



Austell Road
Access
Management
Plan



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Austell Road Access Management Plan



Cobb County...Expect the Best!

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1 Executive Summary

Introduction

The Austell Road Corridor Access Management Plan (AMP) is a distinct, yet complementary component of the original Austell Road Livable Centers Initiative Study (LCI) adopted by the Cobb County Board of Commissioners in June 2007. As with the original study, the AMP was funded partially by the Atlanta Regional Commission (ARC) as part of an ongoing effort designed to create a broad consensus about future transportation and redevelopment patterns. As such, the AMP provides comprehensive recommendations for the implementation of future access management strategies ranging from alternative roadway networks to safer pedestrian connectivity.

Access Management (AM) is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway. Access Management involves roadway design applications, such as median treatments and auxiliary lanes, and the appropriate spacing of traffic signals. The purpose of access management is to provide vehicular access to land development in a manner that preserves the safety and efficiency of the transportation network. In particular, the Austell Road Corridor Access Management Plan focuses on creating a systematic way to carry out the roadway functional hierarchy implicit in Cobb County documents such as the Comprehensive Transportation Plan (CTP), Comprehensive Plan and Livable Centers Initiative (LCI) Plans.

Roadways are classified traditionally by function on the basis of the priority given to land access versus through-traffic movement. Access management is particularly important along facilities such as Austell Road which need to provide safe and efficient movement of traffic, as well as access to existing property and future property development. Complicating access management is the fact that the appropriate degree of access control varies according to the functions and traffic characteristics of a roadway, the character of abutting land, and long-term planning objectives. As property is redeveloped in south Cobb County and along the corridor, the appropriate amount and type of access needs to be decided ultimately on the basis of policy. Georgia Department of Transportation (GDOT), Cobb County and local jurisdictions such as the City

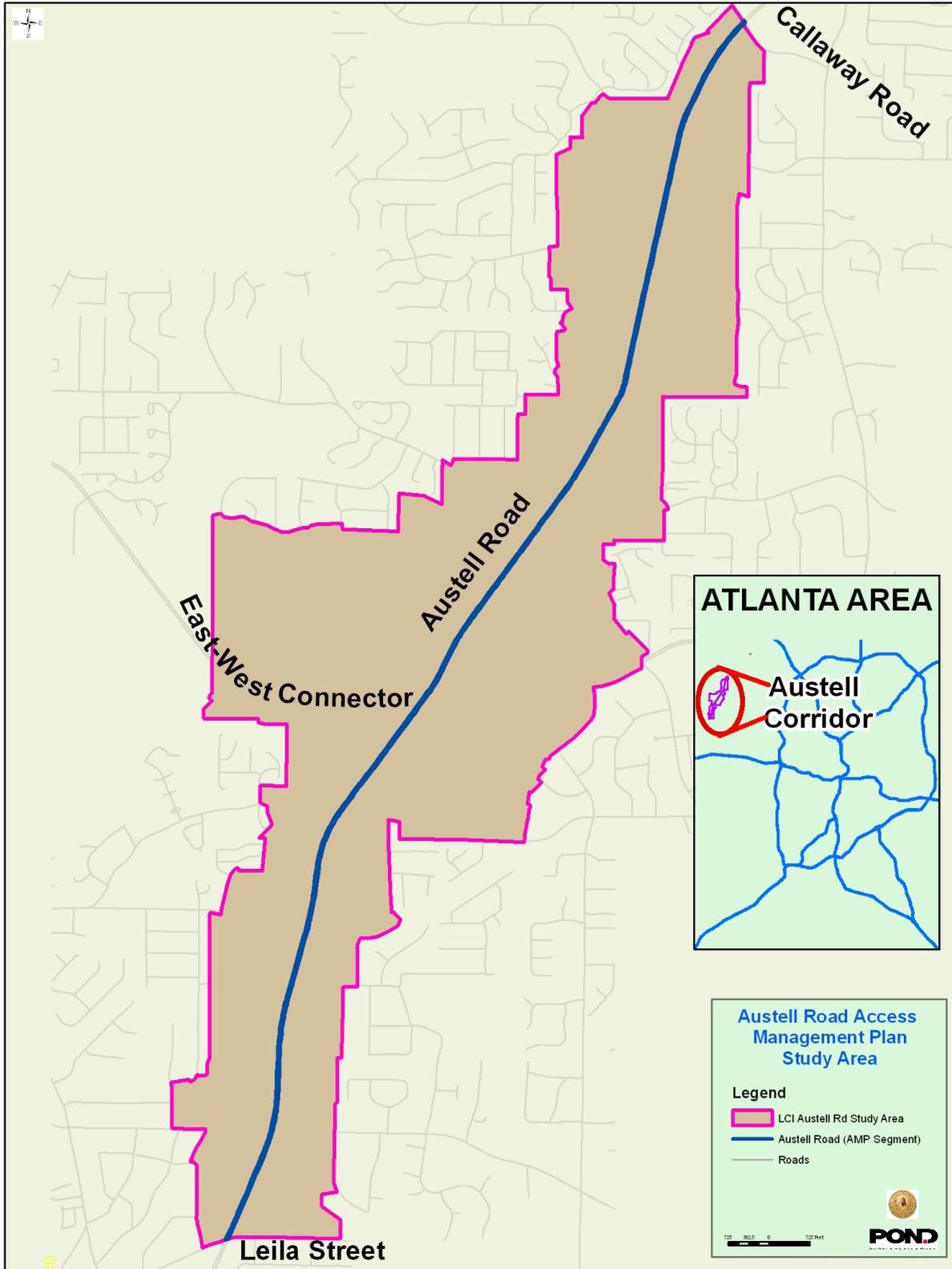


FIGURE 1-1 Austell Road Corridor

of Austell will need to choose the level of arterial performance, safety, and driver ease on this roadway in exchange for more frequent and direct site access.

Through the management of roadway access, the Cobb County Department of Transportation can extend the life of the road, increase public safety, reduce traffic congestion and improve the quality and appearance of the built environment. Access management not only preserves the transportation functions of roadways, but it also helps preserve long term property values and the economic viability of existing development. Safety will also be enhanced in that pedestrians will face fewer and less frequent access points where motorists enter and exit the roadway, and transit riders will experience reduced delay and reduced travel times. Moreover, more convenient access occurs as pedestrian paths are improved and communities form more attractive roadway corridors and a safer transportation network.

Approach

The Austell Road Access Management study moved beyond traditional roadway improvement analyses to address access management considerations in relation to land development. The primary goal of the study is to produce a versatile planning tool that can be used to prevent future access problems and to provide solutions to current access dilemmas. The purpose of this planning effort is to evaluate roadway design and access characteristics and propose access changes that improve the safety and operation of the corridor. Considerations included median closures and improvements, signal location, auxiliary lanes, site access, land use concepts and improvements to the supporting roadway network. The defining characteristic of Cobb County's effort has been the level of cooperation achieved among affected area residents and businesses and internal departments involved in carrying out the study. With many stakeholders influencing the process and the trade-offs involved, accomplishing a set of implementation measures was a challenge. The County worked diligently to establish a process for early and continuing public involvement in the development of this study. Public involvement set forth a process for sharing information, airing concerns, and discussing issues of importance to the community in the Austell Road corridor study area, which is bounded by Perkerson Mill Road / Leila Street on the south and Callaway Road on the north. It also provided a process for obtaining general agreement as to guiding principles and objectives for the corridor. Since the corridor traverses several types of land uses and design characteristics, it is critical that each government entity participates fully.

Framework

The regulatory framework for the Austell Road corridor encourages the implementation of a blueprint for addressing transportation, land use, economic development and community design issues in a integrated fashion. The original LCI study effort vision was to revive the spirit and strength of this street and the neighborhoods, businesses and activity centers that it links together. The study supports the implementation of elements of the Cobb

County Comprehensive Plan and Comprehensive Transportation Plan by encouraging partnerships between the public and private sectors in planning and implementation, linking land use and transportation to improve mobility and economic health in the corridor, identifying multi-modal transportation enhancements, improving land use access and transportation system efficiency.

Existing zoning and land use regulations encourage a development pattern geared towards a more vibrant community. The AMP proposes several important transportation enhancements to encourage more appropriate pattern for the area while providing for increased automobile and pedestrian safety, improved mobility, and a more efficient circulation network. The implementation of these enhancements, with the support of the Cobb County government agencies, will provide the necessary incentives and controls to ensure the development/redevelopment of the area into an attractive place to live, work and play.

The success of the County's efforts hinges on stakeholder acceptance of the need for action and a common future vision for the corridor. The County developed a need statement that articulates clearly the purpose of the study and the issues requiring resolution. This was accomplished through a combination of corridor analysis and stakeholder interviews after which a vision statement and supporting goals and objectives were developed to guide the overall effort. Before initiating the public visioning process, a preliminary corridor analysis was prepared including an overview of transportation and land use trends and conditions. The analysis addressed both current and forecasted trends, as well as the overall role of the corridor in carrying vehicular traffic in the county and region. Also, general access characteristics were identified, including obvious access problems, such as high-crash locations or poorly designed development sites, as well as examples of good access design and site development.

The study also examined a range of traffic operations solutions to development/redevelopment opportunities to create solutions that can enhance value for property owners and the County. The study overlaid potential solutions on aerial photographs to perform an assessment of implementation opportunities and barriers. These were refined and combined with treatments on the Austell Road right-of-way to develop a preferred set of access management recommendations. The study is consistent with many land use and transportation standards in the corridor with some variances to provide needed flexibility so as to ensure a win-win plan for property owners and residents.

An initial step in the study development involved mapping the geographic boundaries of Austell Road through aerial photography and field observation. The study effort was supplemented with a series of closer segment photographs that depicted physical attributes more precisely; dividing

Vision

Study Area

the corridor into sub-areas on the basis of shared characteristics. Separate sub-areas were established for land that is commercial versus areas that are residential in character. The core of the study area is commercial and required and benefited from special attention in the development of different access management strategies.

Policy Analysis

The study reflects an evaluation of existing public planning efforts and overall policy framework affecting the corridor. This assessment provided insight into needed changes, as well as any existing policies and standards that became part of access management alternatives. Embedded in the work effort was a review and critique of comprehensive plans, corridor studies, and relevant ordinances and other regulations of the County. Each document was reviewed to identify strengths and weaknesses of existing planning and regulatory programs with regard to access management.

Land Use Analysis

The study effort included an inventory of land use characteristics, including existing land use, zoning, numbers of driveways and spatial distances, transit stop locations and spatial distances, types of businesses, internal circulation and locations of auxiliary roadways and paths, planned developments and parcel boundaries. The data was used to examine potential scenarios against the capacity and operation of the transportation system through peak hour traffic analyses. Every attempt was made to create a refined analysis of the relationship between corridor development and the ability of the road network to meet current and projected traffic demand, as well alternative modes of travel including walking, bicycling, and using transit. Maps were generated to highlight functional areas of key intersections where access management strategies could be implemented.

Transportation Analysis

The Austell Road Access Management study builds upon standards developed by Cobb County and tailored, specific recommendations to address the needs of the corridor. This required an understanding of travel patterns along the corridor for current conditions as well as potential future conditions. The access management plan considered the future use of all travel modes and provides for trips within the corridor, those traveling to and from destinations along the corridor, and those traveling through the corridor. Certain aspects of the access management plan recommendations should be uniformly applied along the corridor. Implementing standards for driveway spacing and design, signal spacing, management of turning movements to reduce conflicts, as well as standards for application off the physical Austell Road, such as inter-parcel connections and parallel frontage and reverse frontage (backside access) are examples. However, the timing of these enhancements may need to be staggered based on current and anticipated development, geometric constraints and funding. For example, the commercial core of the study area may start with improved inter-parcel connections with a parallel facility to be added later as redevelopment occurs.

According to the original LCI study, the Austell Road Corridor faces several challenges that are addressed in this study, including:

- Severe traffic congestion – Due to commuting patterns and the roadway’s intersection with the East-West Connector, the corridor experiences high levels of traffic congestion and delay during morning and evening rush hours.
- Traffic safety – The intersection of Austell Road and East-West Connector has the highest accident rate in the state of Georgia and is challenging for both autos and pedestrians.
- Economic decline – As the corridor’s importance as a transportation route has increased, the vibrancy of many of the older strip shopping centers along it has decreased.
- Lack of community identity – Austell Road has large, unattractive signs; featureless parking lots; vacant storefronts; neglected maintenance of rights-of-way; a barren concrete median; overhead powerlines; and chain-link-fenced detention ponds in front yards.

At the same time, this corridor has several important assets that are opportunities for redevelopment:

- Stable residential neighborhoods – The residential areas located just behind the corridor are, for the most part, strong, well-maintained neighborhoods.
- Community institutions – WellStar Hospital is in the center of the study area with 347 beds and 2,264 employees. The South Cobb Government Center is located in the southern portion of the corridor.
- The Silver Comet Trail – The Trail passes through the southern end of the study area; however, there is currently no access to this recreational amenity provided in the Austell Road Corridor.
- Development opportunities – There are several well-placed tracts of vacant land, a number of aging commercial centers, and other underutilized tracts (such as the two mobile home parks) that should provide ample opportunities for development and redevelopment in this corridor.

An accurate assessment of existing conditions along Austell Road was a key to determining how the corridor serves a variety of travel patterns. The Average Annual Daily Traffic (AADT) volumes along the corridor were obtained from GDOT to determine the overall traffic demand on various segments of the roadway throughout the corridor. A peak hour traffic analysis was conducted for a segment of the most congested, central part of the corridor. In addition to traffic and crash data, the roadway network along Austell Road and connecting roads were inventoried to determine driveway locations, roadway and intersection configuration, and presence of sidewalk, bicycle and transit facilities.

