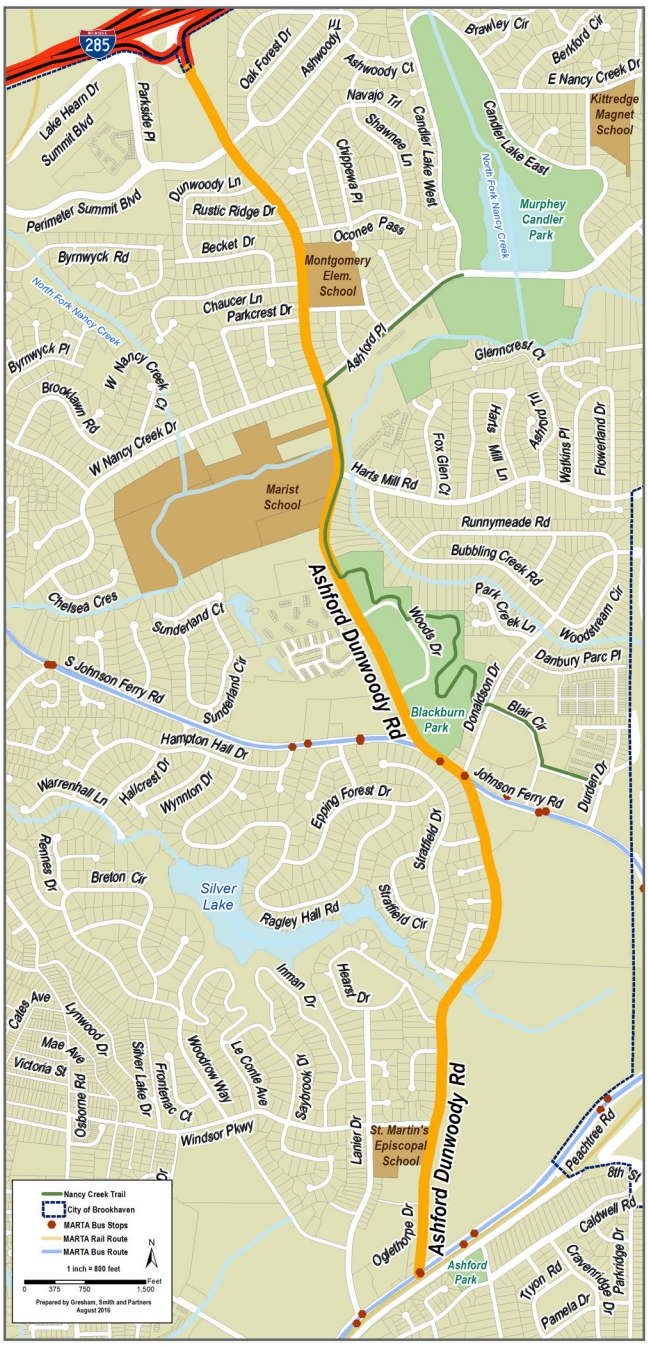


FIGURE 1. MAP OF STUDY AREA

In recent years, population and employment in the City of Brookhaven and the adjacent Perimeter Center have surged, and substantial development and redevelopment is occurring along Ashford Dunwoody Rd and nearby corridors. Traffic congestion along Ashford Dunwoody Rd is anticipated to increase with upcoming developments in the Perimeter Center area and near the Brookhaven/Oglethorpe MARTA Station. At the same time, there is a greater desire for alternate facilities so that Brookhaven residents can exercise or travel to community destinations without having to get into their vehicles.

Today, Ashford Dunwoody Rd remains a significant corridor for the City of Brookhaven. It provides access to I-285 via a diverging diamond interchange north of the City Limits and provides access to the Perimeter Center area, a significant hub of commercial, business, and retail activity. Within the city limits, Ashford Dunwoody Rd connects important activity centers and is home to many single family homes and residential neighborhoods, as well as three schools, houses of worship, and recreational and sports facilities.

The City's Comprehensive Transportation Plan (CTP) recommended that a visioning process be undertaken to develop general consensus around options to improve traffic operations, safety, and multimodal connectivity for several key corridors throughout the City, including Ashford Dunwoody Rd. To that end, the City of Brookhaven initiated the first phase of a two-phase study of the Ashford Dunwoody Rd corridor for the purpose of developing a future vision for the corridor to serve the projected traffic as well as to provide facilities for bicycles, pedestrians, and transit, to be based on a "Complete Streets"[1] and context-sensitive approach that addresses all forms of transportation. The limits of the study area are Peachtree Rd (SR 141) on the south and the City Limits, between Lake Hearn Dr and I-285 on the north. Figure 1 shows a map of the study area. The overall goal of the project is to balance operational improvements with improvements that enhance the safety of all users, including pedestrians, cyclists, and motorists. The ***purpose of this first phase of the Ashford Dunwoody Road Corridor Study is to develop an overall vision*** for a multi-modal corridor that:

- Serves the needs of all users;
- Is harmonious with existing development and future growth along the corridor;
- Minimizes negative impacts to property owners and neighborhoods along the corridor;
- Is cost-effective and implementable; and
- Has broad community support from citizens, stakeholders, and other partners.

Key objectives of the study include: evaluate traffic conditions along the corridor and at key intersections along the corridor for current and future conditions; develop a corridor vision, including typical sections, lane use configurations, and streetscape recommendations; develop recommendations for intersection improvements; and develop alternatives for bicycle and pedestrian accommodations in the corridor. The outcome of this phase of the process are visual depictions of the desired general look of the corridor and a series of recommended phased projects, including estimated costs, to improve the corridor over time. Upon approval of the visioning report by the City Council, the City will develop a plan to identify funding sources and implement recommended projects. This visioning study does not prescribe fully fledged, detailed design concepts, but rather **outlines an overall vision to guide future improvements along the corridor**. It may be thought of as a template upon which to build or a starting point to be further developed and refined over time. The ***design details of recommendations from this first phase of the study will be worked out during the planning and design phase of the individual projects.*** This includes, but is not limited to details such as: the precise length of turn lanes; location of traffic signals; the type, location, and position of medians and the number and location of median openings; and the precise location of roadway elements and impacts to individual properties and/or utilities. Design of these elements requires refined plans with topographical survey database and development of engineering concepts. This process will include the opportunity for the community to review and provide input into and comment on the proposed detailed designs of the individual projects.

1.2 STUDY PROCESS

As discussed above, the City of Brookhaven adopted a Comprehensive Transportation Plan, or CTP, in September 2014. One of the recommendations of the plan was to facilitate a series of corridor vision

[1] Complete Streets are transportation facilities that are "designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities." *(Source: Smart Growth America)*

studies, including one for Ashford Dunwoody Rd. Specifically, the CTP recommended conducting a two-phase process. The first phase would be to develop a vision to guide future improvements along the corridor that would establish the basic typical elements of the road. The second phase would design individual phased projects in line with the corridor vision and result in concepts for those projects per the Georgia Department of Transportation (GDOT) process, including public outreach, environmental screening, traffic analysis, complete streets, roadway concepts, and signal improvements. Furthermore, the CTP recommended improvements at several key intersections along Ashford Dunwoody Rd, including Peachtree Rd, Johnson Ferry Rd, and Windsor Pkwy. (Additional details are provided about these recommendations in Section 2.3.1.)

Building upon these recommendations, the City issued a request for proposals (RFP) in May 2015 for consultants to lead a corridor visioning study for Ashford Dunwoody Rd. Multiple proposals were submitted, and following interviews with top candidate firms, the City selected Gresham, Smith and Partners to lead the study. The City Council approved this measure on October 13, 2015. The study, overseen by the City's Department of Public Works, began in earnest in early 2016. An overall timeline for the study is shown in Figure 2.

To help guide the study, the City of Brookhaven identified residents and stakeholders representing community organizations, such as area schools, commercial property management companies, and neighborhood associations. This Corridor Advisory Committee (CAC) served an advisory role to the project team, acting as a sounding board for potential ideas and providing input and guidance about community needs, opportunities, and possible solutions. The group also served as liaisons to the community, helping to spread the word about events and opportunities for the public to provide input. The committee met three times during the course of the study to review draft materials, discuss public input, and to provide guidance to the project team. Additional information on committee meetings is provided in Section 5.

Over the course of the study, the project team analyzed existing conditions and reviewed prior plans and studies done for and by the City of Brookhaven and DeKalb County. Plans were reviewed for any recommendations that might be applicable to the Ashford Dunwoody Rd corridor. The team also conducted an analysis of current and projected future traffic volumes along the corridor and at seven key intersections. Once the preliminary recommendations were identified, the team conducted a high-level environmental scan to identify any potential issues that might impact recommendations during implementation, such as the presence of environmentally sensitive habitats or potential hazardous waste risks, such as underground storage tanks.

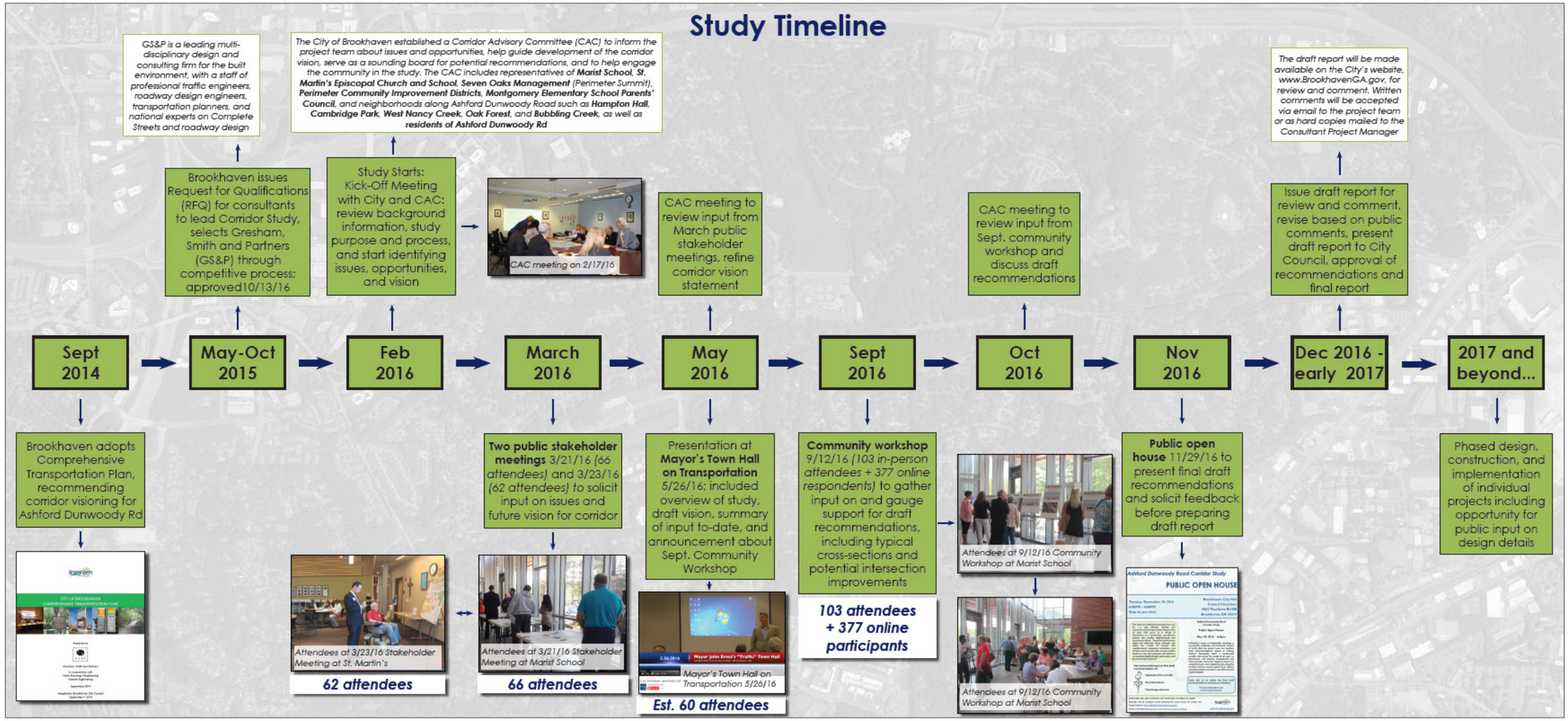


FIGURE 2. STUDY TIMELINE

Following the inventory of existing conditions, the team began identifying needs and opportunities for the corridor, which included input from the public and community members. The project team held two public stakeholder meetings to provide information about the study, identify needs, and highlight critical issues on March 21 and March 23, 2016. The two meetings were collectively attended by more than 120 people. Over the course of several months following the stakeholder and public meetings in March, the project team developed initial draft recommendations to improve key intersections as well as overarching recommendations for the corridor and potential typical cross-sections for segments of Ashford Dunwoody Rd. Recommendations were based upon traffic engineering analysis as well as identified concerns and input from the March public stakeholder meetings. Draft recommendations were presented during a community workshop on September 12, 2016, which was attended by 103 people. Following the workshop, materials presented were placed on the City's website along with an online version of the evaluation worksheets that attendees filled out during the in-person workshop. A total of 377 people participated in the online version of the workshop.

Using the input gathered during the community workshop, the project team refined the draft recommendations. The team met with the CAC to review the community input from the workshop and discuss comments and additional suggestions. The team then met with City officials to review the refined recommendations, presented as visual depictions of the typical cross-sections, recommended intersection improvements, and examples of potential streetscape elements. A public open house meeting was held on November 29, 2016 at City Hall and was attended by more than 75 people. Materials presented were also placed on the City's website and comments were collected for a period of two weeks following the open house. A summary of all public engagement activities and input is included in Section 5.

In early March 2017, a draft of the report was made available on the City's website following review and approval by City staff. The project team presented the draft report to City Council later that month, and it is anticipated that the final report will be accepted and approved by the City sometime in the Spring of 2017.

1.3 VISION AND GOALS

The City has taken an approach to transportation that seeks to create a more balanced network, in order to encourage and enable active transportation and increase access to bicycle and pedestrian facilities. When the City of Brookhaven set out to conduct the *Ashford Dunwoody Road Corridor Study*, it was made clear that the vision should be based on a Complete Streets and context-sensitive approach that addresses all forms of transportation. To help guide the planning process and development of recommendations for the corridor, the project team worked with the CAC and City to develop a vision statement that reflects the desired future for the corridor. While the vision is aspirational, it is simultaneously realistic and implementable. It is intended to serve as the basis of recommendations and to express how the corridor should be designed and should operate in the future. The vision statement was developed based upon initial elements provided by the CAC during its first meeting and with input from community members during the two stakeholder meetings in March of 2016. The statement was reviewed and agreed upon in May 2016. The vision for Ashford Dunwoody Rd is as follows:

> *"Ashford Dunwoody Road should be a safe, efficient, inviting, and convenient multi-modal corridor that provides all users with access to a variety of destinations in a harmonious, cost-*

effective manner that enables neighborhoods and businesses to thrive. People are able to move safely, efficiently along, through, and within the corridor to connect with neighborhoods, workplaces, institutions, and activity centers on foot, bike, car, bus or other modes in a way that preserves and enhances surrounding neighborhoods, green space, and the community in general."

From this overarching vision statement, several specific goals were developed. The goals of the study are listed below.

1) Design Ashford Dunwoody Rd to function as and accommodate a 35-mile-per-hour speed limit and encourage slower vehicular speeds.
2) Improve operations for all users along the corridor and at key intersections.
3) Improve safety for all users of the corridor.
4) Provide facilities that give users transportation choices, ensure all users have access to the corridor, regardless of mode of travel, and provide links between existing and future multi-modal facilities.
5) Minimize impacts on adjacent properties by working within the existing public right-of-way along Ashford Dunwoody Rd where possible.
6) Enhance the look and feel of the corridor through the addition of landscape and streetscape elements.

The vision, goals, and overriding purpose of the study were used to help guide development of recommendations throughout the course of the study.

2. EXISTING CONDITIONS

2.1 THE ASHFORD DUNWOODY ROAD CORRIDOR

The City of Brookhaven is located in northwestern DeKalb County, northeast of the City of Atlanta. It is primarily suburban in character with a variety of housing types and commercial development concentrated along major corridors. Ashford Dunwoody Rd is located on the north side of the City of Brookhaven, stretching between the central portion of Brookhaven and northward into Dunwoody. The roadway links to two important activity centers in the Atlanta region. To the south, Ashford Dunwoody Rd meets Peachtree Rd. (SR 141) just north of the Brookhaven-Oglethorpe MARTA Station, which is lined with commercial and retail uses, and is home to the mixed-use Town Center development, City Hall, and Oglethorpe University. To the north, Ashford Dunwoody Rd continues into Perimeter Center, one of the most active business submarkets in the southeast U.S. At the north end of the corridor, within the City of Brookhaven, there are several commercial office developments and event spaces at Perimeter Summit and an interchange for I-285 at Ashford Dunwoody Rd, just north of the City of Brookhaven limits. Ashford Dunwoody Rd is also one of the primary north-south arteries in northeast Metro Atlanta. It's nearest parallel roads south of I-285, are Peachtree Dunwoody Rd to the west and Chamblee Dunwoody Rd to the east. Both roads are approximately 1.5 miles from Ashford Dunwoody Rd, connected mainly by residential streets. There are five primary east-west roads that provide access to these parallel north-south roads: Windsor Pkwy, Johnson Ferry Rd, Harts Mill Rd, West Nancy Creek Dr, and Perimeter Summit Pkwy. These factors contribute to this portion of Ashford Dunwoody Rd experiencing a significant volume of morning and evening rush hour traffic.

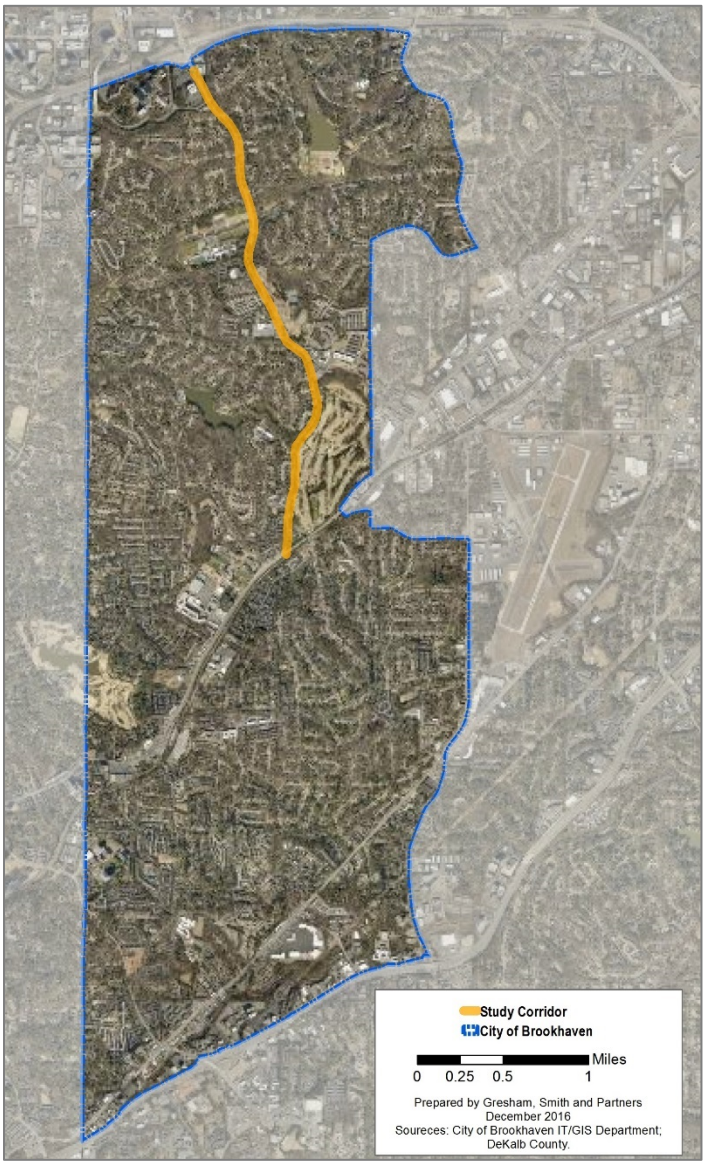


FIGURE 3. ASHFORD DUNWOODY ROAD WITHIN CITY OF BROOKHAVEN

Ashford Dunwoody Rd is primarily a two-lane road with a center turn lane and left turn lanes in some locations. Typically, travel lanes are 13 feet wide. Where they exist, turn lanes are sometimes the same size and sometimes narrower. Where Ashford Dunwoody Rd meets Johnson Ferry Rd near the central portion of the study corridor, there are two lanes in

each direction, and north of Perimeter Summit Pkwy, it is wider, becoming six lanes wide just south of I-285. The study corridor is an approximately three-mile segment of Ashford Dunwoody Rd from Peachtree Rd (SR 141) to the City Limits, just north of Lake Hearn Dr, near I-285.

2.1.1 GENERAL CHARACTERISTICS

The Ashford Dunwoody Rd corridor serves a number of users, including people on foot, bicycle, and in cars, who use it for local travel as well as commuting to and from other areas, including the Perimeter area, as well as for access to I-285. The area adjacent to and immediately surrounding Ashford Dunwoody Rd is largely residential in nature, with some commercial, recreational and educational uses nearby. Single-family homes front Ashford Dunwoody Rd in the northern portion of the corridor, from West Nancy Creek Dr to Perimeter Summit Pkwy. In addition to single-family homes and subdivisions, there are also a number of townhomes and condominiums along the corridor. Residential neighborhoods along the corridor are shown in Table 1. Three senior housing developments are located near the intersection of Johnson Ferry Rd: Ashford Parkside, Ashford Landing; and Hearthside Brookleigh.

TABLE 1. NEIGHBORHOODS ALONG ASHFORD DUNWOODY ROAD

Neighborhoods		
Windsor Oaks	Cambridge Park	Devonshire
Lanier Court	Ashford Creek Townhomes	Murphey Candler Park
Brookhaven Close	Park at Ashford	Canterbury Hill
Brookhaven Trace	Sexton Woods	Ashford Forest
Brookhaven Hill	Ashford Lake	Nancy Creek Heights
Ashford Club	Ashford Place	Oak Forest Heights

There are four schools on and along Ashford Dunwoody Rd: St. Martin in the Fields Episcopal Church and School in the southern portion of the corridor, near Windsor Pkwy; Our Lady of the Assumption Catholic Church and School located to the west of Ashford Dunwoody Rd, off of Humility Ln; Marist School, located at the intersection of Harts Mill Rd and Ashford Dunwoody Rd; and Montgomery Elementary School, located between Brenton Dr and Oconee Pass on the east side of Ashford Dunwoody Rd. Collectively, these schools serve nearly 2,900 students. Schools tend to generate a substantial amount of vehicular traffic as well as limited non-vehicular traffic, although this activity is primarily limited to a few hours in the mornings and afternoons. Some school arrival times coincide with peak morning rush hour traffic, exacerbating congestion for a short period of time. In addition, all of the schools offer before- and after-school programs and serve as community resources beyond the school day, hosting sporting and other community events during evenings and on weekends.

In addition to the schools, several other recreational facilities exist along the corridor, including the Cowart Family/Ashford Dunwoody YMCA on the west side and Blackburn Park on the east side, north of Johnson Ferry Road. The YMCA is open seven days per week and operates programs throughout the day, including until 9:00 or 10:00 PM Monday through Friday, and from 8:00 AM to 6:00 PM Saturday and Sunday. A portion of the Nancy Creek Trail, maintained by the PATH Foundation, runs through Blackburn Park and along the east side of Ashford Dunwoody Rd, then continues along West Nancy Creek Dr, where it connects to Murphey Candler Park. The Peachtree Golf Club is situated to the east of Ashford Dunwoody Rd, south

of Johnson Ferry Rd and north of Peachtree Rd. There are three driveways that provide ingress and egress to the club along the east side of Ashford Dunwoody Rd.

Ashford Dunwoody Rd is not home to many major employers, although there is a node of neighborhood retail and commercial development and a growing residential population around the intersection of Johnson Ferry Rd, including along Donaldson Dr, Blair Circle, and Durden Rd. In this area, there are a number of retail and commercial businesses, including supermarkets, restaurants, and other establishments. Near the northern end of the corridor, inside the boundaries of the Perimeter Community Improvement District (PCIDs), is Perimeter Summit, a mixed-use development featuring 1.8 million square feet (SF) of Class A office space, the Hyatt Regency Atlanta Perimeter at Villa Christina, and Villa Sonoma, a 320-unit luxury condominium community. Adjacent to Perimeter Summit is Ashford Green, a six-story office building, and there are also a number of commercial and office buildings farther north at Lake Hearn Dr. Several redevelopment and new development projects are planned for this area, including 650 residential units and 1,132,000 SF of office space between projects at Ashford Green and Perimeter Summit (see section 2.4.1 for additional information). The area is also home to a Hilton Garden Inn hotel, and large employers such as Autotrader, Insight Global, and a campus of Belhaven University, as well as various other employers.

2.1.2 CORRIDOR DIMENSIONS

Segment 1: Peachtree Road to Johnson Ferry Road

This area generally consists of residential properties on the west side of the corridor and the Peachtree Golf Course on the east side, which has three driveways. There are limited to no sidewalks along this section of Ashford Dunwoody Rd. There is one travel lane in each direction, which is generally between 11 and 14 feet wide, but varies depending on the precise location. In some locations, a turn lane is provided. There are bus stops located on Peachtree Rd at the south end of the corridor.

FIGURE 4. EXISTING ROAD CONFIGURATION IN SEGMENT 1 (FACING NORTH)

Segment 2: Between the Johnson Ferry Road Intersections

This area is the neighborhood commercial and retail hub of the corridor. It is home to several local businesses and some multi-family and senior residential communities. Several single-family residential neighborhoods border the area, primarily to the southwest and northeast. Sidewalk is present on the north/east side of the corridor, and connects to Blackburn Park. There are generally two 11-foot lanes in each direction, with some turn lanes. The main intersections - Ashford Dunwoody Rd and Johnson Ferry Rd – are not squared off, but rather intersect at skewed angles. There is a shared segment of roadway between Ashford Dunwoody Rd and Johnson Ferry Rd before they split off from one another. In addition, Donaldson Dr also intersects Johnson Ferry Rd and Ashford Dunwoody Rd in this area, as shown in Figure 5.

FIGURE 5. EXISTING ROAD CONFIGURATION WHERE JOHNSON FERRY ROAD AND ASHFORD DUNWOODY ROAD MEET (FACING EAST)

Segment 3: Johnson Ferry Road to Perimeter Summit Parkway/Oak Forest Drive

The segment of Ashford Dunwoody Rd between Johnson Ferry Rd and Perimeter Summit Pkwy is home to a combination of recreational, institutional, and residential uses. The general configuration of the roadway changes from one end of the segment to the other. At the south end of this segment is Blackburn Park on the east side of the corridor. Although a trail is present through the park, there is no sidewalk alongside the park on Ashford Dunwoody Rd. Opposite the park are multi-family developments of townhomes and condominiums, the Cowart Family/Ashford Dunwoody YMCA, and Marist School, located roughly one-quarter mile north of the park. Several single-family homes are present on the east side of Ashford Dunwoody Rd north of Blackburn Park. Through this area, the corridor is comprised of two 11-foot travel lanes, a 12-foot two-way center turn lane, and roughly three-foot paved shoulder, as shown in Figure 6. The through travel lanes are shared by motor vehicles and bicycles (marked with "sharrows") from Johnson Ferry Rd to a point roughly one-tenth of a mile south of Harts Mill Rd. Here, on-street bicycle lanes are provided, until West Nancy Creek Dr. Between Johnson Ferry Rd and West Nancy Creek Dr, the west side

of the road has a roughly six-foot wide sidewalk and Nancy Creek Trail runs along the east side of Ashford Dunwoody Rd.

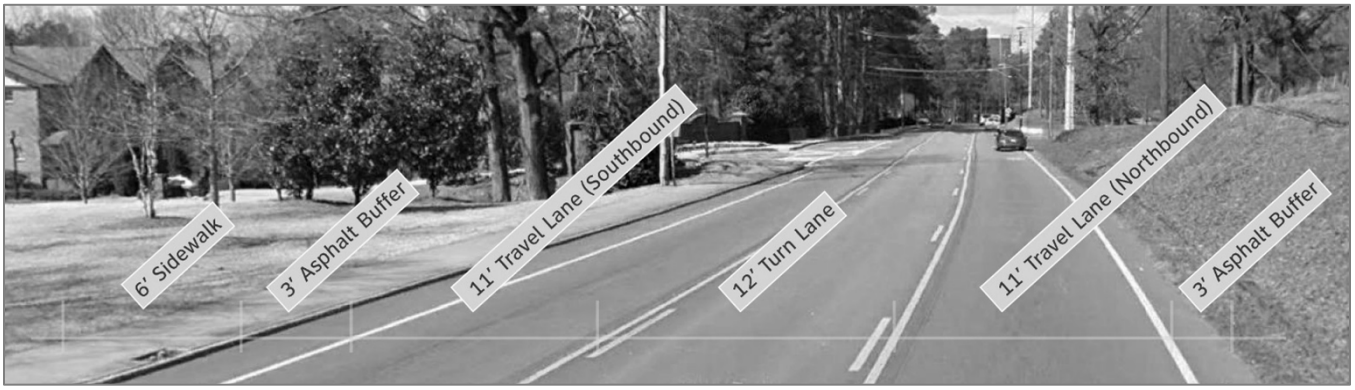


FIGURE 6. EXISTING ROAD CONFIGURATION IN SOUTH PART OF SEGMENT 3, NEAR BLACKBURN PARK (FACING NORTH)

The northern portion of this segment, from West Nancy Creek Dr to Perimeter Summit Pkwy/Oak Forest Dr, is characterized primarily by single-family homes and is the site of Montgomery Elementary School as well. The roadway in this area is comprised of two 13-foot travel lanes with intermittent turn lanes, and four-foot sidewalks on either side, separated from the travel lanes by a buffer ranging from zero to two feet in width.

Segment 4: Perimeter Summit Parkway/Oak Forest Drive to City Limits

The northern segment of Ashford Dunwoody Rd within the City of Brookhaven, falls within the boundaries of the PCIDs. The area from Perimeter Summit Pkwy/Oak Forest Dr to the city limits is within PCIDs boundaries. PCIDs are self-taxing districts in the Perimeter area that use additional property taxes to help fund transportation and infrastructure projects within the boundaries of the district, in partnership with the Cities of Brookhaven, Dunwoody, and Sandy Springs. The Perimeter area is home to the largest retail mall in Georgia, dozens of restaurants, retailers, single- and multi-family housing, and the largest commercial sub-market in the southeastern U.S., including a number of Fortune 500 companies, such as Newell Rubbermaid, United Parcel Service (UPS), and First Data Corporation.

Although it spans a distance of roughly one-quarter mile, Ashford Dunwoody Rd changes quickly from intersection to intersection within this segment. South of Perimeter Summit Pkwy/Oak Forest Dr, Ashford Dunwoody Rd is one travel lane in each direction, with a left turn lane at the Perimeter Summit Pkwy/Oak Forest Dr intersection. Between Perimeter Summit Pkwy/Oak Forest Dr and Ashford Green, there are two northbound through lanes, one southbound through lane, and turn lanes at the intersections. Between Ashford Green and Lake Hearn Dr, there are three northbound through lanes, two of which provide direct access to I-285, and a left turn lane to Lake Hearn Dr Heading southbound there is one through lane and one right turn lane (to Ashford Green). Travel lanes are generally 11 feet wide in this area and the total width of the road ranges from 35 feet on the south side of the Perimeter Summit Pkwy/Oak Forest Dr intersection to 60 feet near Lake Hearn Dr. Five-foot wide sidewalks are present on both sides of the road and there is no buffer between the travel lanes and sidewalk. Crosswalks follow the PCIDs design standards and are wide textured brick crosswalks outlined in white paint. Figure 7 shows a view of the area between Perimeter

Summit Pkwy/ Oak Forest Dr and Ashford Green, facing north. Perimeter Summit Pkwy has on-street bicycle lanes, which connect to bicycle lanes on Perimeter Center Pkwy and provide access to the core Perimeter Center area.

FIGURE 7. EXISTING ROAD CONFIGURATION IN SEGMENT 4, NEAR ASHFORD GREEN (FACING NORTH)

2.1.3 INTERSECTIONS

There are a total of 25 intersections along Ashford Dunwoody Rd within the City of Brookhaven. Nine of the intersections are signalized, including two signalized driveways at Montgomery Elementary School and Ashford Green. The intersections are listed in Table 2 and signalized intersections are shown in Figure 8.

TABLE 2. INTERSECTIONS ALONG ASHFORD DUNWOODY ROAD

Cross Street	4-way or T (dir.)*	Traffic Control	Pedestrian Facilities*
Peachtree Rd	T (S)	Signalized	Crosswalks (W, N, E), signals
Oglethorpe Dr	T (W)	Unsignalized	N/A
Windsor Pkwy	T (W)	Unsignalized	Crosswalk (W)
Brookhaven Close	T (W)	Unsignalized	N/A
Humility Ln	T (W)	Unsignalized	Crosswalk (W)
Stratfield Dr	T (W)	Unsignalized	Crosswalk (W)
Brookhaven Trace	T (W)	Unsignalized	N/A
Brookhaven Hill	T (W)	Unsignalized	N/A
Ashford Club Ct	T (W)	Unsignalized	N/A
Kadleston Way	T (W)	Unsignalized	Crosswalk (S)**
Johnson Ferry Rd / Donaldson Dr	4-way	Signalized	Crosswalk (W, N), signals
Johnson Ferry Rd	T (W)	Signalized	N/A
Ashford Creek Dr	T (W)	Unsignalized	Crosswalk (W)
Harts Mill Rd (Marist School)	4-way	Signalized	Crosswalks (S, W, N, E), signals
West Nancy Creek Dr	4-way	Signalized	Crosswalks (S, W, N, E), signals
Parkcrest Dr	T (W)	Unsignalized	Crosswalk (W)
Brenton Dr	T (E)	Unsignalized	Crosswalk (E)
Chaucer Ln	T (W)	Unsignalized	Crosswalk (N, E)
Montgomery Elementary School (driveway)	T (E)	Signalized	Crosswalk (W, N), signal across Ashford Dunwoody Rd
Oconee Pass	T (E)	Unsignalized	Crosswalk (W)
Rustic Ridge Dr	T (W)	Unsignalized	Crosswalk (E)
Dunwoody Ln	T (W)	Unsignalized	Crosswalk (E)
Perimeter Summit Pkwy / Oak Forest Dr	4-way	Signalized	Crosswalks (S, W, N, E), signals
Ashford Green *(driveway)*	T (W)	Signalized	Crosswalks (S, N, E), signals
Lake Hearn Dr	4-way	Signalized	Crosswalks (S, W, N, E), signals

**N, E, S, and W refer to cardinal directions, indicating which side of the road the intersecting street or pedestrian facility is on.*

*** Note: crosswalk being added on the west as part of recent sidewalk construction*

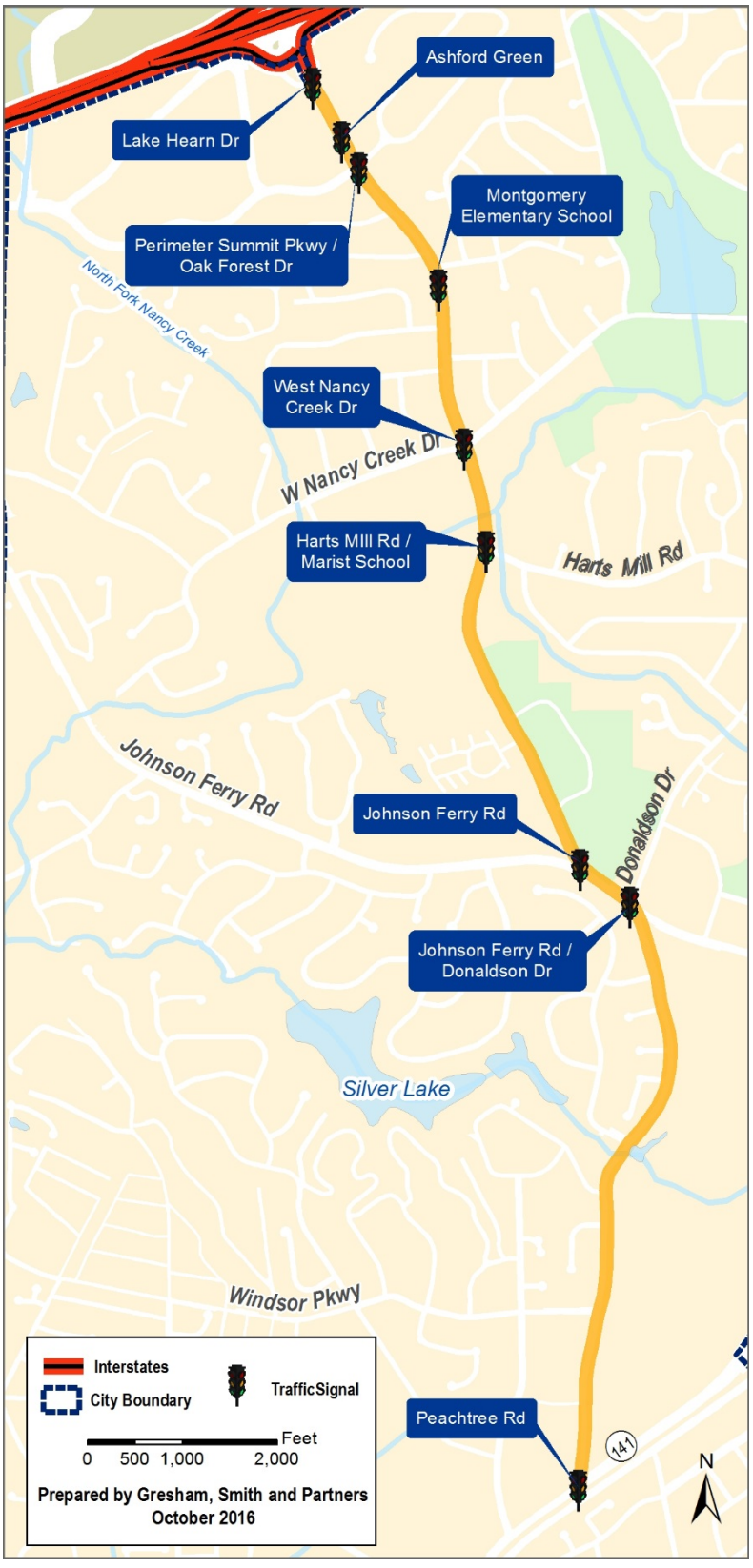


FIGURE 8. SIGNALIZED INTERSECTIONS

2.1.4 BICYCLE AND PEDESTRIAN FACILITIES

While the City has made great strides in improving the bicycle and pedestrian network, it currently lacks provisions for pedestrians and cyclists in many areas. Throughout the City of Brookhaven, facilities for pedestrians and cyclists are somewhat irregular and disconnected. Overall, the City scores 17 points out of 100 on the website Walkscore.com, which measures the walkability of addresses and places throughout the United States, analyzing hundreds of walking routes to nearby amenities and destinations using population density, block length, and other data. This score means that almost all errands or trips require a car. Some locations along Ashford Dunwoody Rd score slightly higher, generally within close proximity to the area around Johnson Ferry Rd and Donaldson Dr.

The only current dedicated multi-use trail in Brookhaven is Nancy Creek Trail. Located in northern Brookhaven, Nancy Creek Trail runs from Durden Rd, north of Johnson Ferry Rd, to Murphey Candler Park. Heading northward, the Nancy Creek Trail runs through Blackburn Park, then along the east side of Ashford Dunwoody Rd to West Nancy Creek Dr, where it turns and heads east along West Nancy Creek Dr to Murphey Candler Park. In general, the sidewalk network is more robust than the network for cyclists. Shared lane markings for bicyclists (commonly called "sharrows") are present on a portion of Ashford Dunwoody Rd between Johnson Ferry Rd and the Nancy Creek Trail (at the north end of Blackburn Park), just south of Ashford Creek Trail at the YMCA. From south of Harts Mill Rd (Marist School) to West Nancy Creek Dr, there are bicycle lanes on both sides of Ashford Dunwoody Rd. There are bicycle lanes on Perimeter Summit Pkwy that connect from Ashford Dunwoody Rd to Perimeter Center Pkwy, however there are no facilities for cyclists along the portion of the Ashford Dunwoody Rd corridor north of West Nancy Creek Dr.

The sidewalk network along Ashford Dunwoody Rd is mostly complete, although there are portions of the corridor that have no sidewalk on one side or the other. Many sections of sidewalk are located very close to the roadway with little buffer between vehicles and pedestrians. Sidewalks along Ashford Dunwoody Rd provide access to most of the schools along the corridor as well as to key east-west roads such as Windsor Pkwy, Johnson Ferry Rd, Harts Mill Rd, West Nancy Creek Dr, and Perimeter Summit Pkwy. Sidewalk is missing, however, from the southern portion of the corridor, providing no pedestrian connection to Peachtree Rd. There are also some gaps in areas near Johnson Ferry Rd, along Blackburn Park, and near Montgomery Elementary School. Figure 9 shows the existing bicycle and pedestrian network in the area around Ashford Dunwoody Rd. Gaps in the sidewalk network are shown in Table 3 below. There are a total of eleven opportunities to cross Ashford Dunwoody Rd along the corridor, nine of which are north of Johnson Ferry Rd, due to a lack of sidewalk on the east side of the road south of Johnson Ferry Rd.

Montgomery Elementary is an active partner in Georgia's Safe Routes to School program, which encourages walking and biking to school as a means of improving the health and well-being of children. According to a recent Student Travel Tally Report conducted as part of the Safe Routes to School Program (data gathered in April 2015, report prepared in October 2015), between four and nine percent of trips to and from school are made on foot, or about 60 trips in the morning and 134 trips in the afternoons.

Additional bicycle and pedestrian facilities are planned throughout much of Brookhaven, including adjacent to the Ashford Dunwoody Rd corridor. As the City works to round out its non-motorized transportation network, it will be important to provide connections between existing and planned future facilities, such as planned trails along Nancy Creek, planned shared bicycle facilities on West Nancy Creek Dr, Oak Forest

Dr, Lanier Dr and Humility Ln, and planned improvements to existing facilities on Johnson Ferry Rd and Peachtree Rd.

