Study Overview



Study Update and Revised Approach

In early 2021, the City of Brookhaven initiated an evaluation of three intersections along Dresden Drive, based on recommendations from the City's 2020 Comprehensive Transportation Plan (CTP) Update. That plan recommended a safety and operations analysis to identify specific improvements to reduce crashes and injuries and to improve operations at the key intersections of Dresden Drive and Apple Valley Road, Ellijay Drive, Caldwell Road, and Clairmont Road.

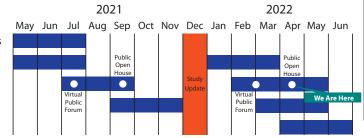
Following feedback received during the fall of 2021, the scope of this study was expanded to refine the analysis, update the traffic study (including new traffic counts), develop updated recommendations and new considerations, and to hold two additional public meetings. Specifically, the study now includes consideration of additional intersections and roadway segments within the Brookhaven Fields and Ashford Park neighborhoods and of options for traffic calming beyond what is in place now on neighborhood streets due to possible increases in potential future traffic. Since the scope was revised, a virtual public meeting was held on March 3, 2022, to provide community members an opportunity to learn about the new data collected and the assumptions incorporated into the analysis. Since then, the project team developed initial recommendations and considerations based on analysis and findings. The purpose of today's Public Open House is to present those draft recommendations and considerations and to get feedback from the community.

Study Process

Assessment of Existing Conditions
Traffic Study
Public Involvement

Development of Alternatives

Final Report and Deliverables



About Dresden Drive

Dresden Drive is the primary east-west corridor connecting Peachtree Road (SR 141) and Clairmont Road. In addition to evaluating safety and operations at critical intersections, the study is also assessing traffic calming options for streets that can be accessed from Caldwell Drive between Dresden Drive and Redding Road and from Ellijay Drive between Dresden Drive and Briarwood Road. The map above right shows the location of Dresden Drive and the critical study intersections within the City of Brookhaven.





Study Purpose

The City of Brookhaven is undertaking an operational and safety analysis for critical intersections along Dresden Drive - Apple Valley Road, Ellijay Drive / Caldwell Road, and Clairmont Road. The purpose of the study is to identify improvements to help serve projected vehicular traffic while providing safe and comfortable facilities for pedestrians, cyclists, and transit users. The primary objectives of the study are to:

- Evaluate existing and forecast future traffic based on known and planned developments in the area
- Evaluate existing conditions, signals, and pedestrian facilities for safety and efficiency
- Recommend intersection improvements for optimal traffic movement
- Provide recommendations for additional or revised traffic calming measures in the neighborhoods north and south of Dresden Drive accessed from the Caldwell Road/Ellijay Drive intersection based on an evaluation of future traffic impacts

Summary of Draft Recommendations & Considerations



Intersection Recommendations

Dresden Drive at Peachtree Road (SR 141)

- Widen Peachtree Rd to six lanes with three travel lanes in each direction
- Construct additional turn lanes and turn lane improvements
- Adjust traffic signal phasing

Dresden Drive at Apple Valley Road

- Construct additional turn lanes and turn lane improvements
- Shift EB approach lanes south to accommodate additional receiving lane on Dresden Dr west of Apple Valley Rd
- Adjust traffic signal phasing
- Add flashing yellow arrows (FYAs) for WB and SB permissive left-turn phases

Dresden Drive at Ellijay Drive & Caldwell Road

- Install a crosswalk across the east leg of the Ellijay Dr intersection, with pedestrian ramps and signals for crossing in both directions
- Install new sidewalk along the north side of Dresden Dr, to connect to the proposed crosswalk at the Ellijay Dr intersection

Dresden Drive at Clairmont Road

- Construct additional turn lanes and turn lane improvements
- Adjust traffic signal phasing
- Add flashing yellow arrows (FYAs) for all permissive left-turn phases
- Prohibit right-turns on red along Dresden Drive
- Work with property owners to identify opportunities to consolidate driveways in close proximity to the intersection
- Add more street lighting
- Evaluate the need for No Loading and/or No Parking signage along Clairmont Rd south of Dresden Dr