Existing Conditions

Traffic Analysis

For the peak hour traffic analysis, the methodology used for evaluating traffic operations at intersections is based on the criteria that is set forth in the Transportation Research Board's *Highway Capacity Manual 2000* (*HCM 2000*). Synchro 6 software, which emulates the *HCM 2000* methodology, was used for the analysis to determine the level of service (LOS) of specific intersections within the study area. Four alternatives were analyzed as a part of the peak hour traffic analysis. These include the following:

- 2009 Existing Conditions
- 2009 With Access Management Recommendations
- 2019 Without Access Management Recommendations
- 2019 With Access Management Recommendations

AM and PM peak hour traffic counts were conducted at three signalized intersections and four unsignalized intersection within the study area. These were used to conduct the 2009 traffic analyses. Existing signal cycle length and other parameters were incorporated into the intersection analysis to provide an accurate assessment of current operations. This analysis showed that while traffic congestion exists at the signalized intersections, no intersections have a failing LOS. However, the unsignalized intersections experienced a failing LOS at a number of left turn movements from cross streets and driveways onto Austell Road.

After this analysis was complete, preliminary access management recommendations were developed. Implementation of these recommendations impacted traffic patterns in the area and required redistribution of some turning movements. These recommendations were analyzed in the "2009 With Access Management Recommendations" alternative to determine any impact these projects could have if they are implemented in the short term.

A simple annual growth rate of 3% was applied to the 2009 traffic counts to increase the background traffic volumes to 2019 levels. This growth rate was developed using historic AADT volumes provided by GDOT. Additional trip generation was conducted at two sites along the corridor where additional development or redevelopment is anticipated. Methodology from the *ITE Trip Generation Handbook, 7th Edition* was followed to conduct trip generation for each of these sites. The 2019 alternatives compared traffic operations with and without the implementation of the access management recommendations to determine how the roadway will operate based on these two different alternatives.

Bicycle / Pedestrian Analysis

The locations of sidewalks along the Austell Road corridor and major cross streets were identified using Geographic Information Systems (GIS) data provided by Cobb County. This data was field-verified to determine if any additional sidewalk infrastructure existed but was not represented in this data. The revised data is a sidewalk inventory of

the study area that identifies not only the locations of sidewalks but also all roadway segments that do not have sidewalks. The Cobb County Board of Commissioners adopted the County's Sidewalk Program Implementation Plan in April 2006 to select a methodology for allocating funds to sidewalk projects from the 2005 SPLOST. Criteria from this methodology were applied to the Austell Road sidewalk inventory to prioritize future sidewalk projects within the study area.

While identifying and prioritizing pedestrian projects helps to direct future infrastructure development, it should also be noted that all reductions in driveways and median openings are beneficial to bicyclists and pedestrians in a similar way as they are beneficial to automobiles. Closure of driveways and median openings reduces the number of conflict points between bicyclists and automobiles and between pedestrians and automobiles. This increases safety and reduces delay for bicyclists and pedestrians, making these alternative travel modes more viable.

The study arrived at a set of transportation enhancement and land use suggestions identified in Table 1-1 at the end of this section. The alternatives identified existing and future access locations, the type of access to be provided, modifications to existing access, additional paths and roadways, and minor changes to development regulations. The process culminated in a series of very specific, preferred access management strategies for the commercial core of the corridor and generalized improvements for the other, defined sub-areas.

As alternative recommendations emerged a hierarchy of recommendations was selected with a range of choices including:

- A supporting street system including back streets, parallel roads, and inter-parcel circulation access.
- Median closures that restrict cross-street turning and through movements.
- The inclusion of a raised and planted (non-traversable) median.
- Additional signal location and spacing requirements to include uniform spacing of traffic signals that will improve traffic flow capacity, reduce crash rates, improve fuel efficiency and reduce vehicular emissions.
- Access location and spacing including a map identifying the preferred reduction of driveways.

Each alternative arrived at in the study was applied and evaluated in detail to clarify potential redevelopment impacts, as well as specific impacts on roadway safety, roadway efficiency and operation, alternative transportation modes, the supporting street network, accessibility of neighborhoods and commercial areas, and continued prevention of non-local trips through an existing residential area. Considerations also included financial

The Access Management Plan

Alternatives

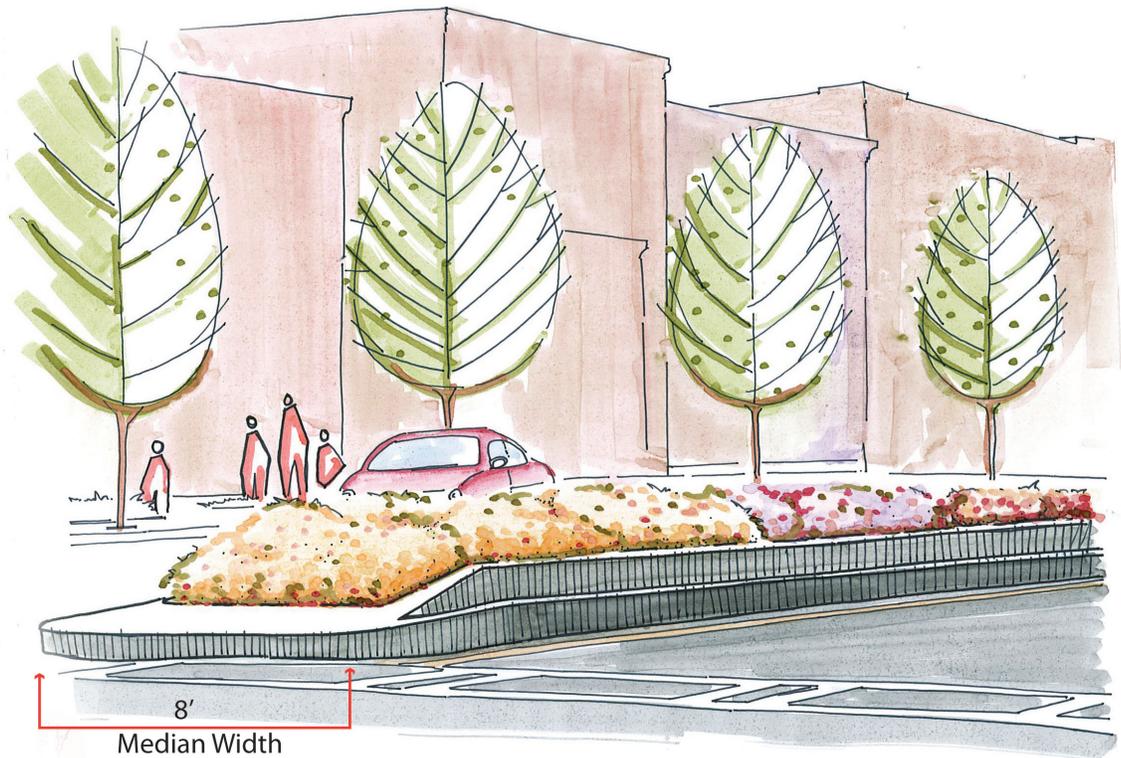


FIGURE 1-2 Rendering of proposed median heights

feasibility (short-term construction costs, long-term operation and maintenance costs), vehicular and pedestrian safety, traffic progression and roadway efficiency, aesthetics, or other criteria established by stakeholders and the general public.

Creating the priority and timing among alternatives required careful evaluation and coordination among the consultant, Cobb County and the public. On a broad level, the study determined the extent to which each alternative is consistent with the established vision for the corridor. The costs and benefits of each alternative were weighed against a set of common evaluation criteria before final selection to ensure that the hierarchy of access management activities reflects priorities of the County and groups involved in the study process.

Study Adoption and Implementation

The Project Team crafted a plan that includes a map and report establishing desired access outcomes. The maps display existing access points, temporary and future access points, zoning, lot ownership, building outlines, and related information. The following report will address future land use, design concepts, implementation strategies, policies and standards, necessary interagency agreements, and other pertinent information. The adopted plan will serve as a guide for Cobb DOT permitting and roadway improvement decisions. It will also guide prospective property owners/developers on approved access locations and areas where service roads or shared access may be required.

To conform to ARC standards and to assist the County in moving the study results forward, the study contains an Action Plan identifying short-term, mid-term and long-term implementation strategies and the respective roles for several County departments and other governmental entities. As conditions along Austell Road change over time, it will be important to establish government entity roles and responsibilities, identify funding sources, create a phasing plan to implement recommendations, provide information to property owners, and establish all necessary monitoring systems.

An implementation schedule was developed to help ensure that improvements are carried out systematically. The plan may have immediate rapid-response components, and it may incorporate long-term components, such as major capital improvements or changes to state and local policy. Full implementation of recommended improvements may take several years and depend on the availability of local, state, private, or federal funding, as well as on the support and action of different levels of government. The implementation schedule also takes into account design and construction of other County committed projects, such as those identified as needed for immediate improvements to safety; design and construction of roadway and driveway projects; design and construction of pedestrian, bicycle, or transit improvements; design and placement of visual amenities including signs and landscaping features; land use plan amendments and changes to land development regulations; and funding sources and options.

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2 Introduction

Effective Access Management

The key to effective access management is linking appropriate access design to roadway function. Successful access management protects and enhances property values while preserving the public investment in our roads. Access management strategies help reduce crashes, increase roadway capacity, increase road safety, and reduce travel time and delay. With improved accessibility, land values increase and real estate development is stimulated. Gradually, older, developed areas like the Austell Road corridor begin to deteriorate because of access and aesthetic problems, and investment moves to newer, better-managed corridors. That is the reason why access management needs to take place in this area to improve vehicular and pedestrian safety, increase mobility, and improve aesthetics.

Figure 2-1 shows that through traffic movement increases when access to property decreases, and vice versa.

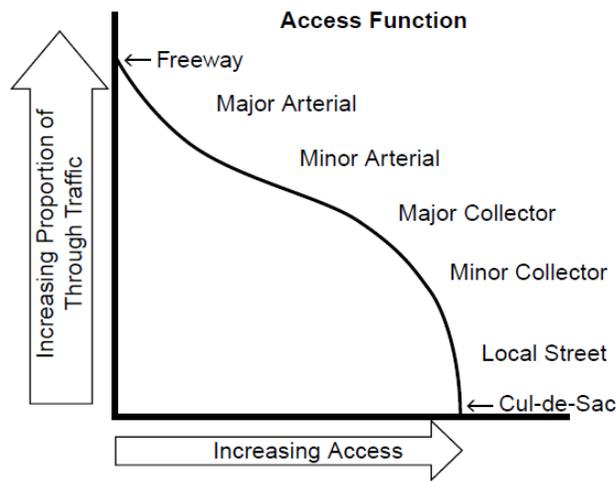


FIGURE 2-1 Relationship between through traffic movement and access to property (Source: Access Management Manual, 2003 from TRB)

Austell Road is classified as an urban minor arterial roadway. Based on this characterization, it operates under lower traffic volumes, serves trips of shorter distances, and provides a higher degree of property access than major arterials.

The primary design techniques used in this access management study focused on the control and regulation of the spacing and design of the following:

- Driveways and streets
- Medians and median openings
- Turning movements

Ancillary elements of the study included:

- Sidewalk Inventory and condition
- Limiting Conflict Points

As articulated in the Goals and Objectives of the study, there is an interest in access management because of increasing traffic congestion, traffic safety issues, and the rising costs of road improvements. Good access management can accomplish the following:

- Reduce crashes and crash potential.
- Preserve roadway capacity and the useful life of roads.
- Decrease travel time and congestion.
- Improve access to properties.
- Coordinate land use and transportation decisions.
- Maintain travel efficiency and related economic prosperity.

Benefits of Access Management

Six basic principles are observed in achieving the benefits of access management.

- Limit the number of conflict points.
- Separate conflict points.
- Separate turning volumes from through movements.
- Locate traffic signals to facilitate traffic movement.
- Maintain appropriate functional hierarchy of roadways to function.
- Limit direct access on higher-speed roads.

Basic Principles of Access Management

- The efficiency of Cobb County's transportation system will deteriorate, and traffic and land use conflicts will also increase.
- Poorly planned strip commercial development will be encouraged.
- The number of private driveways will proliferate.
- The existence of more driveways means more traffic conflicts, crashes, and congestion.
- The public's investment in Cobb County's roadways will be diminished.
- Roads will have to be widened at great public expense to make up for capacity lost to inefficient traffic operations.
- The incompatibility of providing land service and traffic service will become more severe.
- Neighborhood streets will be used to bypass congested intersections.

Consequences of Not Managing Access

Access management balances mobility and access. The need for better access management is most obvious in corridors such as Austell Road where parts of

the roadway have far too many driveways. Too many driveways often confuse drivers, who become uncertain as to when turns into or out of driveways will be made. As can be observed, their existence results in a large number of turning movements and conflict points increasing the potential for traffic accidents. Unfortunately, once an access management problem is obvious, it is often too late to correct. By managing access on Austell Road before project redevelopment activities take place, safe, and sometimes enhanced, access can be provided while preserving traffic flow.

Study Area

This corridor is located in the southwestern portion of Cobb County between the City of Marietta to the north and the City of Austell to the south. Specifically, the corridor study area is bordered by the intersection of Austell and Callaway Roads on the north, and the intersection of Austell Road and Leila Street on the south (see Figure 2-1). The corridor is approximately four (4) miles in length and one-half (1/2) mile in width. The functional classification of Austell Road is a minor urban arterial roadway and is primarily a commuter roadway, carrying traffic between Marietta to the north and the Thornton Road area in Douglas County to the south, providing access to Interstate 20.