TABLE 3. MISSING SEGMENTS OF SIDEWALK

Side of Ashford Dunwoody Rd	From	To
West Side	Peachtree Rd (SR 141)	St. Martin's Episcopal Church and School
	Kadleston Way	Just north of Johnson Ferry Rd, near the Valero gas station
East Side	Peachtree Rd (SR 141)	Just south of Johnson Ferry Rd, near the Publix
	South entrance to Blackburn Park	North entrance to Blackburn Park
	Entrance to Montgomery Elementary School	Exit to Montgomery Elementary School

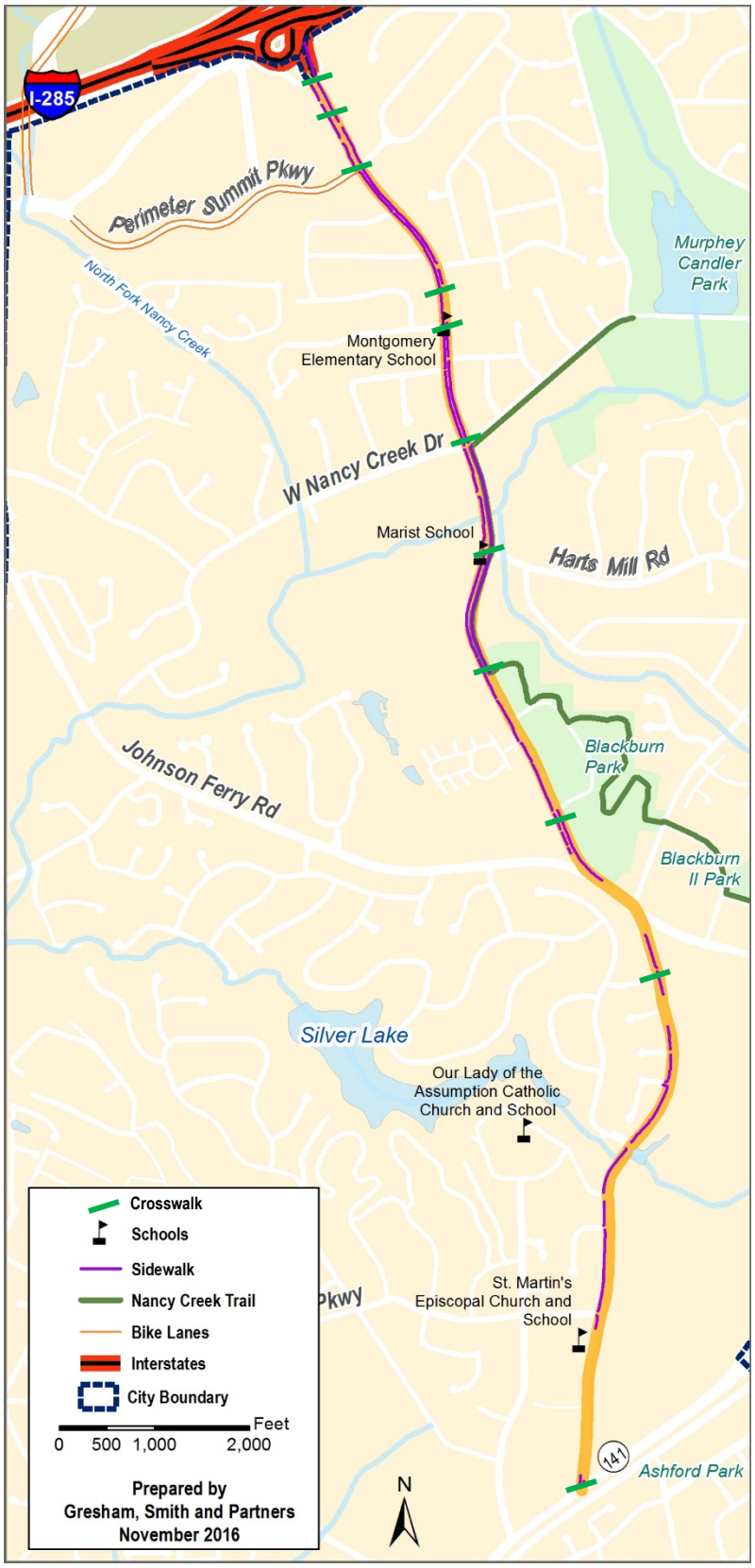


FIGURE 9. EXISTING BICYCLE AND PEDESTRIAN FACILITIES ALONG ASHFORD DUNWOODY ROAD

Ashford Dunwoody Rd is an important corridor for many types of travelers. It is an important link for the many residents who live along and in neighborhoods adjacent to Ashford Dunwoody Rd, as well as for commuters working nearby and throughout the region, and for people accessing the many crucial facilities and amenities along the corridor, including recreational facilities such as parks and the YMCA, schools, and retail destinations. Many communities in and around Metro Atlanta, including Dunwoody and Sandy Springs, are embracing the Complete Streets model of integrating multiple modes of travel into key corridors, and there is growing interest among other neighboring communities, including portions of nearby Cobb County. There is evidence that there is demand for non-motorized travel throughout Brookhaven, including along Ashford Dunwoody Rd, and it is expected that demand will continue to grow as growth patterns and travel trends play out over time.

The City's Bicycle, Pedestrian, and Trail Plan analyzed attractors of and demand for non-motorized travel throughout the City. Along Ashford Dunwoody Rd, demand ranges from moderate to high on both sides of the corridor, with higher demand on the west side of the corridor and particularly around the retail node around Johnson Ferry Rd (Cambridge Square and around Blair Cir Durden Dr) and near the Nancy Creek Trail. Using spatial analysis in combination with vehicle speeds, traffic volumes, and topography among other factors, the plan assessed overall suitability for bicycle and pedestrian facilities. The plan found that high suitability is present around the intersection of Ashford Dunwoody Rd and Johnson Ferry Rd, Blackburn Park, driven primarily by retail destinations, schools and recreational facilities, and an aging population. Along West Nancy Creek Dr near Ashford Dunwoody Rd, between Ashford Dunwoody Rd and Murphey Candler Park, and areas south of Johnson Ferry Rd were found to exhibit moderate levels of suitability.

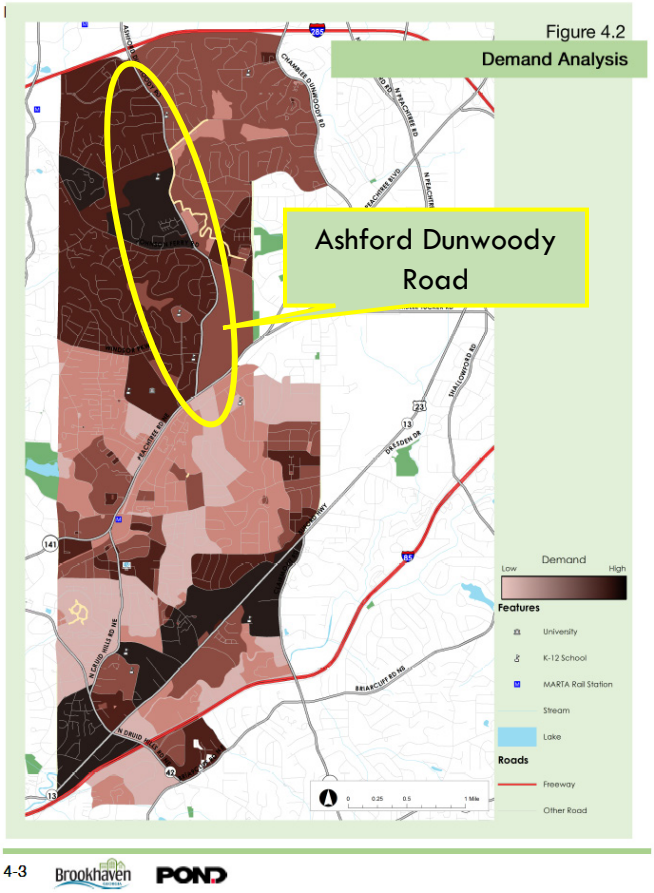


FIGURE 10. ASHFORD DUNWOODY CORRIDOR WITHIN BICYCLE, PEDESTRIAN, AND TRAIL PLAN DEMAND ANALYSIS (APRIL 2016, SOURCE: CITY OF BROOKHAVEN, POND).

The relative concentration of recreational, sporting, and educational venues along the corridor, along with limited retail uses make a strong case for additional biking and walking facilities and it is likely that there is strong latent demand for these facilities. The City's Comprehensive Plan states, "Increasing activity in the surrounding regional activity nodes of Perimeter Center and the St. Joseph's Medical Center (Pill Hill) will bring additional people to and through the area. Furthering alternative modes of getting around will help preserve quality of life and traffic congestion as these and other areas grow."[i]

2.1.5 TRANSIT SERVICE

FIGURE 11. EXISTING PUBLIC TRANSPORTATION SERVICE

The City of Brookhaven is served by the Metropolitan Atlanta Rapid Transit Authority (MARTA) rail and bus service. The rail service's Gold Line travels to the Brookhaven-Oglethorpe MARTA Station located at the intersection of Peachtree Rd and Dresden Dr approximately 1.25 miles southwest of Ashford Dunwoody Rd.

There is currently no public transportation service along Ashford Dunwoody Rd within the City of Brookhaven. MARTA operates bus service along several corridors that intersect Ashford Dunwoody Rd, including Route 25 (Peachtree Ind. Blvd/Johnson Ferry). The route operates between Lenox, Brookhaven/Oglethorpe, and Doraville rail stations, along Lenox Rd, Peachtree Rd (SR 141), Peachtree Industrial Blvd, and Motors Industrial Way. Service is provided to Medical Center rail station on select weekday trips, via Johnson Ferry Rd The route includes stops at the intersections of Ashford Dunwoody Rd with Peachtree Rd (SR 141) and Johnson Ferry Rd, as shown in Figure 11.

As part of the Last Mile Connectivity Study currently underway (see Section 2.3.7), transit service along Ashford Dunwoody Rd has been identified as a possible long-term recommendation to facilitate improved connectivity and help alleviate congestion. This will require coordination between the City of Brookhaven and MARTA's planning division, and will depend upon a number of factors. As MARTA continues to evolve its service, it is considering different models, including smaller shuttle-style vehicles as well as larger articulated buses where appropriate.

2.1.6 TRAFFIC VOLUMES

Ashford Dunwoody Rd is currently classified as a minor arterial on the regional thoroughfare network.[ii] Generally traffic volumes are heavier in the northern portion of the study area, closer to I-285 and Perimeter Center. Average Annual Daily Traffic (AADT) volumes for 2016 range from approximately 11,000 to 27,000 vehicles per day (vpd). The intersection of Ashford Dunwoody Rd and Johnson Ferry Rd serves more than 40,000 vpd. Johnson Ferry Rd carries approximately 15,000 vehicles daily west of Ashford Dunwoody Rd and approximately 18,000 vehicles daily east of Ashford Dunwoody Rd. According to GDOT's traffic count data for 2015, the Ashford Dunwoody Rd on- and off- ramps for I-285 serve 21,000-22,300 vehicles daily, while further south, Peachtree Rd (SR 141) near Ashford Dunwoody Rd carries nearly 40,000 vehicles each day.

The northern portion of the corridor is actively managed as part of the Perimeter Traffic Operations Program (PTOP), a joint program between the PCIDs, GDOT, and the Cities of Brookhaven, Dunwoody, and Sandy Springs. PTOP actively manages arterial traffic flow at nearly 100 signalized intersections as well as four freeway interchanges, and uses traffic cameras and remote communication. There are no traffic signals along Ashford Dunwoody Rd south of Johnson Ferry Rd until the intersection at Peachtree Rd. Signals along Peachtree Rd (SR 141), including the intersection at Ashford Dunwoody Rd, are actively managed as part of the Regional Traffic Operations Program (RTOP). These traffic operations programs are focused on actively managing traffic signals along corridors of regional significance.

Additional information and a detailed traffic analysis is provided in Section 3.

2.2 CRASH DATA

According to data obtained from the GDOT crash database, there were a total of 668 crashes on the Ashford Dunwoody Rd study corridor between 2011 and 2015. Nearly half of all crashes (59%) were rear end collisions, and about one-third (27%) were angle collisions. Sideswipe crashes represent about 7% of all crashes. This type of crash typically indicates a lack of turn lanes, congestion and sight distance issues along the corridor. This data is presented in Table 4 and Figures 12 through 15.

The vast majority of crashes occurred on dry roadway surfaces (80%) and during daylight hours (82%). Approximately 15% of crashes occurred at night (103 crashes) – 13 % of crashes occurred during lighted conditions at night, and 2% occurred during unlit conditions at night.

TABLE 4. CRASH TYPES ALONG STUDY CORRIDOR

	Crash Type						
Year	Angle	Head On	Rear End	Sideswipe Same Direction	Sideswipe Opposite Direction	Not a Collision with a Motor Vehicle	Total Crashes
2011	7	2	23	1	0	5	**38**
2012	27	2	59	4	0	8	**100**
2013	50	5	101	10	2	8	**176**
2014	44	2	95	10	3	7	**161**
2015	51	3	118	13	1	7	**193**
Total	**179**	**14**	**396**	**38**	**6**	**35**	**668**
% of Total	**27%**	**2%**	**59%**	**6%**	**1%**	**5%**	

There were two pedestrian crashes, both resulting in an injury, along the study corridor during this five-year period. One occurred at the intersection of Ashford Dunwoody Rd and Johnson Ferry Rd. The other pedestrian crash occurred along Ashford Dunwoody Rd near the YMCA. There were no recorded collisions with bicyclists on the study corridor between 2011 and 2015.

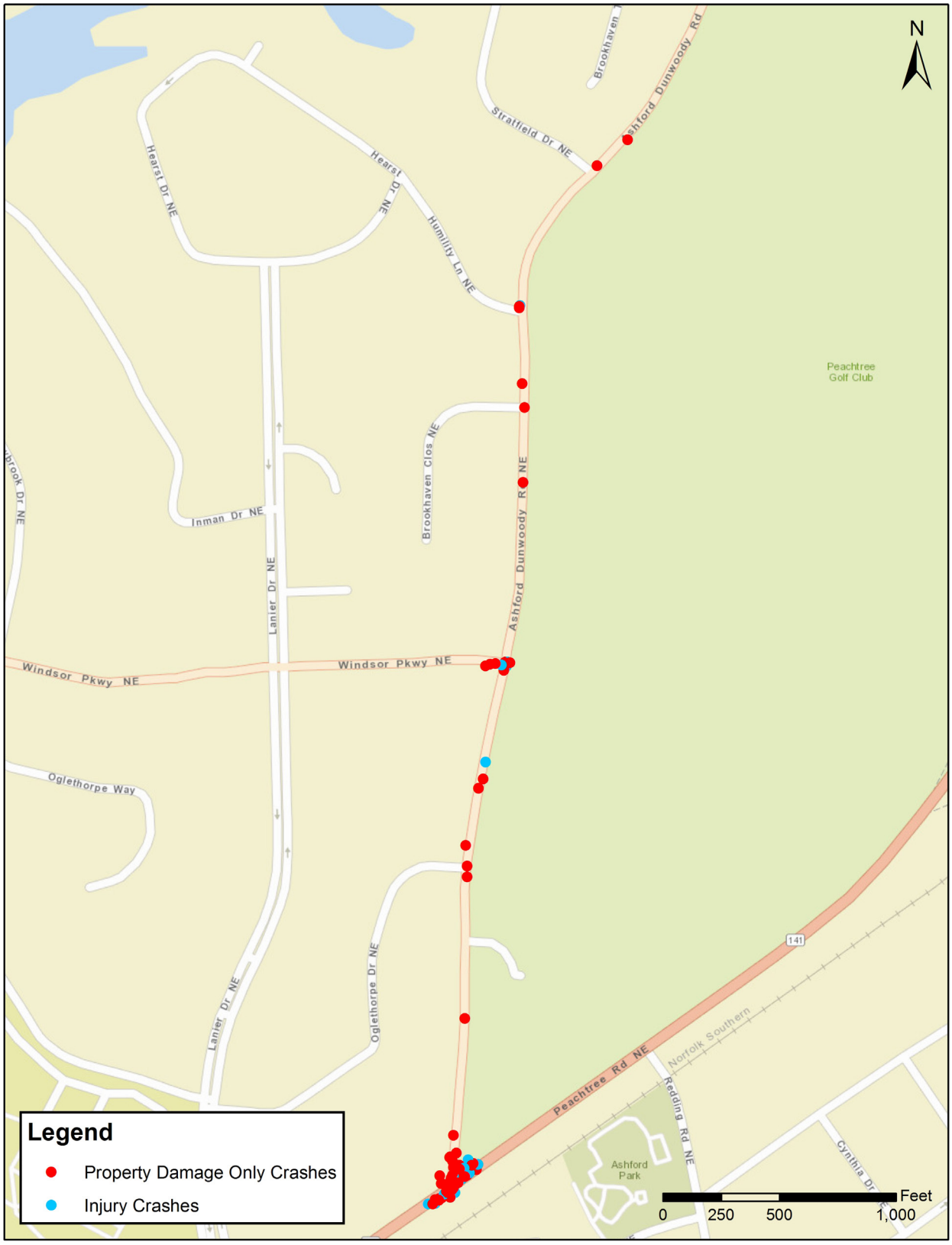


FIGURE 12. CRASHES ALONG STUDY CORRIDOR - PEACHTREE ROAD TO SOUTH OF JOHNSON FERRY ROAD

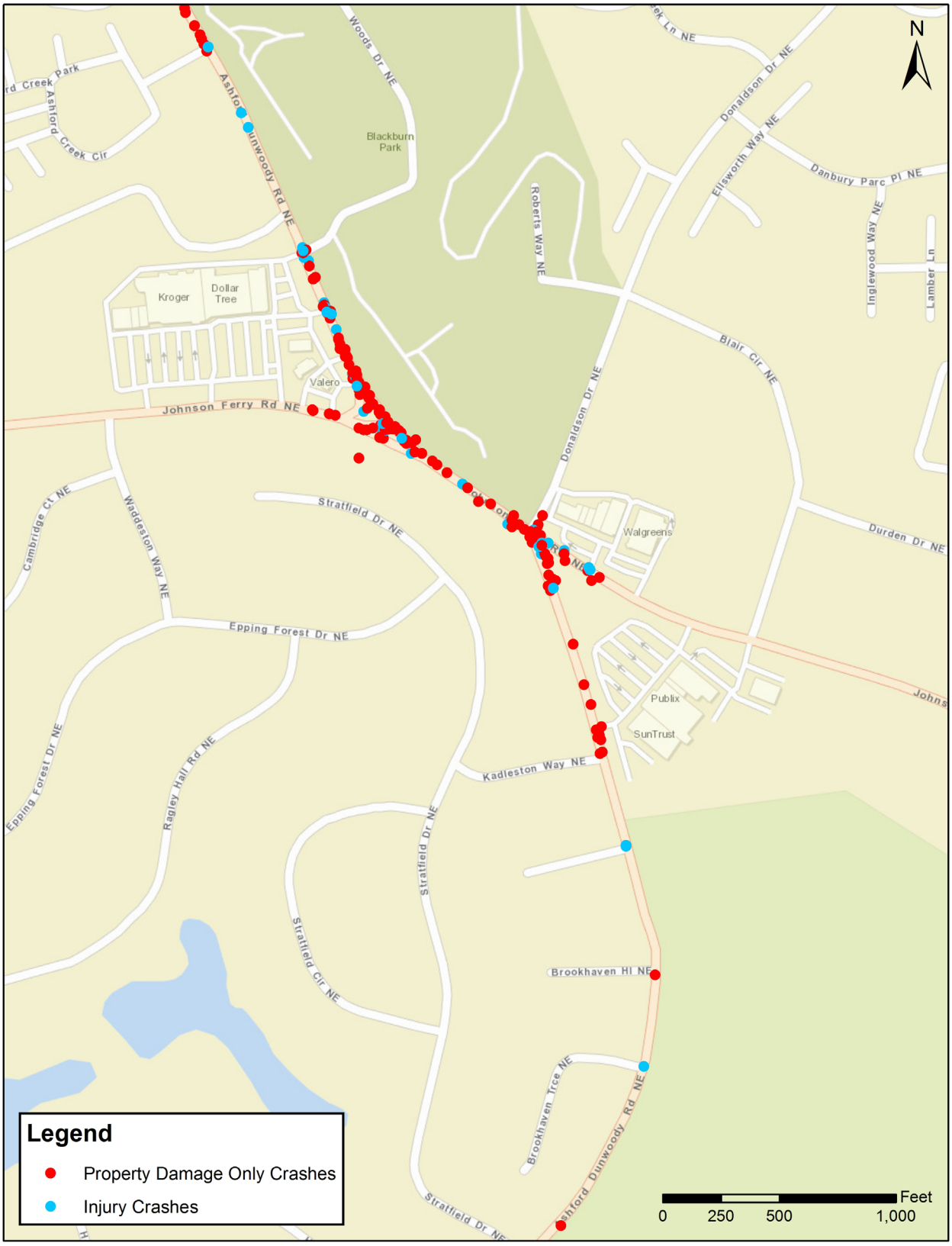


FIGURE 13. CRASHES ALONG STUDY CORRIDOR - JOHNSON FERRY ROAD AT ASHFORD DUNWOODY ROAD

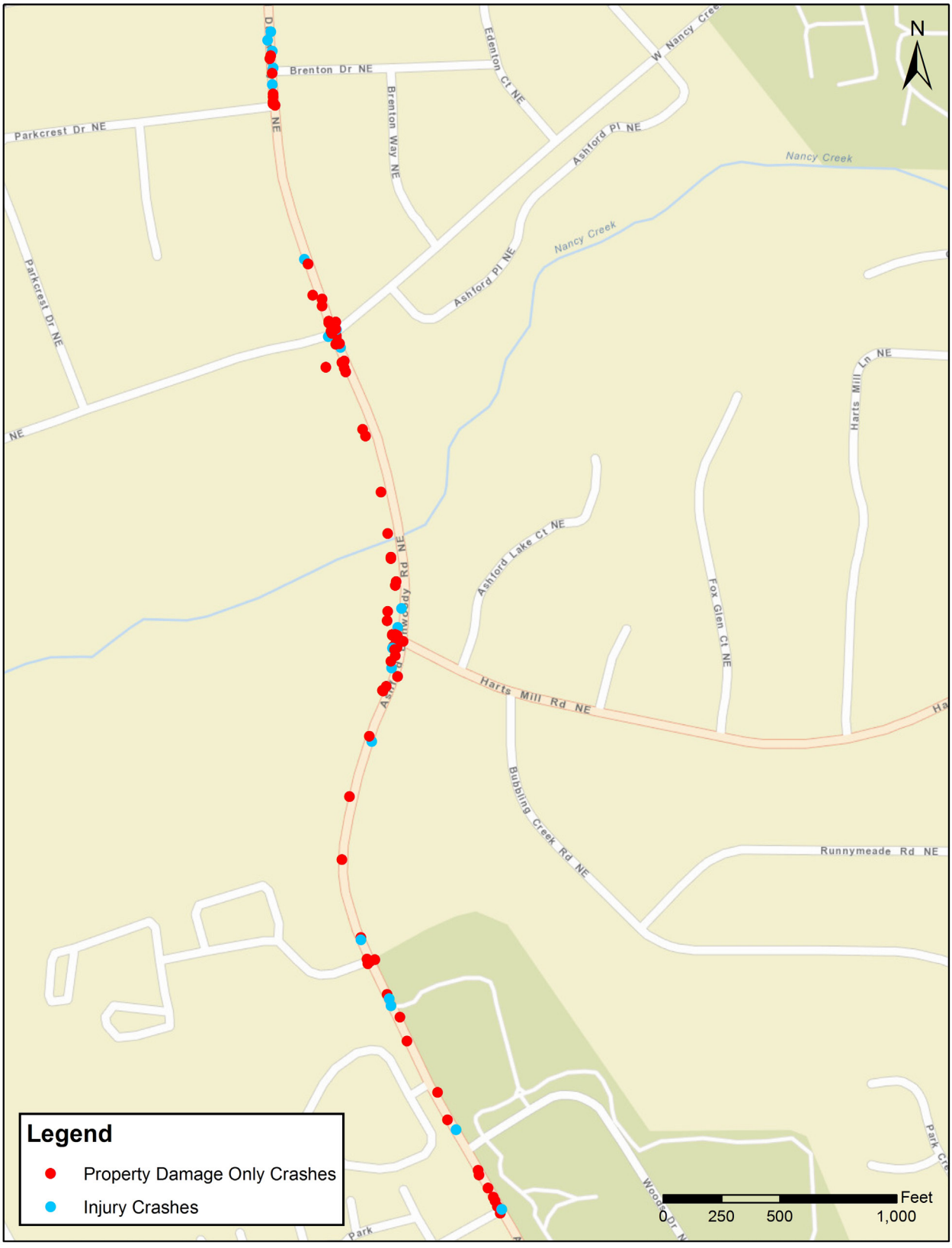


FIGURE 14. CRASHES ALONG STUDY CORRIDOR - NORTH OF JOHNSON FERRY ROAD TO PERIMETER SUMMIT PARKWAY/OAK FOREST DRIVE

FIGURE 15. CRASHES ALONG STUDY CORRIDOR - PERIMETER SUMMIT PARKWAY/OAK FOREST DRIVE TO CITY LIMITS

While most crashes (77%) resulted in property damage only, there were a total of 154 injury crashes that resulted in a total of 215 injuries. There were no fatal crashes along the study corridor during the period of analysis. Table 5 below shows the number of property damage, injury, and fatal crashes by year.

TABLE 5. SEVERITY OF CRASHES ALONG STUDY CORRIDOR

	Severity			
Year	Property Damage Only	Injury	Fatal	Total Crashes
2011	30	8	0	**38**
2012	79	21	0	**100**
2013	133	43	0	**176**
2014	120	41	0	**161**
2015	152	41	0	**193**
Total	**514**	**154**	**0**	**668**

Crash rates by severity were also calculated for the study corridor and were compared to the statewide average crash rates for similar roadway facilities. Ashford Dunwoody Rd is classified as an urban minor arterial within the study limits based on GDOT's roadway functional classification database. As shown in Table 6, the total crash rate and the injury crash rate along the section of Ashford Dunwoody Rd within the study limits are significantly higher than the statewide averages for the most recent two years.

TABLE 6. CRASH RATES - SEVERITY OF CRASHES ALONG STUDY CORRIDOR

	Crash Rate by Severity (Crashes Per 100 Million Vehicle Miles)[1]		
Year	Property Damage Only	Injury	Fatal
2011	198 (482)	42 (110)	0.00 (1.15)
2012	522 (544)	110 (120)	0.00 (1.12)
2013	919 (606)	224 (128)	0.00 (1.14)
2014	840 (604)	214 (124)	0.00 (1.02)
2015	1007 (-)	214 (-)	0.00 (-)
Average	**699 (559)**	**162 (121)**	**0.00 (1.11)**

Note: The number in parentheses represents the statewide average crash rates for urban minor arterials. The statewide average for year 2015 has not been compiled at the time of writing this report

An analysis of contributing factors reveals that following too closely was the most common factor in all crashes. This, sometimes in conjunction with other factors, was the cause of 363 crashes in total (54% of all crashes). Other common factors include failure to yield (119 crashes or 18%), changing lanes improperly (29 crashes or 4%), and improper turns (20 or 3%). A detailed analysis of crashes along Ashford Dunwoody Rd, including crash data at intersections, is included in Appendix B.

2.2.1 INTERSECTION CRASHES

The majority of crashes (419 crashes, or 63% of all crashes) along the study corridor occurred at seven key intersections with Ashford Dunwoody Rd. The highest number of intersection crashes occurred at Johnson Ferry Rd (154 crashes). The following sections provide details of crashes at these intersections between 2011 and 2015.

Peachtree Road (SR 141)

In total, 83 crashes occurred at the intersection of Ashford Dunwoody Rd and Peachtree Rd (SR 141), representing about 12% of all crashes along the corridor. Thirty-nine people suffered injuries in 27 crashes at this intersection. Crashes at Peachtree Rd were primarily due to following too closely (44) and failure to yield (15). The most common type of crashes report at this location were rear end collision (51), which represents 61% of all crashes at the intersection. Other common crash types include angle crashes (19) and sideswipes in the same direction (5). Most of the crashes at Ashford Dunwoody Rd and Peachtree Rd occurred during daylight hours (58), and most occurred during dry conditions (65).

Windsor Parkway

A total of 24 crashes occurred at the intersection of Ashford Dunwoody Rd and Windsor Pkwy, representing about 4% of all crashes along the corridor. Ten people suffered injuries in six crashes at this intersection. Crashes at Windsor Pkwy were primarily due to following too closely (11) and failure to yield (7). The most common type of crash reported at this location were rear end collisions (12), which represents 50% of all crashes at the intersection. Other common crash types include angle crashes (7) and collisions with objects other than motor vehicles (4). Most of the crashes at Ashford Dunwoody Rd and Windsor Pkwy occurred during daylight hours (22), and most occurred during dry conditions (19).

Johnson Ferry Road

In total, 154 crashes occurred at Ashford Dunwoody Rd and Johnson Ferry Rd, representing about 23% of all crashes along the corridor. Forty-two people suffered injuries in 28 crashes at this intersection. Crashes at this intersection were primarily due to following too closely (73) and failure to yield (38). The most common type of crashes reported at this location were rear end collisions (80), which represents 52% of all crashes at the intersection. Other common crash types include angle crashes (53) and sideswipes in the same direction (10). Most of the crashes at the intersection occurred during daylight hours (140), and most occurred during dry conditions (129).

Harts Mill Rd / Marist School

A total of 56 crashes occurred at Ashford Dunwoody Rd and Harts Mill Rd and the Marist School driveway, representing about 8% of all crashes along the corridor. Ten people suffered injuries in nine crashes at this intersection. Crashes at Harts Mill Rd and the Marist School driveway were primarily due to following too closely (41). The most common type of crashes reported at this location were rear end collisions (43), which represents 77% of all crashes at the intersection. Other common crash types include angle crashes (7) and collisions with objects other than motor vehicle (4). Most of the crashes at the intersection occurred during daylight hours (43), and most occurred during dry conditions (36).

West Nancy Creek Drive

In total, 42 crashes occurred at Ashford Dunwoody Rd and West Nancy Creek Dr, representing about 6% of all crashes along the corridor. Nine people suffered injuries in seven crashes at this intersection. Crashes at West Nancy Creek Dr were primarily due to following too closely (33). The most common type of crashes reported at this location were rear end collisions (34), which represents 81% of all crashes at the intersection. Other common crash types include angle crashes (6) and sideswipes in the same direction (2). Most of the crashes at the intersection occurred during daylight hours (37), and most occurred during dry conditions (36).

Montgomery Elementary School/Chaucer Lane

A total of 20 crashes occurred at Ashford Dunwoody Rd and the Montgomery Elementary School driveway and Chaucer Ln, representing about 3% of all crashes along the corridor. Seven people suffered injuries in five crashes at this intersection. Crashes at the Montgomery Elementary School driveway and Chaucer Ln were primarily due to following too closely (13). The most common type of crashes reported at this location were rear end collisions (16), which represents 80% of all crashes at the intersection. Most of the crashes at the intersection occurred during daylight hours (17), and most occurred during dry conditions (13).

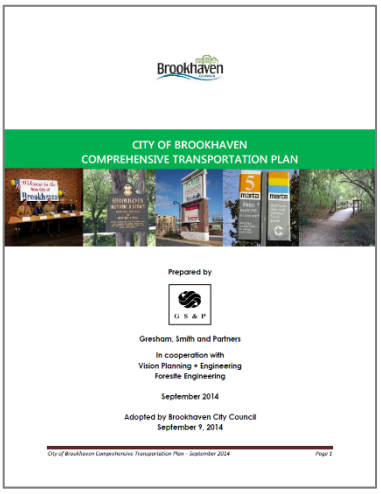
Perimeter Summit Parkway/ Oak Forest Drive

In total, 40 crashes occurred at Ashford Dunwoody Rd and Perimeter Summit Pkwy/Oak Forest Dr, representing about 6% of all crashes along the corridor. Eleven people suffered injuries in eight crashes at this intersection. Crashes at Perimeter Summit Pkwy and Oak Forest Dr were primarily due to following too closely (25). The most common type of crashes reported at this location were rear end collisions (26), which represents 65% of all crashes at the intersection. Other common crash types include angle crashes (7) and sideswipes in the same direction (4). Most of the crashes at the intersection occurred during daylight hours (31), and most occurred during dry conditions (32).

2.3 PRIOR PLANS AND STUDIES

2.3.1 BROOKHAVEN COMPREHENSIVE TRANSPORTATION PLAN

The Brookhaven Comprehensive Transportation Plan (CTP) establishes a long-term, multimodal transportation vision for the City of Brookhaven. The plan identifies needs and deficiencies in the transportation network and presents a series of recommendations to improve the transportation system in the short-term, mid-term, and long-term. The following information from the plan pertains directly to the Ashford Dunwoody Rd corridor.



Traffic Congestion along the Corridor

- Currently, there is moderate traffic congestion between Peachtree Rd and W. Nancy Creek Dr, and severe traffic congestion between W. Nancy Creek Rd and I-285.
- Without new improvements, the forecasted traffic projections (2040) indicate that the entire corridor will become severely congested between Peachtree Rd and Ashford Dunwoody Rd. Future traffic congestion will also worsen on Windsor Pkwy and Johnson Ferry Rd.

Traffic Congestion at Intersections

- Traffic at intersections along Ashford Dunwoody Rd worsens during the morning and afternoon peak hours (rush hours).
- Currently, in the morning, there is traffic congestion at the intersections with Perimeter Summit Pkwy and Johnson Ferry Rd. Forecasted traffic projections (2040) indicate that traffic will worsen at Perimeter Summit Pkwy, Johnson Ferry Rd, and Lake Hearn Dr.
- Currently, in the afternoon, there is severe traffic congestion at the intersection with Perimeter Summit Pkwy, and there is moderate traffic congestion at Johnson Ferry Rd, Oconee Pass, and Lake Hearn Dr. Forecasted traffic projections (2040) indicate that congestion will remain serious at Perimeter Summit Pkwy, Johnson Ferry Rd, Oconee Pass, and Lake Hearn Dr.

Input Received from Stakeholders and the Public

- Intersections at W. Nancy Creek Dr, Johnson Ferry Rd, Windsor Pkwy, and Peachtree Rd need to be improved (signal installation/timing, turn lanes, re-alignments, etc.).
- Need to address back-ups at key destinations such as Montgomery Elementary School.
- Need bus service along Ashford Dunwoody Rd.
- Need better accommodations for pedestrians and cyclists.

Prior Plans and Studies Reviewed

- Brookhaven Bicycle and Pedestrian Plan (2016)
- Commuter Trail System Master Plan (Perimeter Community Improvement Districts) (2016)
- Brookhaven Comprehensive Transportation Plan (2014)
- Brookhaven Comprehensive Plan (2014)
- DeKalb County Comprehensive Transportation Plan (2014)
- Brookhaven Comprehensive Parks and Recreation Master Plan (2014)
- Ashford Dunwoody Master Active Living Plan (DeKalb County) (2013)
- Perimeter @ The Center – Future Focus, 2011 – A Ten Year LCI Update

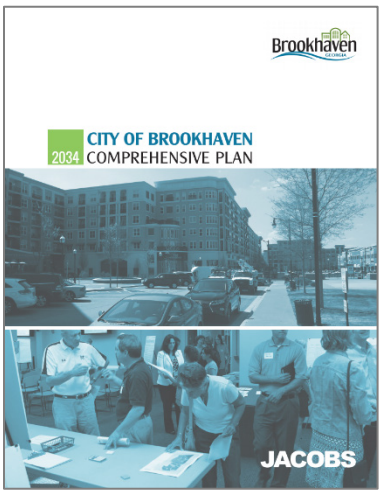
- Need better pedestrian crossings (crosswalks, signage, pedestrian signals, etc.) near commercial, park, and school areas, and ways to slow vehicle traffic in these areas.

Recommendations from the Comprehensive Transportation Plan

- It is recommended that the Ashford Dunwoody Rd corridor employ a visioning process to create community consensus and improve traffic operations, safety, and multimodal connectivity.
- Traffic study, operational, and intersection improvements are recommended as follows:
  - Project I-1 (at Peachtree Rd): Lengthen turn lane, add sidewalks, drainage improvements, including realignment of Ashford Dunwoody Rd to improve turning traffic.
  - Project I-7 (at Johnson Ferry Rd): Develop a GDOT concept study and implementation of resulting improvements for the entire intersection of Johnson Ferry Rd and Ashford Dunwoody Rd, including innovative intersection, complete streets elements, and turn lanes.
  - Project I-8 (at Windsor Pkwy): Conduct traffic study to determine need for turn lanes and active transportation improvements, including concept.
  - Project OP-1: Expansion of intelligent transportation systems (ITS) on Ashford Dunwoody Rd from/to Dresden Dr corridor (included in ARC's PLAN 2040).
  - Project OP-3 (from north entrance to Montgomery Elementary School to West Nancy Creek Dr): Install pedestrian crossing and make signal improvements at school entrance.

2.3.2 BROOKHAVEN COMPREHENSIVE PLAN 2034

The Brookhaven Comprehensive Plan, adopted by City Council on June 21, 2016, distinguishes distinctive character areas within the City to guide future growth and development. As the Ashford Dunwoody Rd corridor traverses a number of different types of land uses, the corridor falls into multiple character areas between I-285 in Peachtree Road.



- From the northern city limit to Perimeter Summit Pkwy, Ashford Dunwoody Rd is part of the Perimeter Center character area. Perimeter Center is characterized by high-intensity development such as high-rise office towers, mid-rise hotels, and multi-family residential developments. In order to maintain the more urban character of this district, the Comprehensive Plan recommends that development policies pursue a multi-modal transportation network. The implementation strategies laid out include:
  - Investigate adding a nature trail through the wooded area south of Perimeter Summit Pkwy.
  - Incorporate appropriate end-of-trip facilities for bicycle commuters, such as bicycle racks, showers/locker rooms, etc. within new and existing office development.
  - Follow the Lifelong Communities principles, including:
    - Special accommodations for vanpools, shuttles and Human Services Transportation (HST)
    - Improved sidewalk connectivity, traffic calming strategies, and the construction of pedestrian refuge island
    - Pedestrian crossings with signal timing suitable for slower walking speeds
    - Design standards in coordination with ADA and AARP

- From Perimeter Summit Pkwy to just north of Blackburn Park, the study corridor is part of the Lakes District. The Lakes District is characterized primarily by single-family residences. The Brookhaven Comprehensive Plan lays out a vision that largely preserves the residential neighborhoods, while making accommodations for an active transportation corridor. The Comprehensive Plan identifies the Nancy Creek stream corridor as a potential place for a linear park or trail, and recommends that the City examine the feasibility of extending a trail southward along Ashford Dunwoody Rd.
- In the vicinity of Blackburn Park and Johnson Ferry Rd, Ashford Dunwoody Rd is part of the Blackburn Park Neighborhood Center. This character area is composed of a mix of commercial, multi-family residential, townhomes, and single-family residences. As many of the newer developments in this area were built under the Pedestrian Community (PC) zoning designation, the Comprehensive Plan recommends that this area be developed into a pedestrian-friendly village with an emphasis on walkability, where pedestrians have priority over automobiles. The implementation strategies laid out include:
    - Incorporate a series of safe pedestrian crossings along Johnson Ferry Rd and Ashford Dunwoody Rd to promote pedestrian connectivity.
    - Identify and implement appropriate traffic calming techniques to reduce vehicular speeds and increase pedestrian safety.
    - Pursue opportunities to connect the existing path network with new pedestrian connections.
    - Implement streetscaping strategies that promote walkability along portions of Johnson Ferry Rd and Ashford Dunwoody Rd.
- Between Johnson Ferry Rod and Peachtree Rd, most of the corridor is part of the Lake District once more. A small sliver of land to the west of the corridor, immediately north of Peachtree Rd, falls within the Peachtree Corridor Overlay District. The Peachtree Corridor Overlay District is designed to promote mixed-use, pedestrian-friendly development around the Brookhaven-Oglethorpe MARTA Station. The Comprehensive Plan recommends that the area continue its transition into a pedestrian-friendly, mixed-use development area.

The plan identified overall needs and priorities for the City of Brookhaven, including:

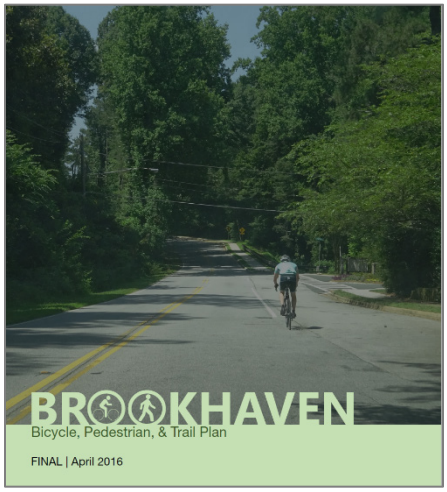
- Further Brookhaven as a walkable and bikeable community (1.4)
- Further health and exercise in the community through supportive infrastructure and design (1.7)

Specifically, the Comprehensive Plan's 2015-2019 and 2017-2021 Community Work Programs recommended several projects that pertain directly to the Ashford Dunwoody Rd corridor and incorporates by reference the recommendations of the CTP.