Diagonal Diverter





Mini-Roundabout



Additional Signage



Flashing Yellow Arrow (FYA)

Traffic Calming Measures

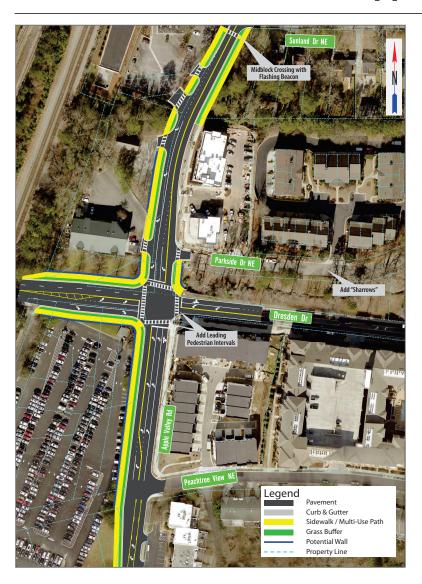
- Restrict turning movements at select intersections to prevent cut-through traffic and improve multimodal safety
- Restrict access at select streets to prevent cut-through traffic and improve multimodal safety
- Implement additional signage improvements to communicate local traffic only on residential streets
- Install speed tables along select roads
- As an alternative to turn restrictions, consider the use of mini-roundabouts

Other Considerations

- To accommodate on-street bicycle facilities along Dresden Dr, consider trade-offs such as eliminating center turn lane and removing on-street parking
- Require more holistic traffic studies from developers to consider interactions with adjacent developments and overall effects on the City's transportation system

Draft Recommendations - Apple Valley Road Intersection





Vehicular Improvements

- Install an additional NB left-turn lane with left-turn arrow (protected-only phasing)
- Shift EB approach lanes south to accommodate additional receiving lane on Dresden Dr west of Apple Valley Rd
- Lengthen the SB right-turn lane and install a dedicated SB left-turn lane, so the SB approach consists of one right-turn lane, one through lane, and one left-turn lane
- Install left-turn arrows with flashing yellow arrows (FYAs) for WB and SB left-turn phases
- Add a protected left-turn signal phase for WB left turns
- Add right-turn arrows for EB and SB right-turns

Potential Benefits

- Increases capacity and reduces delay for NB left-turns onto Dresden Dr towards Peachtree Rd
- Provides dedicated storage for SB left-turns and increases capacity of the SB approach along Apple Valley Rd
- Provides dedicated signal phase for left-turn movements from Dresden Dr
- Improves safety for bicyclists and pedestrians crossing the intersection
- Fills sidewalk gaps, improving connectivity and pedestrian access to Parkside Park

Bicycle & Pedestrian Improvements

- Add leading pedestrian interval for crosswalks across south and east legs
- Install shared lane markings ("sharrows") along Parkside Dr
- Extend the sidewalk along the east side of Apple Valley Rd to connect to Parkside Dr and install a crosswalk across Parkside Dr
- Add a midblock crossing with rapid-flashing beacon south of Sunland Dr to connect the east and west sides of Apple Valley Rd

Note: This area lies within the Peachtree Road Overlay (PRO) district and should meet minimum requirements for landscape zone, pedestrian zone, and streetscape elements. Implementation should align with guiding principles and recommendations from the City Centre Master Plan.

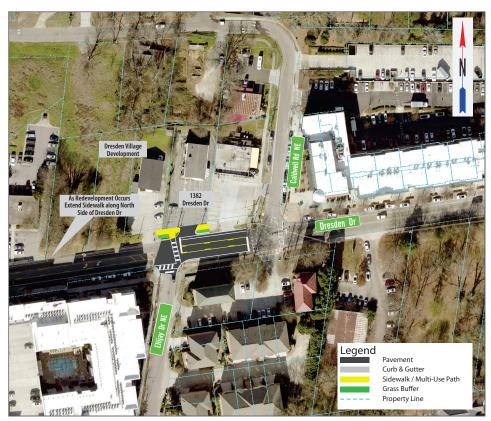




ote: Images are for conceptual representations only. Details will be worked out during design phase.