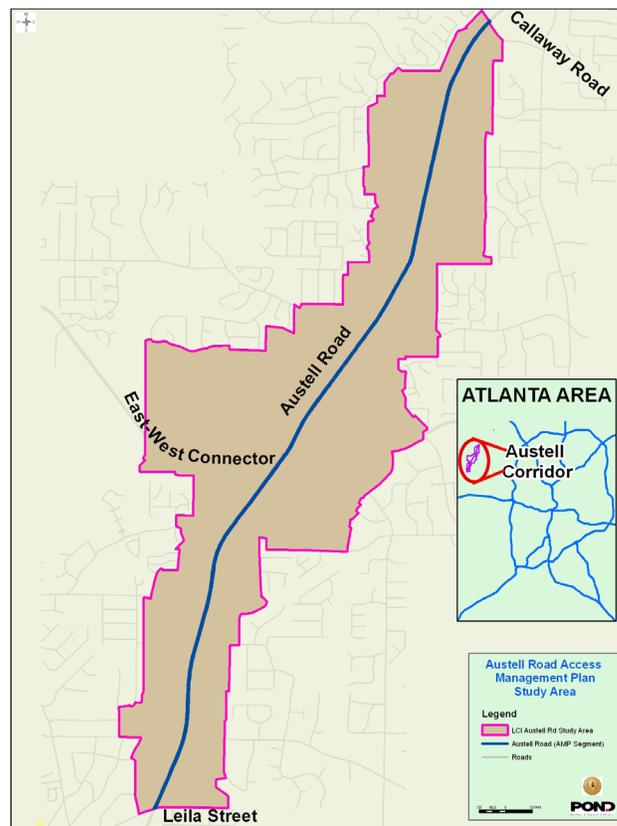


FIGURE 2-1 Study Area

This study effort represents the practical application of access management techniques and tools gleaned from a variety of sources including the

Transportation Research Board (TRB), the Center for Urban Transportation Research (CUTR), as well as best practices from other states. This study is developed for the Cobb County Department of Transportation and is the first Access Management Plan in the region.

In July 2007, Cobb County completed a LCI Study for the Austell Road Corridor in which several recommendations were given. One of the results of the prior LCI study effort was the inclusion of a transportation systems recommendation to develop an Access Management Plan.

The LCI Study identified five (5) primary benefits to implementing an AMP:

1. Improvement of traffic safety and vehicular crash rates;
2. Shorter travel times and reduced travel costs;
3. Increased capacity of roadways;
4. Enhancement of the value of private land development and improvements to access to property;
5. Improvements to the overall aesthetics of the community.

Cobb County decided to undertake an Access Management Plan (AMP) for the Austell Road corridor, putting the County at the forefront of the region in this area.

For Austell Road, the consultant team undertook a methodology depicted in Figure 2-4 to develop the Access Management Plan. Information was gathered from stakeholders, the general public, Cobb DOT officials and staff, Atlanta Regional Commission, and County Board of Commissioners to create a Needs Assessment based on Existing Conditions for the corridor. The next step was to perform a traffic analysis and develop proposed recommendations. These recommendations were presented to the public, Cobb DOT officials, and the Board of Commissioners for approval. The public participation process included three (3) general meetings, as well as a survey.

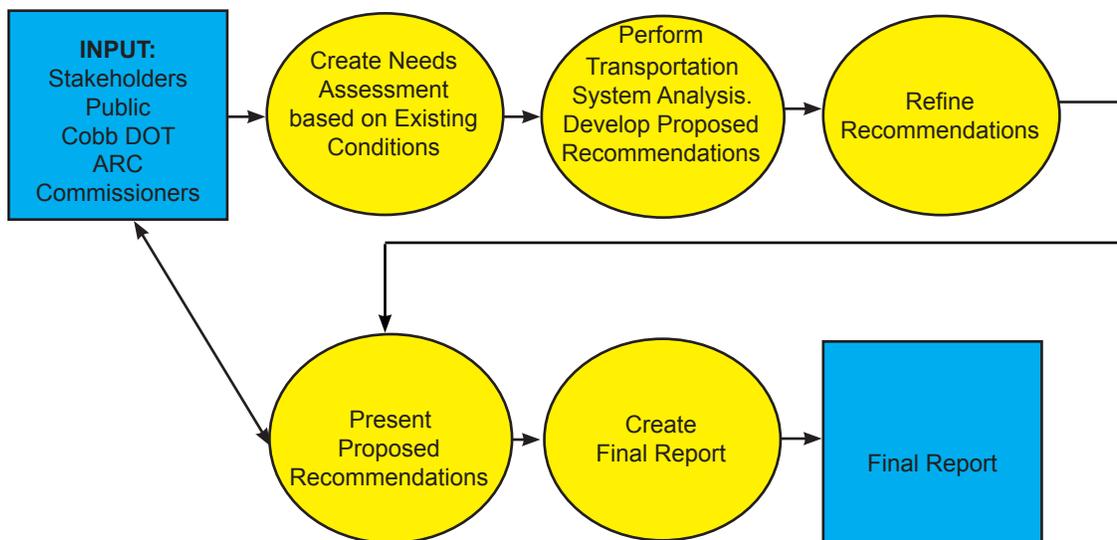


FIGURE 2-5 Study Methodology

3 Outreach and Participation

The strategies and techniques used for the Planning Process of the study enabled the consultant team to gather information from a variety of people. In this way, the consultant team was able to get input from different perspectives and interests that may be applied to access management. Figure 3-1 illustrates the planning process used. The techniques used in this study were as follows:

- Interviews with elected officials and County staff
- Project management meetings (with Cobb DOT)
- Stakeholder meetings
- Public meetings
- On-line survey

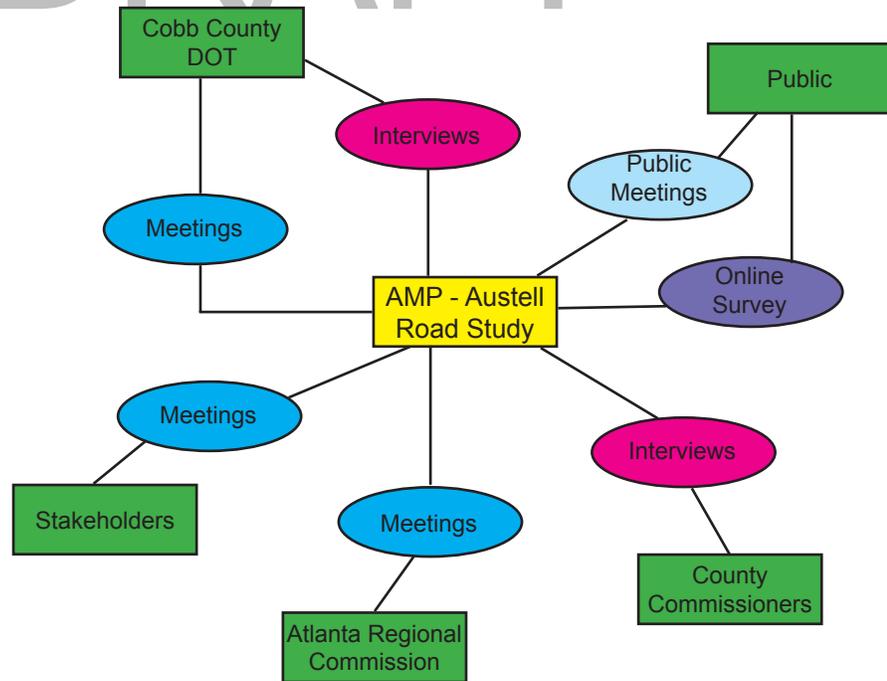


FIGURE 3-1 Illustration of Planning Process

In addition to these techniques, the consultant team had several meetings with the Cobb DOT Project Management Team to discuss issues related to the study. At the same time, the consultant team made several presentations to the Commissioner of the District in which the study area is located, the Director of Cobb DOT, representatives from ARC, the Board of Commissioners' work session, and the Board of Commissioners' regular meeting. The purpose of the presentations was to discuss the project and introduce the Access Management components.

As part of the Austell Road corridor AMP process, the consultant team performed a wide variety of data gathering and public participation tasks. These tasks involved outreach efforts to contact as many stakeholders as possible, as well as numerous meetings and presentations. Elements of the planning process included:

- **Steering Committee:** A steering committee was created representative of the broad Austell Road Corridor area including residential commercial and institutional interest. The consultant team met with the Steering Committee regularly to provide project updates and receive input.
- **Stakeholder Interviews:** The consultant team conducted several stakeholder interviews with key constituents within the project area; these interviews included neighborhood organizations, business interests, government officials and property owners.
- **Field Assessments:** The consultant team conducted several field surveys to verify existing transportation and land use features.
- **Review of Existing Resources:** The consultant team reviewed a variety of existing documents including transportation and land use policy documents, land use plans and area zoning and previous studies.
- **Community Outreach:** The consultant team conducted three public forums and undertook a survey to solicit suggestions and garner feedback for the Access Management Plan.

For the Austell Road AMP, the consultant team, in collaboration with Cobb County, created a list of key people to interview and to gain input about the project. A total of six (6) people were interviewed, including County Commissioner Woody Thompson; the Director of Cobb County DOT, David Montanye; and the Director of Cobb County Community Development, Rob Hosack.

There was a group of Project Managers (PM) from the Cobb County office that helped on the evolution of the study. The PM team included personnel from the traffic operations, transportation planning, economic development, and planning departments. These people participated in several meetings to discuss the

Methodology and Public Participation

Implementation Overview

Project Management Meetings

project before the information was presented to stakeholders and general public.

Steering Committee A group of stakeholders determined by Cobb DOT was invited to three (3) meetings during the development of the project. This stakeholder group was gave crucial input on the different alternatives and issues of the study.

Community Outreach **T**he objective of the public involvement process was to achieve outcomes that are both acceptable to the public and technically sound. The development of the project was presented to the public through three (3) public meetings. These meetings were advertised by Cobb County through flyers, water bills, and the internet. In these meetings, the public was well informed about the status of the project, and the consultant team gave them the opportunity to ask questions, write comments on provided comment cards, and to discuss issues related to the study in a face-to-face manner. Also, each of the PowerPoint presentations was uploaded to the Cobb DOT website.

Cobb County Austell Road Access Management Study

The Cobb County Department of Transportation invites the public to learn more about an access management study along Austell Road. We want your input on opportunities and constraints in the area.

Tuesday February 17th, 2009
6:00 p.m. to 8:00 p.m.*

South Cobb County Government Service Center
4700 Austell Road
Austell, GA 30106-2004

- Access management methods are designed to improve operational efficiency of roadways without adding lane capacity.
- The study also has potential benefits for pedestrians, bicyclists and transit users.

***An open-house format will be followed by a short presentation.**

For more information, please contact:
Cobb County Department of Transportation - Planning Division
 1890 County Services Parkway
 Marietta, GA 30008-4014
 Phone: 770-528-1679
 Email: planning@cobbcountry.org
 Website: www.cobbdot.org/AustellRoadLCI/index.htm

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Examples of materials provided to inform the public about the AMP.

Access Management Plan
 June 2009

Access Management Plan is one of the **results** of the original **LCI study (Completed on July, 2007)**

The purpose of **access management** is to design roadways that balance access and mobility that reduces vehicular conflict and is safe and sensitive to business and property owners.

Results of LCI Study:

- Transportation Improvements: **Access Management Plan**
- Better Land Use regulation and incentives
- Community design features
- Neighborhood preservation and housing
- Community Organization Strategies

The consultant team developed a survey to gather input from the general public related to the perception of issues that the community had for the corridor. The survey consisted of twelve questions and a section for additional comments (see Appendix A for a copy of the online survey). The survey was advertised at the second public meeting and was posted for about two months. The questions asked for information on an array of issues and were designed to ensure that answers were consistent. There were 49 surveys submitted. The issues mentioned most were:

- Congestion
- Pedestrian friendly design
- Intersection design
- Aesthetics

The results of the surveys are as follows:

- 66% agree with mixed use development
- 96% are concerned about congestion
- 63% would encourage new access among large commercial properties
- 92% are concerned about commercial development
- 96% support Cobb County building sidewalks

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4 Goals and Objectives

General Access Management Goals

Access management is accomplished through the systematic application of planning, regulatory, and design strategies. The basic methods to accomplish access management are as follows:

- State and local policies, directives, and guidelines
- Enforceable access management regulations, codes and guidelines
- Acquisition of access rights
- Land development regulations
- Development review and impact assessment
- Good geometric design criteria
- Understanding of access implications by business and property owners.

The benefits of access management can be divided in different areas as follows:

- Safety
- Operations
- Economics
- Land use and the environment.

Safety can be benefited by improving access design, fewer traffic conflict locations, and increased driver response time to potential conflicts. These conflicts include vehicles, pedestrians and bicyclists.

Operation effects show that access management helps to maintain desired speeds and reduce delays. Increasing the number of access points and signals along a roadway, result in increased delay.

Economic effects on market area and property values show that having poorly design vehicular access could reduce the economic vitality of the corridor. Property values tend to increase rapidly during commercial development, but can decline after the area is built out, if the character and efficiency of that corridor have been damaged in the process. However, research to date has not systematically examined the potential long-term economic benefits of access management.

Land use and environmental effects of access management show that the aesthetics and development can be influenced. Minimizing curb cuts, consolidating driveways, constructing landscaped medians, and buffering parking lots can create a visually pleasing and more functional corridor, and it can attract new investment. In addition, well-designed road and access systems further the orderly layout and use of land and help improve design of residential subdivisions and commercial circulation system.

Access management can be achieved through land use strategies that discourage strip development and promote clustering of land used into unified activity centers. This advances local planning and growth management policies, and it enhances bicycle, pedestrian, and transit mobility. Finally, protecting capacity on a corridor reduces the need for new major roadways of bypass facilities and their adverse environmental impacts, and the corridor can better the air quality due to less emissions because it reduces the number of vehicles accelerating and decelerating in response to turning vehicles.

The goals and objectives of this effort were determined through an interactive public process. At the first public meeting held on February 17, 2009, the set of goals listed below were adopted after initial approval by the stakeholder committee.