TABLE 7. RECOMMENDATIONS FROM COMMUNITY WORK PROGRAMS OF THE COMPREHENSIVE PLAN 2034

Project No.	Description	Timeframe	Est. Cost	Responsibility
1.2.1	Conduct two-part study to (1) establish a corridor vision for Ashford Dunwoody Rd from the north City limits to Peachtree Road, including context-sensitive design concepts, traffic operations, active transportation, safety, and public outreach; and (2) if feasible, develop a GDOT-type concept report for the preferred alternative(s).	2015-2017	Phase 1: $125,000 Phase 2: #375,000	City, ARC
1.2.5	Conduct traffic operations analysis, develop traffic calming concepts, assess need for turn lanes at Ashford Dunwoody Rd, and public outreach	2017	$150,000	City, ARC
1.3.1	Ashford Dunwoody Rd at Peachtree Rd - lengthen turn lane, add sidewalks, drainage improvements, including realignment of ADR to improve turning traffic	2016	TBD (Sources: general fund)	GDOT, City
1.3.7	Ashford Dunwoody Rd at Windsor Pkwy – Conduct traffic analysis and develop concept report for turn lanes, active transportation features, and public outreach	2019	$100,000 (Sources: GDOT, general fund)	City
1.3.8	Ashford Dunwoody Rd at Johnson Ferry Rd – Conduct traffic analysis, develop concept report, and construction of ultimate intersection improvement including innovative intersection, turn lanes, active transportation, and public outreach	2017	$1.2 million (Sources: GDOT, general fund)	GDOT, City
1.4.1.b	Establish streetscape standards for Ashford Dunwoody Rd	2016	$10,000	City
1.6.1	Ashford Dunwoody Rd at Dresden Dr Corridor – Intelligent Transportation Systems (ITS) Expansions – included in ARC's PLAN 2040 RTP	2017	$1.3 million	GDOT, City
1.6.4	Ashford Dunwoody Rd at Montgomery Elementary School – install pedestrian signal improvement	2017	TBD	City

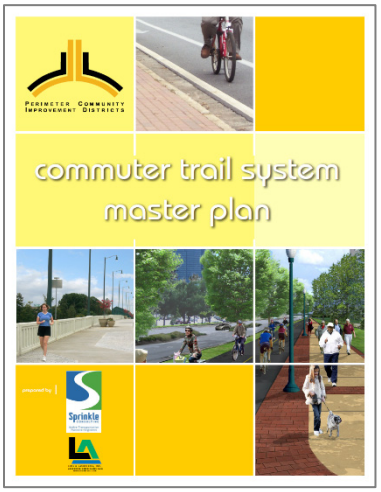
2.3.3 BROOKHAVEN BICYCLE, PEDESTRIAN, AND TRAIL PLAN



The Brookhaven Bicycle, Pedestrian, and Trail Plan was adopted in April 2016. This objective of the plan is to develop a vision for a future bicycle, pedestrian and trail network to be enjoyed by all residents and visitors to the City. The plan designates portions of Ashford Dunwoody Rd as a "Target Corridor" for bicycle and pedestrian improvements. It indicates that the area where Johnson Ferry Rd and Ashford Dunwoody Rd intersect exhibits a high level of suitability for active transportation. Ashford Dunwoody Rd was cited as an important corridor, but the plan acknowledged that the City was undertaking a separate project to develop concepts for this corridor (this *Ashford Dunwoody Road Corridor Study*) and that the vision created as part of that processes would be used to guide any specific future improvements along the road. The plan recommends the following for Ashford Dunwoody Rd:

- Fill in sidewalk gaps along the east side of Ashford Dunwoody Rd from the I-285 interchange to West Nancy Creek Dr (project 127-ST);
- Expand sidewalk to multi-use trail along the east side of Ashford Dunwoody Rd from I-285 to West Nancy Creek Dr (project 127-MT);
- Improve, widen, and brand the existing multi-use path along the east side of the road path from West Nancy Creek Dr to Blackburn Park (project 128-MT);
- Sidewalks along the east side of Ashford Dunwoody Rd from Peachtree Rd to the northern edge of the Golf Course (project 146-ST);
- Multi-use trail along east side of Ashford Dunwoody Rd from Peachtree Rd to the northern edge of the Golf Course (project 146-MT);
- Modify the existing path in Blackburn Park and/or add paths to create a more direct link between Blair Circle and the north end of Blackburn Park (project 162-MT); and
- Multi-use path on property line between golf course and Publix shopping center (project 175-MT).

2.3.4 COMMUTER TRAIL SYSTEM MASTER PLAN



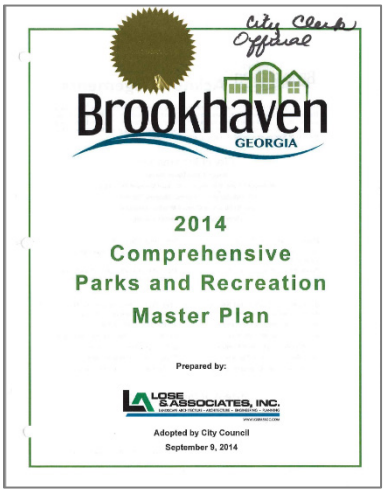
This plan, prepared for the Perimeter Community Improvement Districts in 2016, outlines the development of a proposed Commuter Trail System throughout the Perimeter Area and how it connects to other areas, how users will travel the system, and recommends specific projects for various corridors that will serve the needs of Perimeter Area commuters.

While most of the section of Ashford Dunwoody Rd discussed in the plan are north of the limits of the City of Brookhaven, the plan does recommend a "sidepath" (multi-use path alongside the roadway) from Perimeter Summit Pkwy to Hammond Dr/Ravinia. This stretch is about a half-mile in length and would include modifications to the bridge over I-285. The project is also consistent with recommendations in the 10-year update of

the Perimeter Center Livable Centers Initiative (LCI) plan and connects to other projects included in the Commuter Trail Master Plan.

2.3.5 BROOKHAVEN COMPREHENSIVE PARKS AND RECREATION MASTER PLAN

The Comprehensive Parks and Recreation Master Plan was adopted by City Council on September 9, 2014. The plan provides guidance on design of pedestrian and bicycle facilities, adapted from a number of sources, including the American Association of State Highway and Transportation Officials (AASHTO) and several state departments of transportation planning and design guidelines. The plan differentiates between off-road and on-road systems and provides illustrations of examples of typical cross-sections for various multi-modal facilities, including guidance for sidewalks, shared-use trails, bike lanes. Specifically, the plan recommends that bike lanes should have minimum width of four feet, sidewalks should be five-to-six feet, and that shared-use trails should be 12 feet wide with minimum two-foot shoulders and a minimum of five feet of cleared area outside the shoulder, depending on what is adjacent to the trails.



Specific recommendations in the plan include:

- Create north-south greenway corridors connecting community parks and neighborhoods to the proposed regional greenway
- Improve sidewalk and bicycle lanes throughout the City to provide access to greenways, parks, and public transportation
- Greenways should complement complete street initiatives in the City and street crossings should be at controlled intersections or through grade separation (when possible) to improve safety
- Greenways should have a minimum 14' paved surface where space allows to better accommodate different user groups
- Good directional signage and rules should be provided at all trailhead access points
- Create more non-vehicular access routes to MARTA Station to promote healthier lifestyles for community residents

2.3.6 DEKALB COUNTY COMPREHENSIVE TRANSPORTATION PLAN

In 2014, DeKalb County adopted a countywide Comprehensive Transportation Plan, designed to identify transportation investment priorities for the next 25 years. The following information on the plan pertains directly to the Ashford Dunwoody Rd corridor:

- It is recommended that Ashford Dunwoody Rd be designated as a minor arterial between Peachtree Rd and Johnson Ferry Rd, and a major arterial between Johnson Ferry Rd and I-285.
- In assessing active transportation needs, the CTP recommends that bicycle Ashford Dunwoody Rd become a bicycle-friendly corridor, consistent with ARC's Bicycle Transportation and Pedestrian Walkways Plan. The plan establishes that in designated "activity nodes," there should be a bicycle level-of-service (LOS) of "B," and that the bicycle LOS should be "C" on roadways outside of activity nodes. The plan designates portions of Ashford Dunwoody Rd (Peachtree Rd to Windsor Pkwy, and Johnson Ferry Rd to I-285) within activity centers, thereby assigning these segments LOS B. Outside of the activity centers, between Windsor Pkwy and Johnson Ferry Rd, the plan sets a goal of LOS C.
- The CTP designates a priority bicycle network that represents a vision of cohesive, countywide bike facilities. A portion of Ashford Dunwoody Rd, between Johnson Ferry Rd and I-285, is designated on the First Tier priority network.

2.3.7 OTHER PLANS AND STUDIES

It should also be noted that several other studies have also discussed or included recommendations for Ashford Dunwoody Rd within Brookhaven. The 10-year update of the LCI Plan for the Perimeter Center area (*Perimeter @ The Center – Future Focus, 2011 – A Ten Year LCI Update*) recommended intersection improvements at six locations, including Ashford Dunwoody Rd at Ashford Green (project T-21). This project was included in the Regional Transportation Plan (RTP) at the time and were slated to begin in 2017. The plan also recommended a potential multi-use path on Ashford Dunwoody Rd (project T-23).

The DeKalb County Board of Health conducted a *Master Active Living Plan* (MALP) for Ashford Dunwoody Rd in 2013. The goal of the process was to improve the integration of physical activity into the daily routines of DeKalb County residents. Instead of focusing on one county-wide plan, the overall plan was divided into multiple small area plans that focus on specific places, including Ashford Dunwoody Rd (one of eight plans created under the MALP). These small area plans were intended to guide future redevelopment and transportation improvements by identifying opportunities to improve bicycle and pedestrian connections between key activity centers and nearby neighborhoods, parks, schools, and other public facilities. The Ashford Dunwoody Rd MALP offers several recommendations ranging from general recommendations like increasing access and connectivity to Blackburn Park and improving pedestrian access and connectivity within the study area, to specific projects for pedestrian improvements, sidewalks, trails, and intersection improvement. It identifies gaps in the bicycle and pedestrian network along Ashford Dunwoody Rd, including a disconnected sidewalk network; scarcity of bicycle lanes; and lack of public transit service. The plan recommends a series of improvements to improve active mobility along Ashford Dunwoody Rd, including:

- Pedestrian improvements at the YMCA, Lakeside Way NE, Kroger Shopping Plaza, and Kadleston Way
- Sidewalk improvements near Peachtree Golf Club and at Johnson Ferry Rd
- Construction of two roundabouts at the northern and southern legs of the intersection with Johnson Ferry Rd along with signalized pedestrian crossing and pedestrian markers
- Ashford Dunwoody Rd & Harts Mill Rd
    - Signalized intersection, signalized pedestrian crossing, pedestrian markers
- Increased access and connectivity to Blackburn Park would be an amenity and could increase the solid customer base for retail users
- Increased pedestrian access and connectivity within the study area would be an amenity for both retail and residential uses
- Retail outparcels would likely be supportable for Kroger, with increased connectivity to Blackburn Park. Small-scale local-serving retail space is supportable in the area

It should be noted that at the time of this report, the City of Brookhaven placed implementation of this plan on hold for the time being.

In partnership with the Cities of Sandy Springs and Dunwoody and with the Perimeter Community Improvement Districts (PCIDs), the City of Brookhaven is participating in a *Last Mile Connectivity Study*, which focuses mainly on the Perimeter Center area, the boundaries of which coincide with those of the PCIDs. The study has three main objectives: a) to consolidate all recent (within the past five years or so) planned and programmed projects that would facilitate last mile connectivity and to reconcile them by identifying gaps, overlap, and inconsistencies; b) to recommend strategies and projects to fill gaps and improve last mile connectivity; and c) to develop a vision for introducing transit into the study area. The study also seeks to look at improved connections between hubs or activity centers in each of the participating jurisdictions, such as MARTA rail stations. The study is currently under way and is expected to conclude in early 2017. It will reflect recommendations of this corridor study, with the understanding that details and design of specific projects will be worked out in the future.

2.4 RECENT AND PENDING PROJECTS NEAR ASHFORD DUNWOODY ROAD

The City of Brookhaven has recently begun design and construction of several capital projects along and near Ashford Dunwoody Rd. Several other projects are slated for design and construction in the near-term, and there may be opportunities to capitalize on or leverage these projects in future projects and recommendations along the corridor. A brief description of each of these projects is described below.

As of September 26, 2016, the City of Brookhaven has completed the installation of two segments of sidewalk along Ashford Dunwoody Rd. The first segment, completed in 2014, was along the west side of Ashford Dunwoody Rd from Stratfield Ln to Humility Ln. The second, completed in 2016, was also along the west side of Ashford Dunwoody Rd from Brookhaven Hill to Kadleston Way. There are no additional sidewalk projects for this corridor funded at this time.

In the fall of 2015, the GDOT initiated a partnership with Intelight, Inc. to deploy state-of-the-art software at GDOT-maintained signals at 1,000 intersections throughout the state. In August of 2016, GDOT

announced[iii] that it had reached this milestone and would begin deploying "smart" signals at approximately 9,000 intersections, including in Metro Atlanta. The software is expected to be fully deployed on state-maintained signals by fall 2017 and GDOT will be providing the system to local agencies with statewide deployment expected by 2018. The project upgrades signals by converting them to a new traffic signal controller software, which allows signals to automatically provide feedback to a central system in the Traffic Operations Center in real-time. This eliminates the need to require engineers to rely on citizens or on-site checking of signals, allowing engineers to make real-time) and Dresden Dr (Apple Valley Rd to Clairmont Rd). The project will include but is not limited to upgraded traffic signals, pedestrian improvements, installation of fiber optic or equivalent communications, CCTV surveillance, and corridor system vehicle detection. The City issued a Request for Qualifications in the spring of 2015. The project is anticipated to get underway in February 2017.

There are no other known planned transportation projects along Ashford Dunwoody Rd at the time of this report.

2.4.1 APPROVED / POTENTIAL DEVELOPMENTS

Most of the properties along Ashford Dunwoody Rd are zoned as suburban residential. The northern portion of the corridor, which lies within the boundaries of the PCIDs is zoned as a regional center. The core retail area around the intersections at Johnson Ferry Rd and Ashford Dunwoody Rd are zoned as neighborhood center.

Redevelopment is an ongoing process in most communities. Periodically, properties turn over or are sold for redevelopment, presenting opportunities for towns, cities, and counties to take steps towards achieving their overall visions and plans for the future. The City's Comprehensive Plan identified priority parcels for redevelopment, including those that have been prioritized for redevelopment or that are currently underdeveloped. While most of these line the Peachtree Rd and Buford Hwy (SR 13) corridors, there are a few such parcels along Ashford Dunwoody Rd. At the time of the plan, parcels prioritized for redevelopment included Ashford Green and Cambridge Square, and those identified as underdeveloped included parcels such as Oglethorpe Crossing (Publix shopping center) and a few parcels on the north side of Johnson Ferry Rd near Donaldson Dr.

As of January 2016, four properties along or immediately adjacent to Ashford Dunwoody Rd have been approved for redevelopment. These include Ashford Dunwoody Townhomes (known as Ashton Woods), Ashford Green (mixed-use), Perimeter Summit Apartments, a mixed-use project with apartments and office space. These are shown in Figure 16. Ashton Woods will include up to 46 townhomes and will have one driveway for access to Ashford Dunwoody Rd. The Ashford Green redevelopment will include 300 residential units and 777,000 SF of office space. Perimeter Summit Apartments will include 350 units and 355,000 SF of Class A office space, and an urban park and green space.

Several other approved developments were provided by City of Brookhaven as being in the vicinity of the Ashford Dunwoody Rd corridor while not directly located along or immediately adjacent to the study corridor. These include the Hermance Townhomes, Caliber Brookhaven (office), and Apple Valley redevelopment (office). Hermance Townhomes will include 18 townhomes located on Hermance Dr, which connects to Windsor Pkwy and Peachtree Rd (SR 141). Caliber Brookhaven, which includes 9,200 SF of

office space, and Apple Valley, which includes 62,000 SF of office space, are both located on Peachtree Rd (SR 141) just south of the Ashford Dunwoody Rd intersection.

Several potential future development projects have been taken into consideration as part of the study, including the future development of the area around the Brookhaven/Oglethorpe MARTA Station. Additionally, several Developments of Regional Impacts (DRIs) in the vicinity of the Ashford Dunwoody Rd corridor were considered. These include: Peachtree and Hermance Roads (now known as Town Brookhaven) (DRI #1093); Johnson Ferry East Redevelopment, which includes the Brookleigh development (DRI# 1237); 236 Perimeter Mixed-Use (DRI #1582); High Street mixed-use development (DRI #1423); Park Center (DRI #2501); and Dunwoody Crown Towers (DRI #2567). Brief descriptions of these projects are provided below.

- What was known at the time as the Peachtree and Hermance Roads development is now known as Town Brookhaven. It is a 50-acre mixed-use development with 600,000 SF of retail; 150,000 SF of office space; and 1,700 residential units, including apartments, townhomes, and condominiums. The site is located along Peachtree Rd with site access along Hermance Rd.
- The Johnson Ferry East Redevelopment is a 56-acre mixed-use development along Johnson Ferry Rd and Donaldson Dr. It consists of 836 residential units and 80,000 SF of retail. The residential component consists of senior living units, apartments, townhomes, single family detached units, and retirement residential units.
- The 236 Perimeter Mixed-Use development is located in Dunwoody near the intersection of Hammond Dr and Perimeter Center Pkwy, and includes 200 hotel rooms, 600,000 SF of office space, and 22,000 SF of retail space.
- The High Street mixed-use development is located in Dunwoody near the intersection of Hammond Dr and Perimeter Center Pkwy, and includes 1,500 apartment units, 325,000 SF of retail space, 400 hotel rooms, and 75,000 SF of restaurant space.
- The Park Center development is a proposed 12.74-acre mixed-use development located south of Hammond Dr and west of Perimeter Center Pkwy that would consist of a combination of 1,650,000 SF of office space; 55,000 SF of retail; and 27,000 SF of restaurant space.
- The Dunwoody Crown Towers development is located in DeKalb County near the intersection of Hammond Dr and Perimeter Center Pkwy, and includes 1,134,000 SF of office space, 96,000 SF of restaurant/conference center space, up to 650 hotel rooms, 380 condominium units, and 43,700 SF of retail space.

The Johnson Ferry East Redevelopment DRI, which was approved in December, 2006, required several roadway improvements as conditions for approval in an effort to improve traffic conditions in conjunction with the development. Conditions applicable to the study corridor are listed below:

- Johnson Ferry Rd at Donaldson Dr/Ashford Dunwoody Rd *(not completed)*
    - Movement on the Donaldson Dr southbound approach shall be limited to right-turn only and enforced by a raised concrete median
- Johnson Ferry Rd/Ashford Dunwoody Rd Corridor *(project underway)*
    - Provide a signal communication system at a minimum of between the signals at:

        - Johnson Ferry Rd at Ashford Dunwoody Rd
        - Johnson Ferry Rd at Ashford Dunwoody Rd/Donaldson Dr
        - Johnson Ferry Rd at Blair Circle
- Johnson Ferry Rd at Blair Circle *(completed)*
    - Provide a dedicated eastbound left-turn lane from Johnson Ferry Rd onto Blair Circle
    - Provide a dedicated westbound right-turn lane from Johnson Ferry Rd onto Blair Circle
    - Signalize if warranted
- Johnson Ferry Rd at Ashford Dunwoody Rd *(completed)*
    - Provide two southbound through lanes
- Ashford Dunwoody Rd *(not completed)*
    - Sidewalks and bike lanes from West Nancy Creek Rd to Perimeter Summit Pkwy, and continue to Lake Hearn Dr
- Ashford Dunwoody Rd at Johnson Ferry Rd *(completed)*
    - Install an additional southbound through lane

The Town Brookhaven DRI, which was also approved in December, 2006, included improvements to the intersection of Ashford Dunwoody Rd and Windsor Pkwy among the required conditions to serve the development. Specifically, the DRI conditions included the following *(not completed)*:

- A traffic signal at the intersection, if warranted
- A northbound left-turn lane along Ashford Dunwoody Rd
- A southbound right-turn lane along Ashford Dunwoody Rd
- An additional eastbound lane on Windsor Pkwy, to create dedicated right and left-turn lanes

FIGURE 16. APPROVED DEVELOPMENTS DIRECTLY ADJACENT TO ASHFORD DUNWOODY ROAD (AS OF JANUARY 2016, RECONFIRMED FEBRUARY 2017)

2.5 NEEDS AND OPPORTUNITIES

Throughout the course of meetings with the City and community, and through the review of existing conditions, several themes emerged as key issues to address and as opportunities to improve conditions for all users along the study corridor.

Excessive Speed

Speed of traffic along Ashford Dunwoody Rd is a key concern. The road serves a variety of users, including people walking, children going to and from school, people engaged in recreational activities such as jogging or dog walking, residents traveling to and from home, commuters, and others. The posted speed limit on the study corridor was recently raised to 40 miles per hour (mph) from 35 mph, due to requirements of the City's Radar Enforcement Permit issued by the State Department of Public Safety. In school zones, the posted speed limit is 25 mph during restricted hours. There is a strong desire on the part of the community and City leaders that Ashford Dunwoody Rd should be designed and posted as a 35 mph roadway. This was echoed throughout the public involvement activities for this corridor study. Reducing vehicular speed through design and other measures is a priority.

Limited Sight Distance

The geography and topography of the corridor limit sight distance in some areas, making it difficult for drivers to see other vehicles approaching either because of curves or hills. In some locations, turning from side streets onto Ashford Dunwoody Rd is difficult, which was reiterated by the public stakeholders during the community meetings. Sight distance also poses a potential risk for pedestrians seeking to cross Ashford Dunwoody Rd, making it important to increase their visibility through additional or improved crossing signals and/or refuge islands. The City is undertaking an effort to install more advance warning "Intersection Ahead" signs to help drivers anticipate cross streets that are approaching. This is particularly an issue in the southern portion of the corridor, south of Johnson Ferry Rd. Sight distance also poses a potential risk for pedestrians seeking to cross Ashford Dunwoody Rd, making it more important to increase their visibility through additional or improved crossing signals and/or refuge islands. Additional measures to mitigate limited sight distance have been considered as part of the study.

Traffic Signal Timing

Along any roadway, the timing and phasing of traffic signals can help or hinder traffic flow. Signals that are not appropriately synchronized can result in vehicles backing up and lead drivers to block intersections. Signal timing was a common issue mentioned during the community meetings. As mentioned in Section 2.1.6, the signals along Ashford Dunwoody Rd from its origin in Dunwoody to (and including) Johnson Ferry Rd are actively managed as part of the Perimeter Traffic Operations Program (PTOP). Other efforts are under way to improve connectivity and optimize traffic signals throughout the area. It should be noted that traffic signals are inherently responsive to the geometry and configuration of intersections and absent geometric changes, there is a limit to the benefits of signal optimization. Traffic signal timing, in conjunction with other operational improvements, is addressed as part of the study.

Traffic Congestion

Traffic congestion is common on any busy roadway, particularly during peak morning and evening rush hours. Congestion is known to occur on Ashford Dunwoody Rd and was mentioned frequently as an issue during community meetings and was identified as one of the 'important' issues during the community meetings held in March 2016. Congestion is generally due to the volume of vehicles traveling along the road at a given time, but is also related to the geometry and operations of intersections. Congestion at intersections can have an impact on adjacent intersections and areas farther along a roadway.

On Ashford Dunwoody Rd this is sometimes exacerbated by the number of families dropping students off at area schools, albeit during limited periods of time. Congestion at the Johnson Ferry Rd intersection was a common concern during community meetings. The current closely spaced intersection configuration and skewed geometry of the intersection, combined with the heavy volumes of traffic on both Ashford Dunwoody Rd and Johnson Ferry Rd result in substantial congestion and delays during peak hours. The geometry and configuration of the intersection are such that it would be difficult to achieve more efficient traffic patterns without geometric and operational changes. While traffic congestion is an inconvenience and impacts nearly everyone traveling a road at some point in time, this corridor study was not solely intended to eliminate congestion issues by significantly increasing roadway capacity of both Ashford Dunwoody Rd and Johnson Ferry Rd. Opportunities to reduce congestion have been considered in conjunction with other opportunities to improve operations and safety for all users.

Mix of Users and Existing Character

Located between the busy Peachtree Rd (SR 141) and I-285, Ashford Dunwoody Rd in Brookhaven serves a variety of users. With its northern origin in Dunwoody, north of I-285, the road serves to connect Brookhaven to the Perimeter Center area, and provides access to I-285 via the diverging diamond interchange between Lake Hearn Dr and Hammond Dr/Ravinia Pkwy. As described earlier in the report, it is also a residential road, with some homes located directly along Ashford Dunwoody Rd and many neighborhoods located along either side of the road. There are also schools and parks on or adjacent to the road, and bicycle facilities along some segments of the corridor. Balancing the needs and safety of everyone who uses the road is challenging. Consideration has been given to improving operations and safety of all users while working within the existing public right-of-way wherever possible, to try to minimize the impact on adjacent properties and neighborhoods.

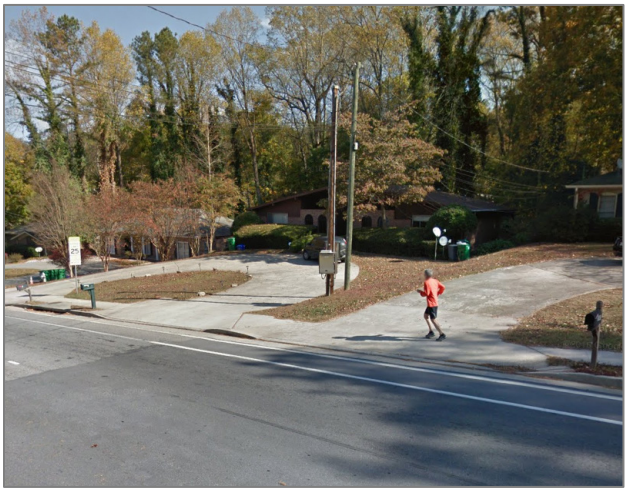


FIGURE 17. RUNNER NEAR MARIST SCHOOL (© GOOGLE 2016).

Neighborhood Cut-Through Traffic

Motorists seeking to avoid congested areas are known to cut through residential neighborhoods. The rise in popularity of traffic applications for mobile phones has exacerbated this issue. Increases in traffic cutting

through residential neighborhoods have been documented across the country, including throughout Metro Atlanta. Along Ashford Dunwoody Rd, drivers cut through residential neighborhoods including, but not limited to, Hampton Hall, Bubbling Creek, Sexton Woods, especially during evening rush hour. With limited nearby parallel north-south roads, improvements to Ashford Dunwoody Rd can help address neighborhood cut-through traffic. However, it is important to consider additional mechanisms that might help further reduce cut-through traffic, such as working through the City's traffic calming program for residential streets.

Pedestrian Safety

Pedestrian safety is another key concern along Ashford Dunwoody Rd. Currently, there are sections of the corridor with no sidewalk on either side of the road, and several segments where there is only sidewalk on one side or the other. Some segments of sidewalk have little to no buffer between them and the roadway, as shown in Figure 18, leaving little protection between pedestrians and vehicles traveling upwards of 40 mph. Furthermore, while crosswalks across Ashford Dunwoody Rd are fairly regularly spaced out, there is generally between one-quarter and one-third of a mile between crosswalks. Four of the crosswalks are not located at signalized intersections, and while these are equipped with flashing signals, drivers often do not stop for pedestrians waiting to cross. Because of the lack of sidewalk in some areas, pedestrians must cross the road several times to reach their destinations. For example, someone wishing to walk from Brookhaven Trace or parts of Cambridge Park to Kroger or the YMCA would have to cross at Oglethorpe Crossing, cross Johnson Ferry Rd, and then cross Ashford Dunwoody Rd once more to reach their destination.

FIGURE 18. NEW SIDEWALK IN GOOD CONDITION BUT HAS NO BUFFER

Safer and continuous pedestrian facilities are considered as part of this study. New sidewalks would facilitate improved pedestrian connectivity throughout the study area and reduce the need for crossing from one side of Ashford Dunwoody Rd to the other. They would also improve access to the Nancy Creek Trail and provide safer access to public transportation, schools and recreational venues, such as Blackburn Park.

2.5.1 LOCATION-SPECIFIC NEEDS AND OPPORTUNITIES

During the two public stakeholder meetings held in March 2016, attendees were asked to write comments and draw on maps to provide input about needs, concerns, and how the corridor could be improved to meet the needs of all users. Below is a synopsis of that input. Additional information is available in section 5.3.1

Peachtree Road to Johnson Ferry Road

- Vehicles regularly speed in this area
- Drivers rarely stop for pedestrians crossing at Kadleston Way – suggestion given to study the feasibility of a pedestrian-operated crossing (like the one at the YMCA) at this intersection
- Curved road results in limited visibility
- Lack of sidewalk on the east side of the road
- Can be difficult to navigate when church lets out on Sundays due to volume of traffic
- Suggestion to consider bicycle facilities
- Opposition to new lanes

At Peachtree Road Intersection

- Angle of right turn from Peachtree Rd (southbound) to Ashford Dunwoody Rd (northbound) is tight; vehicles regularly drive on the curb
- Important pedestrian crossing
- Traffic backs up waiting to turn onto Peachtree Rd

At Windsor Parkway Intersection

- Turning from Windsor Pkwy is difficult because of limited sight distance and motorists on Ashford Dunwoody Rd often exceed the speed limit in this area
- Suggestion to consider mechanism(s) to facilitate safer turning and reduced vehicle speeds

Around Johnson Ferry Road Intersections

- Despite recent improvements that resulted from restriping of the intersection, the current configuration of the five-point intersection at Johnson Ferry Rd/Ashford Dunwoody Rd/Donaldson Dr does not operate well and more needs to be done
- Weaving traffic and last-minute lane-changes are common and pose safety concerns
- Suggestion for additional enforcement of blocking driveways and intersections, and lane changes
- Overhead lane assignment signs needed
- Lack of sidewalk on east side of Ashford Dunwoody Rd
- Would like trail extended
- Turn lanes are not long enough and more or longer turn lanes may be needed
- Timing of traffic signals is problematic
- The turn radius from northbound Ashford Dunwoody Rd to eastbound Johnson Ferry Rd is tight

- Better lighting and safer pedestrian crossings are needed
- Congestion makes turning from Donaldson Dr onto Johnson Ferry Rd difficult – more turn lane storage and capacity is needed

Johnson Ferry Road to Perimeter Summit Parkway/Oak Forest Drive

- Speeding is an issue
- High volume of pedestrians, particularly between Marist School and Cambridge Square
- School traffic causes congestion at Marist and Montgomery Elementary School
- Rush hour congestion, especially in the evenings and especially coming from the highway and hospital ("Pill Hill") area
- Cut-through traffic in adjacent neighborhoods is a problem and speed bumps, on many roads, including West Nancy Creek Dr and Parkcrest Dr, among others do not seem to help, as drivers routinely ignore them
- Mixed opinions about lane configurations
- Preserve Blackburn Park and homes

Cambridge Square/Blackburn Park entrances

- Left turns into and out of Cambridge Square can be difficult
- Pedestrian crossing is often overlooked and some signs may block the signal

Harts Mill Road Intersection

- Length and timing of the signal should be adjusted – few vehicles are able to turn left onto Harts Mill Rd during evening rush hour
- Length of turn lanes may not be sufficient

West Nancy Creek Drive Intersection

- Proponents and opposition to turn lanes on West Nancy Creek Dr at the intersection
- Concern about inviting or encouraging additional traffic on West Nancy Creek Dr
- Signal timing may need to be adjusted to allow more vehicles to get through the intersection from West Nancy Creek Dr
- Drivers reportedly run red lights

Montgomery Elementary School

- Right turn lane needed
- Extend school speed zone
- Pick-up and drop-off traffic impedes Ashford Dunwoody Rd

Perimeter Summit Parkway / Oak Forest Drive Intersection

- More turn storage needed on Ashford Dunwoody Rd
- Frequent last-minute lane changes
- Consider additional turn lane on Oak Forest Dr for vehicles headed north

Perimeter Summit Parkway / Oak Forest Drive to City Limits

- Lane control needed
- More turn lane capacity

2.6 EXISTING YEAR (2016) TRAFFIC VOLUMES AND CAPACITY ANALYSIS

A traffic analysis was performed at several key intersections along the Ashford Dunwoody Rd corridor. Figure 19 schematically depicts the existing lane configurations at these key intersections and the traffic control present at each intersection. Existing AM and PM peak hour turning movement counts at the study area intersections were obtained from PTOP and RTOP, and by Reliable Traffic Data Services. The raw count data was collected from multiple sources and was normalized to provide a consistent baseline of Existing (Year 2016) data. The raw count data is provided in Appendix C. The Existing (Year 2016) AM and PM peak hour turning movement counts are shown in Figure 20.

Based on the existing lane configurations and traffic control presented in Figure 19, and the existing traffic volumes presented in Figure 20, peak hour traffic operations were analyzed at the study area intersections using the methodologies outlined in the 2010 Highway Capacity Manual (HCM) and the Synchro 8.0 software program. According to the HCM, there are six levels of service (LOS) by which the operational performance of an intersection may be described. These levels of service range between LOS "A" which indicates a relatively free-flowing condition and LOS "F" which indicates operational breakdown.

For signalized intersections, LOS is defined in terms of a weighted average control delay for all traffic movements at the intersection. Control delay quantifies the increase in travel time that a vehicle experiences due to the traffic signal control. Signalized intersection LOS is stated in terms of average control delay per vehicle (in seconds) during a specified time period (e.g., weekday PM peak hour). Control delay is a complex measure based on many variables, including signal phasing and coordination (i.e., progression of movements through the intersection and along the corridor), signal cycle length, and traffic volumes with respect to intersection capacity and resulting queues. Table 8 summarizes the LOS criteria for signalized intersections, as described in the 2010 HCM (Transportation Research Board, 2010).

TABLE 8. LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service	Control Delay (sec/veh)	General Description
A	< or = 10 seconds	Free Flow
B	> 10 seconds and < 20 seconds	Stable Flow (slight delays)
C	> 20 seconds and < 35 seconds	Stable flow (acceptable delays)
D	> 35 seconds and < 55 seconds	Approaching unstable flow
E	> 55 seconds and < 80 seconds	Approaching intersection capacity unstable flow, unfavorable progression
F[1]	> 80 seconds	Forced flow, poor progression

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

[1] If the volume-to-capacity (v/c) ratio exceeds 1.0 LOS F is assigned.

For unsignalized intersections (minor street stop controlled intersections) LOS criteria is defined in terms of the average control delay for each minor-street movement as well as major-street left-turns. Major-street through vehicles are assumed to experience zero delay, because of minimal conflicts in operation. Several factors affect the controlled delay for unsignalized intersections, such as availability and distribution of gaps in the conflicting traffic stream. LOS A indicates excellent operations with minimal delay to motorists, while LOS F exists when there are insufficient gaps of acceptable size to allow vehicles on the minor street

to cross safely, resulting in long delays and long queues. Table 9 shows LOS criteria for unsignalized intersections.

TABLE 9. LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Control Delay (sec/veh)	General Description
A	< or = 10 seconds	Minimal Delay
B	> 10 seconds and < 15 seconds	Occasional Delay
C	> 15 seconds and < 25 seconds	Moderate Delay
D	> 25 seconds and < 35 seconds	Noticeable Delay
E	> 35 seconds and < 50 seconds	Delay approaching tolerance
F[1]	> 50 seconds	Delay exceeding tolerance

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

[1] If the volume-to-capacity (v/c) ratio exceeds 1.0 LOS F is assigned.

The results of the intersection levels of service and delay analysis for the existing conditions are summarized in Table 10. As shown in Table 10, all study area intersections operate at a level of service (LOS) "D" or better in the AM and PM peak hours with the exception of the Harts Mill Rd/Marist School intersection (LOS "E" in the PM peak hour). Detailed HCM analyses, including capacity analysis worksheets, can be found in Appendix C.

TABLE 10. EXISTING (YEAR 2016) INTERSECTION LEVEL OF SERVICE

	Intersection	AM *LOS*	PM *LOS*
		Delay (sec.)	*Delay (sec.)*
1	**Ashford Dunwoody Rd @ SR 141/Peachtree Rd**	**B**	**B**
		19.3	**16.8**
2	**Ashford Dunwoody Rd @ Windsor Pkwy***	**C**	**D**
		23.1	**25.2**
3	**Ashford Dunwoody Rd @ Johnson Ferry Rd/Donaldson Dr**	**C**	**C**
		30.3	**31.2**
4	**Ashford Dunwoody Rd @ Johnson Ferry Rd**	**B**	**B**
		15.9	**14.9**
5	**Ashford Dunwoody Rd @ Harts Mill Rd/Marist School**	**C**	**E**
		32.2	**56.7**
6	**Ashford Dunwoody Rd @ W. Nancy Creek Dr**	**B**	**B**
		12.9	**18.2**
7	**Ashford Dunwoody Rd @ Montgomery Elementary School Access/Chaucer Ln***	**C**	**D**
		17.1	**28.8**
8	**Ashford Dunwoody Rd @ Perimeter Summit Pkwy**	**B**	**D**
		18.3	**36.1**

* Unsignalized intersections show results for worst movement

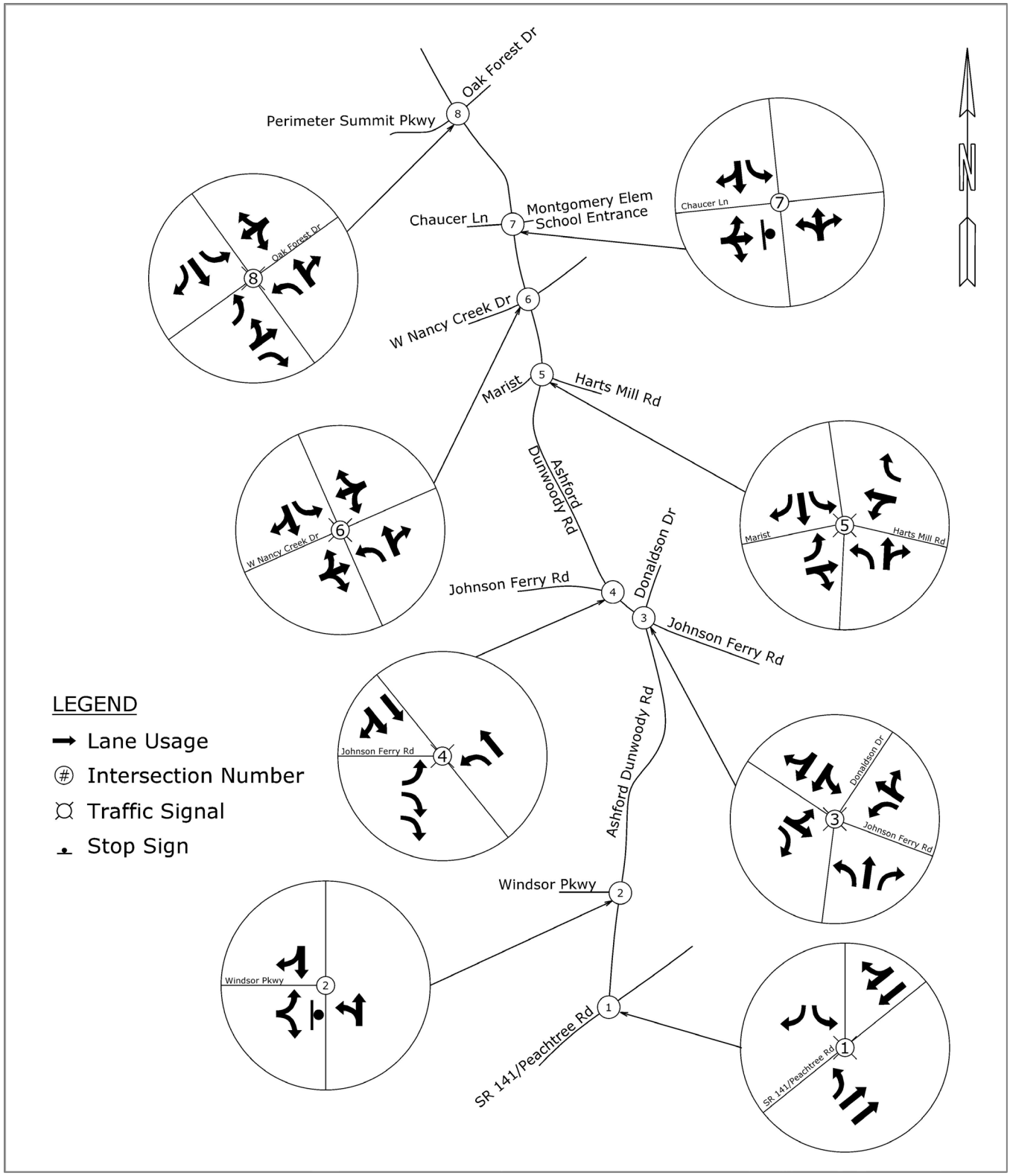


FIGURE 19. EXISTING (YEAR 2016) LANE CONFIGURATIONS AND TRAFFIC CONTROL

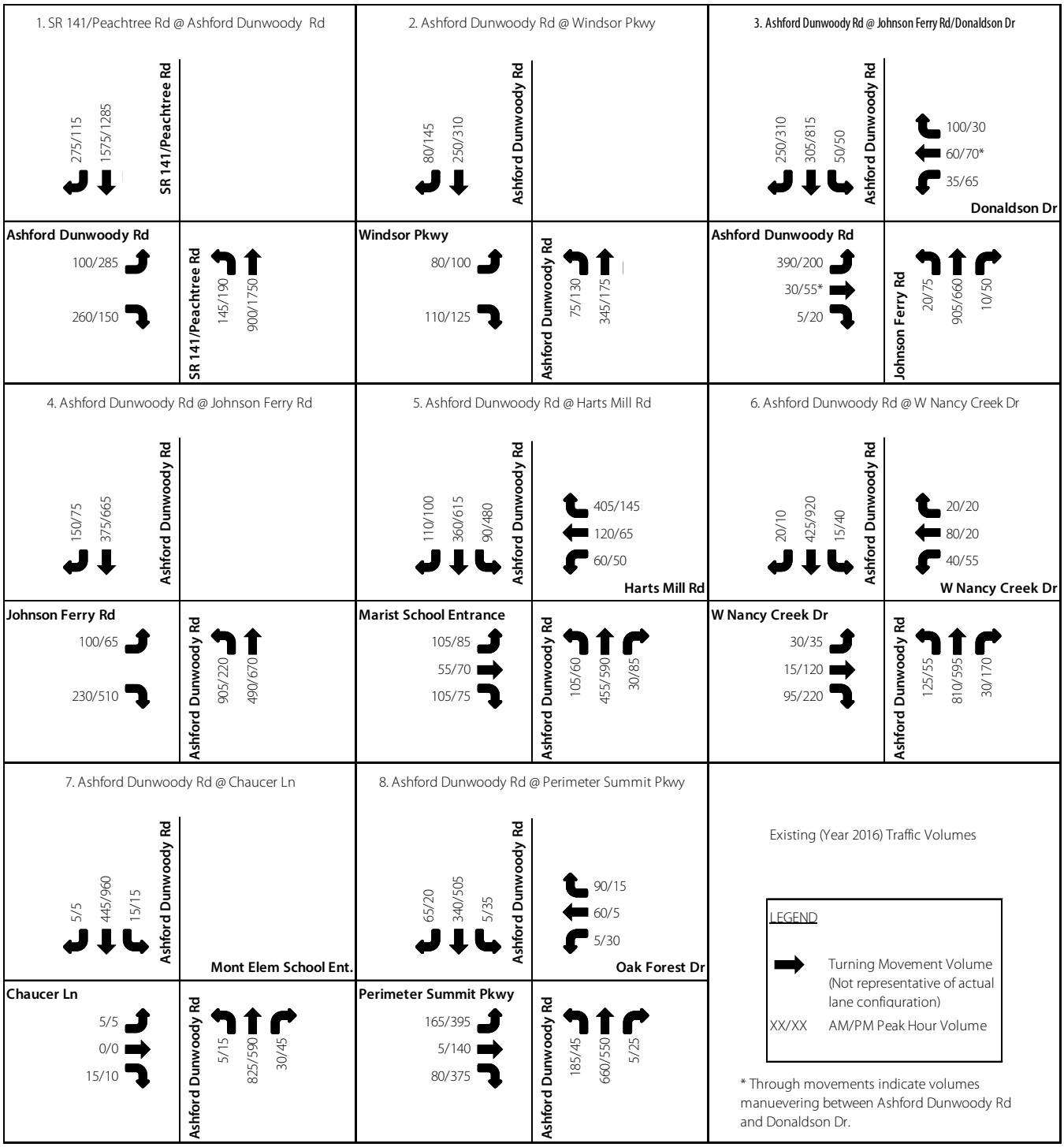


FIGURE 20. EXISTING (YEAR 2016) AM AND PM PEAK HOUR TRAFFIC VOLUMES

3. TRAFFIC ANALYSIS

3.1 FUTURE CONDITIONS

A detailed traffic analysis was undertaken to determine the impact of approved or planned developments in the vicinity of the Ashford Dunwoody Rd corridor and the appropriate roadway improvements along Ashford Dunwoody Rd and at key intersections to accommodate the anticipated future traffic along the corridor.