Draft Recommendations - Ellijay Drive/Caldwell Road Intersection





Vehicular Improvements

Mill, repave, and restripe pavement markings between Ellijay Dr and Caldwell Rd

Bicycle & Pedestrian Improvements

- Install crosswalk across the east leg of the Ellijay Dr intersection
- Add pedestrian signals on the east leg of the Ellijay Dr intersection, for the new crosswalk
- Extend sidewalk along the north side of Dresden Dr west of Caldwell Rd to meet the proposed crosswalk on the east leg of the Ellijay Dr intersection

Potential Benefits

- Provides full pedestrian access at the Ellijay Dr intersection, in addition to the Caldwell Rd intersection
- Fills gaps in sidewalk, improving connectivity and pedestrian access



Note: This area lies within the Peachtree Road Overlay (PRO) district and should meet minimum requirements for landscape zone, pedestrianzone, and streets cape elements. Implementation should align with guiding principles and recommendations from the City Centre Master Plan.



lote: Images are for conceptual representations only. Details will be worked out during design phase.

Draft Recommendations - Clairmont Road Intersection





Vehicular Improvements

- Extend the EB right-turn lane
- Add flashing yellow arrows (FYAs) for all legs of the intersection
- Convert the WB through/right-turn lane to a dedicated right-turn lane with a single through-lane, and a single receiving lane on Dresden Dr west of Clairmont Rd
- Add right-turn arrows for EB and WB rightturns and prohibit right turns on red
- As the former gas station in the northeast corner is redeveloped, seek opportunities to consolidate driveways
- Work with the City of Chamblee and property owners to mitigate driveway turning conflicts at the CVS entrance on Clairmont Rd
- Evaluate the need for No Loading and/or No Parking signage along the west side of Clairmont Rd south of Dresden Dr

Bicycle & Pedestrian Improvements

- Install a multi-use path (MUP) along the south side of Dresden Dr, west of Clairmont Rd
- Add street light to the existing utility pole south of the intersection on the west side of Clairmont Rd

Potential Benefits

- Addresses sight distance issues for EB and WB right-turns
- Provides additional storage for EB right-turns and reduces likelihood of vehicles driving on curb
- Improves traffic signal to meet current standards
- Improves access management, mitigating conflicts between vehicles queuing at the intersection and entering/exiting commercial driveways
- Improves visibility and pedestrian safety
- Reduces congestion due to and/or conflicts with trucks unloading along Clairmont Rd





lote: Images are for conceptual representations only. Details will be worked out during design phase

Draft Recommendations - Traffic Calming Strategies



North of Dresden Drive

ALTERNATIVE A

- Install a diagonal diverter at the intersection of Ashford Rd and N Thompson Rd
 to restrict NB and SB through and right-turn movements. Or, as an alternative to a
 diagonal diverter, close access on Ashford Rd just north of N Thompson Rd (where
 the power lines cross the roadway).
- Install a diagonal diverter at the intersection of Caldwell Rd and Cheshire Way to restrict NB and SB through and left-turn movements.
- Close access on Redding Way at the location of the bridge/culvert between Redding Rd and Winding Ln.

ALTERNATIVE B

 Install a diagonal diverter at the intersection of Redding Rd and Caldwell Rd to restrict NB and SB through and right-turn movements.

South of Dresden Drive

- Install a diagonal diverter at the intersection of Ellijay Dr/Coosawattee Dr and Cartecay Dr to restrict movements between Coosawattee Dr and Ellijay Dr as well as NB and SB right-turns.
- Close the segment of Fernwood Cir between Sylvan Cir and Fernwood Cir.
- Install speed tables along Briarwood Hills Dr.