Goals & Objectives

- Improve traffic safety and vehicular crash rates
- Shorten travel times and reduced travel costs
- Increase capacity of roadways
- Enhance value of private land development and improve access to property
- Improve overall aesthetics of the community
- Connect sidewalks and examine bicycle path feasibility

Similarly, a list of issues and opportunities were suggested by the consultant team and were agreed upon by the stakeholder committee and the general public. Five of the seven issues and opportunities are addressed in this study.

Issues & Opportunities

- Examine Party City and Lowe's shopping center Connectivity
- Examine Ingress/Egress at Target and at other shopping centers
- Create more corridors to get in and out of Hospital area without using Austell Road
- Close Sidewalk gaps along corridor
- Create Better Streetscapes
- The Silver Comet Trail – There is currently no access provided from Austell Road
- Improve continuity of signage

5 Existing Conditions

A number of existing studies, plans, and other documents have been conducted that focus on the study area of the Austell Road Access Management Plan or on unincorporated Cobb County. The Austell Road Corridor LCI Study is the primary document that focuses on this study area. This document identified the need for creating an access management plan for Austell Road. This study provides a significant amount of data specific to Austell Road and the surrounding study area. Other relevant documents and data sources include the following:

- Cobb Community Transit
- GRTA Xpress Bus Service
- Cobb County Bicycle/Transportation Plan
- Cobb County Bicycle and Pedestrian Improvement Plan
- Atlanta Regional Commission (ARC) Regional Transportation Plan (RTP)
- Cobb County SPLOST Project List
- Cobb County 2030 Comprehensive Transportation Plan
- Cobb County Zoning Ordinance

In addition to reviewing the documents listed above, a field review of the corridor was conducted. The field review focused on existing traffic operations, bike/pedestrian facilities, transit service, and existing development.

Austell Road Corridor LCI Study

The Austell Road Corridor LCI Study focused on a four-mile long segment of Austell Road from Leila Street to Callaway Road. The study area is approximately ½ mile in width, although the exact boundaries vary based on the location of property and other roadways. The purpose of the Austell Road Corridor LCI Study was to develop an implementable plan that will serve as a blueprint for addressing transportation, land use, economic development and community design issues in a holistic way. The following goals were developed as a part of the study process:

- Engage all stakeholders in the planning process and encourage partnerships between the public and private sectors in both planning and implementation.
- Link land use and transportation to improve mobility and economic

efficiency in the corridor.

- Identify multi-modal transportation enhancements to balance the transportation system.
- Arrest economic decline and encourage redevelopment of vacant and underutilized commercial centers.
- Encourage appropriate infill opportunities.
- Increase the diversity of housing and support housing choices for current and future residents.
- Improve land use balance and transportation system efficiency in the corridor by creating vibrant, mixed-use development.
- Establish a sense of place that will instill neighborhood pride and ownership in the corridor.

A number of issues and opportunities were identified during the study process and include the following:

- Severe traffic congestion – Due to commute patterns, the roadway’s intersection with the East-West Connector, the presence of several large retail centers, and the location of WellStar Cobb Hospital, the corridor experiences high levels of traffic congestion and delay during morning and evening rush hours.
- Traffic safety – The corridor is a challenging one for both autos and pedestrians. The intersection of Austell Road and East-West Connector has the highest accident rate in the State of Georgia.
- Economic decline – As the corridor’s importance as a transportation route has increased, the vibrancy of many of the older strip centers along it has decreased. Many stores have closed or relocated and some properties have a dilapidated look.
- Lack of community identity – This part of Cobb County once had an identity linked to the history of Milford community, but most of that historic image has been lost to commercial sprawl – large, unattractive signs; featureless parking lots; vacant storefronts; neglected maintenance of rights-of-way; a barren concrete median; overhead powerlines; and chain-link-fenced detention ponds in front yards.
- Stable residential neighborhoods – In contrast to the run-down appearance of many of the retail uses along Austell Road, the residential areas located just behind are, for the most part, strong, well-maintained neighborhoods. Most residential uses in the corridor are older, mature, low-density single family neighborhoods. Additionally, due to proximity to the hospital, a number of residential developments in the corridor cater to senior citizens, such as the Presbyterian Village Retirement Community.
- Community institutions – WellStar Hospital is in the center of the study area with 347 beds and 2,264 employees. The South Cobb Government Center is located in the southern portion of the corridor. In addition, there are three public schools – Sanders Primary and Intermediate Schools, and South Cobb High School – and several churches.

Land Use Recommendations for the Residential Overlay District (ROD)

- The Silver Comet Trail – This is a multi-use trail of regional proportions, stretching from Smyrna to Alabama’s Chief Ladiga Trail. It passes through the southern end of the study area; however, there is currently no access to this recreational amenity provided in the Austell Road Corridor.
- Development opportunities – There are several well-placed tracts of vacant land, a number of aging commercial centers, and other underutilized tracts (such as the two mobile home parks) that should provide ample opportunities for development and redevelopment in this corridor.

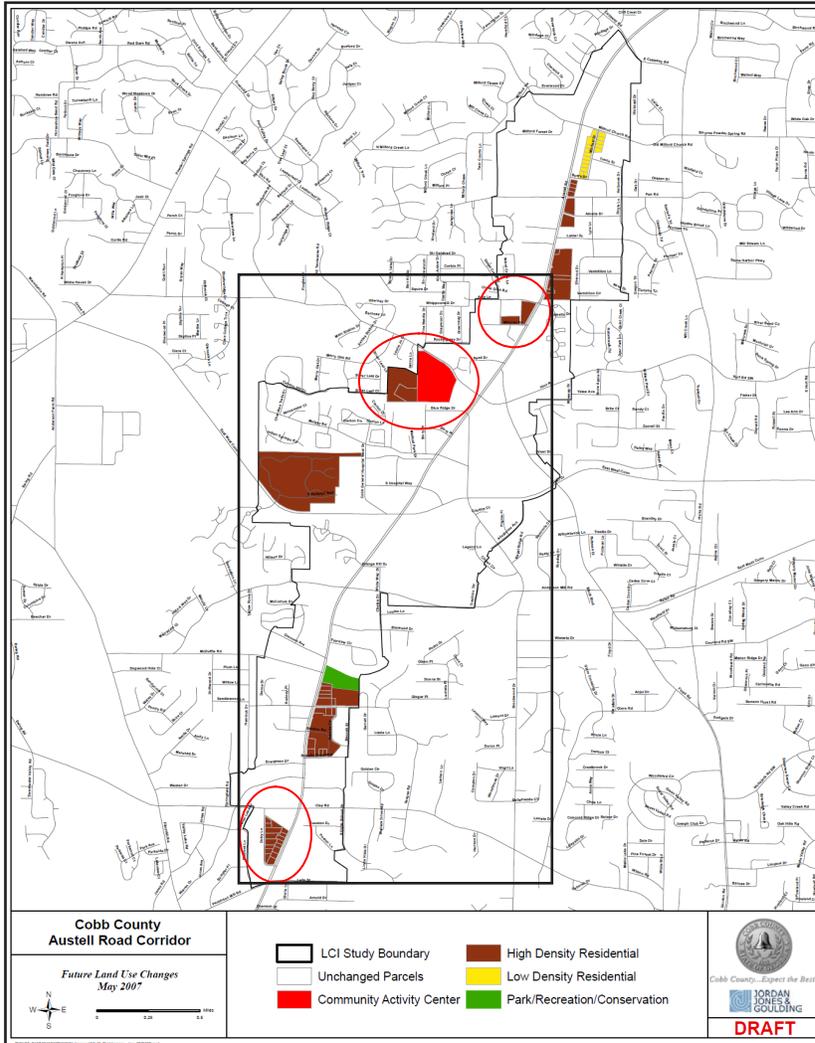
The Austell Road LCI study recommended a number of land use changes along Austell Road. The majority of the recommended changes are to high density residential with the following exceptions; east side of Austell Road between Milford Church Road and Byers Drive amended to low density residential, west side of Austell Road south of Hurt Road amended to Community Activity Center, and a parcel across the street from the terminus of McDuffie Road at its intersection with Austell Road amended to Park/Recreation/Conservation. The existing and proposed ROD areas as well as the proposed land use changes discussed above are located in Figure 5-1. The proposed land use changes associated with either the existing ROD or proposed RODs have been circled.

The Austell Road LCI Study states that there are 41 total zoning districts. Contained within the 41 districts are 22 residential, 10 commercial, 5 office, 2 industrial and 2 overlay districts. The study finds that mixed-use development is allowed in six of these districts but the language more directly addresses “greenfield” development not redevelopment, which is the focus of the Austell Road LCI. The ROD, an existing overlay district (adopted in 2006), is geared toward redevelopment and is the most appropriate tool for implementing the recommendations of the Austell Rd LCI Study.

The purpose of the ROD is to “provide locations for redevelopment of commercial, office and residential uses which are pedestrian oriented and developed at a community or regional activity center and intensity, as identified for each specific site or corridor via the Cobb County Comprehensive Plan”. The Austell Road/Hurt Road/Floyd Road area, shown in Figure 5-2, is currently the only site identified and adopted within the study area. The LCI proposed additional ROD Overlay districts, as well as catalyst sites along the corridor, as can be seen in Figure 5-3.

The LCI Study notes that the existing ROD Overlay (Sec. 134-221.2) can be used only for property that has at least five acres and is currently zoned (or proposed to be zoned) in the following zoning districts:

- LRO – Low-Rise Office
- LRC – Limited Retail Commercial
- NRC – Neighborhood Retail Commercial
- O&I – Office and Institutional



From Final Summary Report: Austell Road Corridor LCI Study, July 2007

FIGURE 5-1 Future Land Use Changes

- CRC – Community Retail Commercial
- RMR – Residential Mid-rise
- OMR – Office Mid-rise
- OHR – Office High-rise
- NS – Neighborhood Shopping
- PSC – Planned Shopping Center
- TS – Tourist Services
- GC – General Commercial
- RM-12 – Multi-family Residential, up to 12 units per acre (*)
- RM-16 – Multi-family Residential, up to 16 units per acre (*)

*Section 134-221-2 (1) notes that the overlay district may be used for property zoned RM-12 and RM-16 only if the RM district is “adjacent to commercially zoned properties within these redevelopment corridors and specific sites”.

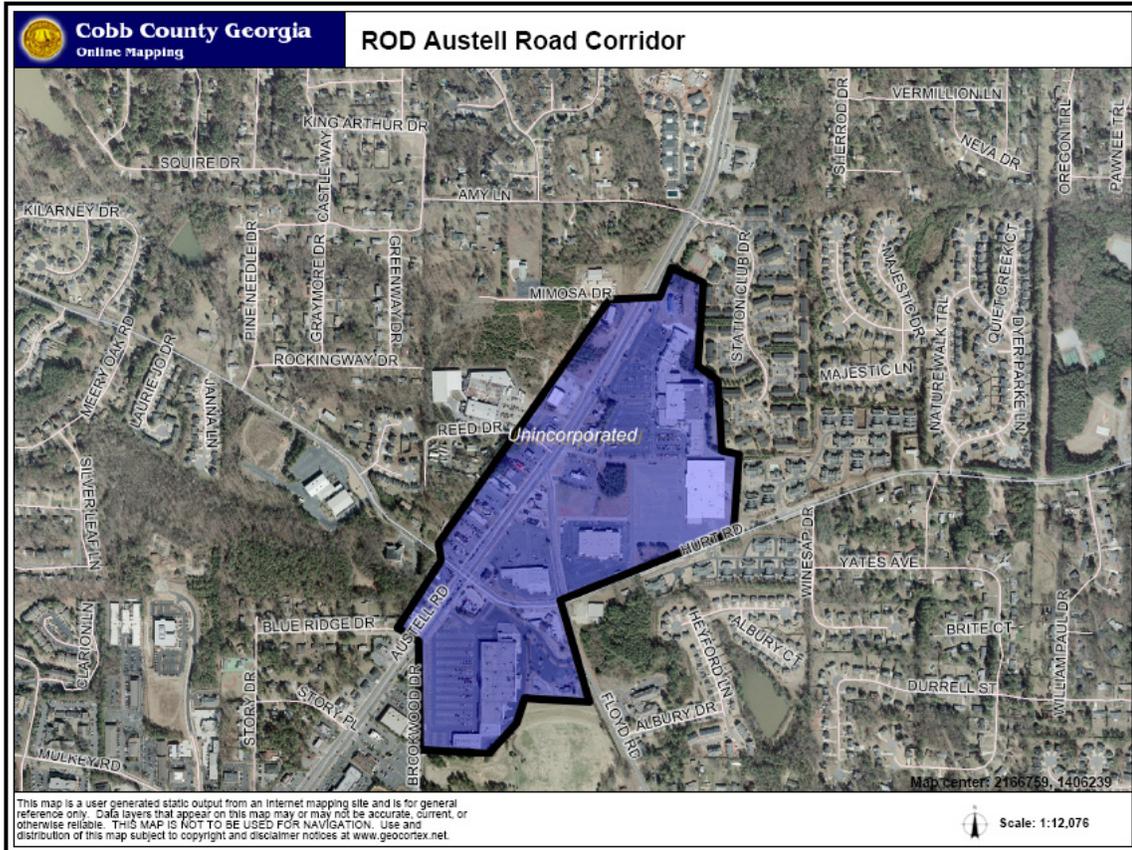


FIGURE 5-2 Existing ROD Location

The LCI Study lists the advantages of the ROD as follows:

- Mixed-use development is allowed.
- Site development standards are flexible and based on an approved Concept Plan.
- Minimum lot sizes and building setbacks do not apply – buildings are to be oriented to the street with a contiguous and consistent building edge along a public sidewalk.
- Building height is “to be designed to provide compatibility with adjacent uses”; however, no standards for “compatibility” are given in the ordinance.
- Minimum off-street parking standards are reduced by 20 percent when parking is shared between adjacent uses; an additional 10 percent reduction may be approved by the Director of Community Development.
- Tree density units required in the tree preservation and replacement ordinance may be reduced by 10 percent if xeriscape is implemented.