Information on the approved or planned developments and traffic studies prepared for these developments were obtained from the Atlanta Regional Commission (ARC) and the City of Brookhaven. The following is a list of the approved or planned developments in the vicinity of the Ashford Dunwoody Rd corridor that were incorporated into this traffic analysis:

A. 236 Perimeter Mixed-Use (DRI# 1582)
B. High Street Mixed-Use (DRI #1432)
C. Park Center (DRI #2501)
D. Dunwoody Crown Towers (DRI #2567)
E. Ashford Green Mixed Use Developments
F. Brookhaven/Oglethorpe MARTA TOD (DRI# 2604)
G. Perimeter Summit Apartments
H. 4004 Perimeter Summit
I. Ashford Dunwoody Townhomes (Ashton Woods)
J. Hermance Townhomes
K. Caliber Brookhaven
L. Apple Valley (redevelopment)

3.1.1 FUTURE (YEAR 2040) NO-BUILD CONDITION TRAFFIC FORECASTS

To estimate the impacts of the future traffic and to identify the necessary roadway improvements, the Year 2040 was chosen as the horizon year to conduct the traffic analysis. The Year 2040 peak hour traffic volumes were forecasted by growing the 2016 Existing Year peak hour traffic volumes at an estimated annual growth rate and adding the projected traffic from the approved or planned developments. The annual growth rate was estimated from traffic volume information obtained from the GDOT's Annual Traffic Count Data, ARC's Travel Demand Model, and from population growth information also obtained from the ARC. Based on this, a growth rate of 0.5% was determined to be representative of the background future growth along the Ashford Dunwoody Rd corridor. Additionally, the approved or planned developments

represent the growth in traffic from developments in the vicinity of the Ashford Dunwoody Rd corridor in the future forecasts.

The following formula was used for the traffic projections:

$$F = P\ (1+i)^n + \text{Development Traffic}$$

Where:

F = future projected traffic volume, vehicles per hour

P = 2016 peak hour traffic volume, vehicles per hour

i = annual growth rate = 0.5 percent (0.005)

n = number of years in projection, 24 for 2040 (existing year 2016)

The Year 2040 peak hour traffic volumes along Ashford Dunwoody Rd are shown in Figure 21. For the purposes of this study the no-build condition is defined as the existing condition plus the anticipated growth in traffic to the Ashford Dunwoody Rd corridor from the year 2016 to the year 2040 without any improvement. The build condition will also be represented by the volumes shown in Figure 21.

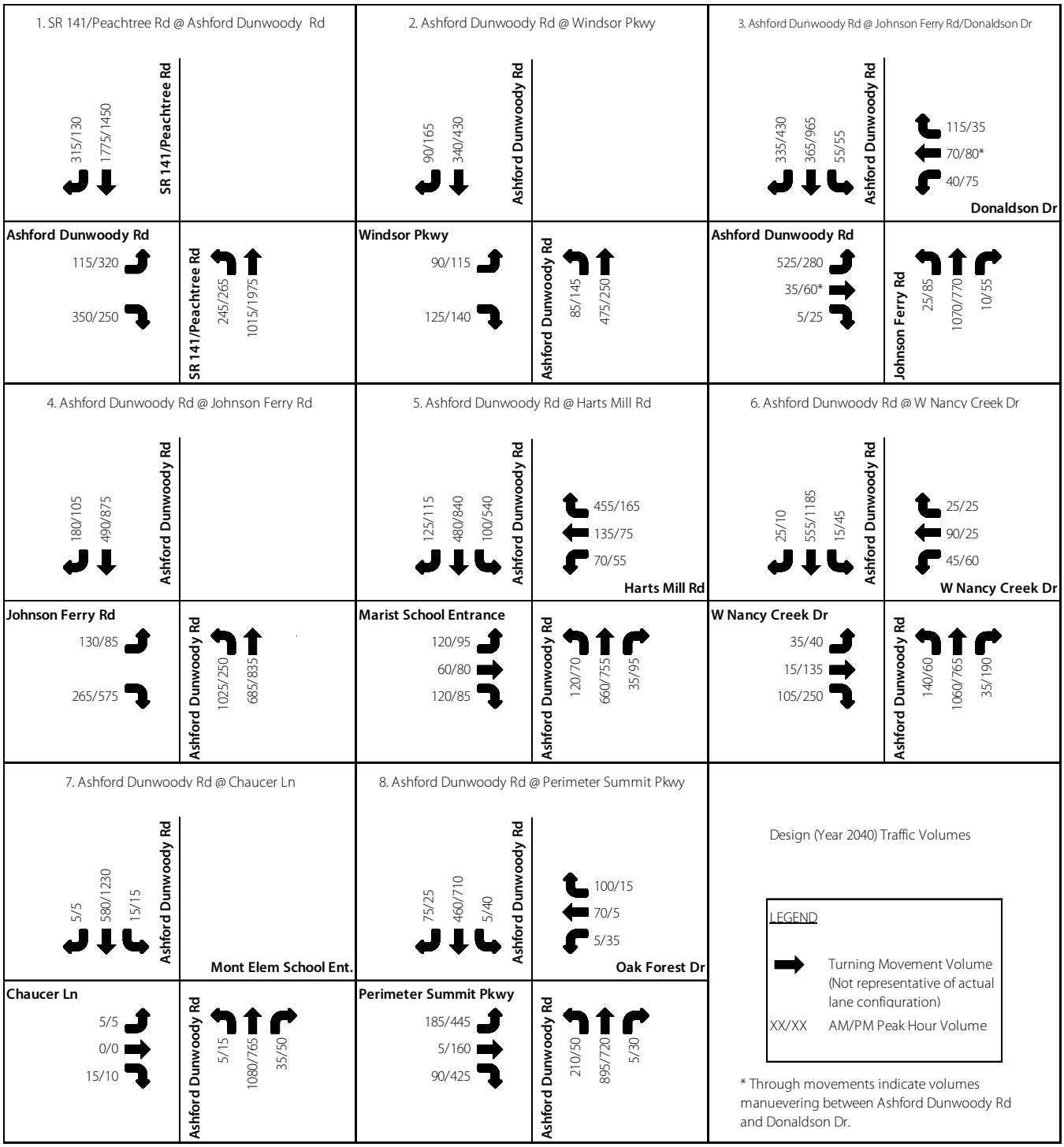


FIGURE 21. YEAR 2040 NO-BUILD AND BUILD AM AND PM PEAK HOUR TRAFFIC VOLUMES

3.1.2 FUTURE (YEAR 2040) BUILD CONDITION TRAFFIC FORECASTS

The build condition traffic volumes were the same as the no-build condition traffic volumes, since the recommended intersection and lane configuration changes improvements, as shown in Figure 22, do not require any diverting or rerouting traffic. The 2040 traffic volumes are shown in Figure 21. The following is a list of changes to the lane configurations at each key intersection included in the build condition:

1. SR 141/Peachtree Rd @ Ashford Dunwoody Rd
    a. Southbound right turn added on SR 141/Peachtree Rd
    b. Eastbound right turn yield converted to a free-flowing right turn on Ashford Dunwoody Rd
2. Ashford Dunwoody Rd @ Windsor Pkwy
    a. Northbound left turn lane added on Ashford Dunwoody Rd
    b. Signalized intersection (previously stop-controlled)
3. Ashford Dunwoody Rd @ Johnson Ferry Rd/Donaldson Dr
    a. Northbound right lane (Ashford Dunwoody Rd) extended past the Publix entrance
    b. Northbound left turn/through lane allowed more storage due to the extension of the right lane
4. Ashford Dunwoody Rd @ Johnson Ferry Rd
    a. Optimized signal timing to increase efficiency
5. Ashford Dunwoody Rd @ Harts Mill Rd
    a. Northbound left turn lane extended
6. Ashford Dunwoody Rd @ W. Nancy Creek Dr
    a. Eastbound left turn lane added on W. Nancy Creek Dr
    b. Westbound left turn lane added on W. Nancy Creek Dr
7. Ashford Dunwoody Rd @ Chaucer Ln/Montgomery Elementary School Entrance
    a. Northbound left turn lane added on Ashford Dunwoody Rd
    b. Northbound right turn lane added on Ashford Dunwoody Rd
8. Ashford Dunwoody Rd @ Perimeter Summit Pkwy
    a. Northbound through lane added to Ashford Dunwoody Rd (total of two northbound through lanes)
    b. Southbound through lane added to Ashford Dunwoody Rd (total of two southbound through lanes)

In addition to the changes to intersection lane configurations as listed above, optimization of the signal timings and phasings as appropriate were also reflected in the traffic analysis.

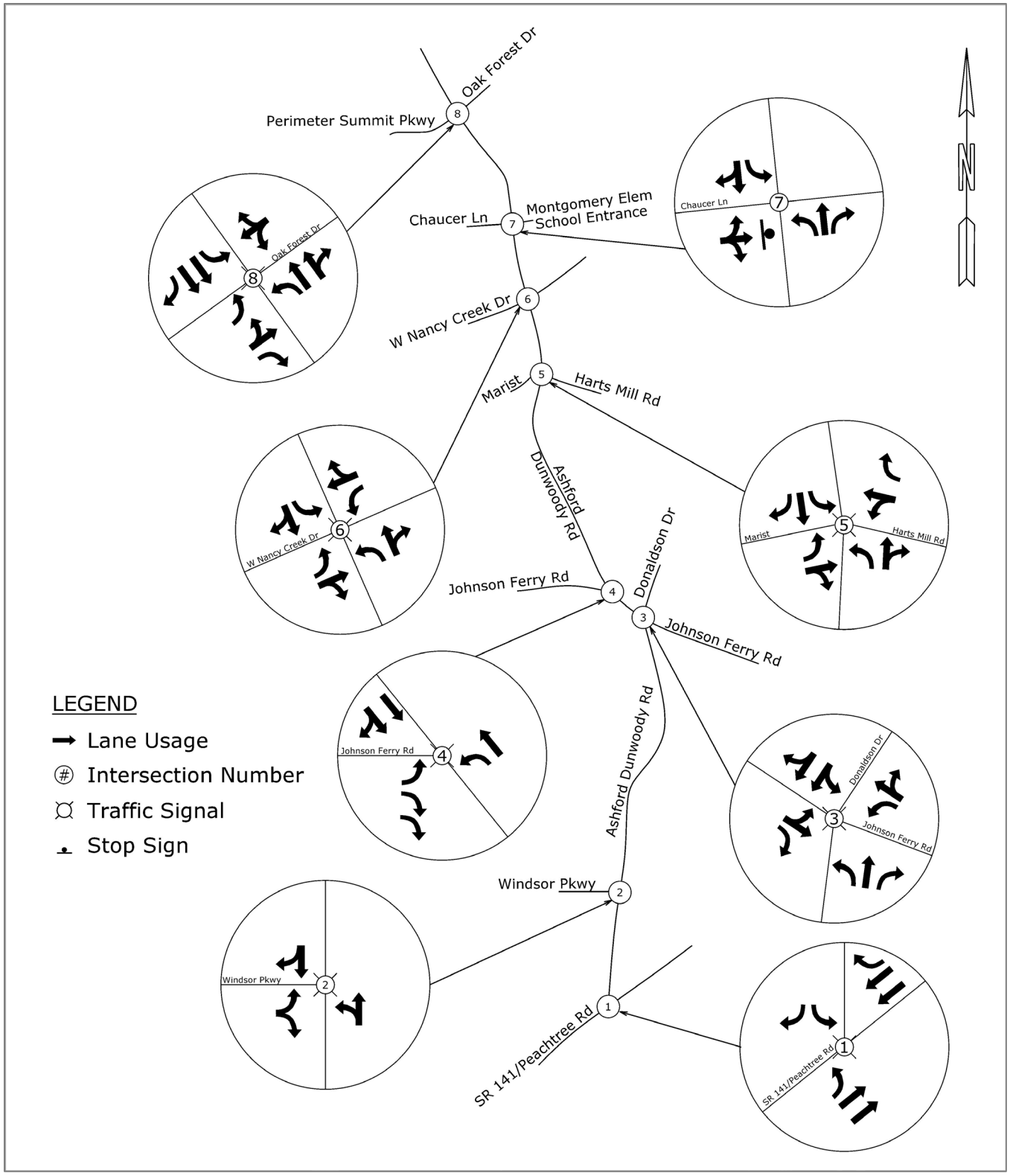


FIGURE 22. FUTURE LANE CONFIGURATIONS AND TRAFFIC CONTROL

3.1.3 FUTURE (YEAR 2040) NO-BUILD AND BUILD CONDITION CAPACITY ANALYSIS

The results of the key intersection levels of service (LOS) and delay analysis for the future no-build and build conditions are summarized in Table 11. The analysis for the no-build and build condition was based on the traffic volumes shown in Figure 22 and the lane configurations shown in Figure 19. The build condition analysis was based on the traffic volumes shown in Figure 21and the lane configurations shown in Figure 22. Detailed HCM analyses, including capacity analysis worksheets, can be found in Appendix C.

As shown in Table 11, the following intersections operate at an LOS of "E" or "F" in the no-build condition: Ashford Dunwoody Rd @ Windsor Pkwy (AM and PM), Ashford Dunwoody Rd @ Harts Mill Rd/Marist School (AM and PM), and Ashford Dunwoody Rd @ Montgomery Elementary School Access/Chaucer Ln (PM Only). These intersections improve to operate at an LOS of "D" or better in the build condition, except for Ashford Dunwoody Rd @ Montgomery Elementary School Access/Chaucer Ln, which improves from an "F" to an "E". Additionally, all study intersections show improvement from the no-build to the build condition accounting for geometry/configuration improvements as well as signal timing and phasing optimization where applicable.

TABLE 11. YEAR 2040 INTERSECTION LEVELS OF SERVICE

	Intersection	2040 No Build		2040 Build	
		AM	PM	AM	PM
		LOS	*LOS*	*LOS*	*LOS*
		Delay (s)	*Delay (s)*	*Delay (s)*	*Delay (s)*
1	**Ashford Dunwoody Rd @ SR 141/Peachtree Rd**	**D**	**C**	**B**	**C**
		37.3	**24.6**	**14.1**	**20.3**
2	**Ashford Dunwoody Rd @ Windsor Pkwy***	**F**	**F**	**B**	**B**
		60.2	**71.2**	**19.2**	**16.9**
3	**Ashford Dunwoody Rd @ Johnson Ferry Rd/Donaldson Dr**	**D**	**D**	**D**	**C**
		37.9	**38.7**	**37.2**	**22.7**
4	**Ashford Dunwoody Rd @ Johnson Ferry Rd**	**D**	**B**	**C**	**B**
		35.6	**19.6**	**28.0**	**16.3**
5	**Ashford Dunwoody Rd @ Harts Mill Rd/Marist School**	**E**	**F**	**C**	**D**
		73.7	**90.8**	**31.2**	**54.6**
6	**Ashford Dunwoody Rd @ W. Nancy Creek Dr**	**B**	**C**	**B**	**C**
		13.4	**30.7**	**11.3**	**28.9**
7	**Ashford Dunwoody Rd @ Montgomery Elementary School Access/Chaucer Ln***	**D**	**F**	**C**	**E**
		25.0	**52.8**	**24.7**	**49.8**
8	**Ashford Dunwoody Rd @ Perimeter Summit Pkwy**	**C**	**D**	**B**	**C**
		21.9	**41.3**	**18.5**	**27.3**

* Unsignalized intersections show results for worst movement

4. EVALUATION OF CONCEPTS: A COMPLETE STREETS APPROACH

4.1 OVERVIEW

Ashford Dunwoody Rd is an important corridor for the City of Brookhaven. The roadway carries a substantial amount of traffic, with average daily traffic volumes ranging from 11,000 to 27,000 vehicles per day. The corridor is home to a variety of uses, including residential, educational, recreational, retail and commercial development, office space, and new and redeveloped townhomes, condominiums, and apartments. The City of Brookhaven has set goals to create a more bikeable and walkable community and, through this study, set out to develop a vision for Ashford Dunwoody Rd that is based on a Complete Streets and context-sensitive approach that addresses all forms of transportation.

For much of our past, roads were planned and designed primarily to move as much motorized traffic as efficiently and as quickly as possible. This approach, however, has ignored the travel needs and preferences of large segments of the population. The Federal Highway Administration (FHWA), Department of Transportation (DOT), State Departments of Transportation, and other agencies are now considering a wider range of factors in planning, design, and operation of roads and streets, including concerns about accommodating aging populations, improving public health and fitness, minimizing transportation costs, creating and maintaining vibrant neighborhoods, reducing carbon emissions, and pursuing healthier, more sustainable lifestyles.[iv]

"Complete Streets" is an approach to street and roadway design that enables safe mobility for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. The concept of Complete Streets integrates people and places in the planning, design, operation, and maintenance of transportation networks. Communities across the country are adopting Complete Streets policies, designing and operating streets and roads for all users. Complete Streets are for everyone and consider the context of the road, including adjacent land uses and developments, connections to transit and other forms of transportation, the range of users of a road or street, and other factors. There is no specific 'standard' for Complete Streets; each recommendation should be responsive to the local context in which the corridor is situated. The concepts include features that make it safe for all users, regardless of ability, age, or mode of travel, to travel the roadway. These features may include elements such as sidewalks, bike lanes or wide paved shoulders, dedicated lanes for buses, comfortable and accessible public transportation stops, safe pedestrian crossings, median islands, pedestrian signals, roundabouts, narrower travel lanes, adequate separation between sidewalks and streets, curb extensions, and more.

There are numerous benefits to complete streets, including safety, encouraging and enabling more active lifestyles and forms of transportation, and helping to change travel patterns. Complete streets can also provide environmental benefits through appropriate design of landscaping, drainage facilities, and by reducing stormwater runoff with narrower roadways. Complete streets also give people choices in how they travel. Increasing opportunities for safe travel by means other than an automobile can help alleviate

congestion and can reduce the demand for peak-hour travel in cars. Research shows that 44% of vehicle trips made during morning peak periods are not to work or work-related; instead, they are trips for shopping, running errands, to school, or to a gym.[v] Shorter trips can be made on foot, bike, or transit, if streets are more "complete." Shifting even a small proportion of trips from single-occupant vehicles to other modes can have a significant impact on congestion.

Benefits of complete streets go beyond reducing traffic volume and improving congestion. Complete Streets enable people to be more physically active, which improves health. The improvements help create more livable communities, especially for older adults who may rely more on walking or public transportation than driving. A lack of complete streets features may lead to a feeling of isolation for these groups.

Based on the overall vision, study goals, and a complete streets approach, the following strategies were developed:

- Incorporate design elements that support a 35-mph speed limit and improve safety for all users, such as the use of 10-foot travel lanes, prominent pedestrian facilities, medians, landscaping, and pedestrian-scale lighting.
- Provide continuous, high quality facilities for pedestrians and bicyclists, as well as motorists, throughout the length of the corridor to facilitate connectivity between origins, destinations, and other facilities, including future trails, sidewalks, and bicycle facilities.
- Separate pedestrian facilities from travel lanes by a distance of two to five feet where possible, narrowing the buffer in residential areas or to accommodate turn lanes as needed.
- Consider opportunities to narrow facilities where needed to minimize impacts to adjacent properties.
- Incorporate landscaping in buffer strips where they are sufficiently wide to provide additional protection for pedestrians and incorporate landscape elements to screen residential properties from pedestrian facilities. Landscaping can also help calm traffic and create a sense of place.
- Incorporate raised medians or refuge areas to increase safety for motorists and pedestrians.
- Incorporate facilities that are compliant with the Americans with Disabilities Act (ADA). Use flashing pedestrian signals at all crosswalks across the corridor not located at a signalized intersection.

4.2 CONCEPTS EVALUATED

Bicycle Facilities

According to the FHWA publication *Separated Bike Lane Planning and Design Guide* (FHWA-HEP-15-025)[vi], there are six options for accommodating bicycles along a roadway. These options include the following, as shown and described in Figure 24:

- Signed Routes (no pavement markings)
- Shared Lane Markings (i.e., "Sharrows")
- On-Street Bike Lanes
- On-Street Buffered Bike Lanes

- Separated Bike Lanes (Cycle Track)
- Off Street Trails/ Sidepaths (i.e., Multi-Use Trail)

These concepts were evaluated to determine how they might help meet the stated objectives of the *Ashford Dunwoody Road Corridor Study* and help meet the City's overall goal of creating a more bikeable and walkable community. Shared lane markings, on-street bike lanes, and on-street buffered bike lanes meet some of these objectives; however, they may pose safety risks as they offer little protection for cyclists other than pavement markings. Given the relatively high vehicle speeds, curvilinear nature of portions of Ashford Dunwoody Rd, and high volumes of peak hour traffic, a physical separation is recommended. Protected bicycle lanes, separated by raised planted buffers were also considered as part of this study. These were eliminated from consideration based upon constrained right-of-way and community input.

FIGURE 23. EXAMPLES OF BICYCLE FACILITIES (SOURCE: FHWA-HEP-15-025)

Given the dimensions, geometry, and topography of the corridor, proximity of residential properties, and because the City of Brookhaven does not allow bicyclists on sidewalks less than eight (8) feet wide (unless they are under the age of 13), it was determined that a shared facility for bicyclists and pedestrians is the best way to accommodate bicycles along the corridor (rather than creating separate or on-street facilities for bicyclists). Multi-use paths allow pedestrians and cyclists to share the same area, eliminating the need for separate bicycle facilities and preventing cyclists from riding on narrower sidewalks.

According to the FHWA report *Evaluation of Safety, Design, and Operation of Shared-Use Paths* (FHWA-HRT-05-137),[vii] bicyclists are the most common users of shared-use paths; however, paths should always be designed to include pedestrians, wheelchair users, and others. Generally, "trail" and "path" are used interchangeably and the FHWA defines a shared-use path as paved, off-street travel ways designed to serve non-motorized travelers. They are usually separated from motorized vehicular traffic by an open space or barrier and usable for recreational opportunities, transportation purposes, and increasingly, to serve commuters. Over the past ten years, shared-use paths, trails, and sidepaths (located alongside roadways) have become increasingly popular and have been constructed in almost every medium-sized and large urban area in the United States, including Metro Atlanta.

A multi-use path along Ashford Dunwoody Rd can facilitate safe non-motorized travel linking destinations such as schools, parks, the YMCA, and retail establishments, and can increase access to the MARTA bus route on Peachtree Rd (SR 141). and Johnson Ferry Rd. A multi-use path can also be a viable commute option for people living in Brookhaven and working in the Perimeter Center area, or for people traveling to Oglethorpe University. In addition, a multi-use trail can extend the reach of and provide additional connections to the existing Nancy Creek Trail. As recommended in the City's *Bicycle, Pedestrian, and Trail Plan*, a multi-use path is recommended for the east side of Ashford Dunwoody Rd, where it would connect public transportation routes, retail establishments, Blackburn Park, Nancy Creek Trail, Montgomery Elementary School, and planned future bicycle and pedestrian facilities along Peachtree Rd (SR 141)., Donaldson Dr, West Nancy Creek Dr, and Ashwoody Tr. Alongside Blackburn Park, the path would provide a more direct connection between the two ends of the park, and by connecting to the Nancy Creek Trail, it would provide access to Murphey Candler Park as well.

During the detail plan development, consideration should be given to the design of path crossings at intersections and driveways, following applicable guidelines and standards. GDOT recognizes the American Association of State Highway and Transportation Officials (AASHTO) design standards for multi-use trails, which recommends a minimum width of ten (10) feet and a recommended width of 12 feet. Shared-use paths are also recommended to provide a two (2) foot shoulder to serve as pull-off or resting/passing space. A shoulder width of one (1) foot is acceptable in constrained spaces. For shared-use two-way paths along roadways, AASHTO recommends a minimum horizontal buffer of five (5) feet or if less than five (5) feet, a wall or railing at least 3.5 feet high is required between roadside multi-use paths and the roadway. The buffer space should be landscaped or have natural vegetation to reduce noise and splashes from vehicles. A drainage ditch or swale with 1:3 slopes can also be used at the edge of a two (2) foot-wide shoulder. A delineation between direction of travel, such as a striped marking, is also recommended. The precise details and design of a multi-use trail will be developed in later design phase(s).

Sidewalks

Currently, most sidewalks throughout the City are four feet wide. According to GDOT's Pedestrian and Streetscape Guide and the City of Brookhaven's municipal code (Sec.14-677(d)), a sidewalk must be no less than five (5) feet wide. The City has larger minimum sidewalks widths in some areas, including the Brookhaven-Peachtree Overlay District, where widths vary by street. Sidewalks should ideally be separated from the roadway by a minimum buffer of two (2) feet, although this can be narrowed in

constrained areas. The City also requires a grassed, planted, or landscaped strip to separate all sidewalks from adjacent curbs, except on bridges.

In order to provide continuous, safe pedestrian facilities, it is recommended that sidewalks be installed, maintained, and enhanced along the west side of Ashford Dunwoody Rd. This may include filling gaps where sidewalk is currently missing and eventually, over time, upgrading sidewalk to meet the recommended standard of five (5) feet. Providing facilities that pedestrians can use on both sides of the road would reduce the need for pedestrians to cross from one side of the road to the other.

Medians and Pedestrian Refuge Islands

Medians are areas between opposing lanes of traffic, not including turn lanes, and can be either open (pavement markings only) or raised and channelized to separate road users. Pedestrian crossing islands or refuge areas are raised islands placed on streets either at intersections or in mid-block locations to separate crossing pedestrians from motor vehicle traffic. Medians and crossing islands can convey safety benefits to both pedestrians and vehicular traffic, including crash reduction, decrease in traffic delays, and better visibility of pedestrians. Medians and refuge islands help draw motorists' attention to the possibility of pedestrians in the area and help reduce speed. Medians also allow pedestrians to focus on crossing one direction of traffic at a time as they cross. Specifically, according to the FHWA's Proven Safety Countermeasures document, *Medians and Pedestrian Crossing Islands in Urban and Suburban Areas* (publication FHWA-SA-12-011), medians have the following benefits:

- Reduce pedestrian crashes by up to 46% and motor vehicle crashes by up to 39%;
- Decrease travel delay by more than 30% for motorists;
- Provide a safe place for pedestrians to stop at the mid-point of a road, before continuing across the remaining travel lanes;
- Improve visibility of pedestrians in crossing locations, especially at unsignalized locations;
- Reduce the speed of vehicles approaching pedestrian crossings;
- Help manage and/or reduce potential conflicts between turning vehicles; and
- Provide space for supplemental signage on multi-lane roadways without the need for overhead signage.

The FHWA recommends raised medians or refuge areas in curbed sections of multi-lane roadways in urban and suburban areas.[viii] They are especially recommended in areas with significant volume of vehicular traffic (more than 12,000 vehicles per day), where pedestrians may be present and where motorists travel at intermediate or higher speeds. Raised islands and medians are especially important in areas where pedestrians access transit stops or other destinations/origins across from each other, and have been proven to be effective on approaches to multi-lane intersections. It is recommended that medians and/or refuge islands should be at least four (4) feet wide and are preferred to be eight (8) feet wide to accommodate pedestrian comfort and safety.

In order to enhance safety of all users, medians should be considered in locations where there is more than one travel lane in each direction. Medians should be designed with consideration for maintaining access to area businesses while providing sufficient safety benefits. The precise design and configuration of medians

and median openings will be developed during the detailed design phase for each individual project. Additionally, the use of pedestrian refuge islands should be considered, especially for unsignalized crossing locations.

Travel Lane and Intersection Configurations

Various configurations and arrangements of lanes along Ashford Dunwoody Rd and at key intersections were considered. Given the constrained right-of-way, presence of utilities, and goals of balancing operations and safety for all users and minimizing impacts to adjacent properties, recommendations focus on operational improvements at key intersections rather than reconfiguring the roadway to improve capacity. Narrowing lanes can provide multiple benefits, including helping to reduce vehicle speed, reducing crossing distance for pedestrians and time the pedestrians are exposed to vehicular traffic. Narrowing lanes can also provide space for other uses such as wider sidewalks, enhanced buffers, and bicycle facilities within the right-of-way. Providing dedicated turn lanes and channelizing turning movements can help communicate intended movements by vehicles and improve safety for motorists and pedestrians. Additionally, separating turning movements into dedicated turn lanes helps to improve safety by reducing potential for rear-end type crashes especially in congested traffic conditions.

As an alternative to conventional intersection treatments, roundabouts were considered at some intersections along the Ashford Dunwoody Rd corridor. Roundabouts are a type of intersection characterized by a generally circular shape, yield control for vehicles entering the intersection, and geometric features that create a low-speed environment. Research shows significant safety improvements at intersections that are converted from conventional design to roundabouts, including reductions in crashes and severity of crashes, as well as reduced vehicle speeds. The physical shape reduces the total number of potential conflict points, from 32 in a conventional intersection to eight (8) at a roundabout, as shown in Figure 24. Previous studies along the corridor have examined the possibility of a roundabout at the intersection of Johnson Ferry Rd and Ashford Dunwoody Rd. The study team reviewed those studies and reconsidered a roundabout at this location; however, it was quickly determined that the impacts to the surrounding area would be too great given the size that would be needed to accommodate the volume of traffic at the intersection and configuration of existing businesses, proximity to Blackburn Park, etc.

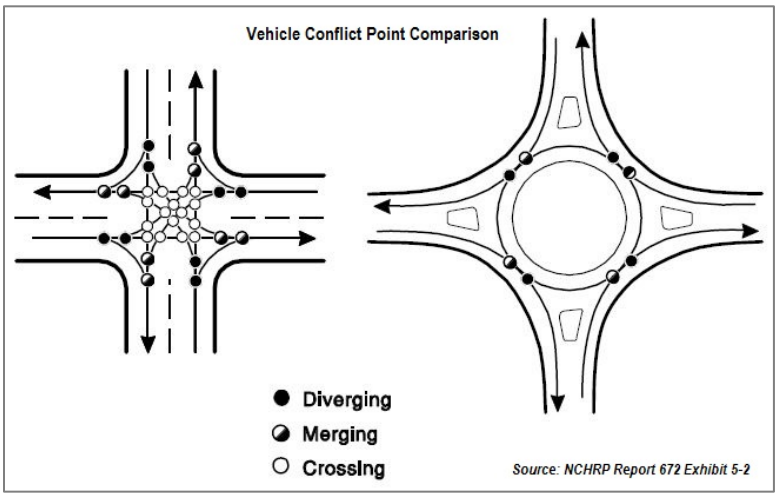


FIGURE 24. DIAGRAM ILLUSTRATING POTENTIAL CONFLICT POINTS IN CONVENTIONAL AND ROUNDABOUT INTERSECTIONS
(SOURCE: NCHRP REPORT 672, EXHIBIT 5-2, VIA FHWA)

4.3 ENVIRONMENTAL SCAN

To help the study team understand potential environmental impacts along the corridor and at the seven key intersections, a high-level environmental screening was conducted. The screening was conducted to help identify potential environmental considerations, such as risks from environmental hazards or contamination, risks to protected species, and special ecological habitats or resources. Below are the findings of this environmental screening. Where potential risks are identified, it does not mean that a risk has been found or confirmed, but rather that in the future, as design and implementation of projects advances, consideration should be given to potential risks and additional research may be needed to confirm possible risks and identify other potential resources.

Corridor-Wide

The Ashford Dunwoody Rd corridor is a marginal habitat for Michaux's sumac (*Rhus michauxii*), which is a federal endangered shrub species. The presence of this species is only a risk to future projects if federal action is required or if state funding is sought. The corridor is also a potential habitat for the bay star vine (*Schisandra glabra*), a threatened vine species according to the State of Georgia. The potential presence of the bay star vine may be a risk if state or federal funding is sought for future projects. Future projects should consider and avoid any potential impacts to these species and identify potential measures to mitigate any potential impacts.

Peachtree Road (SR 141)

One potential risk was identified in the vicinity of the Peachtree Rd (SR 141) intersection. The professional cleaners located in the northwest corner may be a potential hazardous waste site, as is sometimes the case with professional dry cleaners. Hazardous waste has not been confirmed as present in the area; however, future projects may need to consider this possibility and take appropriate measures to confirm and mitigate as needed. While not listed as an historic site by the State of Georgia (Georgia's Natural, Archaeological, and Historic Resources Geographic Information System) or the U.S. Department of the Interior's National Register of Historic Places, the golf course may become eligible for designation as an historic place in the future.

Windsor Parkway

No potential risks were identified in the vicinity of the intersection of Windsor Pkwy and Ashford Dunwoody Rd; however, the green for the first hole of the Peachtree Golf Club is adjacent to this intersection and needs to be taken into consideration during the detail design phase of the intersection design project.

Johnson Ferry Road

Several commercial businesses are located in the vicinity of the Johnson Ferry Rd intersection with Ashford Dunwoody Rd. A potential risk of hazardous waste was identified at three locations, including the CVS Pharmacy, the professional cleaners, and the two gas stations. No determination of risk has been made; however, future projects may need to consider the possible presence of hazardous waste in the area.

Harts Mill Road / Marist School

This area is located within close proximity to Nancy Creek, and the east side of Ashford Dunwoody Rd lies within a designated AE flood zone. This means the area is subject to inundation by the one-percent-annual chance flood event, as determined by the Federal Emergency Management Agency (FEMA). The area may also be home to wetlands along the creek and there is a potential intermittent stream to the east of Ashford Dunwoody Rd passing under Harts Mill Rd. It is unlikely that any roadway projects in this area would affect these environmental resources, due to the elevation of the roadway; however, future projects should consider these potential risks.

West Nancy Creek Drive

Similar to the Harts Mill Rd area, the intersection at West Nancy Creek Dr is in close proximity to a designated AE flood zone and regulatory floodway (located to the south of West Nancy Creek Dr). There is a perennial stream, Nancy Creek, in this area as well. It flows south of West Nancy Creek Dr and crosses under Ashford Dunwoody Rd. Future projects should consider these potential risks and identify measures to avoid or mitigate any potential impacts.

Montgomery Elementary School / Chaucer Lane

No potential risks were identified in the vicinity of Montgomery Elementary School, although it should be noted that the topography of the land on which the school is located and immediately surrounding the school is extremely varied. There are steep slopes on the school property itself, to the rear of the building.

Perimeter Summit Parkway/Oak Forest Drive

No potential risks were identified in the vicinity of the intersection of Perimeter Summit Pkwy/Oak Forest Dr.

5. PUBLIC INVOLVEMENT

5.1 OVERVIEW

From the outset of the planning process, the City of Brookhaven has demonstrated a strong commitment to public and community stakeholder outreach and engagement. This section summarizes the key activities and results of the community engagement activities as part of the *Ashford Dunwoody Road Corridor Study*, including two public stakeholder meetings, a community workshop, and a public open house.

The City of Brookhaven invited representatives from a variety of local groups and organizations, such as schools and neighborhood associations, as well as area residents to participate in a Corridor Advisory Committee (CAC) to help guide the study and serve in an advisory role as a sounding board for the study team. Representatives were selected by the City. The group met periodically throughout the course of the study to provide input, discuss feedback from the community, and share insights. The group also helped spread the word about public engagement activities. People who were invited to participate on the Corridor Advisory Committee include:

- Tiffany Bok (resident, Cambridge Park; parent of student at Montgomery Elementary School)
- Greg Blassingame (resident, West Nancy Creek; Concord Fire Soccer)
- Alan Cole (resident, Oak Forest)
- Nancy Elliott (Seven Oaks Management/Perimeter Summit)
- Dr. James Hamner (Headmaster, St. Martin's Episcopal School)
- Father John Harhager, S.M. (President, Marist School)
- Jennifer Harper, P.E., (Chief of Programs and Operations, Perimeter Community Improvement Districts; Brookhaven resident)
- John Krueger (Brookhaven resident; retired traffic engineer)
- Cody Partin (resident, Hampton Hall; employee, Cox Inc.)
- Mary Storm (resident, Bubbling Creek)
- Christine Taylor (resident, Ashford Dunwoody Rd)

Committee meetings were held at Marist School. Table 12 shows the dates of committee meetings and topics discussed. A brief summary of each meeting is provided below.

TABLE 12. ADVISORY COMMITTEE MEETING DATES AND TOPICS

Meeting Date	Discussion Topics
February 17, 2016	• Project overview and purpose • Corridor issues • Tentative schedule and activities • Findings from Comprehensive Transportation Plan • Draft vision statement and goals • Issue identification mapping activity • Planning for public stakeholder meetings in March
May 23, 2016	• Feedback and input from public stakeholder meetings • Confirm vision statement • Update on project schedule and technical analysis • Planning for public workshop in September
October 3, 2016	• Feedback and input from public workshop • Traffic analysis • Potential streetscape elements • Planning for public open house

5.1.1 MEETING SUMMARIES

February 2016 Meeting

The meeting began with an overview of the study, which was initiated from a recommendation in the City's Comprehensive Transportation Plan (CTP). The group reviewed some of the known issues along Ashford Dunwoody Rd and findings from the CTP. The project manager then discussed the activities involved in the study and the anticipated timeline. Following that, the group had a general discussion about issues and opportunities along the corridor, ranging from traffic volumes to school traffic, vehicle speed, neighborhood cut-through traffic, the need to look at turn lanes and signal timing, and considerations for bicycle and pedestrian activity along the corridor.

FIGURE 25. ATTENDEES AT FEBRUARY 2016 CAC MEETING

Having identified many issues and opportunities, the group discussed elements that could be incorporated into the overall vision for the corridor. Attendees were asked to write down key words or phrases that represent their vision for the future of the corridor and how it could be improved to meet the study's key goal of accommodating all modes of transportation. Responses generally fell into several categories, as shown in the table below.

TABLE 13. VISION ELEMENTS DISCUSSED DURING CAC MEETING

Accessibility	Aesthetics	Operations	Safety	Other
• Bikeable • Walkable • Trail Connection • Commuter Friendly • School Accessible	• Landscaping • Visually appealing • Context sensitive • Street furniture	• Turn lanes • 3-4 lanes • Widen lanes • Free flowing • Turn lane improvements • 35 MPH	• Safe • Speed reduction • Safe for pedestrians and cyclists • No neighborhood cut-throughs	• Partner with property owners • Visible to community

Following the discussion, the team facilitated an exercise to identify issues and areas of need, by thinking about areas to preserve, enhance, or transform. Using a map, stickers, and markers, the group identified issues along the corridor and called out important features, conditions, and areas to look at more closely over the course of the study. Issues identified included at Peachtree Rd (SR 141), Perimeter Summit Blvd (signed Pkwy), school traffic at Montgomery Elementary School, cut-through traffic on West Nancy Creek Dr and along Harts Mill Rd, Donaldson Dr, Blair Circle, Waddeston Way, and others. Other opportunities for improvement included the pedestrian crossings not located at signals, such as at Publix; afternoon congestion around St. Martin's School; extending right turn lanes; and reducing peak-hour congestion in the north end of the corridor.

FIGURE 26. CAC MEETING ATTENDEES IDENTIFYING ISSUES AND OPPORTUNITIES ALONG THE CORRIDOR (FEBRUARY 2016)

May 2016 Meeting

Following a round of introductions, the group reviewed the input received during the two public stakeholder meetings held in March of 2016. In total, the team received more than 680 "pieces" of input in the form of written comments on comment cards, responses to the corridor vision activity, comments on the mapping exercise, and included in the issues questionnaire.

In sum, there are mixed opinions about many of the concerns and issues along Ashford Dunwoody Rd. Some of the most common concern include: traffic congestion, lack of turn lanes, the importance of preserving residential neighborhoods, the prevalence of neighborhood cut-through traffic, speeding traffic, the desire to be able to safely turn onto and off of Ashford Dunwoody Rd, school traffic, the lack of pedestrian facilities in some areas, and the overall volume, congestion, and confusing lane configurations at the intersection around Ashford Dunwoody Rd and Johnson Ferry Rd.

Developing a Corridor Vision

The group reviewed comments received during the public stakeholder meetings related to the corridor in order to formulate the corridor vision. The comments echoed the following themes:

- People are primarily interested in seeing Ashford Dunwoody Rd have efficient flow of traffic and reduced congestion.
- It is important to preserve the residential neighborhoods along the corridor – there are many users and many different uses – but there is an overall sense that the roadway is more residential than anything else.
- Vehicle speed should be reduced on Ashford Dunwoody Rd,
- Citizens would like improved bicycle access via separated paths or trails.
- Turning movement improvements are needed along the corridor.
- In the future, Ashford Dunwoody Rd should provide better access to public transportation as a way to reduce congestion along the corridor.
- The corridor should have more efficient flow of traffic with better synchronized traffic signals.
- The corridor should be "green" and safe for people walking, and should include continuous sidewalks and improved crossings.

Importance of Issues and Input from Mapping Activity

The team reported on the results of an activity to indicate the relative importance of key issues. Responses to this activity identified several issues rated as "important" or "very important:"

- Traffic signal timing;
- Pedestrian safety;
- Congestion along Ashford Dunwoody Rd;
- Congestion at intersections;
- Street crossings; and
- Impact on adjacent neighborhoods.