Optional Temporary Installation of Diagonal Diverters

Diagonal diverters could be installed on a temporary basis to test and evaluate their efficacy. If desired, the temporary installations could be made permanent.

Alternative Considerations

- As an alternative to the proposed diagonal diverters and road closures, a series of mini roundabouts could be installed at the following intersections:
 - · Redding Rd at Caldwell Rd
 - Ashford Rd at N Thompson Rd
 - · Redding Way at Winding Ln
 - · Caldwell Rd at Cheshire Way
 - Ellijay Dr/Coosawattee Dr at Cartecay Dr
 - · Sylvan Cir at Fernwood Cir

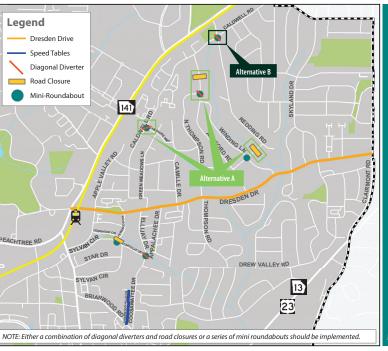
About Diagonal Diverters

Diagonal diverters are islands built within residential street intersections which prevent certain turning movements at a given location. They are designed to break up cut through traffic and force right or left turns in certain directions, preventing through movements.

Diverters are designed to allow bicycle and pedestrian access as well as emergency vehicle access.

Source: National Association of City Transportation Officials (NACTO)

Source: Federal Highway Administration



About Mini-Roundabouts

Mini-roundabouts are a type of traffic circle typically located in residential neighborhood settings that are designed to reduce speeds at minor intersections.

Mini-roundabouts can be installed using a combination of pavement markings and raised islands with care for multimodal users, the turning radius, lane width, and available right-of-way.

Source: NACTO



Mini-Roundabout on North Coleman Rd in Roswell, GA

Other Considerations



On-Street Bicycle Considerations

Existing Cross-Section

The City of Brookhaven is planning to prepare an update to the Bicycle, Pedestrian and Trails Plan starting in 2022. Some community members have expressed a desire for installing on-street bicycle facilities along Dresden Drive. The following summarizes potential trade-offs and considerations that should be taken into account as part of that process.

As an example, Dresden Drive near Ellijay Drive currently has one travel lane in each direction and a center left-turn lane. The south side of the road has a wide sidewalk, landscaped buffer, and some on-street parking. The north side of the road has utility poles and no sidewalk.

Potential Cross-Section

Given the posted speed limit and traffic volume along Dresden Drive, on-street bicycle lanes should be physically separated from vehicular travel lanes. In order to accommodate this, one option could be to preserve the existing curb on the south side of Dresden Drive and to remove the on-street parking and center left-turn lane. This would provide room for one separated bicycle lane with an appropriate buffer and physical barrier in each direction. The widths shown below reflect minimum recommendations per FHWA and the NACTO Separated Bike Lane Design Guide. Trade-offs to accommodate on-street bicycle lanes in this part of Dresden Drive may include the following:

- Lose the existing on-street parking
- Lose the two-way center turn lane
- Requires additional ROW to the north; may encroach on existing properties, driveways
- May require relocation of some utility poles



Preferred 44' Curb-to-Curb Distance (with 3' buffers and 7' bike lanes)

Development Traffic Studies

As new development proposals are advanced in the future, the City should require developers to conduct traffic impact studies as part of these applications. These studies should be based on actual development quantities put forth by the proposal and should take into account the most current traffic data and growth assumptions at the time of the application.

The scopes of these studies should be comprehensive to not only examine the developer's own site plan but also interactions with other proposals for nearby developments. Required roadway and intersection improvements identified as part of each development proposal should consider all users of Dresden Drive including bicyclists and pedestrians and should consider and reexamine recommendations included in this study at the critical study intersections.