The LCI Study lists the following modifications to the existing ROD ordinance to aid in the implementation of the goals in the Austell Road LCI Study:

- Require all site plans to include a Multi-modal Access Plan. A Multi-modal Access Plan provides the overall, multi-property framework that is essential for achieving a pedestrian-oriented district. It has the following features:

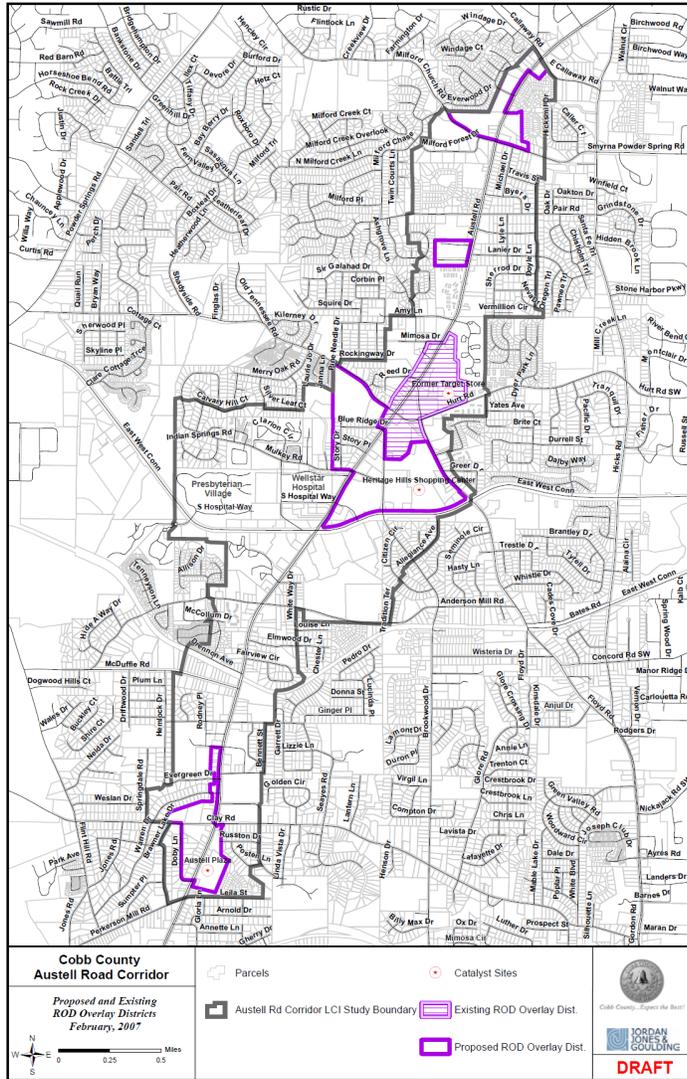


FIGURE 5-3 Proposed and Existing ROD Locations

From *Final Summary Report: Austell Road Corridor LCI Study*, July 2007

- ◆ A Multi-modal Access Plan covers more than the immediate site – it shows the entire street right-of-way, extending across the street to the driveways and building entrances on adjacent properties.
- ◆ It shows access to the site and through the site, connecting to adjacent building entrances for all modes: pedestrians, bikes, transit and automobiles.
- ◆ It shows pedestrian crosswalks and signals needed at adjacent intersections.
- ◆ If there is an off-site transit stop within 500 feet of the site, it shows continuous pedestrian facilities from each building on the subject site all the way to the transit stop.
- ◆ If there is a transit stop on the site, it shows pedestrian connections from the transit stop to adjacent tracts of land.
- ◆ If there are two or more occupied buildings on the site, it shows pedestrian entrances and the sidewalks connecting each building to the others, and sidewalks from each building to the street.

- ♦ If there are parking lots or parking decks on the site, it shows safe, continuous pedestrian ways through the parking lot to building entrances.
- ♦ If there is more than one use and more than one parking area, it shows interparcel connections and cross-access easements between parking areas that enable shared parking.
- ♦ If there are off-site bicycle trails or lanes within 500 feet of the site, it shows connections from these off-site facilities to the subject site.
- ♦ It shows specific entrance and routing for service vehicles (goods delivery and refuse collection).
- ♦ It shows the minimal number of auto access points.
- ♦ It includes the required clearance of driveways from intersecting streets per GDOT Driveway Manual: Regulations for Driveway and Encroachment Control.
- ♦ It shows minimum sight distances along the highway for the design speed per GDOT.
- Draft a new section to address the approval of catalyst sites by the Board of Commissioners based on the following established criteria
 - ♦ The catalyst site occupies a critical location within the ROD that serves either as the potential focal point or the gateway for the overall redevelopment overlay district;
 - ♦ The current condition of the catalyst site is detrimental to the area, so that it represents a compelling redevelopment need;
 - ♦ The redevelopment of the catalyst site will spur on redevelopment of other, less prominent sites within the ROD; and
 - ♦ Without redevelopment of the catalyst site, other redevelopment would be unlikely.
- Add definitions. There should be specific definitions for important terms such as “mixed use,” “compatible,” “xeriscape,” and “open space.”
- Since there are no building setback provisions, it is necessary to provide for a minimum spacing between buildings, such as 15 feet.
- Provide specific standards for architectural treatment of parking structures, specifying that their façades should either not be visible from a public street or be of a similar building material and articulation as occupied buildings. Include retail façades on the ground floor of parking structures that open onto public streets.
- Prohibit drive-through windows.
- If building façades are to be placed along the street, modify sign regulations to prohibit freestanding signs larger than 12 square feet and taller than 6 feet. Encourage pedestrian-oriented signs such as wall signs, canopy signs, awning signs, suspended signs, marquee signs, window signs and others.
- Require possible additional design requirements for the ROD:
 - ♦ A minimum of 10% of the site’s land area should be devoted to outdoor public space, including a plaza, square or green.
 - ♦ There should be specific design standards for the public space to ensure

that it is well-located, attractive, well-landscaped and a safe “signature” space.

- ♦ The site should be developed with interconnecting streets and sidewalks designed on a grid not larger than 600 feet on a side.
- ♦ The maximum length of building façade should be 250 feet to encourage pedestrian circulation throughout the development.
- ♦ There should be design standards for buildings that require quality materials and workmanship, pedestrian oriented storefronts and pleasing, well articulated building massing.
- ♦ The development should be required to prepare a traffic study.
- Investigate density incentives and increased building height allowed for specific improvements, including:
 - ♦ Public Space that is in excess of 10% of the land areas of the site;
 - ♦ Public dedication and construction of new connecting streets, transit or bike/pedestrian facilities that are part of the LCI Conceptual Plan;
 - ♦ More than 30% of the occupied floor area consists of owner-occupied housing;
 - ♦ More than 50% of the parking is provided in a structured deck that meets architectural standards of the ROD.

Austell Road and the East-West Connector are four-lane divided roadways that include left-turn lanes at intersections. All other roadways in the study area are 2-lane, undivided roadways. Austell Road, the East-West Connector, Clay Road, and Floyd Road are all arterial roadways. All other roadways within the study area are collectors or local roads.

Austell Road has a large number of ingress and egress points along the roadway, most of which are right-in/right-out only due to the presence of a median. Roadway connectivity in the study area is generally poor due to a lack of parallel roadways. Additionally, there is a large amount of single family residential development adjacent to the corridor. These developments typically have a limited amount of access points and include a large number of cul-de-sacs which further limits connectivity.

The Georgia Department of Transportation (GDOT) has 8 permanent traffic count locations within the study area. These traffic count locations show that the 2005 Annual Average Daily Traffic (AADT) volumes were:

- AADT volumes along Austell Road was generally just under 40,000
- AADT on the south end of the Austell Road corridor was approximately 27,000 and on the north end of the corridor was approximately 42,000
- AADT volumes along the East-West Connector near Austell Road was just under 40,000
- AADT volumes along Austell Road and Milford Church Road were slightly under 11,000

Roadway traffic congestion is expressed in terms of Level of Service (LOS) as

Existing Transportation Systems and Conditions

defined by the Highway Capacity Manual (HCM). LOS is a letter code ranging from A to F. LOS A represents free flow conditions while LOS F represents heavy traffic congestion where demand is greater than capacity. Both LOS E and LOS F are considered to be failing. The Austell Road Corridor LCI Study identified the PM peak hour LOS of major roadways using the Atlanta Regional Commission's (ARC) regional travel demand model. This analysis showed the following results:

- Austell Road operates at LOS D during the PM peak hour along most segments with the exception of the segments north of Callaway Road and between Seayes Road and Clay Road, which operate at LOS E.
- The East-West Connector operates at LOS E west of Austell Road and at LOS D or better east of Austell Road.
- Callaway Road operates at LOS F west of Austell Road.
- Hurt Road operates at LOS D throughout much of its length, but the segment between Floyd Road and Hurt Road operates at LOS F and is the most congested roadway segment in the study area.
- Clay Road generally operates at LOS D.
- Milford Church Road operates at LOS E west of Austell Road and LOS D east of Austell Road.
- The segment of Floyd Road between Austell Road and Hurt Road operates at LOS D.

The Austell Road Corridor LCI Study used data from previous traffic studies in the study area as well as new traffic count data to determine the 2007 peak hour LOS at a number of intersections within the study area. The results of this analysis are shown in the Table 5-1. As the table shows, the intersections of Austell Road with Milford Church Road, Hurt Road, and the East-West Connector each operate with a failing LOS during both the AM peak hour and the PM peak hour. In addition, a number of other intersections operate at LOS D during at least one peak hour. This analysis helps to target where future traffic improvements may be needed.

A number of high crash intersections exist along Austell Road. The intersection with the East-West Connector is the worst location. Between 2002 and 2005, a total of 517 crashes were reported at this location, which ranks it among one of the highest crash locations statewide. Other high crash intersections within the study area include:

- Milford Church Road
- Pair Road
- Amy Lane
- Floyd Road
- Blue Ridge Drive
- Hospital South Drive
- Anderson Mill Road
- Clay Road

TABLE 5-1 Existing Intersection Level of Service (LOS)

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
Austell Rd @ Callaway Rd.	C	33.7	D	42.8
Austell Rd @ Milford Church Rd.	F	83.2	E	67.6
Austell Rd @ Pair Rd.	C	23.0	B	18.5
Austell Rd @ Amy Ln.	B	19.8	B	11.4
Austell Rd @ Hurt Rd.	E	58.2	E	64.2
Austell Rd @ Mulkey Rd.	B	17.2	C	32.0
Austell Rd @ Hospital S. Dr.	A	7.8	C	30.5
Austell Rd @ East West Conn.	F	135.9	F	110.1
Austell Rd @ E W Commons	A	4.0	B	18.2
Austell Rd @ Anderson Mill Rd.	D	49.4	D	52.7
Austell Rd @ Seays Rd.	A	4.9	A	3.9
Austell Rd @ Clay Rd.	C	23.0	D	53.1
Austell Rd @ Austell Plaza	A	2.7	A	2.9
Austell Rd @ Perkerson Mill Rd.	C	29.2	B	12.2
East West Conn @ Tramore Pk.	A	2.3	A	7.9
East West Conn @ Champion Dr.	A	8.9	B	19.7
East West Conn @ IHOP	A	3.9	B	14.9
East West Conn @ Lowe's	B	11.2	B	11.5
East West Conn @ Brookwood Dr.	B	16.6	C	30.2
East West Conn @ Floyd Rd.	D	41.5	D	48.5
East West Conn @ Mulkey Rd.	A	4.6	A	6.0
East West Conn @ Hurt Rd.	B	15.7	B	14.5

From Final Summary Report: Austell Road
Corridor LCI Study, July 2007

The study area is served by Cobb Community Transit (CCT) Route 30. This route runs from the MARTA Holmes Station to the Marietta Transfer Center via Austell Road, the East-West Connector, and Floyd Road. Ridership on this transit route is one of the highest of all transit routes operated by CCT. In 2006, ridership averaged over 64,000 per month, reaching a total of 777,392 for the year. Average weekday boardings on Route 30 in 2006 were 2,567 persons, with an average of 1,661 boardings every Saturday (CCT Transit Planning Study, May 2006, pp. 3-4).

The Austell Road Corridor LCI Study identified no bicycle lanes within the study area. Sidewalks are located along much of Austell Road as well as many other roadways. However, gaps exist in the sidewalks on these roadways. The Silver Comet Trail is a multi-use trail that passes through the study area and connects the City of Smyrna in Cobb County to the Alabama state

Bicycle and Pedestrian Conditions

line. An inventory of existing infrastructure includes the following:

- Austell Road from East-West Connector to Callaway Road has sidewalks on both sides of the roadway.
- Some segments of the sidewalk on Austell Road between Pair Road and Callaway Road are in disrepair and are less than the required five-foot wide standard.
- Austell Road south of the East-West Connector has many segments that only have sidewalk on one side of the roadway.
- The East-West Connector generally has sidewalks near Austell Road, but gaps in the sidewalks exist.
- Callaway Road, Milford Church Road, Pair Road, Brookwood Drive, Hurt Road, Floyd Road, Anderson Mill Road and Clay Road each have sidewalks on at least one side of the roadway.
- The Silver Comet Trail crosses under Austell Road south of Drennon Avenue. No access to the trail from Austell Road currently exists, and the nearest access point is at Floyd Road. The Austell Road Corridor LCI Study recommends access adjacent to Austell Road.