Next, the group reviewed comments made by attendees on maps that depicted three segments of the corridor. The CAC engaged in lively discussion about the various comments, adding to and expanding upon the input received during the stakeholder meetings. It was noted that a lot of traffic on Johnson Ferry Rd uses the Publix parking lot as a cut-through and that people also make illegal U-turns into the Publix parking lot. The group discussed the need for more east-west connectors to alleviate traffic on the north-south corridors. Discussion then turned to cut-through traffic in residential neighborhoods, including Hampton Hall, Cambridge Park, and on Epping Forest and Stratfield Dr. It was noted that these comments were commonly heard during the stakeholder meetings and that residents report speeding vehicles that regularly ignore speed bumps and stop signs. More police enforcement was suggested.

The comments during the stakeholder meetings identified the intersection of Ashford Dunwoody Rd at Johnson Ferry Rd as the main issue or the biggest problem "hot spot" along the corridor. Concerns noted

included the lane configurations, confusing lane assignments, traffic signal synchronization, and turning radii. The comments acknowledged that improvements have been made, but that there is still room to do more.

The group then discussed the importance of recognizing the role that Ashford Dunwoody Rd plays in the broader context – it serves local uses (schools, neighborhoods), but is also an access road to I-285 and other major Metro Atlanta roadways. It was noted that the CAC and project team should consider these various uses and users during the study. It was discussed that other area projects, such as the reconstruction of the interchange at I-285 and GA 400 will have some impact on the area overall, but is not likely to directly affect Ashford Dunwoody Rd beyond the construction phase.

Finally, the group revisited the overall vision for the corridor and suggested minor changes to the draft that was presented. The group concurred on the following vision statement:

> *"Ashford Dunwoody Road, in the City of Brookhaven, GA should be a safe, efficient, inviting, and convenient multi-modal corridor that provides all users with access to a variety of destinations in a harmonious, cost-effective manner that enable neighborhoods and businesses to thrive. People are able to move safely and efficiently along, through, and within the corridor to connect with neighborhoods, workplaces, institutions, and activity centers on foot, bike, car, bus or other mode in a way that preserves and enhances surrounding neighborhoods, green space, and the community in general."*

The meeting concluded with an overview of the upcoming technical analysis and traffic study, and project team informed that CAC that traffic counts had been obtained for areas along the corridor and at key intersections. The CAC suggested dates, times, venues, and format for the upcoming community workshop in September2016.

October 2016 Meeting

After introductions, the group discussed the input received during the Community Workshop held on September 12, 2016, including the number of attendees (more than 100), the number of comments received, and the online component that allowed people to provide input even if they were not able to attend the workshop in person, as described in Section 5.5. At the time materials for the CAC meeting were prepared (9/25/16), 240 people had participated in the online workshop. The team reminded the group that the opportunity for online comments would be available until Friday, October 7, 2016.

Based on the responses provided through September 25, 2016, it was determined that people generally supported the draft recommendations presented during the workshop. On average, 70% of participants indicated that they strongly or somewhat support potential recommended intersection improvements, and 60% of participants indicated they strongly or somewhat support potential recommended typical cross-sections. The group reviewed evaluations of each recommendation with graphs and charts (see Appendix E and Section 5.5), and the team provided an overview of comments made about each recommendation. The group discussed the evaluations and comments. Key discussion points included:

- People go out of their way to cut through Kadleston Way, Stratfield, Waddeston, Hampton Hall, often to travel to and from the hospital.

- Exact details, such as access would be worked out during design stages of future projects.
- Traffic signal timing continues to be reiterated as an issue. The project team noted that the City would work with PTOP managers to optimize signals as part of that program.
- Some congestion issues are primarily limited to two to four hours during the peak periods.
- It will be important to talk with Montgomery Elementary School and the District about their future plans for the building.
- Left turns into Cambridge Square should be prohibited in the evening peak hours, maybe from 4-7pm.
- Traffic calming is needed on Parkcrest Dr, which people use to avoid the signal at West Nancy Creek Dr.
- Transit is not currently planned for Ashford Dunwoody Road. MARTA recently completed its Comprehensive Operations Analysis, which includes an analysis of different models of service, including smaller shuttle-style vehicles, which may be worth considering in the future. There have been suggestions to consider expansions of public transportation as a way to give people more options for getting around Brookhaven.
- The nature of the study is a concept study. It is important to note that the details are not set in stone and will be worked out in the future as individual projects are advanced.

Next, the team presented some ideas for potential streetscape elements that may be incorporated into various projects as they move forward. It was noted that the team is in the process of identifying potential styles of street furniture, fixtures, etc. and will be developing recommendations for a color palette, materials, and types of amenities that the City can consider in the future. Following the discussion, the group discussed the schedule for the project and potential dates for a public open house to present revised draft recommendations.

Individual summaries of each CAC meeting are provided in Appendix E.

5.2 OUTREACH AND NOTIFICATION

Numerous initiatives were undertaken by the City of Brookhaven Communications Department to aid the Public Works Department and study team in community and media outreach for the Ashford Dunwoody Corridor Study. These efforts include creating a page on the City's website for the study and placing announcements about meetings online, including in email blasts and newsletters, on social media, and in local newspapers.

Through its online and social media platforms, the City reaches a broad audience that includes: 3,884 followers on Facebook; 3,145 email subscribers; 10,000 followers on NextDoor, and 2,699 followers on Twitter, as of November 2016.

Notices of public meetings for the study ran at least 18 times in the City email blasts, including in the issue dates March 15 and 18; May 19 and 20; August 9, 12, 19, and 26; September 2, 9, 21, 23, and 30; and Nov 3, 4, 10, and 18. These included announcements about the opportunity to participate in the online community workshop in September.

In addition, paid newspaper ads announcing upcoming community meetings were placed in several editions of the Brookhaven Reporter, which has a household circulation of 10,000. Ads were published on September 2, 2016, November 11 and November 25, 2016, as shown in 28. Several announcements and posts about the study were made across social media platforms, including posts and paid ads on Facebook, announcements on NextDoor, and announcements and updates on Twitter.

The City website has had a page dedicated to the study since it launched, with regular updates on meetings, presentations, etc.: http://www.brookhavenga.gov/city-departments/public-works/ashford-dunwoody-road-corridor-study.

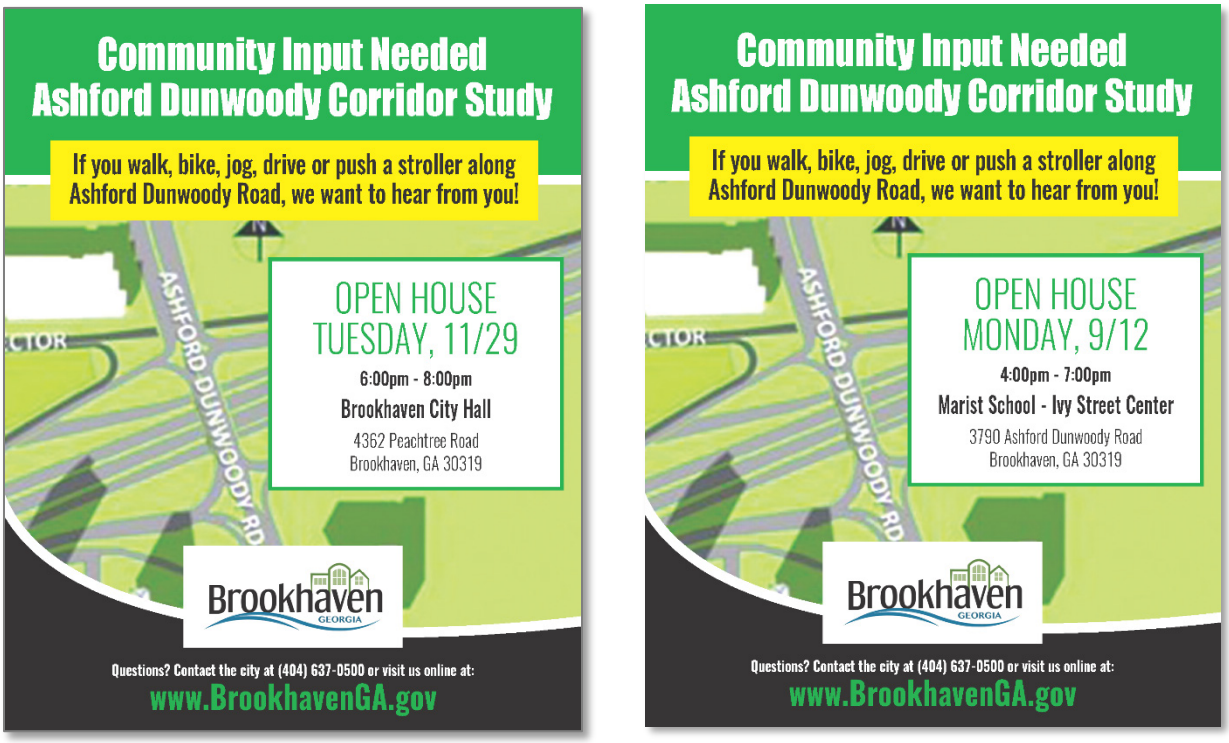


FIGURE 27. ADVERTISEMENTS PLACED IN THE BROOKHAVEN REPORTER ANNOUNCING COMMUNITY MEETINGS

Over the course of the study, several news stories were published to inform people on the study and help spread the word about public engagement activities. Below are links to news stories about the study.

- Public input needed for Ashford Dunwoody Corridor Study - Reporter Newspapers, March 14, 2016
- Brookhaven to hold meetings for Ashford Dunwoody Road study - Atlanta Journal Constitution, March 17, 2016
- Ashford Dunwoody solutions sought - Dunwoody Crier, March 22, 2016
- Mayor John Ernst's Traffic Town Hall – The Brookhaven Post via YouTube, May 26, 2016
- Brookhaven residents updated on city traffic studies at mayor's town hall - Reporter Newspapers, May 27, 2016
- Public meeting scheduled for input on busy Brookhaven corridor – Fox5 Atlanta, Aug. 31, 2016

- Save the Date! Ashford Dunwoody Corridor Study Open house November 29 - The Brookhaven Post, Nov. 8, 2016

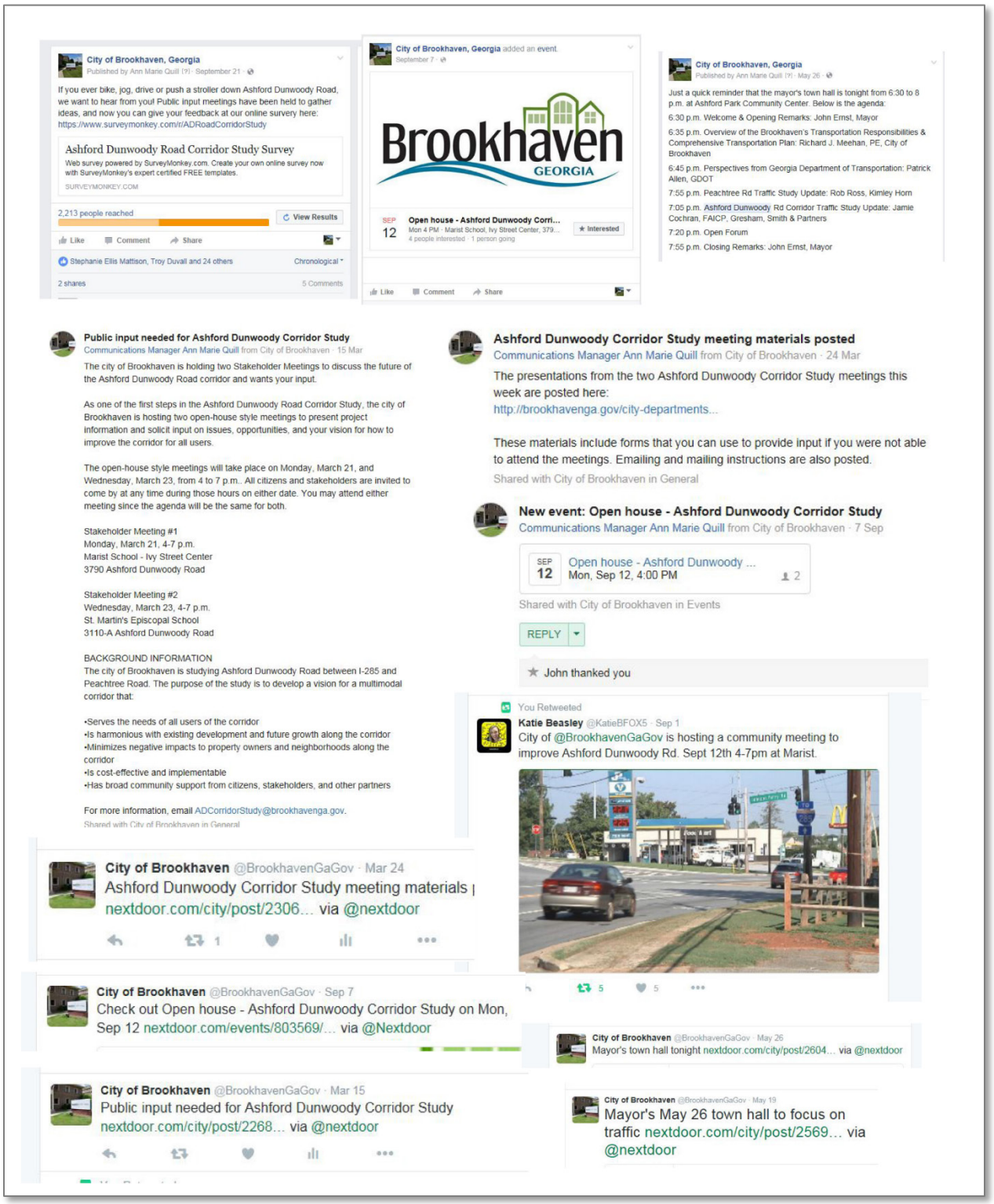


FIGURE 28. A COLLECTION OF THE CITY'S SOCIAL MEDIA OUTREACH REGARDING THE STUDY

In addition, the project team compiled a database of contact information for people who attended public meetings and who contacted the study team via phone or email. This information was used to notify people of study-related activities, such as upcoming meetings. Over the course of the study, the team interacted with more than 250 individuals, many of whom participated in multiple meetings and activities.

5.3 PUBLIC STAKEHOLDER MEETINGS

The study team organized two identical public stakeholder meetings to gather input about issues and identify opportunities to improve the corridor for all users. The meetings were held on March 21, 2016 at Marist School and on March 23, 2016 at St. Martin's Episcopal School. The meetings were open to residents, property owners, groups and organizations, and other stakeholders, and were attended by the project team (City of Brookhaven and project consultant) as well as CAC members. The meeting on March 21st was attended by 66 individuals, and the March 23rd meeting was attended by 62 individuals. Attendees included a range of residents and stakeholders including property owners, business owners, schools, Brookhaven City Council, PCIDs, Peachtree Golf Club, Ashford/Cowart YMCA, and the Ashford Lake Condominium Association.

Notification for the meetings were sent via a series of emails to the CAC and a list of stakeholders that was developed in conjunction with the City and CAC. The list of stakeholders also included individuals and organizations who participated in the City's Comprehensive Transportation Plan effort in 2014. Members of the CAC were encouraged to help spread the word in the community in order to ensure participation by a broad range of stakeholders. The meeting notifications were posted on the City of Brookhaven's website and calendar, and were shared on social media via the CAC and interested citizens. Notifications were also mailed to owners of more than 100 parcels along the study, and flyers were distributed to local businesses and activity centers, including shops, and restaurants. Articles and announcements also appeared in local news publications, including the Atlanta Journal-Constitution, Brookhaven Post, Reporter Newspapers, and Dunwoody Crier.

FIGURE 29. ATTENDEES AT THE MARCH 21, 2016 MEETING AT MARIST SCHOOL

In total, the project team received 188 sets of comments through questionnaires, comment cards, and mailed or emailed comments. In total, the team received nearly 250 responses for the visioning activity and more than 230 comments on maps. The following table presents a breakdown of the meeting results.

TABLE 14. NUMBER OF PARTICIPANTS AND COMMENTS AT PUBLIC STAKEHOLDER MEETINGS

March 21, 2016	March 23, 2016	Mail and Email Comments (received after meetings)
Marist School	St. Martin's Episcopal School	
66 attendees	62 attendees	16 sets of comments
44 comment cards	34 comment cards	2 comment cards
51 completed questionnaires	39 completed questionnaires	2 completed questionnaires

5.3.1 SUMMARY OF INPUT

At each meeting, a brief presentation was given repeatedly, on a loop, so that each attendee received an overview of the study as they arrived. Three main activities were conducted as part of the meetings: (1) contributing to an overall vision for the corridor; (2) identifying and confirming needs and issues along the corridor; and (3) a mapping activity to identify location-specific concerns and opportunities.

Visioning Activity

More than 250 individual comments were submitted in response to the visioning activity. Comments ranged from the general to the very specific, including descriptions of the type of corridor people would like to experience (safe, quiet, efficient, etc.) to suggestions for improvements to segments of Ashford Dunwoody Rd (more or longer turn lanes, improved sidewalks, reduced speed, etc.). Common themes among the vision elements included:

FIGURE 30. VISIONING ACTIVITY DURING THE MARCH 23, 2016 MEETING AT ST. MARTIN IN THE FIELDS EPISCOPAL CHURCH AND SCHOOL

- Improved bicycle access through the corridor via trails or protected paths;
- Improved turning movements throughout the corridor;
- Efficient flow of traffic and reduced congestion throughout the corridor;
- Preserved residential neighborhoods along and adjacent to the corridor;
- Increased public transportation service to help reduce traffic congestion;
- Improved traffic patterns at schools to reduce congestion on Ashford Dunwoody Rd;
- Better coordinated or synchronized traffic signals to improve flow of traffic;

- Reduced vehicle speed;
- Maintained or enhanced greenery (keep trees and green space); and
- Improved safety for people walking through continuous sidewalks and improved crossings.

Some people chose to direct their vision towards specific locations or intersections along the corridor. Vision elements corresponding to specific locations were generally as follows:

- Enhanced operations and efficiency at the intersection of Ashford Dunwoody Rd and Johnson Ferry Rd through improved signal timing and lane configuration or traffic patterns;
- Improved lane configuration at Perimeter Summit Pkwy to reduce congestion and merge issues;
- Longer turn lanes at Peachtree Rd and Ashford Dunwoody Rd;
- Address congestion and traffic patterns at West Nancy Creek Dr; and
- Improved management of traffic at Windsor Pkwy and Ashford Dunwoody Rd.

Identifying and Confirming Issues

Following the visioning activity, attendees were asked to complete a one-page questionnaire to help identify and confirm issues along the study corridor. Participants rated a list of potential issues on a scale of one (1) to five (5), in which one (1) represented "Not at all Important" and five (5) represented "Extremely Important."

In total, 92 worksheets were completed, including several that were mailed to the project team following the stakeholder meetings. The results of the issue identification questionnaire revealed that residents and stakeholders are more concerned with pedestrian safety, signal timing, and congestion than they are with bicycle safety, cut-through traffic, and special event traffic. All issues received a score higher than 3.0 (neutral). About half of the issues were rated between 3.0 and 4.0, somewhere between "neutral" and "important." The other half were rated between 4.0 and 5.0, between "important" and "extremely important." Figure 31 shows the results of this issue identification activity.

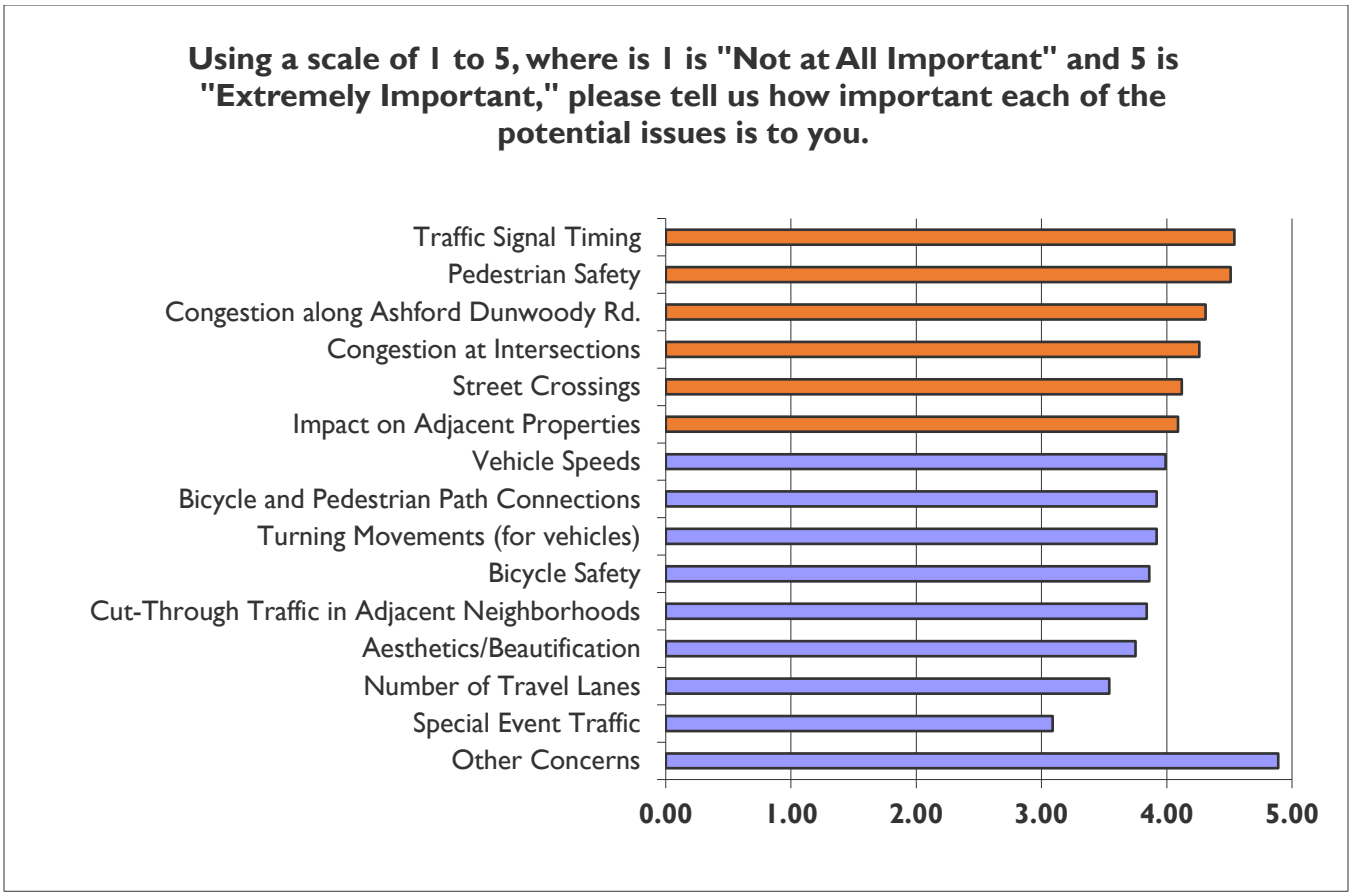


FIGURE 31. RESULTS OF ISSUE IDENTIFICATION QUESTIONNAIRE FROM MARCH 21 AND MARCH 23 MEETINGS

Overall, pedestrian safety and traffic signal timing were rated highest and received a score of 4.53. Special event traffic was the lowest rated potential issue. It received a score of 3.14. Participants also had the option of writing in their own issues and rating them as well. These "other" issues received the overall highest score, 4.89, in part because this option allowed people to comment upon the issues most concerning to them. The issues described in the "other" category were wide-ranging and are summarized below.

- Volume of traffic on West Nancy Creek Dr.
- Drivers run yellow and red lights and the need for turning lanes at West Nancy Creek intersection
- Pedestrian safety and inconsistent sidewalks; desire for more continuous sidewalks and safer crossings.
- Cut-through traffic on Harts Mill Rd and Bubbling Creek Rd, as well as in the Hampton Hall and Cambridge Park neighborhoods.
- More lanes will bring more congestion.
- I-285 is a disaster; people use Ashford Dunwoody as an alternate.
- Separate bicycle facilities.
- Better synchronized or better timed traffic signals.
- There are excessive speeds on Ashford Dunwoody Rd, especially in school zones.
    - If changes are made, speed limit should be lowered, not increased. Something should be done about traffic speed along Ashford Dunwoody Rd.

- Traffic patterns and volumes at intersection of Johnson Ferry Rd and Ashford Dunwoody Rd, including Donaldson Dr.
- Limited sight distance when turning from Windsor Pkwy onto Ashford Dunwoody Rd, and lack of visibility around the curves near Brookhaven Trace, Stratfield Dr, and Kadleston Way.
- Support for additional bus or shuttle service to help alleviate congestion.
- Eliminate left-turns into/out of Cambridge Square, at least during rush hours.
- Mixed opinions regarding widening Ashford Dunwoody Rd in some areas; concern that more lanes or a wider road will only invite more traffic and congestion.
- School drop-off and pick-up traffic; suggestions to consider additional buses or shuttles for off-site school pick-up and drop-off.
- Need more traffic calming (speed bumps) in Cambridge Park and Hampton Hall.
- Support for turning options into subdivisions and more or longer turn lanes in some locations.
- Support for more police enforcement of traffic regulations, including speed limit and stopping for pedestrians in crosswalks.
- Support for preserving the character of the area.
- Need to coordinate with nearby cities to manage traffic and development and consider limiting development to minimize future traffic volume increases.

Although it is outside of the study area for this study, several people mentioned the need to address Johnson Ferry Rd traffic conditions east of the study area. It was suggested to consider extending Johnson Ferry Rd across Peachtree Industrial Blvd to Peachtree Rd to help alleviate other area roads.

Mapping Activity and Other Comments

To help identify location specific concerns and opportunities, the team divided the Ashford Dunwoody Rd corridor into three segments and printed a large map of each segment for attendees to write on at each meeting (six maps total). In addition, comments cards were available for attendees to write additional comments and ideas. The team reviewed, categorized, and summarized all comments received from during the public stakeholder meetings and in the days following. Comments were grouped based on the nature of the comment or the part of the corridor they addressed, as well as by topic of subject. A synopsis of comments is provided below.

Bicycle and Pedestrian Facilities

Attendees commented on the lack of continuous and often narrow sidewalks and a desire for safer pedestrian crossings across various sections of Ashford Dunwoody Rd. Flashing lights and better enforcement were suggested. People also commented on the need for more continuous and connected bike facilities. Comments indicate a preference for off-road or protected bicycle facilities, acknowledging that the roadway may be dangerous for cyclists given the hills and curves. Some comments opposed any bicycle facilities.

Transit Services

Several comments identified the lack of bus or shuttle service in the area and suggested that additional bus or shuttle service may help to alleviate congestion by giving people options other than their cars. It was

suggested that service should connect to existing rail stations and provide service to regional destinations, such as Perimeter Mall.

School Traffic

Attendees expressed strong opinions on school traffic, or traffic generated by parents and buses dropping off and picking up students at the beginning and end of the day. Suggestions for how to address this issue ranged from off-site parking or pick-up/drop-off to additional lanes or rerouting vehicles.

Turn Lanes/Turning Movements

The lack of turn lanes in key locations and a desire for improvements to allow more or better turns onto and off of Ashford Dunwoody Rd were common concerns among participants. More than 100 comments mentioned turn lanes in some form. Many comments called for turn lanes to be added on Ashford Dunwoody Rd at key intersections or on certain side streets to improve access to/from Ashford Dunwoody Rd. A few attendees expressed support for a center turn lane in some areas (particularly into subdivisions), while others opposed such a lane. A longer turn lane was suggested on southbound Ashford Dunwoody Rd approaching Peachtree Rd (SR 141) and it was also suggested to lengthen the left-most turn lane on Ashford Dunwoody Rd northbound at Johnson Ferry Rd to allow more cars to get through the green light.

Traffic Signals

Cited by many attendees as one of the top issues, the coordination and timing of traffic signals was a common subject of comments. Attendees expressed a desire to better synchronize or better program traffic signals at intersections to allow for more efficient flow of traffic throughout the corridor. Several comments made reference to "smart" signals that are more responsive to traffic volumes or increasing the length of green signals at key intersections during peak hours. A few people commented about the length of green signals during non-peak hours, indicating that drivers have to sit and wait when there is little or no cross traffic.

FIGURE 32. ATTENDEES AT THE MARCH 23, 2016 MEETING AT ST. MARTIN IN THE FIELDS CHURCH AND SCHOOL

Vehicle Speeds

Many participants commented on the high speeds at which drivers travel when the road is not congested. In fact, 74 individual comments mentioned vehicle speeds. This was a concern throughout the corridor, but particularly in and near school zones and in the southern portion of the corridor where the speed limit is

now 40 miles per hour. Several people expressed support for a reduction in the posted speed limit, while others suggested more enforcement. Increasing the length of school speed zones was also suggested. Speeding is also a concern on nearby side streets where drivers cut through neighborhoods to avoid congestion on Ashford Dunwoody Rd. Bubbling Creek Rd, Harts Mill Rd, West Nancy Creek Dr, and Kadleston Way were specifically identified, among others.

Roadway Width

Comments were made both in favor or and in opposition to widening the road. Arguments in favor of widening touched upon capacity to handle current and future volumes and the need to get around turning vehicles. Attendees who oppose widening the road generally argue that a wider road will bring more traffic and congestion, as well as disruptions to the residential communities on and adjacent to the corridor.

Comments about Specific Intersections

Some intersections were mentioned more frequently than others. Below is a summary of comments at the most commonly discussed intersections with Ashford Dunwoody Rd. Note that the Johnson Ferry Rd and Ashford Dunwoody Rd intersection is covered in the segment comments in the following section.

- **Peachtree Road**
  - The angle of the right turn from Peachtree Rd to Ashford Dunwoody Rd is narrow and trucks regularly drive on the curb in the northeast corner of the intersection.
  - Visibility is limited due to hedges and overhanging vegetation.
  - It was suggested that the southbound lanes be reconfigured to accommodate more vehicles, particularly those turning right.
  - It was suggested to look at the possibility of creating a protected right-turn lane that allows vehicles to continually turn right without having to stop for southbound traffic on Peachtree Rd.
- **Windsor Parkway**
  - Turning from Windsor Pkwy onto Ashford Dunwoody Rd is difficult due to limited sight distance.
  - Suggestions were made to consider the possibility of some type of traffic signal or other mechanism to allow vehicles to turn onto Ashford Dunwoody Rd more easily, including several suggestions for a roundabout.
- **Brookhaven Trace**
  - Visibility is limited in this area (including from side streets north and south of Brookhaven Trace) due to the curvilinear nature of Ashford Dunwoody Rd in this area.
- **Kadleston Way**
  - It is confusing and difficult for pedestrians to cross this intersection and visibility is limited.
  - There was support offered for studying the feasibility of a pedestrian-operated crossing (like the one at the YMCA) at this intersection.
  - Better enforcement was requested.
  - It was suggested to time the lights to allow more vehicles to get through the intersection after church dismisses on Sundays and in the mornings between 8:00 AM and 9:00 AM.

- **Donaldson Drive**
  - Better lighting is needed.
  - Safer pedestrian crossings should be provided.
  - It is difficult to turn onto Johnson Ferry Rd from Donaldson Dr due to backed up traffic.
- **Cambridge Square/Woods Drive**
  - It was suggested that left-turns into and out of Cambridge Square (and perhaps Woods Dr) should be eliminated, especially during rush hours.
  - The "Stop Here for Pedestrians" sign blocks the flashing pedestrian crosswalk signal.
  - Drivers regularly cut into adjacent lanes at the last minute because of congestion at Ashford Dunwoody Rd and Johnson Ferry Rd.
  - It was suggested that a study should look into an additional road just to the north of Cambridge Square.
- **Harts Mill Road**
  - The crosswalk does not function as it should. Drivers do not stop for pedestrians.
  - Comments were made about the length and timing of the signal, particularly the low number of vehicles that are able to turn left onto Harts Mill Rd (southbound) during evening peak periods.
  - Some comments indicate a longer turn lane is needed on Harts Mill Rd.
- **West Nancy Creek Drive**
  - Some comments described the need to consider turn lanes or turn signals on West Nancy Creek Dr (eastbound and westbound). Some comments opposed center or turn lanes on West Nancy Creek Dr, citing concerns about inviting or encouraging additional traffic and impact on property values.
  - It was suggested that right turn lanes are needed on Ashford Dunwoody Rd (northbound and southbound) at West Nancy Creek Dr. (Note: Left turn lanes are present on Ashford Dunwoody Rd at West Nancy Creek Dr)
  - Some comments suggested something should be done about the timing of the traffic signal. It was suggested to look at the length of the green signal for West Nancy Creek Dr and consider extending it to allow more vehicles to get through each cycle.
  - Concerns were expressed about speeding vehicles on West Nancy Creek Dr.
  - Drivers reportedly run yellow and red lights at this intersection. One car was reported to veer around the vehicle in front of it (which had stopped at the light) and raced through the red light.
  - It can be difficult to tell when a vehicle is going to turn left from West Nancy Creek Dr onto Ashford Dunwoody Rd.
- **Perimeter Summit Parkway/Oak Forest Drive**
  - An outbound turn lane is needed from Oak Forest Dr for vehicles turning north onto Ashford Dunwoody Rd.
  - More left turn storage is needed on Ashford Dunwoody Rd.
  - The lane that becomes right-turn only (southbound) catches people off-guard and people end up cutting in to the through-lane, cutting off drivers.

Segment Comments

For the purposes of sorting and tracking comments, the team divided the corridor into three segments. The southern segment covers the area from Peachtree Rd to just south of Johnson Ferry Rd; the middle segment covers the area just south and just north of the intersection at Johnson Ferry Rd and Ashford Dunwoody Rd; and the northern segment covers the area from just north of Johnson Ferry Rd to the City limits near I-285. Below is a brief summary of comments for each segment.

- **Peachtree Road to South of Johnson Ferry Road**
  - Concerns were expressed about the speed at which vehicles travel in this segment. Drivers travel too fast through this area when it is not congested.
  - More enforcement of speed limits was suggested.
  - An observation was made that there are fewer pedestrians in this segment than in other areas of the corridor.
  - Bicycle access should connect Ashford Dunwoody Rd to Johnson Ferry Rd via a separate path north of Peachtree Golf Club rather than through the intersection.
  - The road should remain two lanes through this segment.
  - Ashford Dunwoody Rd should be widened in this area.
  - Police officers should help direct traffic at St. Martin's Episcopal School during drop-off and pick-up times. It was also stated that the school zone signs are confusing near St. Martin's.
  - The curved road between Kadleston Way and Windsor Pkwy results in limited visibility, high vehicle speeds, and the need for turn lanes into subdivisions.
  - This area is mostly residential in nature.
- **Around Johnson Ferry Road**
  - Johnson Ferry Rd should be extended across Peachtree Industrial Blvd to Peachtree Rd to take pressure off of Ashford Dunwoody Rd and perhaps alleviate traffic on West Nancy Creek Dr.
  - Identifying a way to move vehicles through this intersection was one of the most common concerns or desires. General comments about the need to "transform" or "overhaul" the intersection were made, along with a half-dozen suggestions to consider a roundabout or using a portion of adjacent properties, especially in the south part of the intersection, to improve traffic patterns.
  - Comments expressed concern about motorists who cut into lanes at the last minute (especially on Ashford Dunwoody Rd northbound and southbound) or who block driveways and intersecting roads.
  - It was suggested that better police enforcement may help address some of the common issues.
  - Overhead lane assignment signs (telling drivers where their lane leads to) were suggested for Johnson Ferry Rd approaching Ashford Dunwoody Rd from the east (near Blair Circle and Donaldson Dr) and from the west.
  - Attendees commented on the insufficient length of turn lanes and the need for additional turn lanes, especially on northbound Ashford Dunwoody approaching Johnson Ferry Rd, and turning left from eastbound Johnson Ferry Rd to northbound Ashford Dunwoody Rd.

Suggestions were made to restripe or add another through-lane to draw traffic through eastbound on Johnson Ferry Rd toward Peachtree Industrial Blvd, to alleviate congestion on Ashford Dunwoody Rd, while still providing enough room for left-turn (northbound) traffic on Ashford Dunwoody Rd.
    - Some participants opposed additional lanes or roundabouts at this intersection.
    - Timing of the traffic signals was also a common concern. Suggestions were made to re-examine the timing of the signals and synchronize them to allow better flow of traffic through both ends of the intersection.
    - It was suggested to improve the right-turn radius from northbound Ashford Dunwoody Rd to eastbound Johnson Ferry Rd.
    - Curbs and gutters are not present throughout much of the intersection.
- **North of Johnson Ferry Road to City Limit/I-285**
    - Speeding was cited as an issue on Harts Mill Rd, as well as in the section of Ashford Dunwoody Rd between Perimeter Summit Pkwy and Johnson Ferry Rd.
    - There are many pedestrians in this segment of Ashford Dunwoody Rd, particularly from Marist School to Cambridge Square.
    - School traffic was mentioned by many participants, with specific comments addressing issues at both Marist School and Montgomery Elementary School.
    - The following was suggested for Marist School: (1) Consider buses or shuttles to off-site parking; (2) The traffic signal should be retimed to be more responsive to traffic volumes; and (3) Consider potentially widening the study road north of Marist School.
    - For the area near Montgomery Elementary School, it was suggested that a right-turn lane is needed into the driveway and that a study be done to see if carpool traffic can be rerouted behind the school in some way. It was also suggested that the traffic signal at Montgomery Elementary School be turned off during non-school hours.
    - Traffic congestion, especially southbound in the afternoons/evenings, was among the most common comments. Several suggestions were put forth for adding a two-way center left turn lane, widening Ashford Dunwoody Rd in this area, or to consider a reversible center lane to accommodate rush hour traffic. Some comments indicate strong opposition to any additional lanes or widening.
    - Cut-through traffic in the Bubbling Creek and West Nancy Creek neighborhoods was also a common concern. Residents of these areas are very concerned about the amount and speed of cut-through traffic and do not believe that speed bumps are or would be sufficient to address the issue.
    - Suggestions were also offered to reroute traffic from I-285 and the hospital in other ways to reduce congestion on Ashford Dunwoody Rd.
    - Clearer lane assignments and lane control were suggested for the area between Perimeter Summit Pkwy and I-285.

The full list of comments from the visioning activity, issue identification questionnaire, and mapping activity are provided in Appendix F.

5.4 MAYOR'S TOWN HALL

Mayor Ernst hosted a Town Hall dedicated to traffic and transportation issues on May 26, 2016 at the Ashford Park Community Center. The Town Hall was attended by more than 50 people. The Brookhaven Post posted a video recording of the session on YouTube, which had been viewed by 207 people, as of November 26, 2016. (The video is available online at https://www.youtube.com/watch?v=H_uHqtAyH1A). As part of the Town Hall, the study team was invited to give a briefing on the *Ashford Dunwoody Road Corridor Study*. The consultant project manager gave a brief presentation, including an overview of the study, a synopsis of the feedback received during the March 2016 public meetings, and made an announcement about the upcoming community workshop that would take place in September. Copies of the presentation were given as handouts, and following the meeting, a copy of the presentation was sent via email to attendees upon request.

5.5 COMMUNITY WORKSHOP

Working with the City of Brookhaven, the *Ashford Dunwoody Road Corridor Study* project team organized a Community Workshop to solicit input about potential recommendations for roadway configurations and potential bicycle and pedestrian facilities along the corridor. The Community Workshop took place from 4:00 to 7:00 PM on September 12, 2016 in the Ivy Street Center at Marist School, located at 3790 Ashford Dunwoody Rd. The workshop was conducted as an open-house so that interested community members could come by at any time during the three-hour window and stay as long as they like. This format provided an opportunity for attendees to view display boards at their own pace and to talk with other attendees or project team members as they roamed the room.

The City of Brookhaven led the outreach and notification effort, sending out citywide email blasts to subscribers and posting notifications on the City's website and via social media beginning more than a month prior to the workshop. Flyers were posted at City Hall and distributed at the Brookhaven Food Truck Roundup events. The City also sent out notification via email to the project-specific database comprised of people who had provided contact information during prior meetings or events and via email communication with the project team. At the time, the database contained more than 170 email addresses.

More than 100 people attended the Community Workshop.

Display boards were set up around the room for attendees to view at their own pace. Project team members were stationed around the room so that they could answer questions and help guide attendees as they viewed the display boards and filled out evaluation forms. The first board provided an overview of the project. Following that was a series of boards showing concepts for potential improvements at seven (7) key intersections along Ashford Dunwoody Rd, arranged from the south end of the corridor to the north:

FIGURE 33. ATTENDEES AT THE SEPTEMBER 12, 2016 COMMUNITY WORKSHOP

- Peachtree Rd
- Windsor Pkwy
- Harts Mill Rd / Marist School
- West Nancy Creek Dr
- Montgomery Elementary School (entrance opposite Chaucer Ln and exit)
- Perimeter Summit Pkwy / Oak Forest Dr

Next there was a series of display boards that showed conceptual illustrations of recommended typical cross-sections for six segments of the corridor. Typical cross-sections represent a standard or typical view of the area between intersections, and for this study, they focus on the area and elements within the public right-of-way, such as sidewalk, curb and gutter, travel lanes, and utility area. Information such as an estimate of the existing public right-of-way, an aerial reference image, conceptual illustration of lane assignments, bicycle facilities, pedestrian facilities, and the minimum amount of right-of-way anticipated to accommodate these features was provided. These boards were also arranged from the south end of the corridor to the north end:

- From Peachtree Rd to Windsor Pkwy;
- From Windsor Pkwy to Johnson Ferry Rd;
- Between the two intersections at Johnson Ferry Road;
- From Johnson Ferry Rd to West Nancy Creek Dr; and
- From West Nancy Creek Dr to Perimeter Summit Pkwy/Oak Forest Dr.

FIGURE 34. ATTENDEES TALK WITH THE CITY'S PROJECT MANAGER AT THE SEPTEMBER 2016 COMMUNITY WORKSHOP

After these boards, the team displayed three boards illustrating a variety of potential combinations of roadway configurations and bicycle/pedestrian facilities that the project team considered as possible options for each segment of the corridor.

Finally, a set of two display boards provided a synopsis of comments and input received during the two public stakeholder meetings held in March of 2016. One board included a summary of the types of comments that were received, including issues and ideas for the future vision of the corridor. Another board showed some images of the maps on which attendees wrote comments.

Following the workshop, materials were posted on the City's website (www.BrookhavenGa.gov) and the project team created an online survey to collect responses to the online materials. An option was also provided to mail paper copies of evaluation worksheets or comment cards to the project team. The online survey remained open from Wednesday September 14, 2016 through 5:00 PM on Friday October 7, 2016. The survey was promoted via the City's electronic newsletter, social media, and a banner on the City's homepage.

5.5.1 SUMMARY OF INPUT

In total, 480 people participated in the community workshop either in-person or online. More than 370 people participated online by viewing materials and filling out the electronic evaluations. In addition to individual residents or employees in the area, attendees represented various homeowners' associations, neighborhood groups, the PTOP, schools, PCIDs, biking and walking advocacy groups, Brookhaven City Council, Brookhaven City agencies, property owners, and property management groups.

During the workshop, the project team received a total of 62 completed evaluations of recommended typical cross-sections, 18 completed comment cards, and 77 completed evaluations of recommended improvements at key intersections. The online evaluation yielded 377 responses. The following section provides charts and tables summarizing the evaluation of each recommendation and a summary of common themes among the comments submitted. Copies of comment cards, evaluation sheets, and the online responses are provided in Appendix H.

Evaluation of Intersection Improvements

Overall, attendees and survey participants were supportive of most of the recommended improvements at key intersections along the corridor. At least 362 people responded to each intersection improvement idea, representing 67% of all participants. On average, nearly three-fourths (72%) of respondents indicated that they somewhat or strongly supported the recommended improvements. As a percentage of total participants, all but four recommendations were somewhat or strongly supported by more than half of participants. The proportion of respondents that strongly or somewhat supported recommended improvements at key intersections ranges from 48% to 91%. Among evaluations completed by in-person attendees, levels of support for intersection improvements were similar, ranging from 42% to 92%. ***Note: Results are based upon the number of people who chose to evaluate each recommendation; thus, the total number of responses varies by recommendation.*** Evaluation forms provided room for additional comments about the recommendations. These are summarized in the meeting summary provided in Appendix G.

<u>At Peachtree Road</u>

Respondents were generally supportive of recommended improvements at this intersection.

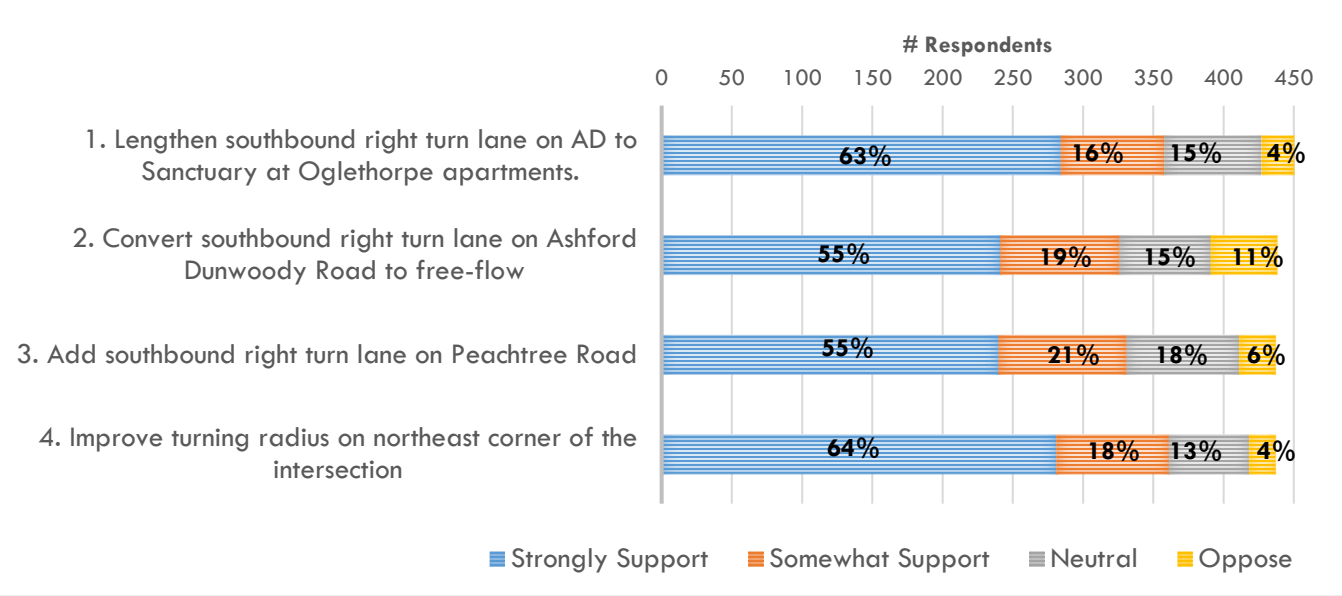


FIGURE 35. LEVELS OF SUPPORT FOR RECOMMENDED INTERSECTION IMPROVEMENTS AT PEACHTREE ROAD

At Windsor Parkway

Respondents were moderately supportive of recommended improvements to the intersection at Windsor Pkwy. More respondents were supportive of adding a northbound left turn lane at this intersection than other recommendations. Slightly fewer than half of respondents supported considering a roundabout at this intersection, although some in favor of this option cited the potential traffic calming effects in their comments.

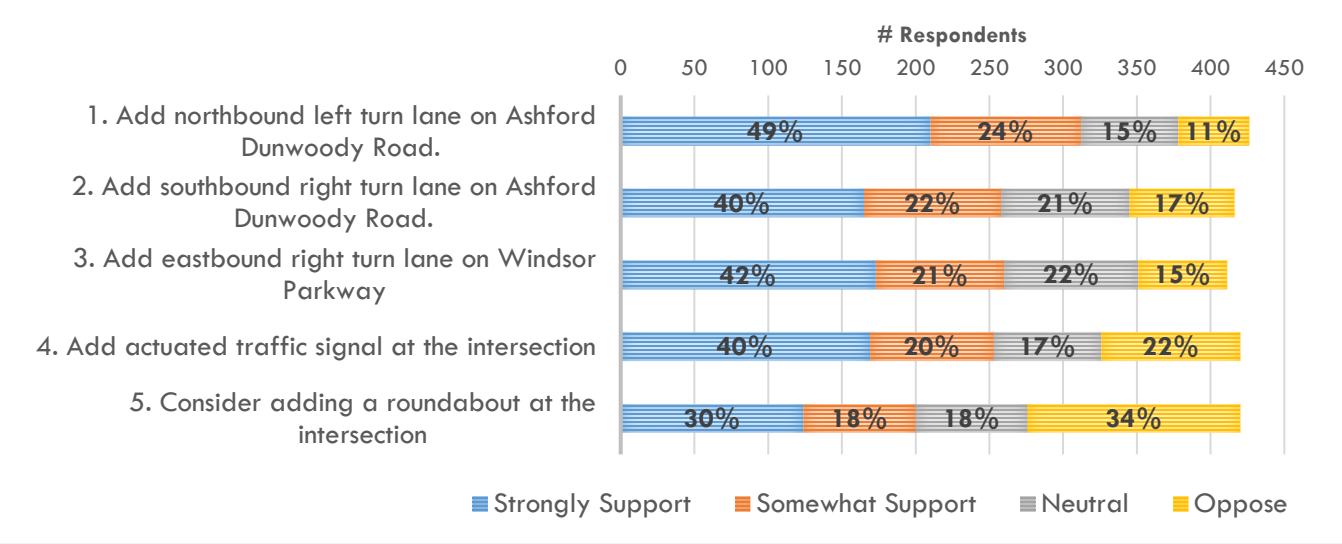


FIGURE 36. LEVELS OF SUPPORT FOR RECOMMENDED INTERSECTION IMPROVEMENTS AT WINDSOR PARKWAY

At Johnson Ferry Road

Most respondents were supportive of recommended improvements at the two intersections with Johnson Ferry Rd. Nearly three-fourths of respondents strongly or somewhat support the idea of realigning the two intersections and increasing the distance between them, along with the associated ideas of adding turn lanes in the area to accommodate the realignment of the intersections. A lower proportion of respondents were supportive of the idea of adding a traffic signal to accommodate the realignment of Johnson Ferry Rd to "T" into Ashford Dunwoody Rd at Woods Dr.

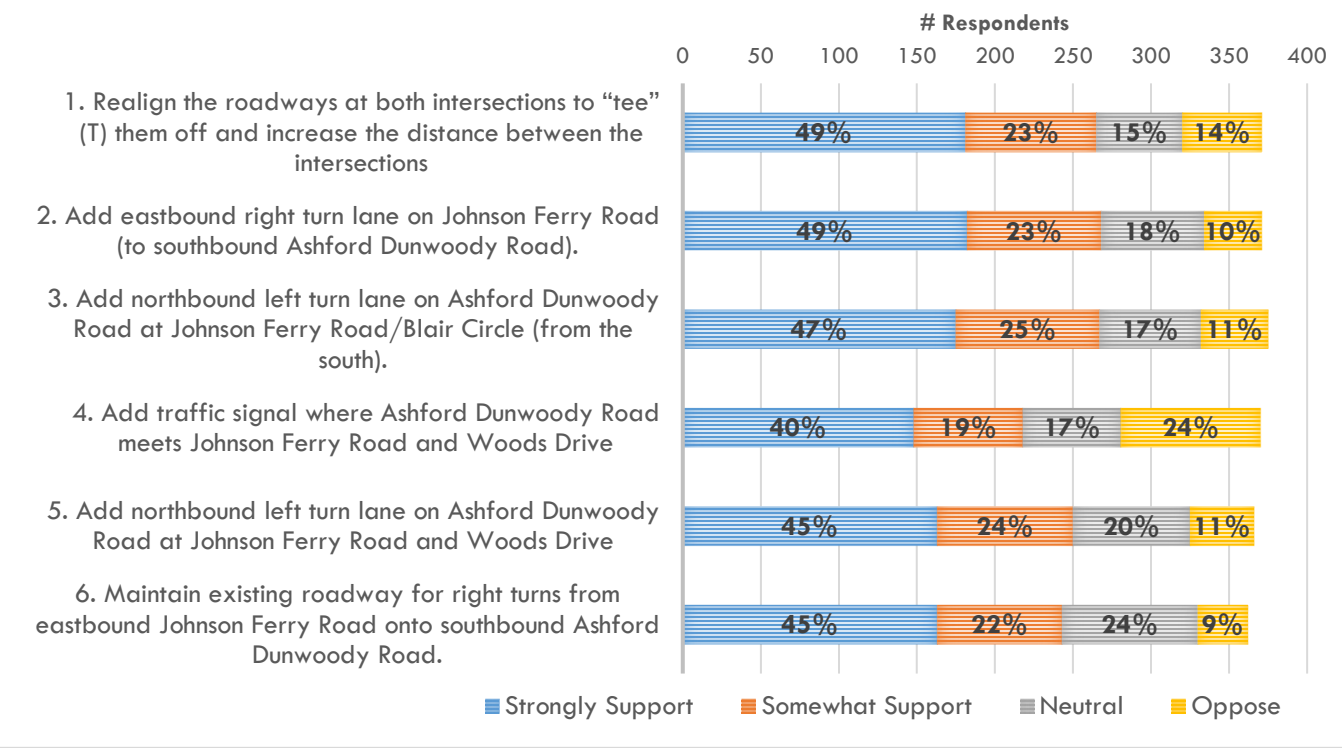


FIGURE 37. LEVELS OF SUPPORT FOR RECOMMENDED INTERSECTION IMPROVEMENTS AT JOHNSON FERRY ROAD

At Harts Mill Road / Marist School

More than two-thirds of respondents supported both recommendations at this intersection. More people supported the idea of signal timing and phasing than did lengthening the westbound turn lane on Harts Mill Rd.

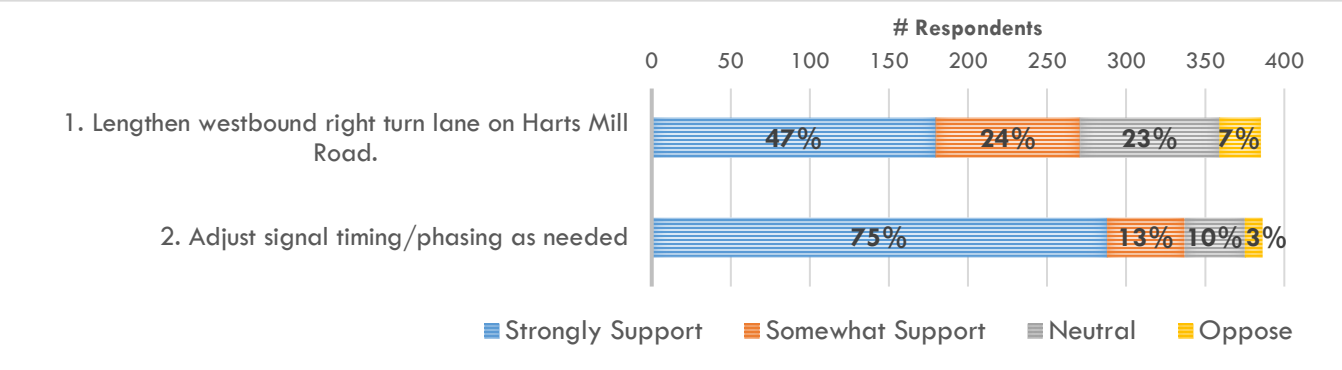


FIGURE 38. LEVELS OF SUPPORT FOR RECOMMENDED INTERSECTION IMPROVEMENTS AT HARTS MILL ROAD / MARIST SCHOOL

At West Nancy Creek Drive

Three-fourths or more of respondents somewhat or strongly supported the recommended improvements at West Nancy Creek Dr. There was especially strong support for adjusting the timing and phasing of the traffic signal at this intersection.

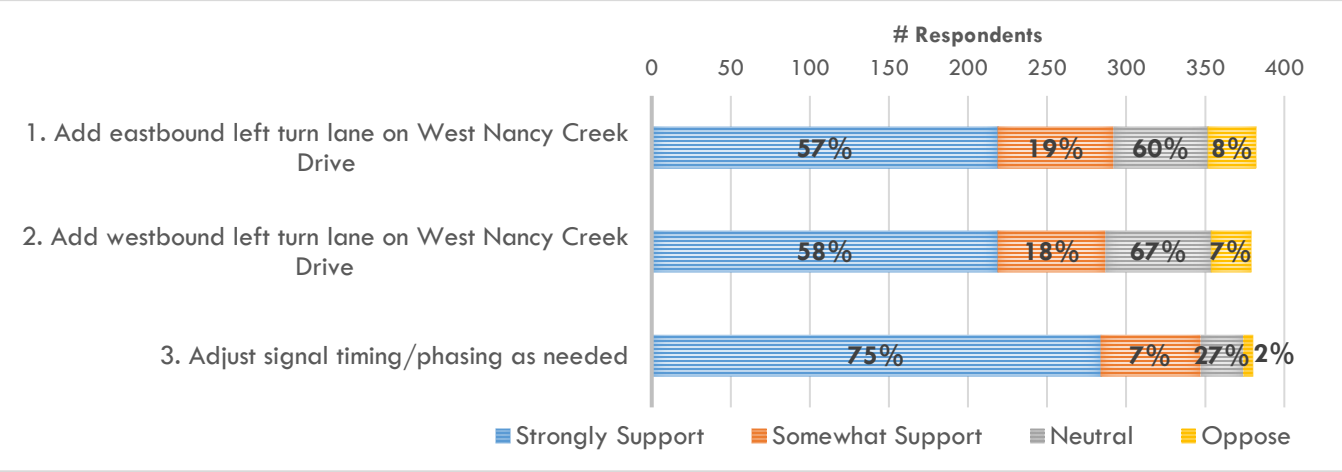


FIGURE 39. LEVELS OF SUPPORT FOR RECOMMENDED INTERSECTION IMPROVEMENTS AT WEST NANCY CREEK DRIVE

At Montgomery Elementary School (Chaucer Lane /entrance and exist)

Three-fourths or more of respondents somewhat or strongly support recommended improvements to the intersections with Montgomery Elementary School exits and entrances. There was particularly strong support for upgrading the traffic signal at the school exit north of the school and adjusting signal timing and phasing. There was also support for improving the pedestrian crossing at Chaucer Lane.

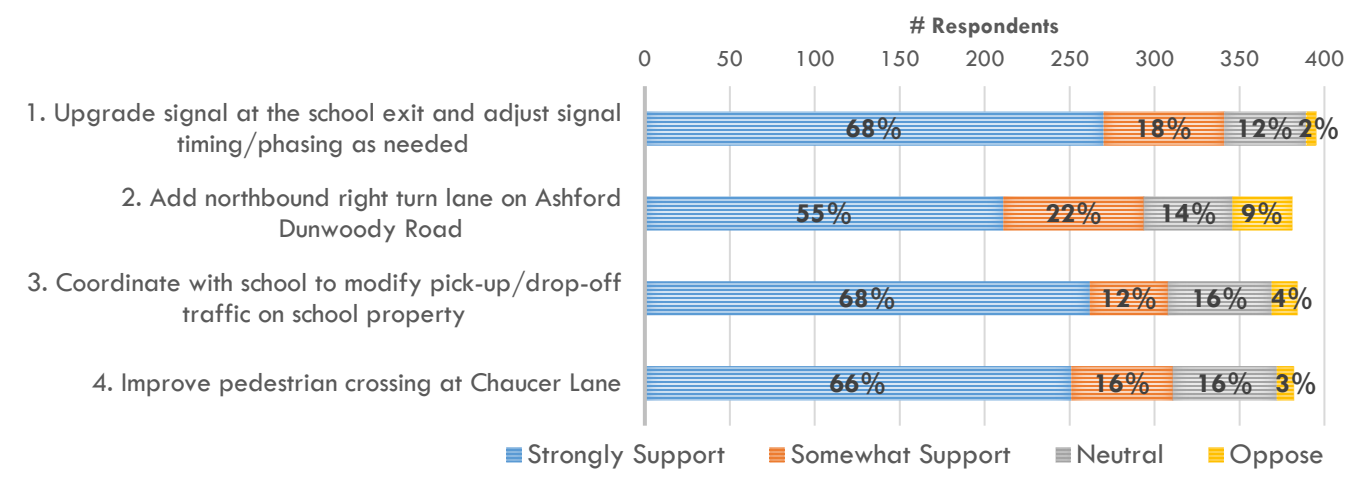


FIGURE 40. LEVELS OF SUPPORT FOR RECOMMENDED INTERSECTION IMPROVEMENTS AT MONTGOMERY ELEMENTARY SCHOOL

At Perimeter Summit Parkway/Oak Forest Drive

More than half of all respondents were somewhat or strongly supportive of recommended improvements at Perimeter Summit Pkwy/Oak Forest Dr. The highest proportion of support was for adjusting the traffic signal timing/phasing and for lengthening the northbound left turn lane on Ashford Dunwoody Rd. Slightly fewer people strongly or somewhat supported adding through lanes and turning lanes.

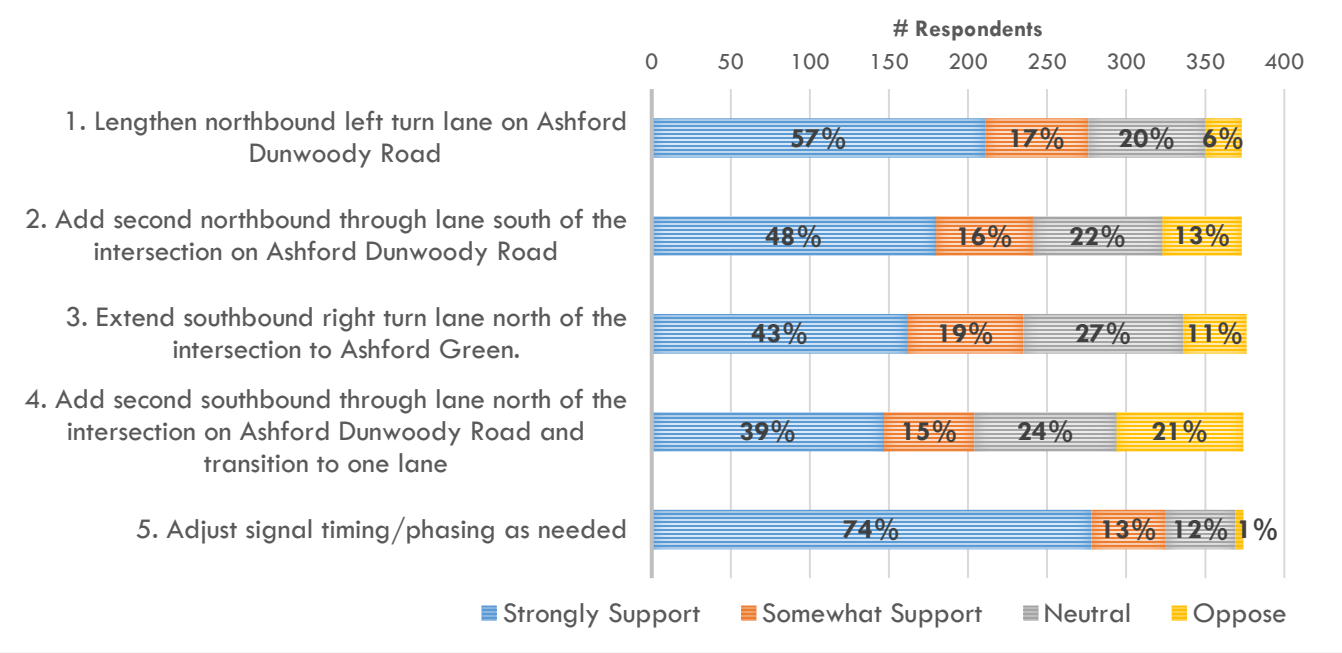


FIGURE 41. LEVELS OF SUPPORT FOR RECOMMENDED INTERSECTION IMPROVEMENTS AT PERIMETER SUMMIT PARKWAY / OAK FOREST DRIVE

Evaluation of Typical Cross-Sections

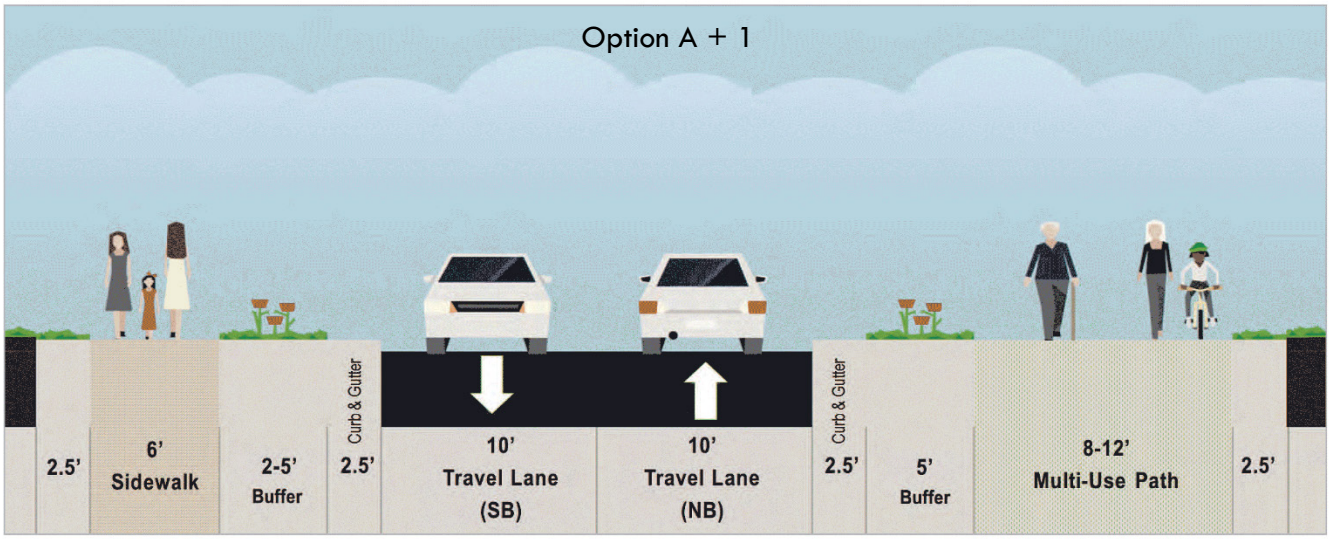
The project team developed a set of recommended typical cross-sections representing potential configurations of the roadway and possible combinations of bicycle and pedestrian facilities for six segments of the corridor between key intersections:

- Options A, B, and C represented different lane assignment configurations. Option A represented a two-lane configuration, with one lane in each direction; Option B represented a three-lane configuration, with one lane in each direction, and a center turn lane; and Option C represented a four-lane configuration, with two lanes in each direction.
- Options 1, 2, and 3 represented different sets of bicycle and pedestrian facilities. Option 1 represented a wide sidewalk on one side of the road and a multi-use path on the other; Option 2 represented a multi-use path on both sides of the road; and Option 3 represented a combination of multi-use path, sidewalk, and protected bicycle lanes.

Workshop participants were asked to indicate how much they support the recommended typical cross-section, using a four-point scale of strongly support to oppose. Then, if they did not support the recommendation for that segment of road, they were asked to indicate which of the other options considered they think would be most appropriate for this area. The "options considered" were displayed

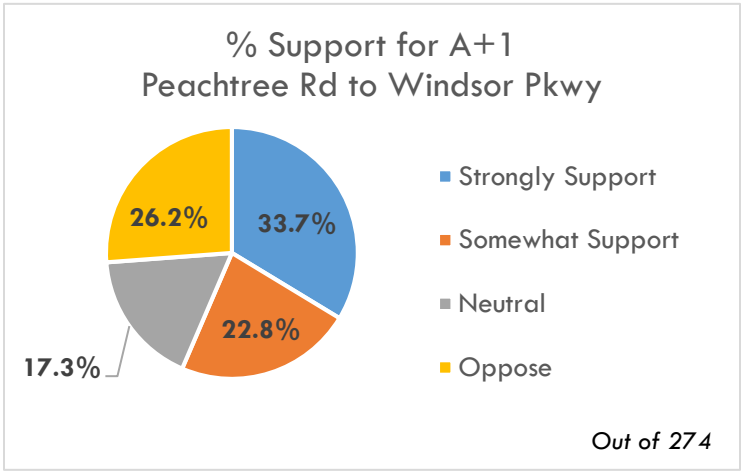
on a set of boards following the recommended cross-sections. Below are the results for this activity. Room was provided on the evaluation worksheets to include comments. These are summarized in the meeting summary in Appendix G.

Segment 1: Peachtree Road to Windsor Parkway

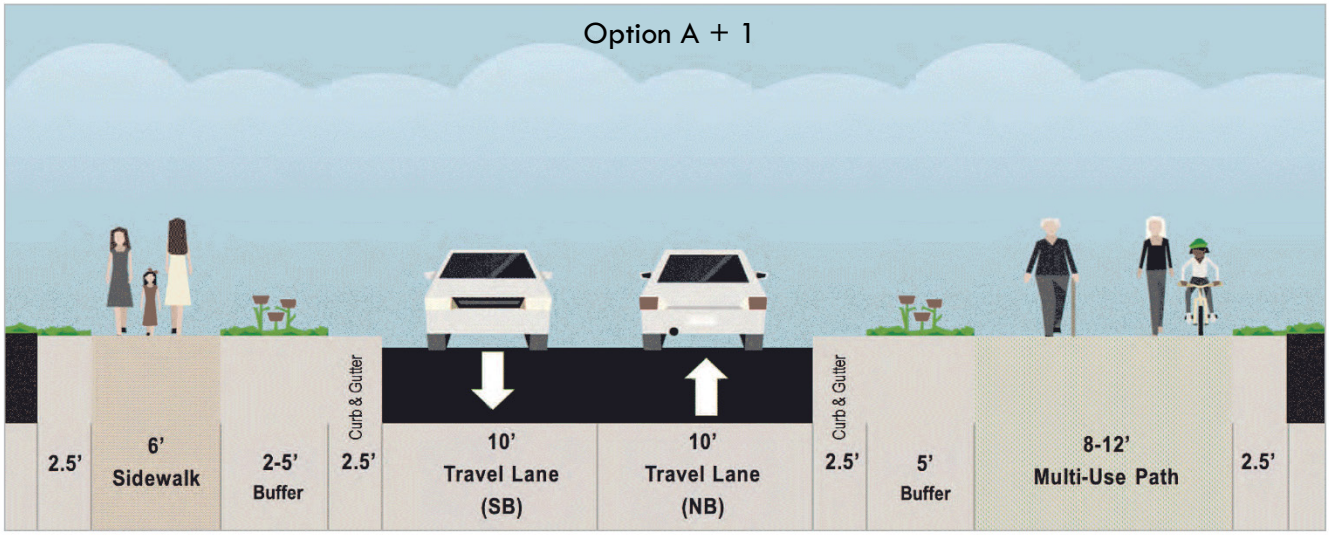


Two 10' travel lanes with 6' sidewalk on the west and 8'-12' multi-use path on the east with turn lanes as needed.
Requires 51' to 58' of right-of-way.

Of the 294 people who evaluated this typical cross-section, **more than half (56.1%) strongly or somewhat supported the recommended configuration (A+1, shown above),** while 17% were neutral and 26% opposed it. Among the 141 people who indicated a preference for a different typical cross-section, opinions were mixed about the other options. More than one-fourth of them (28%) expressed support for a three-lane section that includes two travel lanes, a center left turn lane, and a combination of sidewalk and multi-use path (option B+1).

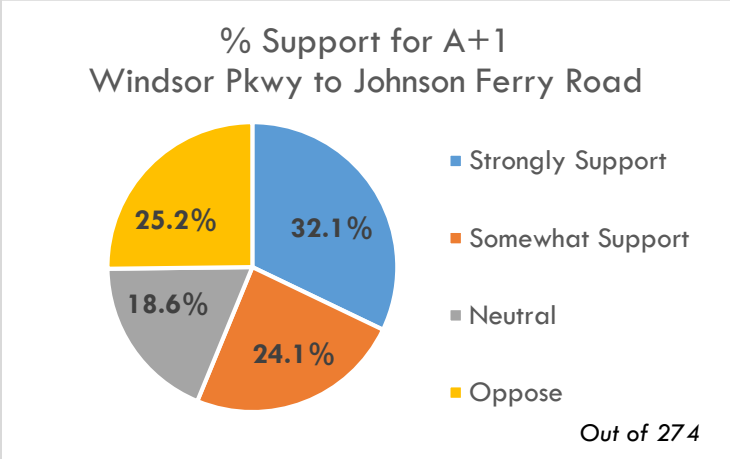


Segment 2: Windsor Parkway to Johnson Ferry Road

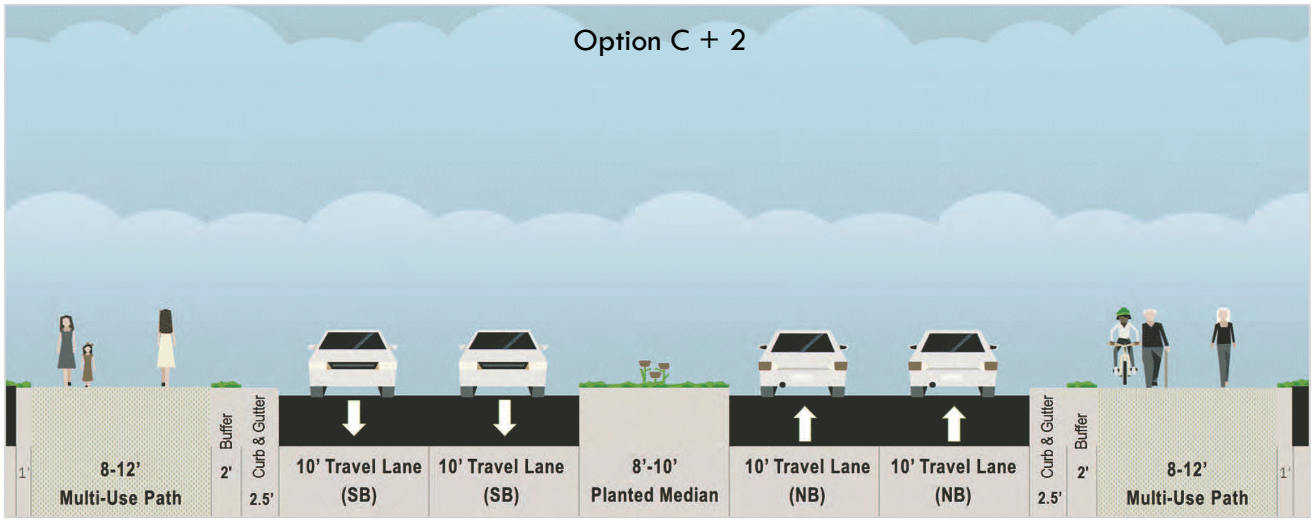


Two 10' travel lanes with 6' sidewalk on the west and 8'-12' multi-use path on the east with turn lanes as needed.
Requires 51' to 58' of right-of-way.

Of the 274 people who evaluated this typical cross-section, **more than half (56.2%) somewhat or strongly supported the recommended configuration (A+1, shown above)**, while 18% were neutral and 25% opposed it. Among the 135 people who indicated a preference for a different typical cross-section, opinions were mixed about the other options; however, nearly one-third of these participants (30%) expressed support for a three-lane section that includes two travel lanes, a center left turn lane, and a combination of sidewalk and multi-use path (option B+1).

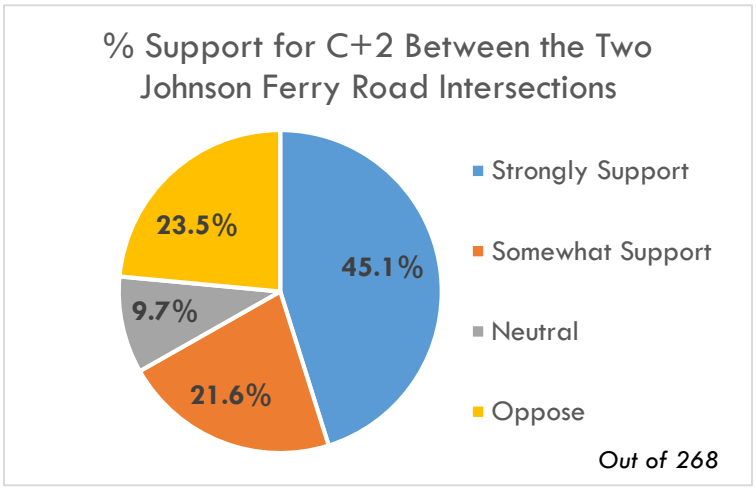


Segment 3: Between the two Johnson Ferry Road Intersections

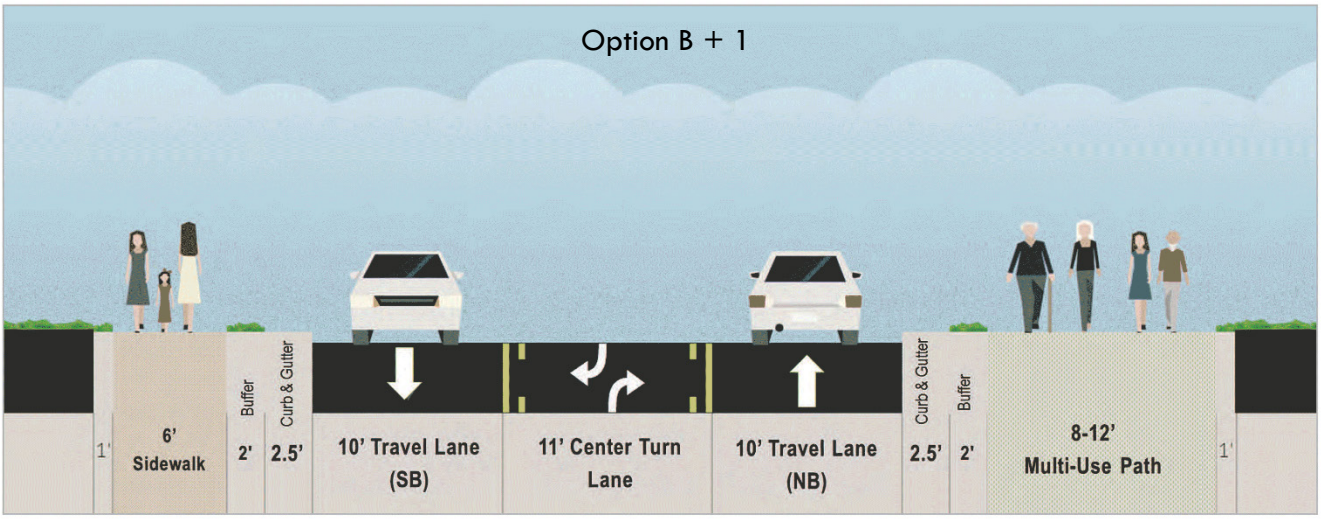


Four 10' travel lanes with 8'-10' planted median and 8'-12' multi-use path on both sides of the road.
Requires 75' to 85' of right-of-way.

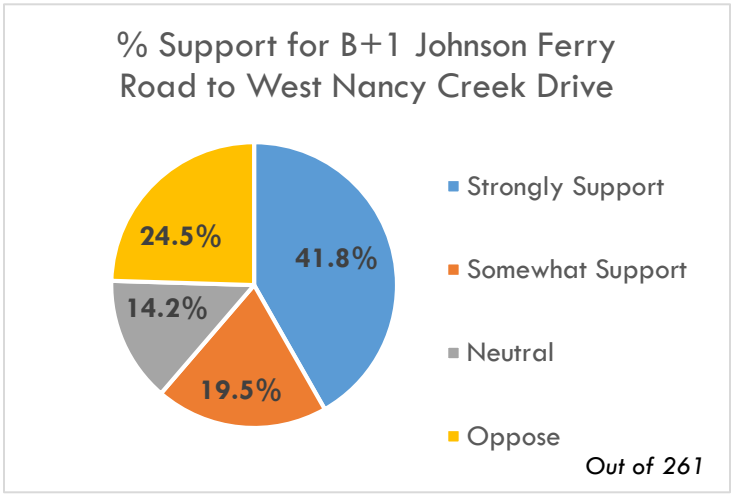
Of the 268 people who evaluated this typical cross-section, **more than two-thirds (66.8%) somewhat or strongly supported the recommended configuration (C+2, shown above),** while 10% were neutral and 24% opposed it. Among the 93 people who expressed support for other typical cross-sections, nearly half (48%) expressed interest in a variation on the recommended four-lane typical cross-section, either with a six-foot sidewalk instead of one of the multi-use paths (option C+1) or for a cross-section with protected bike lanes in addition to the sidewalk and multi-use path (option C+3).



Segment 4: Johnson Ferry Road to West Nancy Creek Drive

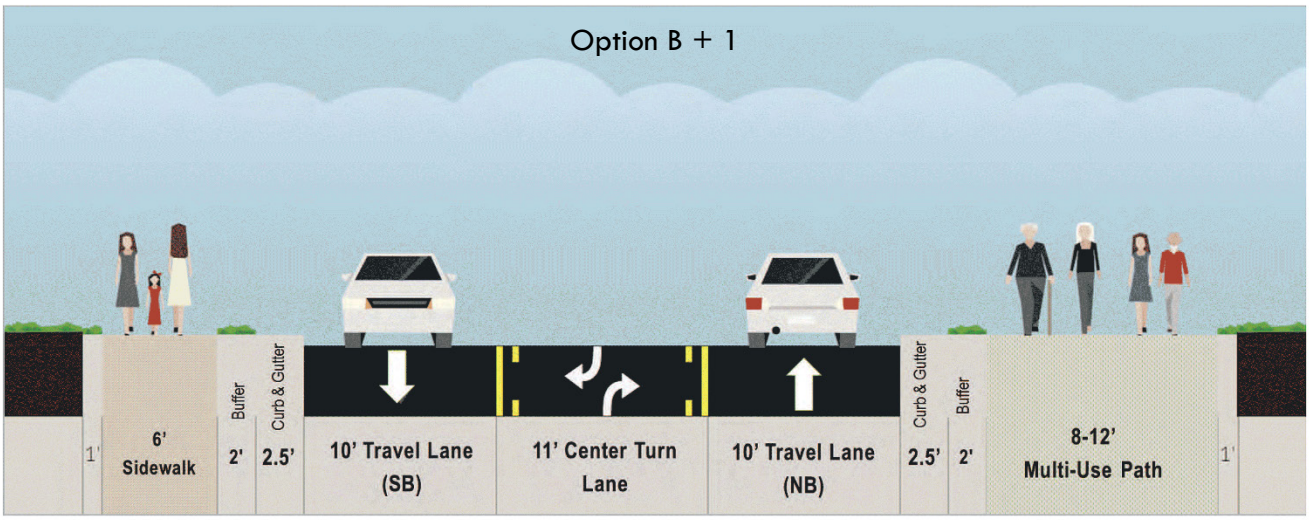


Two 10' travel lanes with 11' center turn lane, 6' sidewalk on the west, and 8'-12' multi-use path on the east.
Requires 56' to 60' of right-of-way.

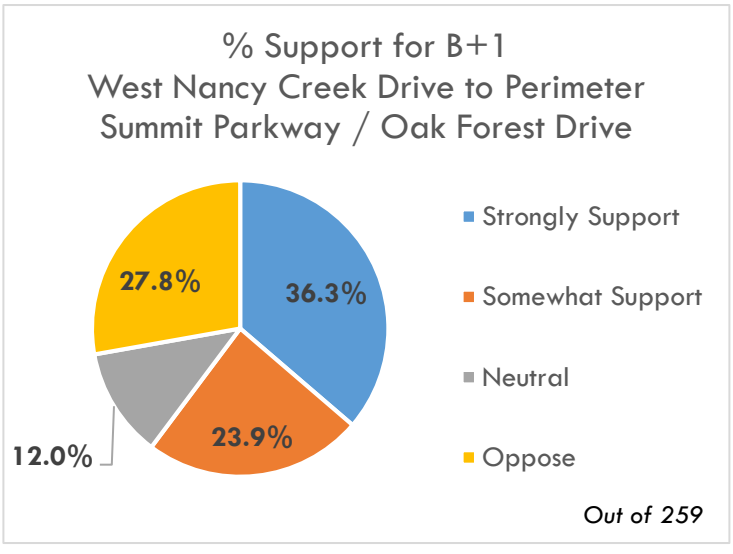


Of the 261 people who evaluated this typical cross-section, **nearly two-thirds (61.3%) somewhat or strongly supported the recommended three lane configuration (B+1, shown above),** while 14% were neutral and 25% opposed it. Among the 107 people who expressed support for other typical cross-sections, opinions were mixed about which other cross-sections would be appropriate in this location. The option with the most support was a two-lane section with a sidewalk and a multi-use path (option A+1), supported by 20% of these respondents. Roughly one-fourth of those who indicated support for other options expressed support for a variation on the recommended typical cross section – either with two multi-use paths (option B+2) or with bike lanes (option B+3). More than one-third of them expressed interest in some variation on a four-lane typical cross-section (options C+1, C+2, and C+3).