Future Transportation Issues and Service Levels

The Austell Road Corridor LCI Study identified two roadway improvements planned in the study area through the year 2030. These projects include:

- Widening Callaway Road to 3 lanes from Austell Road to Powder Springs Road. This is a SPLOST project with construction planned for July 2011.
- Constructing the Mulkey Road Connector, a new 2-lane roadway connecting Mulkey Road to the East-West Connector. This is a SPLOST project that had construction planned for summer 2007. (This project has been completed and is named Lipson Drive.)

The LCI Study identified a number of intersections along Austell Road that had improvements planned through 2012. These intersections include the following:

- East-West Connector
- Callaway Road
- Milford Church Road
- Floyd Road
- Hurt Road
- Hospital South Drive
- Clay Road

The ARC regional travel demand model was used to determine 2030 PM Peak Hour LOS on major roadways in the study area. Congestion levels throughout the study area are expected to increase by 2030. The 2030 PM Peak Hour LOS analysis showed the following:

- Most segments of Austell Road within the study area are projected to operate at LOS E in 2030. The exceptions include segments near Hurt Road which operate at LOS D and segments north of Clay Road and

south of the East-West Connector which operate at LOS F.

- The East-West Connector is projected to operate at LOS F west of Austell Road and at LOS D and E east of Austell Road.
- Callaway Road is projected to operate at LOS E through the study area and LOS F near Powder Springs Road.
- The segments of Hurt Road between Austell Road and Floyd Road and near Powder Springs Road are projected to operate at LOS F. The segments east of Floyd Road are projected to operate at LOS D.
- Segments of Clay Road within the study area are projected to operate at LOS D, but segments east of the study area and near Flint Hill Road are projected to operate at LOS F.
- The portion of Milford Church Road within the study area is projected to operate at LOS D west of Austell Road and LOS E east of Austell Road. However, segments east of Hicks Road and near Powder Springs Road are projected to operate at LOS F.

Year 2030 AM and PM peak hour intersection analyses were conducted on the same intersections included in the 2007 peak hour analyses. This was done by applying a growth rate of 1.6% per year to the 2007 traffic volumes. The results of this analysis are shown in Table 5-2. As the table shows, nearly every intersection operates with a failing LOS in either the AM Peak Hour or the PM peak hour.

The LCI Study also recommended a grid system of streets be implemented in the area east of Austell Road, north of the East-West Connector, and along Hurt Road and Floyd Road. The Heritage Hills Shopping Center and the former Target location were both identified as catalyst sites for redevelopment. Both of these sites would be a part of the proposed street grid. Figure 5-4 shows the proposed street grid recommended in the LCI Study.

The Austell Road Corridor LCI Study provided data regarding transit service at the time the study was conducted. Additional research was conducted on transit within the study area to determine current transit service. Based on data available on the CCT website (<http://www.cobbdot.org/cct.htm>), Route 30 currently operates in the study area from the MARTA Holmes Station to the Marietta Transfer Center via Austell Road, the East-West Connector, and Floyd Road. Peak hour headways on this route are 15 minutes. Off-peak headways are variable, reaching up to an hour on some evening routes. These route locations are shown in Figure 5-5.

Transit Service

CCT Route 70 passes through the study area on the East-West Connector and connects the Cobb County Health Center to Cumberland Mall. This route operates with variable headways, typically around 1 hour in length.

The Georgia Regional Transportation Agency (GRTA) operates Xpress Route 475 within the study area. This route connects the Highest Praise Church (Floyd

TABLE 5-2 Intersection Operations Analysis, 2030 Baseline Conditions

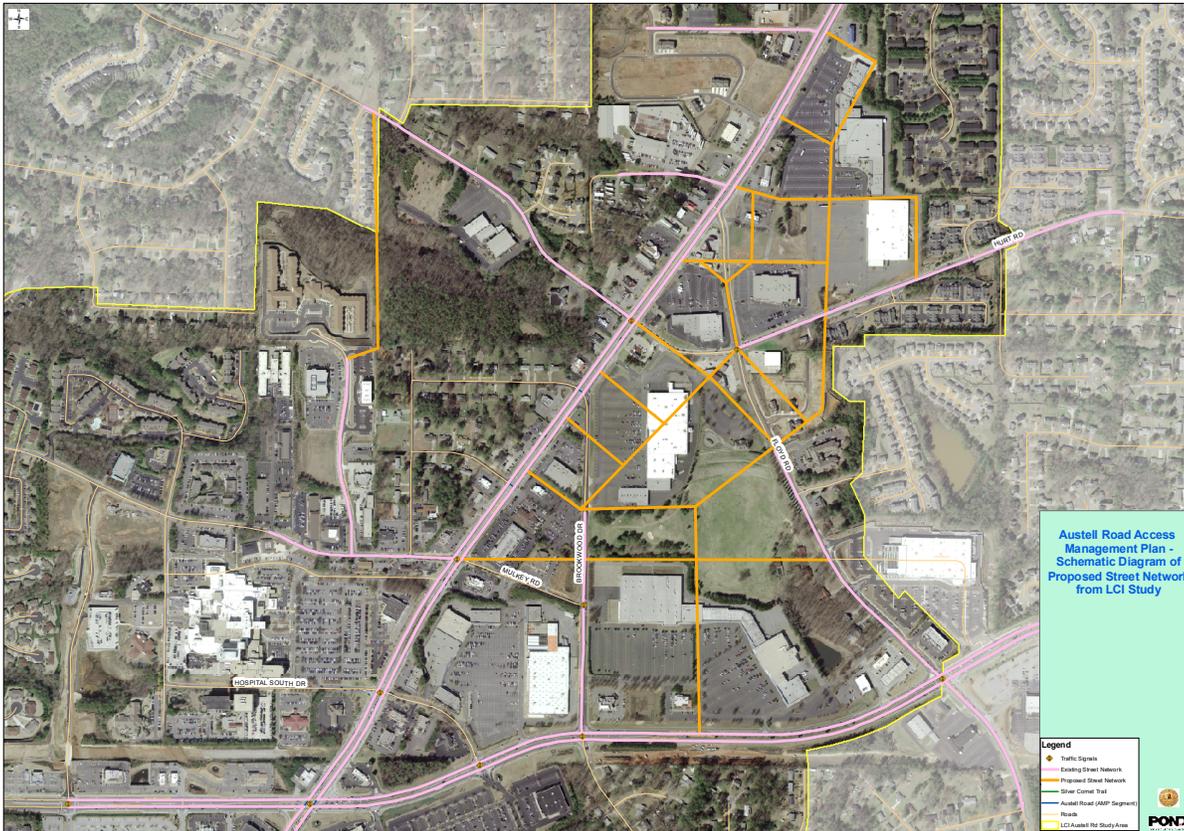
Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)
Austell Rd @ Callaway Rd.	F	>80	F	>80
Austell Rd @ Milford Church Rd.	F	>80	F	>80
Austell Rd @ Pair Rd.	F	>80	E	71.4
Austell Rd @ Amy Ln.	D	53.7	D	50.0
Austell Rd @ Hurt Rd.	F	>80	F	>80
Austell Rd @ Mulkey Rd.	D	37.3	F	>80
Austell Rd @ Hospital S. Dr.	C	20.5	F	>80
Austell Rd @ East West Conn.	F	>80	F	>80
Austell Rd @ E W Commons	D	52.9	E	78.5
Austell Rd @ Anderson Mill Rd.	F	>80	F	>80
Austell Rd @ Seays Rd.	B	11.2	B	12.4
Austell Rd @ Clay Rd.	F	>80	F	>80
Austell Rd @ Austell Plaza	A	6.3	C	27.8
Austell Rd @ Perkerson Mill Rd.	F	>80	E	71.2
East West Conn @ Tramore Pk.	E	77.2	F	>80
East West Conn @ Champion Dr.	F	>80	F	>80
East West Conn @ IHOP	E	59.6	F	>80
East West Conn @ Lowe's	F	>80	D	50.4
East West Conn @ Brookwood Dr.	E	75.2	F	>80
East West Conn @ Floyd Rd.	F	>80	F	>80
Brookwood Dr. @ Mulkey Rd.	A	5.2	A	7.6
Floyd Rd. @ Hurt Rd.	C	26.7	C	32.2

From Final Summary Report: Austell Road
Corridor LCI Study, July 2007

Road at Hurt Road) Park & Ride, WellStar Cobb Hospital, Six Flags Park & Ride, and Downtown Atlanta. The WellStar Cobb Hospital stop is a reverse commute destination intended to serve employees of the hospital rather than residents of the area.

Cobb County Bicycle / Transportation Plan

The Cobb County Bicycle/Transportation Plan, completed in 1993, was intended to meet the requirement of the Intermodal Surface Transportation Act (ISTEA) passed by Congress in 1991. The Atlanta Regional Commission (ARC) requested that counties that make up the ARC complete bicycle transportation plans as part of a regional plan. Due to time constraints, only a skeletal plan was completed in 1993. The Plan did not identify any roadways within the Austell Road Access Management Plan study area for future bicycle facilities. The Silver Comet Trail is the only bicycle facility identified within the Austell Road Access Management Plan study area.



From Final Summary Report: Austell Road Corridor LCI Study, July 2007

FIGURE 5-4 Proposed Street Network

The Cobb County Department of Transportation (DOT) is currently conducting the Cobb County Bicycle and Pedestrian Improvement Plan. This plan will “identify where Cobb County can improve conditions for bicycling and walking and identify a strategy for investing in those improvements over time.”

Cobb County Bicycle and Pedestrian Improvement Plan

Final recommendations and a project list have not yet been formulated as a part of this plan. However, level of service (LOS) for bicycle and pedestrian travel on existing roadways has been determined. Bicycle and pedestrian LOS was determined based on as roadway width, existence of sidewalks or bike lanes, traffic volumes, vehicle speeds, existence of on-street parking, and other factors. The results of this analysis show the following for bicycle LOS on major roadways within the study area:

- Austell Road operates at LOS F
- East-West Connector, Floyd Road, Hurt Road, and Clay Road operate at LOS E
- Anderson Mill Road, Milford Church Road, and Brookwood Drive operate at LOS D

The analysis shows the following for pedestrian LOS on major roadways within the study area:

- Austell Road operates at LOS E
- East-West Connector operates at LOS F west of Austell Road, LOS E east of Austell Road
- Floyd Road, Hurt Road, Clay Road, and Milford Church Road operate at LOS E
- Anderson Mill Road, Brookwood Drive operate at LOS D

The Cobb County Bicycle and Pedestrian Improvement Plan also conducted a travel demand analysis for major roadways within Cobb County. This was done by using four methods of analysis. These methods include counting bicyclists and pedestrians, identifying key bicycle and pedestrian generators and attractors, using models, and assessing latent demand. This analysis then assigned roadways a score between 1 and 5, with 5 representing roadways with the highest demand and 1 representing roadways with the lowest demand. The results of this analysis show the following for bicycle demand on major roadways within the study area:

- Austell Road – Demand Level 4
- East-West Connector, Floyd Road, and Milford Church Road – Level 4
- Hurt Road west of Austell Road – Level 4, east of Austell Road – Level 3
- Clay Road, Anderson Mill Road, and Brookwood Drive – Level 3

The results of this analysis show the following for pedestrian demand on major roadways within the study area:

- Austell Road – Level 5
- East-West Connector, Floyd Road, Milford Church Road, Hurt Road, Anderson Mill Road, and Brookwood Drive – Level 4
- Clay Road west of Austell Road – Level 3, east of Austell Road – Level 4

Overall, on major roadways in the study area the LOS for bicycles and pedestrians is poor. However, on these same roadways, demand for bicycle and pedestrian travel is generally high. This means that bicyclists and pedestrians within the study area are not being served well. Additionally, if better infrastructure was in place, bicycle and pedestrian travel would likely increase. This is due to the fact that some bicycle and pedestrian are likely not taking place due to the poor bicycle and pedestrian infrastructure that exists in the study area.

Table 5-3 is a list of previously planned projects located in or near the Austell Road Access Management Plan study area. This data is from the Atlanta Regional Commission's (ARC) Regional Transportation Plan (RTP) and the Cobb County SPLOST Project List. Figure 5-6 and Figure 5-7 show the locations of these projects as well as other existing transportation infrastructure in the study area.