Segment 5: West Nancy Creek Drive to Perimeter Summit Parkway/Oak Forest Drive

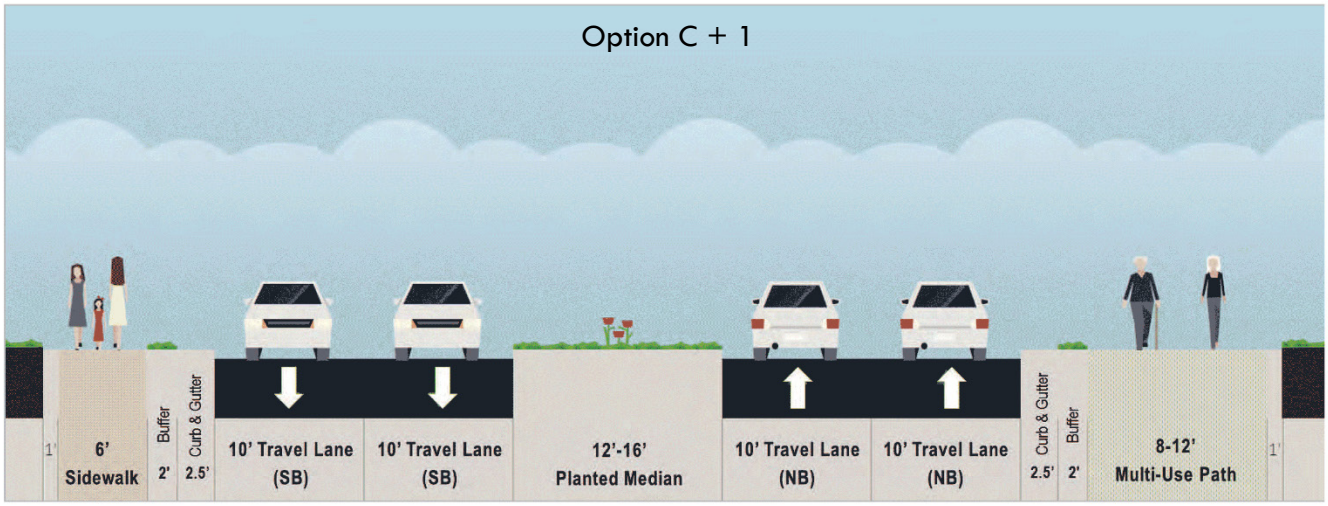


Two 10' travel lanes with 11' center turn lane, 6' sidewalk on the west, and 8'-12' multi-use path on the east.
Requires 56' to 60' of right-of-way.

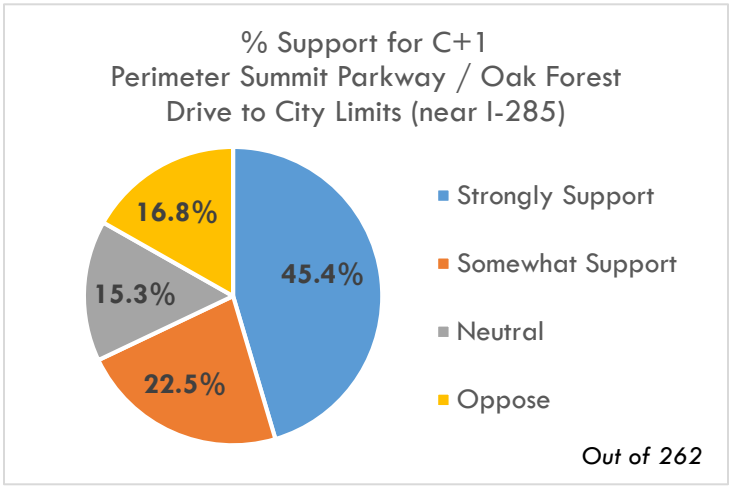


Of the 259 people who evaluated this typical cross-section, **nearly two-thirds (60.2%) somewhat or strongly supported the recommended three lane configuration (B+1, shown above)**, while 12% were neutral and 28% opposed it. Among the 111 people who expressed support for other typical cross-sections, opinions were mixed about which other cross-sections would be appropriate in this location. Two options were supported by roughly one-fourth of the people who expressed support for other typical cross-sections: 20% indicated support for a two-lane section with a sidewalk and a multi-use path (option A+1), while 21% indicated support for a four lane section with a median, sidewalk, and multi-use path (option C+1). Combined, the three four-lane options were supported by 47% of the 111 people who indicated support for options other than the recommended typical cross-section.

Segment 6: Perimeter Summit Parkway/Oak Forest Drive to the City Limits



Four 10' travel lanes with 12'-16' planted median, 6' sidewalk on the west, and 8'-12' multi-use path on the east.
Requires 77' to 85' of right-of-way.



Of the 262 people who evaluated this typical cross-section, **two-thirds (67.9%) somewhat or strongly supported the recommended four lane configuration (C+1, shown above),** while 15% were neutral and 17% opposed it. More than 70 people expressed support for options other than the recommended typical cross-section. Among these 70 respondents, nearly half (48%) expressed support for variations on the four-lane typical cross-section, with 19% supporting a version with two multi-use paths and 29% supporting a version with bike lanes in addition to a sidewalk and a multi-use path. This option (C+3) was the alternative supported by the highest number of people (21) who indicated support for options other than the recommended typical cross-section. There was also some support for a two-lane typical cross-section with a sidewalk and a multi-use path option (A+1) in this area.

5.6 PUBLIC OPEN HOUSE

A public open house session was held on Tuesday, November 29, 2016 from 6:00 to 8:00 PM at City Hall to present the revised draft recommended visions for typical cross-sections and potential intersection improvements. Representatives from the City and the study team were present to answer questions and discuss comments with attendees. A total of 75 people signed in at the session. The meeting was advertised beginning nearly a month in advance of the session, through a series of email notifications, postings on the City's website and social media accounts, and two advertisements in the Brookhaven Reporter on November 11 and November 25, 2016. A flyer was also distributed at City Council meetings and posted at City Hall among other places.

FIGURE 42. ATTENDEES TALKING DURING THE PUBLIC OPEN HOUSE HELD ON NOVEMBER 29, 2016 AT CITY HALL

The meeting took place in Council Chambers inside City Hall. The room was set up with a series of display boards that included an overview of the study process, timeline, and outreach activities, as well as revised draft recommended concepts for typical cross-sections and potential intersection improvements at seven key intersections. These were presented in order from the south end of the corridor (Peachtree Rd (SR 141)) to the north end of the corridor (City Limits, north of Lake Hearn Dr). Following the recommended concepts, the last board showed examples of potential streetscape elements that may be incorporated as individual projects are designed and constructed. Comment cards were available for attendees to share comments and input with the City and study team, and representatives of the City including staff and Councilmember Jones were present to talk with attendees as well. After the open house, all the materials that were presented during the open house were made available on the City's website. Comments on the materials and concepts presented were accepted via email for a period of two weeks, ending December 14, 2016.

Including comment cards handed in during the public open house and those submitted via email following the open house, more than 115 comments were submitted. Below is a synopsis of comments received. All comments were reviewed and provided to the City and are documented in Appendix H. The feedback received will be used to guide future detailed design and development of individual projects.

It should be noted that, consistent with the purpose and objectives of this phase of the study, the recommendations are visions for potential ways to accommodate all modes of travel. The visions may be thought of as templates; the preliminary ideas will be further developed as each individual project undergoes a design and implementation phase. During that process, roadway engineers will design individual projects, identifying details such as the dimensions, placement, and configuration of improvements. The City will initiate a design and implementation phase for each project it decides to pursue. During the design and implementation phase, there will be opportunities for property owners, community members, and other stakeholders to provide input into the design of individual projects. The comments

provided in response to the draft recommended visions in this phase of the corridor study will be considered during the design and implementation phase.

FIGURE 43. CITY STAFF TALK WITH AN ATTENDEE WHILE A REPORTER LOOKS ON

5.6.1 SUMMARY OF INPUT

The range of comments addressed each of the typical cross-sections and each of the intersections. There were also several recurring themes that emerged in the comments submitted, listed below. It should be noted that over the course of the study, competing interests of improving traffic flow/reducing congestion, minimizing property impacts, providing transportation choices, reducing vehicle speed, and reducing/preventing neighborhood cut-through traffic have been discussed and reiterated among the CAC, study team, and community members. The vision explored as part of the corridor study seeks to balance these and to create a safe, operationally efficient roadway for all users.

- ***Concerns about impacts to property*** - There is a sense that some of the recommendations may encroach upon residential properties, particularly in areas south of Johnson Ferry Rd and between West Nancy Creek Dr and Perimeter Summit Pkwy and in areas where utility poles are present.
- ***Maintain access to businesses*** - Comments echoed concerns about the possibility that a median in the vicinity of Johnson Ferry Rd might restrict access to area businesses and could impede emergency vehicles. Others want to ensure that people have safe access to the shopping centers at Cambridge Square and Oglethorpe Crossing.
- ***Concern about neighborhood cut-through traffic*** – Neighborhood cut-through traffic is an issue in nearly every residential neighborhood along the corridor. There is a sense that anything that improves flow of traffic may encourage additional cut-through traffic and that efforts to mitigate cut-through traffic must be considered and implemented going forward.
- ***Appreciation for making the corridor more walkable and livable*** – Comments support improvements to safety, addition of pedestrian facilities, and improving quality of life.
- ***Tension between commuter traffic and local traffic*** – A number of comments express concern that changes to Ashford Dunwoody Rd will only invite or encourage additional traffic and benefit commuters more than local residents.

Several people expressed support for the recommendations, indicating that the recommendations address their key concerns creatively and without necessitating a wholesale redesign or widening of the road. Others expressed regret that more is not being done to address congestion, such as installing additional lanes or increasing lane storage.

Some people expressed that they do not believe a multi-use path is needed, particularly in areas where sidewalk is already present. Reasons cited include impacts to property and a perceived lack of pedestrians,

particularly in the south portion of the study corridor. Others expressed concern about the potential costs of the recommended ideas and improvements.

Several comments reflect the need to get the recommendations moving forward so that changes can be implemented. Other comments indicate a desire to slow the planning process, take an incremental approach to any changes, work closely with residents and property owners, and to consider the impact the ongoing project at GA 400/I-285 may have on Ashford Dunwoody Rd.

Steps can be taken during the design and implementation process to address many of these concerns. As has been mentioned previously, projects that come out of this study will undergo a design and implementation process that will provide opportunities for property owners and community members to provide additional input. The recommendations reflect the need to carefully consider these comments during the design and implementation phases and offer suggestions for steps that may be taken to address concerns, such as:

- Maintaining access to businesses through appropriate design of ingress/egress and access management. This process should include considering multiple design options for any medians, including flush options.
- Reducing the width of elements included in the recommended typical cross-section concepts throughout the corridor, such as sidewalks, buffers, and multi-use paths to minimize impacts to adjacent properties.
- Reduce the width of elements of recommended intersection improvement concepts to minimize impacts to residential properties, such as near Windsor Pkwy, Johnson Ferry Rd, West Nancy Creek Dr, and Oak Forest Dr.
- Considering routing the multi-use path north of West Nancy Creek through Murphey Candler Park to Ashwoody Trail/Ashwoody Ct.
- Working with neighborhood associations and residents to pursue mechanisms to dissuade cut-through traffic, including through the City's Traffic Calming program.

5.7 DRAFT REPORT AND CITY COUNCIL PRESENTATIONS

After review and approval of a draft report by City staff in early 2017, the draft report was made available on the City's website. The study team presented the draft findings and overall vision for the *Ashford Dunwoody Road Corridor Study* to the Brookhaven City Council on March 14 and March 28, 2017. Following review and approval of the revised draft report by City staff, it is anticipated that a final presentation will be made to City Council during April 2017.

6. RECOMMENDATIONS

Based upon the findings and information gathered through research of existing conditions and analysis of traffic, and with input from the community and the City, a series of recommendations have been developed for the Ashford Dunwoody Rd corridor. **It is important to note that this is a high-level visioning study that seeks to identify a "big picture" vision for the corridor and potential intersection improvements.** Specific design details of projects have not yet been identified or developed. To that end, the report offers a series of general recommendations and strategies to address identified issues, along with a vision for potential configurations of facilities to accommodate all modes of travel (typical cross-sections) and potential intersection improvements. The recommendations are designed to work towards achieving the overall vision for the corridor. Finally, to help facilitate the next phases in the study process, the report offers a variety of phased projects, ranging from small-scale, short-term projects such as new signs and pedestrian crossing facilities to large-scale, long-term projects such as turn lanes and operational improvements. Each of these projects will follow a design and implementation process in which the City of Brookhaven will first identify a plan to fund them, and then initiate a detailed design and implementation process. As each project advances through the design and implementation process, transportation engineers and designers will work closely with City officials, property owners, and other stakeholders. It is recommended that each project have its own separate Public Involvement Process, beginning with engagement of property owners and residents, as it advances through design and implementation.

6.1 GENERAL RECOMMENDATIONS

1. Design Ashford Dunwoody Rd as a 35-mile-per-hour roadway, with 10-foot travel lanes and center turn lane where applicable as shown in the recommended typical cross-sections.
2. Provide a continuous network of pedestrian and bicycle facilities along the corridor that will improve access to area trails (Nancy Creek Trail), recreational facilities, schools, public transportation, and other destinations.
3. Ensure all pedestrian facilities comply with Americans with Disabilities Act (ADA) standards and follow GDOT's Pedestrian and Streetscape Guide as applicable.
4. Provide sufficient landscaping to create a comfortable and welcoming environment for all users and to appropriately screen residential areas and homes from sidewalks and multi-use paths. Use low-maintenance, hardwood species appropriate for this area and coordinate with individual property owners where applicable.
5. As the City moves forward with design and construction of recommendations from the *Ashford Dunwoody Road Corridor Study*, work closely with property owners and stakeholders to discuss, review, and solicit input on details of recommended projects. In addition to individual property owners, key stakeholders to engage include, but are not limited to:
    - Peachtree Golf Club
    - Commercial and retail property owners, including but not limited to:
        - Seven Oaks Management (Perimeter Summit)
        - Golden Triangle Holdings (Old Five Points shopping center)
        - Regency Centers (Cambridge Square - Kroger shopping center)

        - Coro Realty Advisors, LLC (Oglethorpe Crossing - Publix shopping center)
        - ACS Ashford Owners LLC (Ashford Perimeter)
    - Multifamily residential developments, including but not limited to:
        - Stockbridge Capital Group (Ashford Apartments)
        - Blue Atlantic Ashford LP (Rock Creek at Ashford)
        - The Colonnades (The Park at Ashford)
    - Marist School
    - DeKalb County Schools/Montgomery Elementary School
    - St. Martin in the Fields Episcopal Church and School
    - Our Lady of the Assumption Catholic Church
    - Cowart/Ashford-Dunwoody Family YMCA
    - Neighborhood and homeowner associations
    - Emergency services providers
6. Work with local police to enforce speed limits along Ashford Dunwoody Rd and enforce the restriction on trucks over 18 tons or over 30' in length.
7. Work with homeowners' associations to discourage cut-through traffic in neighborhoods in the vicinity of Ashford Dunwoody Rd by implementing traffic calming solutions such as speed humps or tables, traffic circles, or closures through the City's traffic calming program. Potential candidate streets include, but are not limited to: Epping Forest Dr, Hampton Hall Dr, Ragley Hall Rd, Stratfield Dr, Donaldson Dr, Bubbling Creek Dr, Keswick Dr, and Parkcrest Dr.
8. Install cohesive streetscape elements such as: pedestrian scale light fixtures that comply with dark skies recommendations, yet provide sufficient illumination; low-maintenance, aesthetically pleasing trees and shrubs; street furniture (benches, bicycle racks, bollards, trash receptacles) in appropriate locations; bus shelters; and wayfinding signage where appropriate.
9. Consider, where feasible, the option of relocating overhead utilities to underground as part of the design and implementation phase of individual projects along the Ashford Dunwoody Rd corridor. As recommended in the City's Comprehensive Plan, this effort may be extended citywide as appropriate.
10. Consider opportunities to accommodate public transportation service that may be offered by partner agencies in the future, such as by incorporating transit signal priority technology into traffic signals along Ashford Dunwoody Rd.

City-wide Recommendations

The following recommendations are suggested for advancement as supplemental initiatives that align with recommendations from citywide plans and will help to establish cohesive policy and guidance for future transportation projects.

1. Develop a Complete Streets policy for the City of Brookhaven that encourages the design and operation of streets that enable safe access for all users, regardless of age, mode of travel, or ability.
2. Establish design guidelines for the City of Brookhaven as a whole using the recommended streetscape elements included in this corridor study as a starting point. Design guidelines should

include, at a minimum, lighting, street furniture, landscaping for public rights-of-way, and standards for pedestrian and bicycle facilities.

3. Conduct a wayfinding study for the City of Brookhaven to identify and design branded signage to guide residents and visitors throughout the City.

6.2 RECOMMENDED VISION

In addition to the general recommendations provided above, the study aimed to develop visions for typical cross-sections of segments of the corridor and improvements at seven key intersections. This section presents recommendations for design and implementation over time to achieve the overall vision typical cross-sections and intersection improvements. The precise details and design of the vision will be worked out during the design and implementation of individual projects. As resources and funding become available, the City will initiate a process to develop detailed designs for each project, which will include close coordination with stakeholders and property owners, and opportunities for the public to provide comments and feedback to the City on a project-by-project basis.

The project team also identified potential opportunities and constraints for each project, as well as estimated cost, and anticipated level of effort to implement the projects. Details are provided in project sheets in Appendix A.

Based on feedback obtained during the public open house and following comment period, concerns expressed by community members about the draft recommendations generally fell into the following categories:

- Maintaining access to businesses (ingress/egress)
- Impacts to residential property
- Speed of vehicles traveling on Ashford Dunwoody Rd
- Cut-through traffic in residential neighborhoods
- Cost of changes
- Impact on capacity and potential to attract additional traffic on Ashford Dunwoody Rd
- Concern that recommendations may not alleviate congestion
- Approach for implementation to be applied incrementally and in coordination with residents, property owners, and other stakeholders

Many of these concerns can be addressed during the design and implementation phase of future projects. Individual projects will be pursued in a phased approach over time, with some longer-term project snot anticipated to get underway for five to ten years. Projects will undergo a thorough design phase that will provide opportunities for property owners and other stakeholders to provide input. During that process, design options can be considered for ensuring access to businesses and designing elements such as sidewalks, buffers, and paths to minimize impacts to adjacent properties. Narrowing travel lanes from existing widths can help accommodate other elements of the design. The study also includes a recommendation to implement traffic calming measures to dissuade neighborhood cut-through traffic.

From feedback obtained during the public open house and following comment period, support for draft recommendations was expressed based on the following:

- Address safety concerns
- Make the area more walkable
- Improve quality of life
- Enhance traffic flow
- Focus on operational improvements rather than capacity

6.2.1 TYPICAL CROSS-SECTIONS

Typical cross-sections are depictions of the roadway from a cut-away view, or a cross-section of the roadway. They show elements within the public right-of-way including, but not limited to, the roadway, median (where applicable), bicycle and pedestrian facilities, utility and landscape areas, and "clear zone" (unobstructed, traversable roadside area designed to enable a driver to stop safely or regain control of a vehicle that has accidentally left the roadway[2]). The typical cross-sections represent a generic view of the typical configuration of the above elements between intersections. The ultimate design of a roadway is usually based on the typical cross-section with variations that depend on a number of factors, such as topography, drainage, presence of utilities, unique features of the road, and others.

The typical cross-sections presented below are all shown in a north-facing direction. Thus, the left side of the image is the west side of the road and the right side of the image is the east. The typical cross-sections are high-level visions of what might be seen at a generic location between intersections within a given section of the corridor. Accommodations will be made for existing and future conditions, such as turn lanes, driveways, and intersections as appropriate during the design and implementation phases of individual projects. Details regarding the application of recommendations will be worked out during the design and implementation phase(s) of projects, and the City will work to minimize negative impacts to adjacent properties, including provision of appropriate screening.

The visions for the typical cross-sections were developed to largely fit within the existing public right-of-way, so as to minimize impacts to adjacent properties. As mentioned in Section 5.6.1, in response to comments received during and subsequent to the public open house, the team recommends the following strategies be considered during the design and implementation phase(s) of projects:

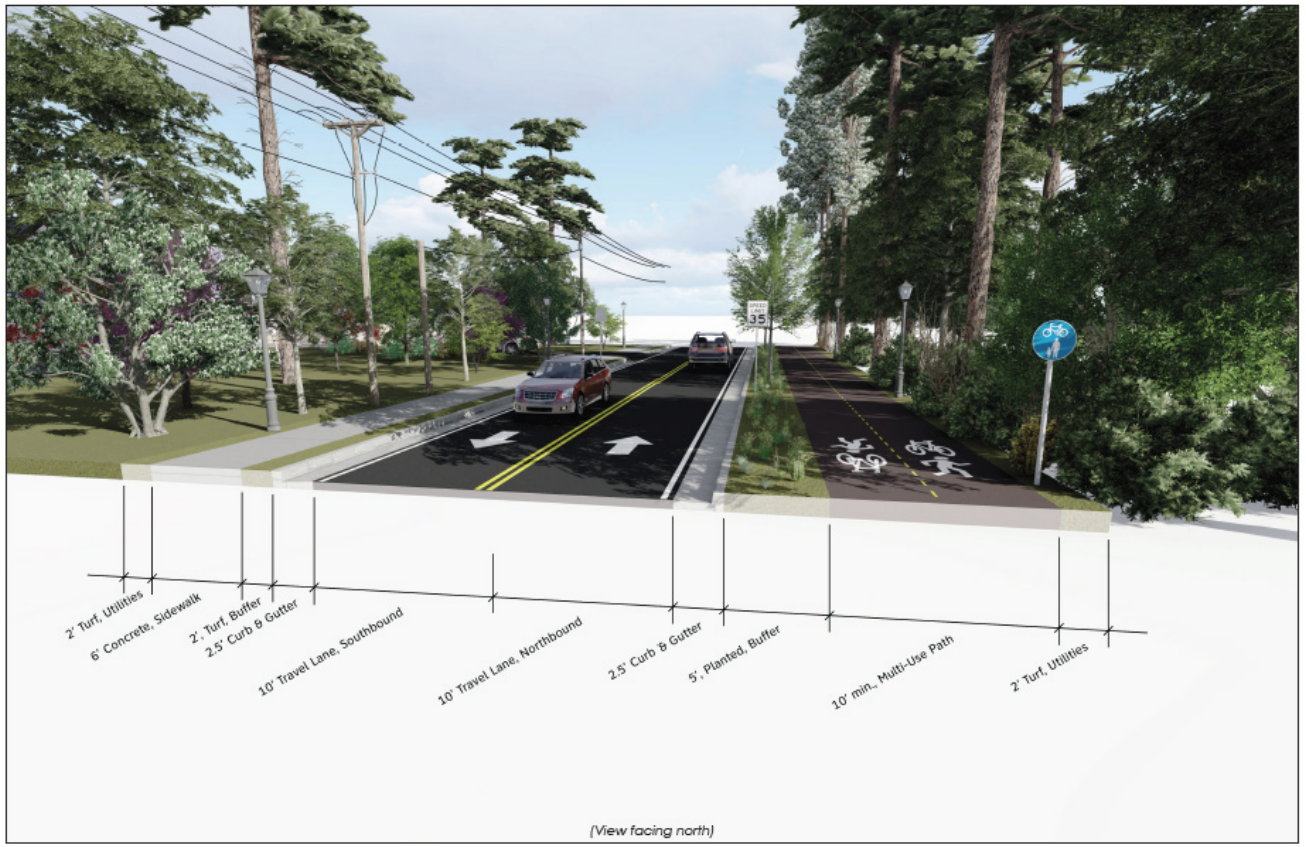
- Maintain access to businesses through appropriate design of ingress/egress and access management. This process should include considering multiple design options for any medians, including flush options, and designing to facilitate emergency vehicle access.
- Reduce the width of elements included in the recommended typical cross-section concepts throughout the corridor, such as sidewalks, buffers, and multi-use paths to minimize impacts to adjacent properties.
- Provide adequate and attractive screening alongside any future multi-use trails to protect neighboring properties.

[2] Federal Highway Administration (FHWA), Clear Zones and Roadside Terrain, https://safety.fhwa.dot.gov/roadway_dept/countermeasures/safe_recovery/clear_zones/cmclearzones/

- Consider alternate routes for the multi-use path north of West Nancy Creek, such as through Murphey Candler Park to Ashwoody Trail/Ashwoody Ct.

Segment 1: Peachtree Road (SR 141) to just south of Johnson Ferry Road

The vision for the typical section for Segment 1 includes two travel lanes, curb and gutter, a sidewalk on the west side of the road, and a multi-use path on the east side of the road. Landscaping should be installed to appropriately screen residential properties, to buffer the multi-use path from the roadway, and to screen the golf course from the multi-use path. Where possible, the design should incorporate existing vegetation. Consideration should be given to opportunities to narrow roadway elements adjacent to residential properties. Details about the application of this vision will be worked out during the design and implementation phase of individual projects.



Two 10' travel lanes with 6' sidewalk on the west and min. 10' multi-use path on the east.
Left turn lanes at St. Martin's Episcopal Church and School and at Windsor Parkway.
Requires 52' of right-of-way.

FIGURE 44. VISION OF TYPICAL CROSS-SECTION FOR SEGMENT 1: PEACHTREE ROAD (SR 141) TO JUST SOUTH OF JOHNSON FERRY ROAD

Segment 2: Between the two Johnson Ferry Road Intersections

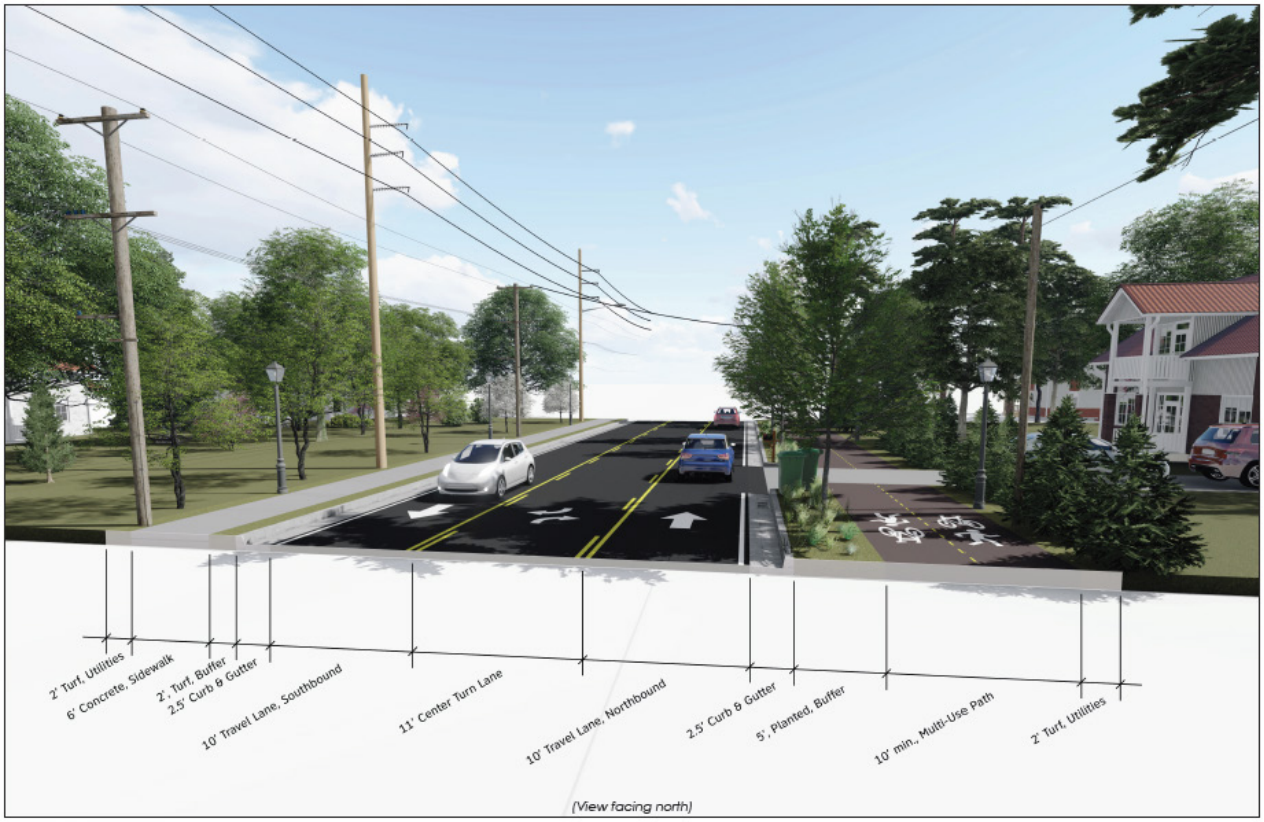
The vision for the typical section for Segment 2 includes maintaining two travel lanes in each direction, with turn lanes as needed, and the addition of a multi-use path on both sides of the road to provide safe pedestrian and bicycle access to all areas of this segment. A planted median is also recommended to separate vehicular traffic and provide pedestrian refuge. ***Any median should be designed with openings to maintain access to businesses and cut-outs to allow left turns as appropriate, and of sufficient width to provide refuge for pedestrians who may cross in this area.*** The community expressed a strong concern about maintaining access to businesses in the area. Therefore, a flush median and other design options should also be considered in the design for this segment. Details about the application of this vision will be worked out during the design and implementation phase of individual projects.

Four 10' travel lanes with min. 8' planted median, min. 10' multi-use path on both sides of the road, and turn lanes as needed (left turn lanes may be cut out of median).
Requires 87' of right-of-way.

FIGURE 45. VISION OF TYPICAL CROSS-SECTION FOR SEGMENT 2: BETWEEN THE TWO JOHNSON FERRY ROAD INTERSECTIONS

Segment 3: North of Johnson Ferry Road to Perimeter Summit Parkway/Oak Forest Drive

The vision for the typical section for Segment 3 includes maintaining the current configuration of one travel lane in each direction with a center turn lane extending to West Nancy Creek Dr, and the addition of a center turn lane at intersections where needed north of West Nancy Creek Dr. The concept also maintains sidewalk on the west side of the road and includes a multi-use path on the east side of the road. Community members expressed strong concern about impacts to adjacent residential properties. Therefore, an option to route the multi-use path through Murphey Candler Park should be considered, along with options to narrow elements such as sidewalk, path, or buffers. Details of how to apply this vision within this segment will be worked out during the design and implementation phase of individual projects.



Two 10' travel lanes with 11' center turn lane, 6' sidewalk on the west, and min. 10' multi-use path on the east. Center turn lane becomes left turn lane as needed.
Requires 63' of right-of-way.

FIGURE 46. VISION OF TYPICAL CROSS-SECTION FOR SEGMENT 3: NORTH OF JOHNSON FERRY ROAD TO PERIMETER SUMMIT PARKWAY / OAK FOREST DRIVE

Segment 4: Perimeter Summit Parkway/Oak Forest Drive to City Limits

The vision for the typical section for Segment 4 includes maintaining the current configuration of two travel lanes in each direction, with turn lanes as needed, and sidewalk on the west side of the road. It includes the addition of a right turn lane on southbound Ashford Dunwoody Rd and a multi-use path on the east side of the road. A planted median is also recommended to separate and slow the speed of vehicular traffic. The median should be designed with cut-outs to allow left turns as needed and to be wide enough to provide refuge for pedestrians. The community expressed concern about frequent lane changes in this area and the use of turn lanes to get around backed-up through traffic. Advance warning lane assignment signs should be considered along with measures to prevent lane changes. Details of how to apply this vision within this segment will be worked out during the design and implementation phase of individual projects.

One 10' southbound right turn lane with four 10' travel lanes, a 12' planted median, 6' sidewalk on the west, and min. 10' multi-use path on the east. Turn lanes as needed (left turn lanes may be cut out of median).
Requires 94' of right-of-way.

FIGURE 47. VISION OF TYPICAL CROSS-SECTION FOR SEGMENT 4: PERIMETER SUMMIT PARKWAY / OAK FOREST DRIVE TO CITY LIMITS

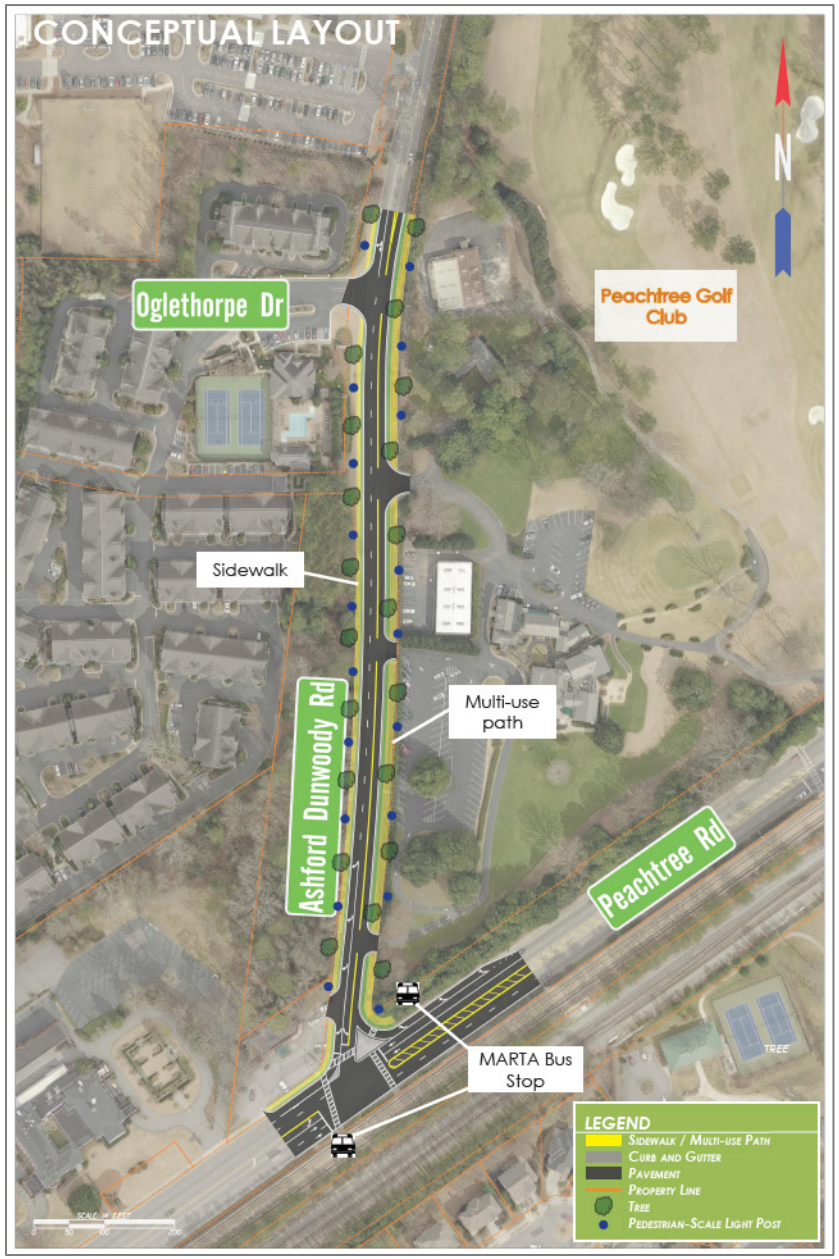
6.2.2 POTENTIAL INTERSECTION IMPROVEMENTS

This section describes the vision for potential intersection improvements at (1) Peachtree Rd; (2) Windsor Pkwy; (3) Johnson Ferry Rd; (4) Harts Mill Rd; (5) West Nancy Creek Dr; (6) Montgomery Elementary School; and (7) Perimeter Summit Pkwy/Oak Forest Dr. The intersection improvements include measures that can be taken at key intersections to improve operations and safety. Each vision has been divided into multiple potential projects that the City can prioritize and pursue over time. Section 6.3 includes a table of phased potential projects grouped by timeframe.

The precise details of each intersection vision will be developed during the design and implementation phases of individual projects. The design and implementation process will include engagement of residents, property owners, and other community members. As each of the intersection improvement projects are designed, they should incorporate the elements of the visions for potential typical cross-sections for the corresponding segment of the corridor. In response to comments received during and subsequent to the public open house, the team recommends the following strategies be considered during the design and implementation phase(s) of projects:

- Maintain access to businesses through appropriate design of ingress/egress and access management. This process should include considering multiple design options for any medians, including flush options, and designs that facilitate access for emergency vehicles.
- Reduce the width of elements included in the recommended intersection improvement concepts to minimize impacts to residential properties, such as near Windsor Pkwy, Johnson Ferry Rd, West Nancy Creek Dr, and Oak Forest Dr.

At Peachtree Road



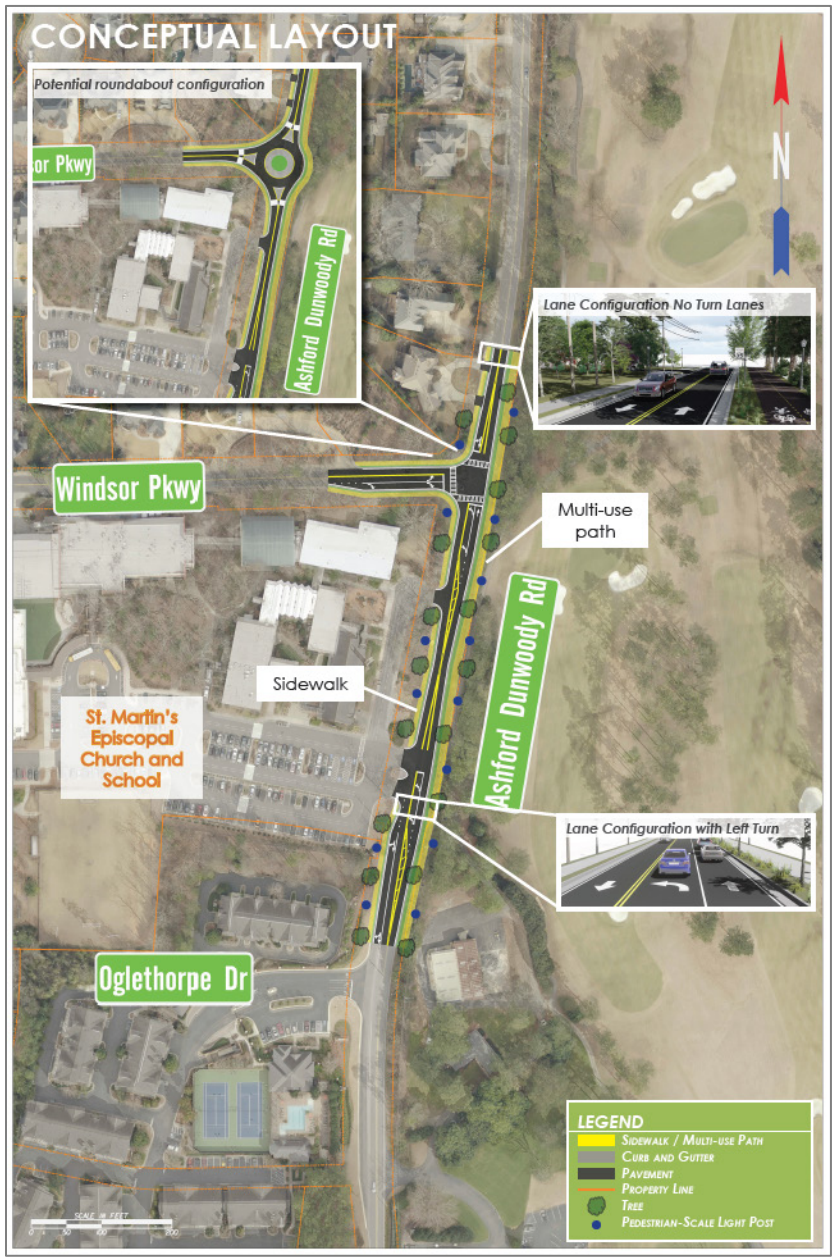
Recommendations

- Extend the length of the right turn lane on southbound Ashford Dunwoody Rd to Oglethorpe Dr (entrance to Sanctuary at Oglethorpe apartments).
- Convert the right turn lane from southbound Ashford Dunwoody Rd to southbound Peachtree Rd into a barrier-separated free-flow lane, controlled by a right turn arrow signal that also has a pedestrian-activated push button to facilitate safe crossing across Ashford Dunwoody Rd.
- Install a dedicated right turn lane on southbound Peachtree Rd at Ashford Dunwoody Rd.
- Increase the radius in northeast corner of the intersection, install a raised concrete island, and provide space for a bus shelter at the existing bus stop.
- Consider utilizing the undeveloped tract on the west side of Ashford Dunwoody Rd to realign the road to the west, away from Peachtree Golf Club, in order to reduce the skew of the intersection with Peachtree Rd.
- Adjust signal timing/phasing as needed following improvements.

Incorporate appropriate pedestrian, streetscape, and landscape improvements based upon the vision for the typical cross-sections and streetscape design guide.

This image is a conceptual representation of how the recommended intersection improvements may look in the future. Specific design and details will be worked out during the design phase of the project(s).

At Windsor Parkway



Recommendations

- Install a left turn lane able to accommodate approximately two vehicles on northbound Ashford Dunwoody Rd at the entrance to St. Martin's Episcopal Church and School.
- As a design option, consider a standard, single-lane urban roundabout at the intersection to help calm traffic. To avoid impacts to the first green of the Peachtree Golf Club, a roundabout would need to be offset to the west of the existing Ashford Dunwoody Rd alignment.
- If a roundabout is not the desired design option, install a right turn lane on eastbound Windsor Pkwy at Ashford Dunwoody Rd, a left turn lane able to accommodate approximately two vehicles on northbound Ashford Dunwoody Rd at Windsor Pkwy, and a traffic signal at the intersection.

Incorporate appropriate pedestrian, streetscape, and landscape improvements based upon the vision for the typical cross-sections and streetscape design guide.

This image is a conceptual representation of how the recommended intersection improvements may look in the future. Specific design and details will be worked out during the design phase of the project(s).

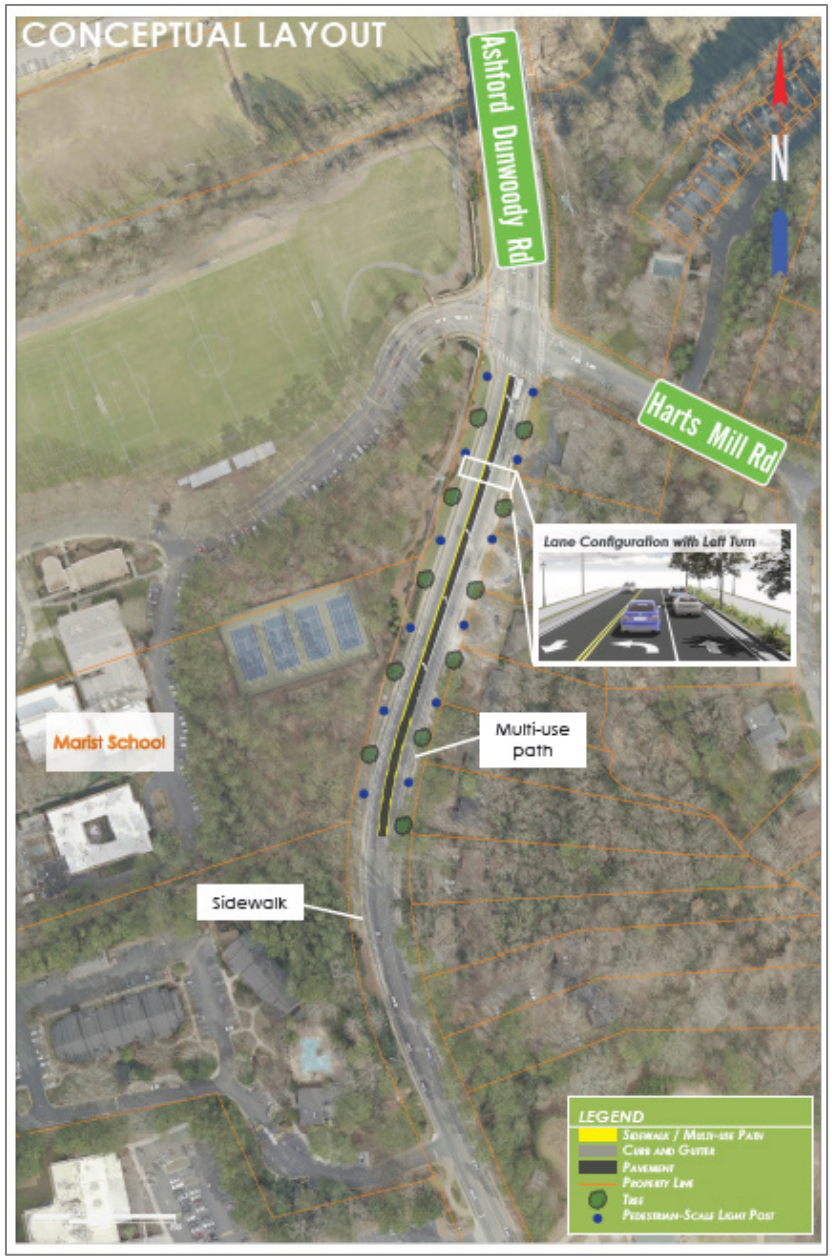
At Johnson Ferry Road

Recommendations

- Extend the right lane on northbound Ashford Dunwoody Rd from south of Publix to Johnson Ferry Rd in order to make room to lengthen the left turn lane. Restripe existing lanes to create one longer dedicated left turn lane and one left/through/right lane. Adjust traffic signal timing and phasing accordingly. Install new pavement markings and overhead lane assignment signage as appropriate.
- Relocate existing narrow median divider to center line to prevent left turns into and out of Publix and to separate northbound and southbound traffic. Design should allow left turns from Kadleston Way.
- Improve the existing mid-block pedestrian crossing near Kadleston Way to include a small/narrow refuge island to enhance visibility of pedestrians.

Incorporate appropriate pedestrian, streetscape, and landscape improvements based upon the vision for the typical cross-sections and streetscape design guide.

This image is a conceptual representation of how the recommended intersection improvements may look in the future. Specific design and details will be worked out during the design phase of the project(s).



Recommendations

- Lengthen the northbound left turn lane on Ashford Dunwoody Rd at Harts Mill Rd/Marist School by restriping the existing two-way center left turn lane.
- Work with Perimeter Traffic Operations Program (PTOP) to optimize signal timing and phasing.

Incorporate appropriate pedestrian, streetscape, and landscape improvements based upon the vision for the typical cross-sections and streetscape design guide.

This image is a conceptual representation of how the recommended intersection improvements may look in the future. Specific design and details will be worked out during the design phase of the project(s).

At West Nancy Creek Drive

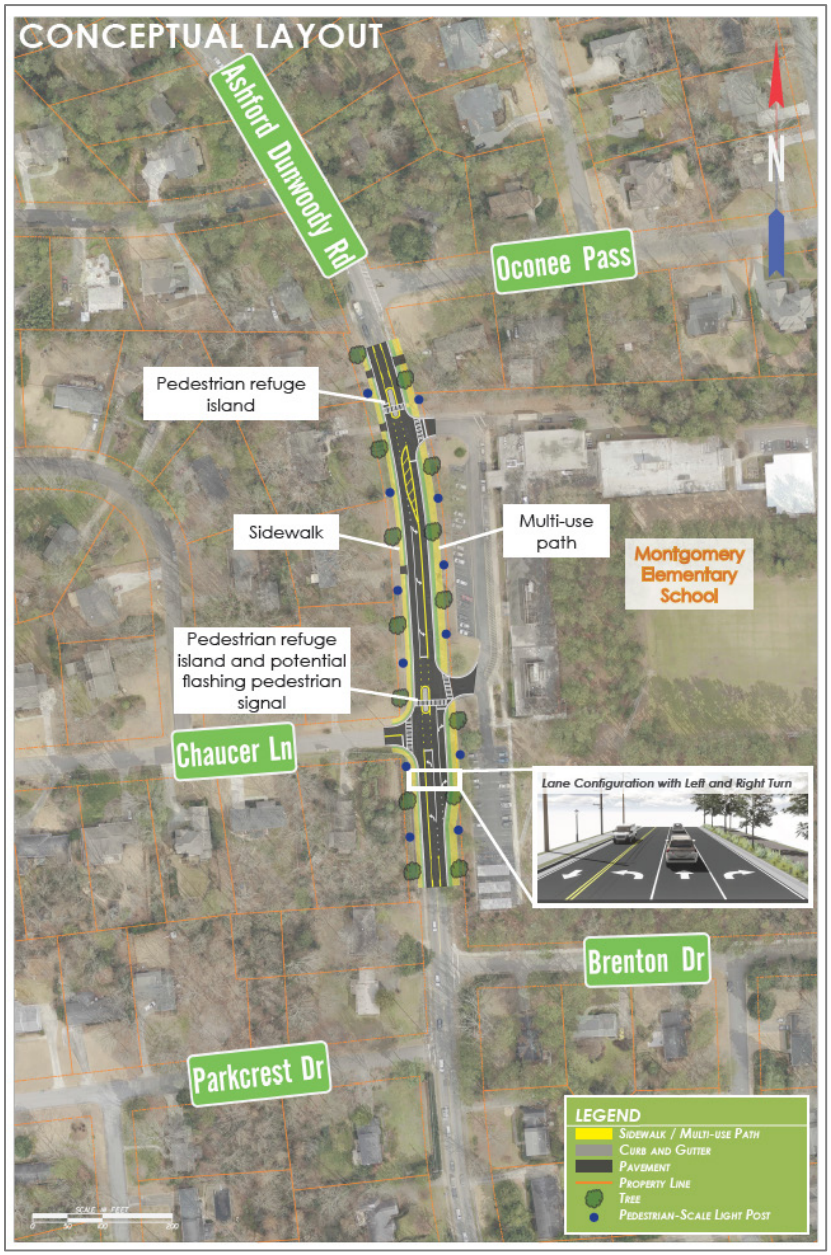
Recommendations

- Install left turn lanes on eastbound and westbound West Nancy Creek Dr with left turn arrow signals and/or flashing yellow arrows. To minimize impacts to adjacent properties, it is recommended that the turn lanes and the through lanes be designed to be 10 feet wide.
- Work with Perimeter Traffic Operations Program (PTOP) to optimize signal timing and phasing.

Incorporate appropriate pedestrian, streetscape, and landscape improvements based upon the vision for the typical cross-sections and streetscape design guide.

This image is a conceptual representation of how the recommended intersection improvements may look in the future. Specific design and details will be worked out during the design phase of the project(s).

At Montgomery Elementary School (Chaucer Lane/entrance and exit)



Recommendations

- Upgrade traffic signal and pedestrian crossing at school exit.
- Install rectangular rapid flashing beacon (RRFB) signal at the pedestrian crossing at Chaucer Ln.
- Upgrade pedestrian crossing at school exit and at Chaucer Ln to include pedestrian refuge island.
- Install right turn lane on northbound Ashford Dunwoody Rd at Montgomery Elementary School driveway.
- Work with Perimeter Traffic Operations Program (PTOP) to optimize signal timing and phasing.
- Work with DeKalb County Schools and Montgomery Elementary School officials to develop plans for modifying patterns for pick-up and drop-off traffic and identify possible opportunities to reduce queuing on Ashford Dunwoody Rd.

Incorporate appropriate pedestrian, streetscape, and landscape improvements based upon the vision for the typical cross-sections and streetscape design guide.

This image is a conceptual representation of how the recommended intersection improvements may look in the future. Specific design and details will be worked out during the design phase of the project(s).

At Perimeter Summit Parkway / Oak Forest Drive

Recommendations

- Extend the right turn lane on southbound Ashford Dunwoody Rd north of Ashford Green, creating two (2) southbound through lanes and a right turn lane at both Ashford Green and Perimeter Summit Pkwy intersections.
- Lengthen left turn lane on northbound Ashford Dunwoody Rd at Perimeter Summit Pkwy.
- Install a second through lane on northbound Ashford Dunwoody Rd to match receiving lanes north of the intersection.
- Install planted median with accommodations for left turns where appropriate from Perimeter Summit Pkwy/Oak Forest Dr to the City Limits, north of Lake Hearn Dr.
- Design and construct a gateway feature in the southwest quadrant of the intersection. This may include sculpture, visually appealing sign or mural, or planted landscaped area. Consider the use of a flowering cherry tree, since it is the official tree of Brookhaven.
- Work with Perimeter Traffic Operations Program (PTOP) to optimize signal timing and phasing.

Incorporate appropriate pedestrian, streetscape, and landscape improvements based upon the vision for the typical cross-sections and streetscape design guide.

This image is a conceptual representation of how the recommended intersection improvements may look in the future. Specific design and details will be worked out during the design phase of the project(s).

6.3 PHASED RECOMMENDED PROJECTS

KEY: S = Safety; O = Operations; I = Intersection; P = Pedestrian; B = Bicycle

For additional descriptions and information, please refer to project sheets in Appendix A. Projects are mapped in Figure 48, Figure 49, and Figure 50.

Project Number	Project Name	From	To	Description	Category(ies)	Estimated Construction Cost	Timeframe	Level of Effort
ST-01	No Left Turn Cambridge Square	Cambridge Square	Cambridge Square	Design and install sign(s) to prohibit left turns from northbound ADR into one or both driveways at Cambridge Square during peak evening rush hour, such as from 4:00 PM to 7:00 PM on weekdays.	S, O	$700-$1000	Short-term	Low
ST-02	Traffic Signal Optimization	N/A	N/A	Work with PTOP to optimize phasing and timing of all PTOP signals along the corridor to improve operations.	O	N/A	Short-term	Low
ST-03	Intersection Advance Warning Signs	South of Windsor Pkwy	North of Windsor Pkwy	Install advance warning "Intersection Ahead" (W2-2) signs with name plaques on the northbound and southbound approaches to Windsor Pkwy.	S	$700-$1,000	Short-term	Low
ST-04	Identify opportunities to modify traffic patterns: Montgomery Elementary	N/A	N/A	Work with DeKalb County Schools and Montgomery E.S. officials to develop plans for modifying traffic patterns on school property. Identify possible opportunities to reduce queueing on ADR and program projects as appropriate.	O	N/A	Short-term	Moderate
ST-05	Intersection Improvement: Harts Mill Rd / Marist School	South of Harts Mill Rd	Harts Mill Rd	Design and construct intersection improvements at Harts Mill Rd/Marist School: lengthen the left turn lane on northbound ADR approaching Harts Mill Rd/Marist School by restriping the existing two-way left-turn-lane.	O, I	$3,000-$3,500	Short-term	Low
ST-06	Flashing pedestrian signal: Montgomery Elementary School	Chaucer Ln	Chaucer Ln	Install flashing pedestrian crossing signal (RRFB) at the crosswalk at Chaucer Ln (entrance to Montgomery Elementary School).	S, P	$8,000-$10,000	Short-term	Low
ST-07	Upgrade Pedestrian Crossings: Kadleston, Nancy Creek Trail	At Kadleston Way, at Nancy Creek Trail/YMCA	At Kadleston Way, at Nancy Creek Trail/YMCA	Upgrade existing pedestrian crossings at two unsignalized locations across ADR to include refuge islands: Kadleston Way; and between the YMCA and Nancy Creek Trail at the north end of Blackburn Park.	S, P	$10,000-$12,000	Short-term	Low
ST-08	Intersection Improvement: Windsor Pkwy	Oglethorpe Dr	North of Windsor Pkwy	Design and construct intersection improvements at Windsor Pkwy and ADR. As a design option, consider a standard, single-lane urban roundabout at the intersection to help calm traffic. To avoid impacts to the first green of the Peachtree Golf Club, a roundabout would need to be offset to the west of the existing Ashford Dunwoody Rd alignment. If a roundabout is not the preferred design option, install a right turn lane on Windsor Pkwy, a left turn lane on northbound ADR, and a traffic signal at the intersection. Install a left turn lane able to accommodate approx. 2 vehicles on northbound ADR at St. Martin's Episcopal Church and School. Construct pedestrian improvements at the intersection based upon the vision of the typical cross-section for Segment 1.	S, O, I	$760,000-$910,000	Short-term	Moderate

Project Number	Project Name	From	To	Description	Category(ies)	Estimated Construction Cost	Timeframe	Level of Effort
ST-09	Intersection Improvement: Johnson Ferry Rd and Donaldson Dr	Kadleston Way	Johnson Ferry Rd	Design and construct short-term improvements at the intersection of ADR at Johnson Ferry Rd and Donaldson Dr Extend the right lane on northbound ADR from south of Publix to Johnson Ferry Rd and restripe existing lanes to create one longer dedicated left turn lane and one left/through/right turn lane. Install new overhead signs and pavement markings, work with PTOP to optimize traffic signal, relocate existing median divider in front of Publix, ensuring full access at Kadleston Way. Install sidewalks based upon the vision of the typical cross-section for Segment 1 on the west side and fill sidewalk gaps on the east side.	O, I	$665,000-$795,000	Short-term	Low
ST-10	Intersection Improvement: West Nancy Creek Dr	West Nancy Creek Dr, west of Ashford Dunwoody Rd	West Nancy Creek Dr, east of Ashford Dunwoody Rd	Design and construct intersection improvements at West Nancy Creek Dr and ADR. Install left turn lanes on eastbound and westbound West Nancy Creek Dr with left turn arrow signals and/or flashing yellow arrows. To minimize impacts to the adjacent properties, it is recommended that the turn lanes and the through lanes be designed to be 10' wide. Construct appropriate pedestrian improvements at the intersection based upon the vision of the typical cross-section for Segment 3.	S, O, I	$755,000-$910,000	Short-term	Low
MT-01	Intersection Improvement: Peachtree Rd (SR 141)	Peachtree Rd (SR 141)	Oglethorpe Dr	Design and construct intersection improvements at Peachtree Rd (SR 141) and ADR. Extend the right turn lane on southbound ADR to Oglethorpe Drive. Convert the right turn lane from southbound ADR to southbound Peachtree Rd into a barrier-separated, free-flow turn lane, with right turn arrow signal and pedestrian-activated push button. Install right turn lane on southbound Peachtree Rd and increase turn radius in the northeast corner of the intersection, install concrete island, and provide space for shelter/waiting area at the bus stop on Peachtree Rd. Consider utilizing the undeveloped tract on the west side of ADR to shift realignment of the road to the west in order to reduce the skew of the intersection with Peachtree Rd and minimize impacts to Peachtree Golf Course. Construct pedestrian improvements at the intersection based upon the vision of the typical cross-section for Segment 1.	O, I	$1,770,000-$2,125,000	Mid-term	Moderate
MT-02	Intersection Improvement: Montgomery Elementary School	North of Brenton Dr	Montgomery Elementary School exit	Design and construct intersection improvements at Montgomery Elementary School. Install a right turn lane on northbound ADR into the school entrance. Upgrade the existing traffic signal at the school exit and work with PTOP to optimize phasing/timing of the signal. Upgrade the pedestrian crossings at the school exit and at Chaucer Ln to include refuge islands and install a wide sidewalk between the two school driveways.	S, O, I	$835,000-$1,005,000	Mid-term	Low
MT-03	Segment Improvements south of Johnson Ferry Rd	Limit of ST-08 (north of Windsor Pkwy)	Limit of ST-09 (south of Johnson Ferry Rd)	Design and construct improvements along ADR south of Johnson Ferry Rd as shown in the typical cross-section for Segment 1, including sidewalk, multi-use path, narrower travel lanes, and curb and gutter.	S, P, B	$1,810,000-$2,175,000	Mid-term	Low
MT-04	Segment Improvements from Donaldson Dr to Blackburn Park	Donaldson Dr	Where Nancy Creek Trail enters Ashford Dunwoody Rd, near the north end of Blackburn Park.	Design and construct improvements based upon the vision of the typical cross-section for Segment 2 (between Donaldson Dr and Johnson Ferry Rd) including a multi-use path on both sides of the road, narrower lanes, a median, curb and gutter, and new sidewalk north of Cambridge Square. Design and construct improvements based upon the vision of the typical cross-section for Segment 3 (North of Johnson Ferry Rd) including a multi-use path on the east side of the road, a sidewalk on the west side of the road, narrower lanes, a center turn lane that becomes left turn lane where needed, and curb and gutter.	S, P, B	$2,260,000-$2,715,000	Mid-term	Moderate

Project Number	Project Name	From	To	Description	Category(ies)	Estimated Construction Cost	Timeframe	Level of Effort
MT-05	Intersection Improvement: Perimeter Summit Pkwy/Oak Forest Dr	South of Perimeter Summit Pkwy	City Limits	Design and construct intersection improvements at Perimeter Summit Pkwy/Oak Forest Dr and ADR and recommendations based upon the typical section for Segment 4. Extend the right turn lane on southbound ADR, creating 2 through lanes and a right turn lane at both Ashford Green and Perimeter Summit Pkwy. Lengthen left turn lane on northbound ADR at Perimeter Summit Pkwy. Install 2nd through lane northbound ADR to match receiving lanes north of intersection. Install planted median with accommodations for left turns where appropriate from Perimeter Summit Pkwy/Oak Forest Dr to City Limits. Construct pedestrian improvements based upon vision of the typical cross-section for Segment 4. Work with PTOP to optimize the signal.	S, O, I, P, B	$2,045,000-$2,455,000	Mid-term	High
MT-06	Gateway Monument	Southwest corner Ashford Dunwoody Rd and Perimeter Summit Pkwy	Southwest corner Ashford Dunwoody Rd and Perimeter Summit Pkwy	Issue a request for proposals or qualifications for the design and construction of a gateway feature to go in the southwest quadrant of the intersection at Perimeter Summit Pkwy/Oak Forest Dr. May include sculpture, visually appealing sign or mural, or planted landscaped area.	Other	$40,000-$60,000	Mid-term	Low
LT-01	Turn lane and pedestrian improvements north of Johnson Ferry Rd to Perimeter Summit Pkwy/Oak Forest Dr	Northern limit of MT-04	Southern limit of MT-05	Design and construct improvements along ADR from north of Johnson Ferry Rd to Perimeter Summit Pkwy/Oak Forest Dr as shown in the typical cross-section for Segment 3. Narrow lanes and install center turn lane that becomes left turn lane where needed from north of West Nancy Creek Dr to Perimeter Summit Pkwy/Oak Forest Dr. Install multi-use path on the east side of ADR from West Nancy Creek Dr and sidewalk on the west side of ADR to the limit of MT-05, considering opportunities to reduce width of elements in residential areas.	O, P, B	$4,745,000-$5,695,000	Long-term	High

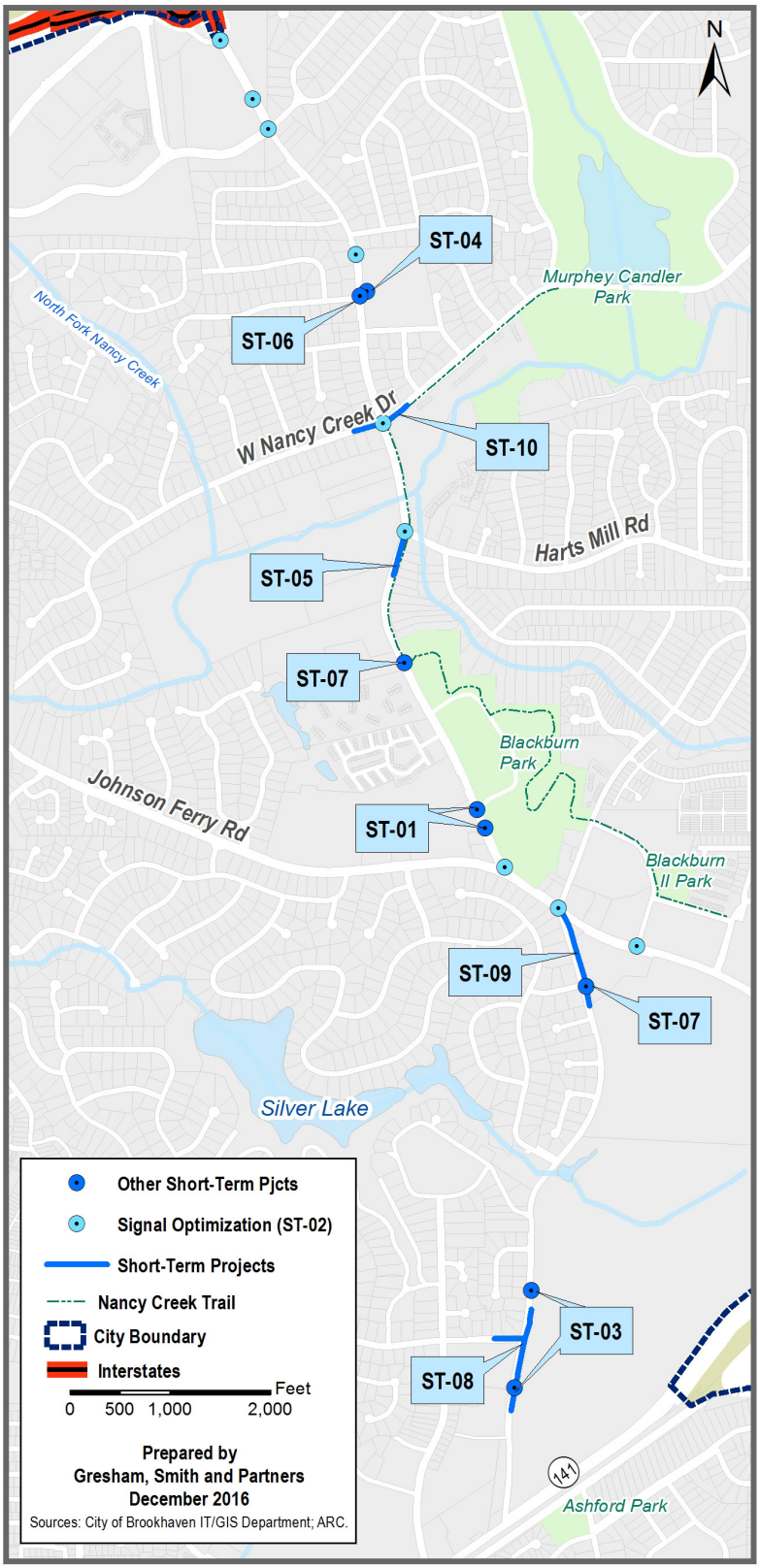


FIGURE 48. RECOMMENDED SHORT-TERM PROJECTS

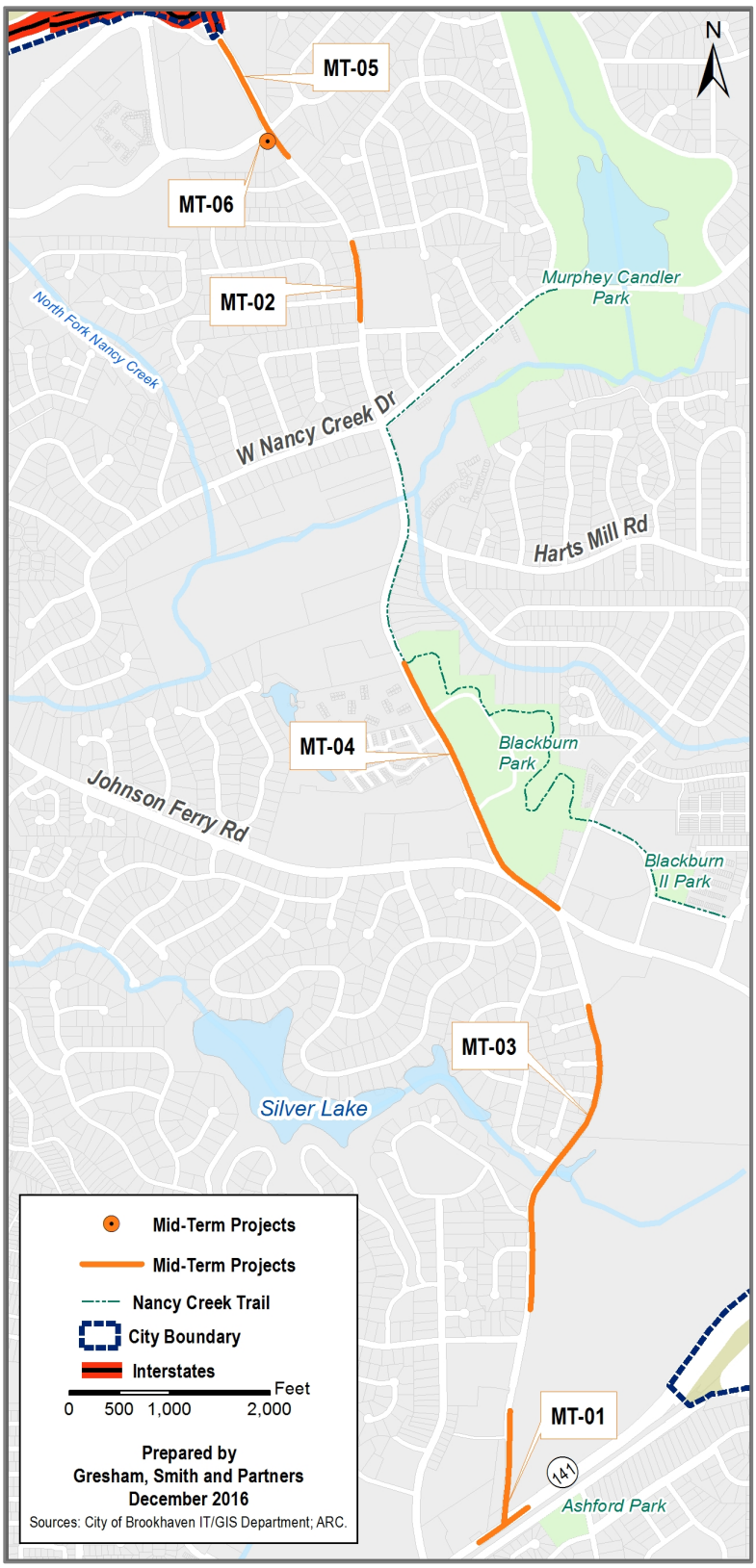


FIGURE 49. RECOMMENDED MID-TERM PROJECTS

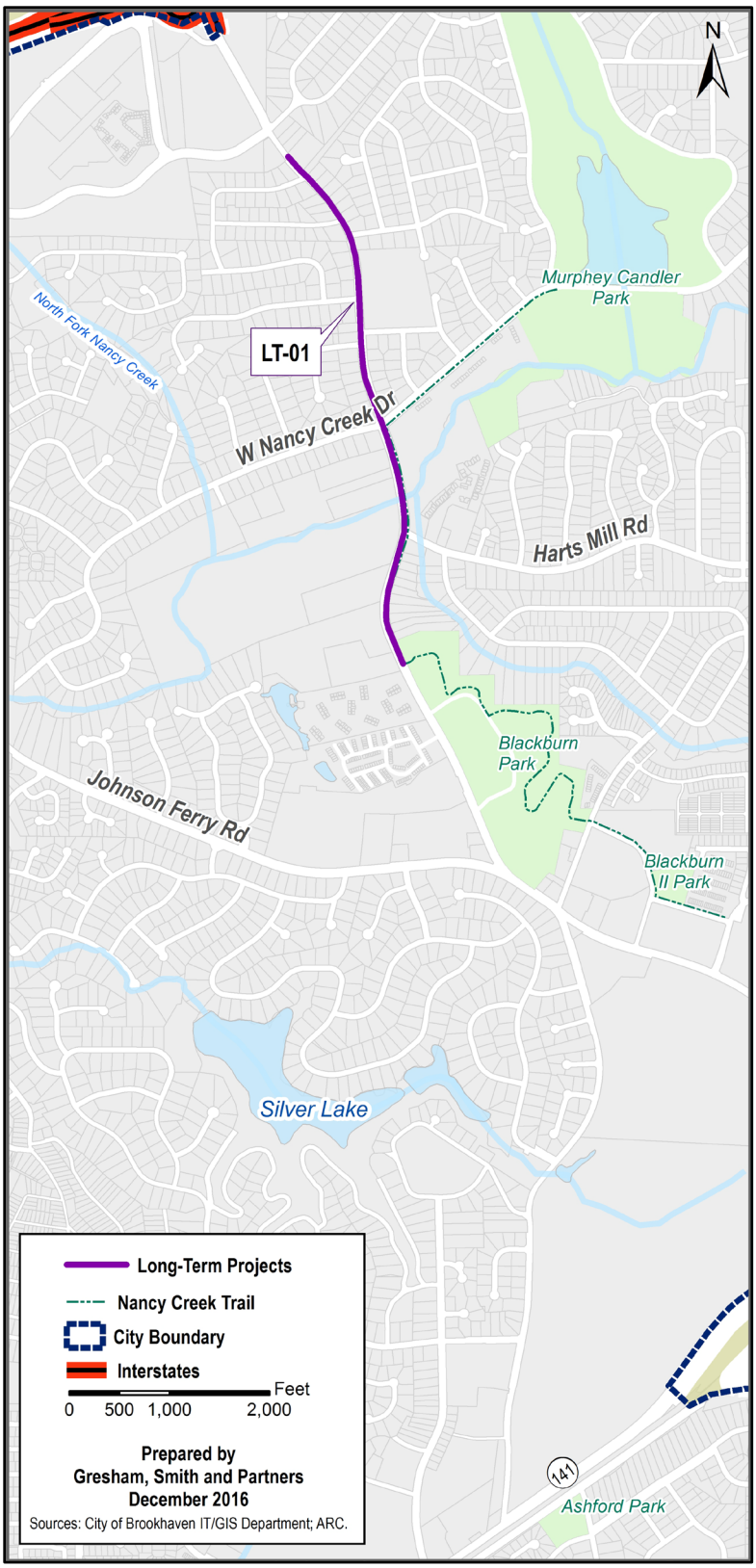


FIGURE 50. RECOMMENDED LONG-TERM PROJECTS

6.4 STREETSCAPE DESIGN

Streetscape design entails hardscape, landscape, and lighting along the corridor to that marry with the recommended improvements to the roadway, intersections, and bicycle and pedestrian facilities. The conceptual guidelines presented in this section are based on best practices and reflect contextually appropriate streetscape elements that may be incorporated into the corridor. They address streetscape elements and offer guidance regarding materials, signage, and color palette. The streetscape design guidelines are intended for corridor-wide application, with the understanding that some streetscape elements are more appropriate and best suited to retail, commercial, and recreational areas. It should also be noted that the north end of the corridor, from Perimeter Summit Pkwy/Oak Forest Dr to beyond the City limits, falls within the boundaries of the PCIDs, which has established public space standards and design guidelines. Any streetscape elements placed within this area should be designed in collaboration with the PCIDs to ensure consistency.

A good source for additional information on streetscape elements is the Pedestrian and Bicycle Information Center (www.pedbikeinfo.org). This information repository is funded by the U.S. Department of Transportation and Federal Highway Administration and maintained in collaboration with the Pedestrian and Bicycle Information Center of the University of North Carolina Highway Safety Research Center. Additional information and examples of potential streetscape elements are provided in the accompanying Streetscape Guide found in Appendix D.

Street Furniture

Street furniture can serve as a buffer between the sidewalk and the roadway, providing important safety and aesthetic benefits. Street furniture may include trees, benches, shelters, bicycle racks, kiosks or signs, bollards, and other elements. Careful attention should be paid to the placement and location of furniture so as not to block pedestrian traffic or motorists' sight lines. Street furniture is most appropriate at key nodes such as in retail or commercial districts, at parks or recreational destinations, plazas, and transit stops. Some street furniture elements may be appropriate where trails cross paths.

Suggested street furniture to consider includes seating, bollards, bicycle racks, and trash receptacles. It is recommended that these be of high quality materials and that finishes be consistent to provide a cohesive look and feel. Black, powder-coated finishes are recommended.

Figure **51.** Example of a wayfinding sign (Source: GS&P)

Wayfinding

Wayfinding signage is designed to help pedestrians find or discover nearby destinations, such as parks, trails, retail or commercial districts, transit facilities, businesses, and more. Pedestrian-oriented directional signs and maps can guide circulation, draw attention to key features or attractions of a community, and help enhance a sense of place. The City of Brookhaven should consider a city-wide wayfinding system, as mentioned in the recommendations above. If a city-wide wayfinding program is not implemented, signage can be developed and implemented on a smaller scale within certain districts or along corridors. Generally, it is recommended

to highlight all destinations within a 10-minute walk of the location of the sign. Signs and maps should be cohesive within a system to provide a unified look and be easily recognizable by users.

Landscaping

Landscaping can provide numerous benefits, including noise abatement, shade, and separation between vehicular traffic and pedestrians. Landscaping has also been proven to help enhance a sense of place and slow vehicular traffic by reducing the visual width of the roadway. Landscaping and street trees also reduce stormwater runoff and reduce soil erosion.

All landscaping should be coordinated with the City's Arborist. Choosing appropriate species, providing adequate space for maturation, and preparing the ground can help ensure survival of vegetation with minimal maintenance. Where landscaping is adjacent to residential properties, property owners should be included in the design process. In general, it is recommended to use low-maintenance plants that are appropriate for the climate and location. Native species and hardwood trees are recommended where possible. Fruit and nut trees should be avoided. A list of suggested tree species is included in the Streetscape Guide. The Flowering Cherry Tree is the official tree of Brookhaven. Where possible and appropriate, the City should incorporate Flowering Cherry Trees into landscape elements, such as at gateway locations.

Trees and other vegetation should be planted along the outside edge of sidewalks and multi-use paths, to screen pedestrians from the roadway. Where it is sufficiently wide (minimum of four feet), trees may be planted along the buffer strip between travel lanes and the multi-use path. These should be maintained so that limbs do not obstruct sight lines, maintaining clear sight and head room; clearance should be a minimum of eight (8) feet. Grass and other appropriate vegetation may also be planted in the buffer, so long as it does not surpass a height of three (3) feet. Spacing of trees is important, as is mature tree height, especially in areas with overhead utility lines. Trees may be spaced irregularly or regularly and should be placed between 30 and 75 feet apart, depending on the size of mature trees. Trees should be located 15 feet from driveways and at least 35-50 feet from intersections.

Lighting

It is recommended that the City incorporate pedestrian-scale lighting along Ashford Dunwoody Rd in addition to the general street lighting that is already provided. Appropriate quality and placement of lighting can enhance a place and increase comfort and safety. It is best to place street lights along both sides of a road and provide a consistent level of lighting. The goal with pedestrian lighting is to ensure both the horizontal surfaces (ground) and vertical surfaces (pedestrians) are receiving the desired illumination and uniformity. A standard practice is to install light fixtures that are between 12 and 15 feet in height, spaced at a distance of approximately 100 feet. Luminaires should be positioned such that the light is directed towards the pedestrians and away from adjacent properties, to prevent light trespass, light pollution, and glare.

FIGURE 52. EXAMPLE OF ALTERNATING ROADWAY AND PEDESTRIAN SCALE LIGHTING (SOURCE: GOOGLE STREET VIEW)

Preference should be given to locating light fixtures outside the clear-zone if possible. If AASHTO-compliant break-away poles are used, it may be acceptable to place light fixtures alongside the roadway; however, this would need to be evaluated on a case-by-case basis and poles should be located as far from the path of vehicular traffic as possible.

Pedestrian-scale light fixtures may be interspersed with general roadway lighting or co-located with roadway lighting on the same poles.

Sidewalks

Consistent with GDOT standards and City code, sidewalks along Ashford Dunwoody Rd should all eventually be a minimum of five (5) feet wide and should ideally be separated from the roadway by a minimum two (2) foot buffer, where possible, to protect pedestrians. In constrained areas, the buffer width may be reduced. All sidewalks along Ashford Dunwoody Rd should be designed and constructed in accordance with GDOT and AASHTO standards.

Crosswalks

Crosswalks indicate the preferred locations for pedestrians to cross and help designate the right-of-way for motorists to yield to pedestrians. They should be installed at signalized intersections and other select locations with appropriate levels of pedestrian and vehicular traffic. A variety of crosswalk designs are included in the FHWA *Manual on Uniform Traffic Control Devices (MUTCD)*, including transverse lines, ladder, and other markings. High visibility crosswalks are more easily detected by motorists and have been shown to lead to a reduction in pedestrian-vehicle collisions and should be used at uncontrolled crossing locations.[ix] Ladder markings, sometimes referred to as "piano keys," shown in Figure 53Figure 53. Example High Visibility crosswalk (source: www.pedbikeimages.org / Sree Gajula), are often considered "high visibility" and recommended for uncontrolled or midblock crossings. These also require less maintenance due to the spacing that can avoid the wheel path of automobiles. More highly designed, textured crosswalks can be used at signalized or controlled locations.

FIGURE 53. EXAMPLE HIGH VISIBILITY CROSSWALK (SOURCE: WWW.PEDBIKEIMAGES.ORG / SREE GAJULA)

Multi-Use Trails

Consistent with recommendations from the City's *Bicycle, Pedestrian and Trail Plan*, multi-use paths along Ashford Dunwoody Rd should be no less than ten (10) feet wide and should ideally be separated from the roadway by a minimum of five (5) feet. In constrained areas, the buffer width may be reduced as needed. All multi-use path segments should be designed and constructed in accordance with GDOT and AASHTO standards.

GDOT's *Pedestrian and Streetscape Guide* offers special considerations for paths shared by multiple users traveling by different modes (i.e. walking, bicycling, skating, etc.). The guide stipulates that design of shared use paths should carefully consider the various skill levels, experience, and characteristics of anticipated users. With regard to design standards, the guide states that all trails must be designed in accordance with GDOT and the AASHTO design requirements. To help minimize potential conflicts between different users, it is recommended to provide clear sight lines, wide shoulders, paths free from obstacles, delineation and separation treatments, and the use of bicycle speed limits and directional signage. [x]

The GDOT *Pedestrian and Streetscape Guide* also recommends the following treatments for delineation or separation treatments on shared-use paths:

- Colored paving
- Signing
- Textured paving or paving patterns
- Slip resistant pavement markings (in symbols or words - raised pavement markers are not acceptable methods of delineation for trails with bicycles)
- Striping with education program about trail etiquette and meaning
- Combinations of two or more of the above

In general, trails and paths in urban areas should be paved or consist of other hard-surfaced materials. Paths shared by pedestrians and bicyclists should be constructed of smooth, paved, all-weather material such as concrete or asphalt. For details regarding design and construction, refer to GDOT's *Pedestrian and Streetscape Guide*.

End Notes and Sources

[i] City of Brookhaven. (2014). Comprehensive Plan 2034. http://www.brookhavenga.gov/home/showdocument?id=4638, p. 77.
[ii] In August of 2014, Ashford Dunwoody Road was reclassified from Other Principal Arterial to Minor Arterial between Johnson Ferry Road and I-285 (adopted by the Board of the Atlanta Regional Commission).
[iii] Georgia Department of Transportation, "Georgia DOT's Signal Software Update to Make Traffic "Smart." Press release August 25, 2016, http://www.dot.ga.gov/PartnerSmart/Public/PressReleases/Georgia%20DOT%E2%80%99s%20Signal%20Software%20Update%20to%20Make%20Traffic%20Smart-8-25-16.pdf
[iv] Federal Highway Administration. Street Design: Part 1 – Complete Streets. Public Roads, 74/1, July/August 2010, https://www.fhwa.dot.gov/publications/publicroads/10julaug/03.cfm
[v] U.S. Department of Transportation. (2007). Congestion: Who is Traveling in the Peak? http://nhts.ornl.gov/briefs/Congestion percent20- percent20Peak percent20Travelers.pdf, cited in "Complete Streets Ease Traffic Woes" from the National Complete Streets Coalition, https://smartgrowthamerica.org/app/uploads/2016/08/cs-congestion.pdf.
[vi] Federal Highway Administration (2015). Separated Bike Plan Planning and Design Guide. Publication FHWA-HEP-15-025, https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/separated_bikelane_pdg/separatedbikelane_pdg.pdf.
[vii] Federal Highway Administration. (2006). *Evaluation of Safety, Design, and Operation of Shared-Use Paths, Final Report*. Publication FHWA-HRT-05-137m http://www.fhwa.dot.gov/publications/research/safety/pedbike/05137/05137.pdf
[viii] Federal Highway Administration. *Medians and Pedestrian Crossing Islands in Urban and Suburban Areas*. Publication FHWA-SA-12-011, http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_011.cfm.
[ix] McGrane, A. and Mitman, M. (2013). *An Overview and Recommendations of High-Visibility Crosswalk Marking Styles*. Pedestrian and Bicycle Information Center. http://www.pedbikeinfo.org/cms/downloads/PBIC_WhitePaper_Crosswalks.pdf
[x] GDOT Pedestrian and Streetscape Guide (2003), Chapter 7. Toolkit 4 – Trails and Paths.