**ARC Regional
Transportation
Plan and the
Cobb County
SPLOST Project
List**

TABLE 5-3 ARC RTP and Cobb County SPLOST Project List

Project Number	Project Name	Project Type	Project Description	Project Schedule
ARC CO-326	Austell Road Intersection Improvements from Clay Road to Sandtown Road	Roadway Operational Upgrades	This project will improve a series of intersections along Austell Road. The intersections to be improved are: Sandtown Road, Windy Hill Road, Callaway Road, Milford Church Road, Floyd Road, Hurt Road, and Clay Road.	Completion Date: 2008
ARC CO-356/ SPLOST D3030	Austell Road at East-West Connector	Roadway Operational Upgrades	Dual left turn lanes will be constructed on the southbound, eastbound, and westbound approaches. On the eastbound and westbound approaches a 3rd thru lane will be added and the right turn lane storage capacity will be extended.	Completion Date: 2009
ARC CO-342/ SPLOST D4240	Windy Hill Extension / Macland Road Connector	General Purpose Roadway Capacity	This project involves the construction of a new four-lane roadway between the intersection of SR 360 (Powder Springs Road) and Macland Road and the intersection of Austell Road and Windy Hill Road.	Completion Date: 2011
ARC CO-384A	Mulkey Road Extension - West from near Cliff Way to East-West Connector	General Purpose Roadway Capacity	This project involves constructing a new two-lane roadway from near the intersection of Mulkey Road and Cliff Place to the East-West Connector.	Completion Date: 2013
ARC CO-384B	Mulkey Road Extension - East from Brookwood Road to Floyd Road	General Purpose Roadway Capacity	This project involves constructing a new two-lane roadway from the intersection of Mulkey Road and Brookwood Road to Floyd Road.	Completion Date: 2012
ARC CO-385	Mulkey Road from just west of Cherokee Trails Drive to Austell Road	Roadway Operational Upgrades	This project involves making safety and geometric improvements to the existing alignment of Mulkey Road between Cherokee Trails Drive and Austell Road.	Completion Date: 2013
SPLOST D4140	Mulkey Road Connector	General Purpose Roadway Capacity	Mulkey Road to East-West Connector New 2 Lane Roadway	Construction Complete, Out to Bid February 2007
ARC CO-340	Callaway Road from Austell Road to SR 360 (Powder Springs Road)	Roadway Operational Upgrades	This project provides for roadway operational upgrades on Callaway Road to improve mobility and safety.	Completion Date: 2011
SPLOST D3040	Austell Road at Pat Mell Road	Roadway Operational Upgrades	Realign Pat Mell Rd to line up with apartment entrance	Completion Date: 2009
SPLOST D3050	Austell Rd at Roberta Dr/Cochran Rd	Roadway Operational Upgrades	Improve Alignment	Completion Date: 2009
SPLOST D3190	East-West Connector @ Hicks Road	Roadway Operational Upgrades	Add Right-Turn Lanes Northbound and Southbound	Completed 2008
SPLOST D7150	Austell Road	Bike/Ped	Sidewalk Batch #3	Final Design, Out to Bid September 2008
SPLOST D7210	Clay Road	Bike/Ped	Austell Road to Floyd Road	Engineering RFP, Engineering began November 2008
SPLOST D8210	South Cobb High School	Bike/Ped	Sidewalks on Clay Road	Construction Complete, Out to Bid January 2008

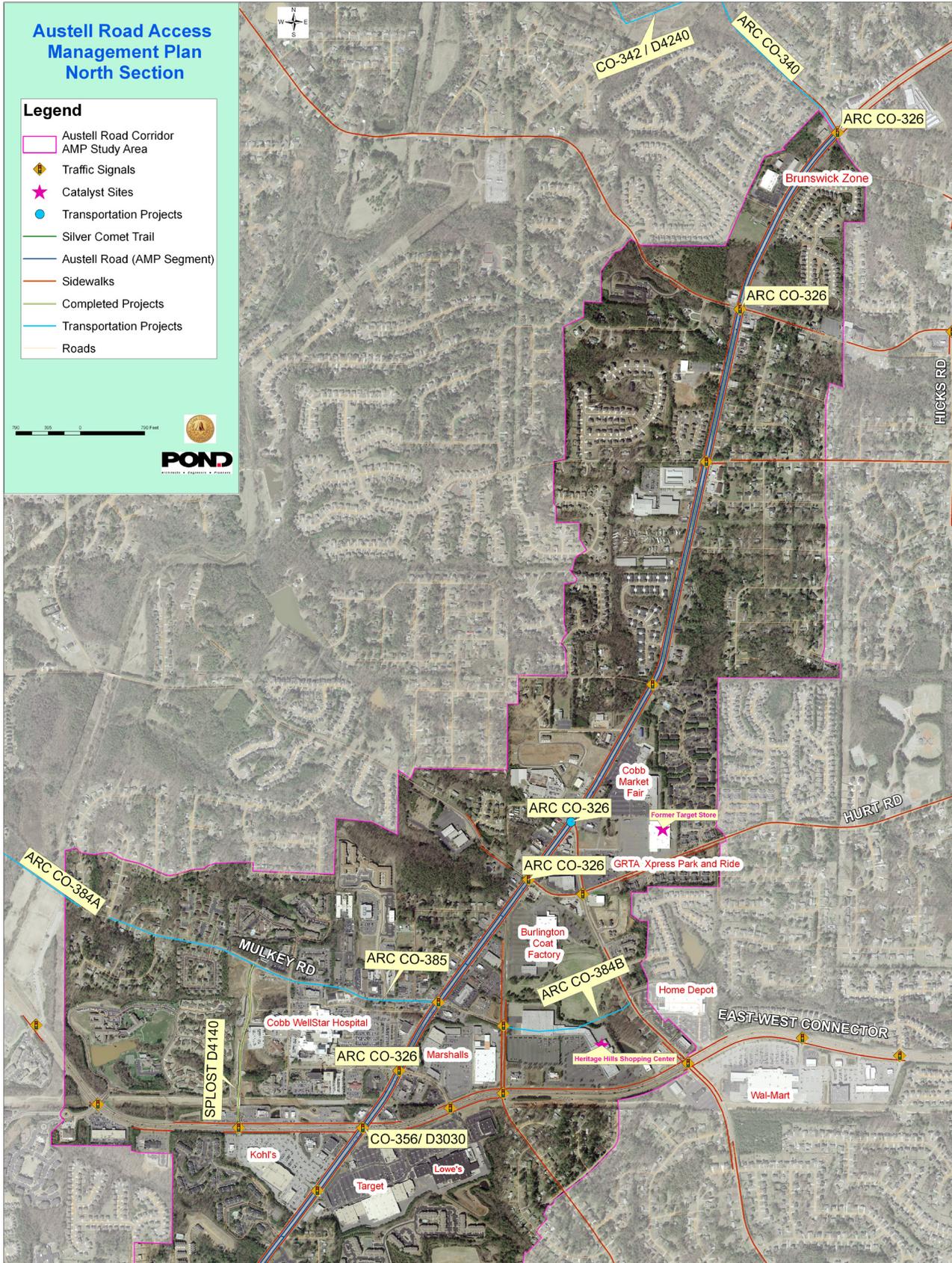


FIGURE 5-6 Transportation Infrastructure and Planned Projects, North Section

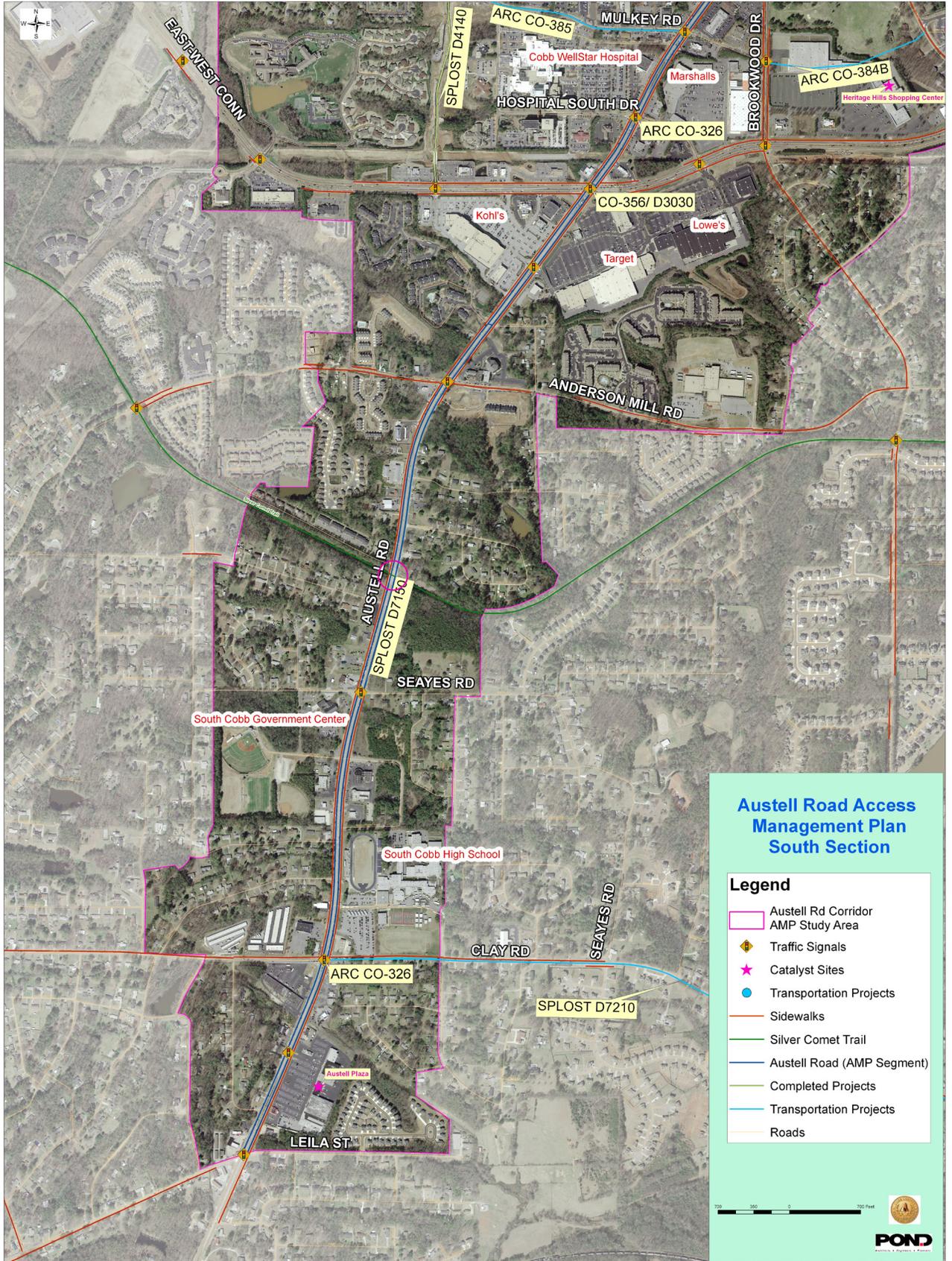


FIGURE 5-7 Transportation Infrastructure and Planned Projects, South Section

**Cobb
County 2030
Comprehensive
Transportation
Plan**

The Cobb County 2030 Comprehensive Transportation Plan (CTP) reviewed the transportation program in the context of local land use, economic development, and public expectations and priorities. The plan considered transportation modes individually as well as part of an interactive system. The results of the study were synthesized into a transportation project list that covered roadway, transit, pedestrian, and bicycle infrastructure projects.

The recommended roadway projects located in or near the Austell Road Access Management Plan Study Area are shown Table 5-4. Project number 1 has the potential to have the greatest impact on traffic operations in the area. This project would expand Austell Road from a 4-lane roadway to a 6-lane roadway from Windy Hill Road to Veterans Memorial Highway. Implementation of this project will provide additional traffic capacity on Austell Road and reduce traffic congestion throughout the corridor.

TABLE 5-4 Cobb CTP Roadway Projects

Map ID #	Project Location	Project Scope	Project Category
1	Austell Road from Windy Hill Road to Veterans Memorial Highway	Widen to 6 lanes	Capacity Projects
10	Brookwood Dr Extension to Veterans Memorial Hwy (US 278/US 78/SR 5)	Roadway Extension (2 lanes)	Capacity Projects
33	Floyd Road from Austell Rd to Hicks Rd	Widen to 4 lanes	Capacity Projects
37	Hurt Road at Floyd Road	Intersection Realignment	Capacity Projects
82	Clay Rd from Austell Powder Springs Rd to Austell Rd	Roadway operational upgrades	Off-Model Projects

As shown in Table 5-5, two transit projects were recommended that would pass through the study area. Project T31 would implement local bus service connecting two major activity centers, the Town Center Mall area and the Cumberland Galleria area. This transit route would pass through the study area on the East-West Connector, providing additional travel options to residents in the area. Project T37 would implement limited bus service connecting the Marietta Transfer Center to the Bankhead MARTA station in Atlanta. This route would be particularly beneficial to commuters as limited bus service typically has faster travel times due to the fact that only a small number of stops are made by the bus. Additionally, the connection to the Bankhead MARTA provides access to the rest of the City of Atlanta via MARTA's heavy rail and bus systems.

TABLE 5-5 Cobb CTP Transit Projects

Map ID #	Project Description
T31	Local Bus Service on Barrett Pkwy and East-West Connector, Town Center Park and Ride to Cumberland Galleria
T37	Limited Stop Bus Service from Marietta Transfer Center to Bankhead MARTA Station via Atlanta St, Austell Rd, and Veterans Memorial Pkwy

A number of pedestrian projects, shown in Table 5-6, were recommended for the study area. The CTP recommended pedestrian countdown signals for eight intersections along Austell Road. These signals increase safety and improve the pedestrian experience. Project P51 recommends adding sidewalks to a segment of Austell Road on the southern end of the study area. This segment has existing sidewalk on the west side of the roadway, so this project would fill in the gap on the east side of the roadway. The CTP also recommends adding sidewalks to three other roadways located within the study area.

TABLE 5-6 Cobb CTP Pedestrian Projects

Map ID #	Project Name	Project Description	Length (Linear Miles)
P2	Austell Road	At Anderson Mill Rd - Pedestrian Countdown Signals	0
P3	Austell Road	At Milford Church Rd - Pedestrian Countdown Signals	0
P4	Austell Road	At Pair Rd - Pedestrian Countdown Signals	0
P5	Austell Road	At Hurt Rd - Pedestrian Countdown Signals	0
P6	Austell Road	At Mulkey Rd - Pedestrian Countdown Signals	0
P8	Austell Road	At Amy Ln - Pedestrian Countdown Signals	0
P9	Austell Road	At Evergreen Dr - Pedestrian Countdown Signals	0
P10	Clay Road	At Seayes Rd - Pedestrian Countdown Signals	0
P39	Amy Lane	Velvet Creek Dr to Austell Rd	0.2
P48	Pair Rd	Hidden Valley Dr to Austell Rd	0.5
P51	Austell Rd	Anderson Mill Rd to Stallion Dr	0.8
P55	Callaway Road	Austell Rd to Greenridge Dr	0.6

Table 5-7 shows the two multi-use trails recommended by the CTP that are located in or near the study area. Project M4 would provide connections to the Silver Comet Trail from multiple local roadways located near Austell Road. The nearest connection to the Silver Comet Trail is from Floyd Road, located to the east of the study area. Project M4 would make access to the Silver Comet Trail significantly more convenient. Project M43, the Olley Creek Trail, is located west

of Austell Road. This trail will parallel Austell Road, providing a continuous, north-south route for bicyclists separated from vehicular traffic.

TABLE 5-7 Cobb CTP Multi-Use Projects

Map ID #	Corridor	Project Description	Length (Linear Miles)
M4	Austell Road Corridor Trails	Anderson Mill, Stonecrest Drive, Seayes Road, Hemlock Drive Extension to Silver Comet Trail	1
M43	Olley Creek Trail	Old Marietta Road north to County Services Parkway	8.5

As required by the Department of Community Affairs (DCA), counties must assign character areas to land throughout their jurisdiction as part of the comprehensive planning process. The Austell Road corridor has multiple character areas assigned to it. These character areas include the following:

- Redevelopment Commercial
- Activity Center
- Corridors
- Suburban Residential
- Residential Revitalization

The Cobb County Comprehensive Plan references the Austell Road corridor LCI Study numerous times. The comprehensive plan generally recommends implementing the policy changes and redevelopment steps recommended in the LCI study. In the Action Items section, the comprehensive plan states that the County should “Pursue economic, land use, and transportation changes as defined in the Canton Road Corridor Study, Austell Road Livable Center Initiative, Six Flags Drive Corridor Study, and the Historic Mableton Master Plan as a means of expanding opportunities for areas that have traditionally been underserved.” This statement is made for the following Action items:

- Economic Development – Jobs-housing balance
- Economic Development – Managing land for business and industrial growth
- Economic Development – Promote historic based tourism
- Transportation – Context sensitive design
- Transportation – Transportation alternatives
- Quality-of-life – Urban design
- Intergovernmental Coordination – Future growth and development
- Intergovernmental Coordination – Comprehensive planning

The Transportation section of the document states that the County is in the process of creating a Comprehensive Transportation Plan (CTP). Transportation issues and opportunities identified in the Comprehensive Plan include the following:

Cobb County Comprehensive Plan

DRAFT

- Traffic congestion
- Air quality
- Context sensitive design
- Transportation alternatives
- Land use-transportation connectivity
- Intelligent transportation systems
- Operational improvements
- Travel demand management

Within the list of issues and opportunities, the traffic congestion section specifically supports interconnectivity of streets, inter-parcel access, and the reduction of curb cuts. The transportation alternatives section supports expansion of CCT, supports new regional transit, and recommends investment in new bicycle and pedestrian facilities. The land use-transportation connectivity section recommends linking land use and transportation planning, promoting grid street systems, and promotes a development pattern that enhances mobility such as mixed-use developments. These concepts are key components of any access management plan.

Existing Zoning

The corridor does not have a consistent zoning pattern. Figure 5-8 shows the study area with the zoning districts aggregated to general land uses. This was done due to the fact that the study area includes a large number of zoning districts.

The corridor generally consists of Office/Institutional and Retail/Commercial. These two zoning designations operate to keep the corridor at a fairly consistent low density with standard screening techniques. Most of the major intersections have Community Retail Commercial (CRC) and Planned Shopping Center (PSC) designations. Their intents state they want to reduce congestion, by “being a one-stop shopping destination.” However, they both allow a number of permitted uses that are not particularly pedestrian friendly or consistent in theme (i.e. carwashes, drive in fast food, golf courses) along with wide setbacks and large minimum lot size requirements (20,000 sq ft). Sidewalk and landscaping requirements are minimal.

Interspersed throughout the corridor are Neighborhood Retail Commercial and Neighborhood Shopping districts, which differ from PSC and CRC through allowable uses. They want to focus on “nodal growth” and “stepping down from more intense urban uses” but they have the same setbacks, minimum lot size, and frontage requirements as the PSC and CRC.

Residential zoning districts range from compact single family detached to several attached designations (from 6 to 12 units per acre). Some pedestrian friendly districts such as Planned Residential Districts exist along the corridor, but do not allow mixed use development.

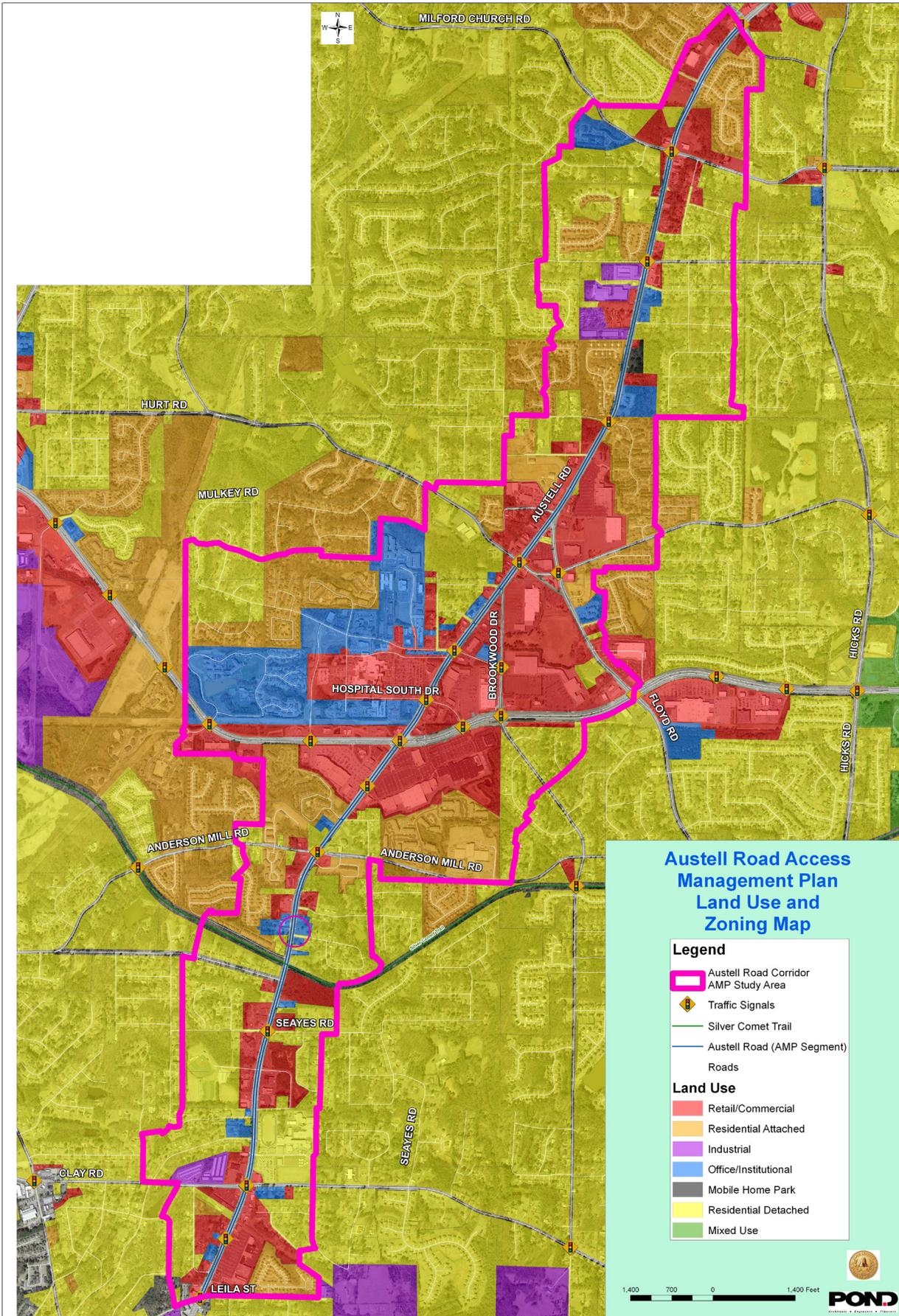


FIGURE 5-8 Land Use Map

At the north and southern end of the corridor there are some parcels zoned Heavy Industrial and Light Industrial, these could be problematic with trucks entering and leaving Austell Road and highlights the need for strong transition regulations for the corridor.

The Residential Overlay District (ROD) ordinance was adopted as a part of the zoning code in 2007. This ordinance is a useful tool to accommodate redevelopment in Cobb County. As discussed in the Austell Road Corridor LCI Study, there is one location along the Austell Road corridor where the ROD has been applied. The Austell Road Corridor LCI Study made recommendations which further emphasize redevelopment along the corridor. These land use and zoning changes have not yet been adopted.

Public Involvement

The data discussed in the preceding text was presented to the public in two meetings. The first was a stakeholders meeting held on February 5, 2009, at the South Cobb Government Center. Stakeholder comments at the meeting include the following:

- Some attendees expressed concern about the continuity of signage.
- Traffic safety for pedestrian and vehicles was identified as one of the most important issues for this study.
- The need to create more corridors to get in and out of the WellStar Cobb Hospital area without using Austell Road.
- An attendee mentioned that some drivers cut through neighborhood roads at 45 mph because of the lack of different corridors (Hurt Road was mentioned specifically).
- Residents believe that the majority of the drivers that commit traffic violations are not residents of the area, but rather live in surrounding areas.
- An attendee identified the Party City and Lowe's shopping centers as needing improved connectivity to reduce the traffic entering and exiting the East-West Connector and accessing these two sites.
- The stakeholders think that if the former Target store area is redeveloped, a back entrance could help alleviate traffic congestion on Austell Road caused by traffic from the site.
- Some attendees think that CCT bus stops need to be relocated. The bus stops are not always close to signalized intersections and some transit users cross roadways mid-block to reach the bus stops, creating a safety hazard.
- Some attendees would like to see improved streetscapes.
- A shuttle system was mentioned as an option to alleviate traffic on Austell Road.
- The section of Austell Road between Callaway Road and Milford Church Road is very slow and some analysis is needed, based on some participants' comments.
- Some attendees suggested prohibiting left turns from Hicks Road to Austell Road southbound. Additional analysis was proposed at this intersection. However, this intersection lies outside the project study area.

- Some attendees expressed safety concerns about the Austell Road and Floyd Road intersection. It is a full median opening that is not signalized and has significant turning movements.
- A more in-depth study was suggested for the gaps on sidewalks along the corridor.
- There are concerns with the Silver Comet Trail because Austell Road is about 20 feet above the trail. This configuration creates a safety issue and robberies have taken place on the trail at this location.
- Some attendees mentioned that extended-stay facilities and medical offices were previously proposed around Wal-Mart but they were concerned about how to redevelop this area with the market downturn. There are many underutilized developments that could be used for medical ancillary services to revitalize the area.
- Commissioner Woody Thompson mentioned that new ordinances were being developed for the area to be applied.
- Some attendees mentioned that one objective of the study should be to create a sense of community (maybe get a YMCA in the area). They would like to get people out of their cars and have more activities for families and children.

A public meeting was held on February 17, 2009, at the South Cobb Government Center. This meeting consisted of an open house with boards presenting existing conditions. Meeting attendees had the opportunity to review the data, ask questions of staff members, and make written comments. A formal presentation then took place followed by an additional open house time period.

Comments and questions from the public focused primarily on existing problems or potential improvements at specific locations. These included comments/questions about specific intersections, when resurfacing of specific segments would take place, the location of potholes, and comments that power lines were unsightly. Other comments/questions about individual developments were also made. Specific comments/questions related to transportation and traffic operations include the following:

- Please consider the residential areas that will be impacted by the traffic that is re-routed to reduce congestion on Austell Road.
- Signal timing along the corridor needs to be re-evaluated.
- Can left and right turns be coordinated based on volume in predominant flow directions?
- Will the daycare being built at Amy and Austell Roads have access onto Austell Road?
- What are the plans for the intersection of Clay and Austell Roads?
- A right turn is needed from Seayes onto Austell Road.
- Austell Road is congested enough without adding another [intersection] for the Silver Comet Trail.
- Consider some type of solar cell system for Silver Comet Trail tunnel

underneath Austell Road.

- Need a bike trail from Silver Comet to Traymore Park.
- Need a right turn lane for east Anderson Mill onto Austell Road.
- At stop lights for Austell Road and Parkway Station (Ivy Commons Apts), add left turn arrows on Austell Road sides of lights.
- Intersection of Austell at Floyd Road is dangerous. It needs to be fixed and improved in some way. Also, Cobb Market Fair has some problems going left on Austell Road.
- Left turn at Austell and Pair Road is confusing.
- Anderson Mill Road and Austell Road – only a few cars get to turn right or left at a time. Sit a long time.
- Hard to get out of Dolly's Restaurant onto Austell Road – also to turn left at the light on Austell Road to go back to Dolly's.
- Getting on to or across Austell Road at Domino's Pizza and Burlington/Dollar General shopping area.

Intersections and Access Points

There are a total of 14 signalized intersections within the study area. In addition, there are 12 unsignalized intersections, or full median openings, within the study area. Peak hour turning movement traffic counts were conducted for this study at 3 of the signalized intersections and 4 of the unsignalized intersections. This traffic count data was used in the existing and future traffic analysis of a segment of the study area, which is discussed later in this report. These traffic count locations include the following intersections:

- Austell Road and Mulkey Road, signalized
- Austell Road and Story Place, unsignalized
- Austell Road and Blue Ridge Drive/Brookwood Drive, unsignalized
- Austell Road and Hurt Road, signalized
- Austell Road and Floyd Road, unsignalized
- Austell Road and Cobb Marketfair driveway/Park Trail townhomes, unsignalized
- Austell Road and Amy Lane, signalized

Additional details regarding the traffic analysis are included later in this report.

The Austell Road corridor involved in this project has a total of 165 driveways. There are 87 driveways on the northbound and 78 driveways on the southbound. The Austell Road section in this study has 27 median openings. From these openings, there are 22 full intersections and 5 median openings for U-turn movements.

For the Austell Road segment in this project, there are 34 intersections total. 22 intersections have full median openings. There are 7 intersections on the northbound and 6 intersections on the southbound, that do not have median openings. See Figures 5-9, 5-10 and 5-11.

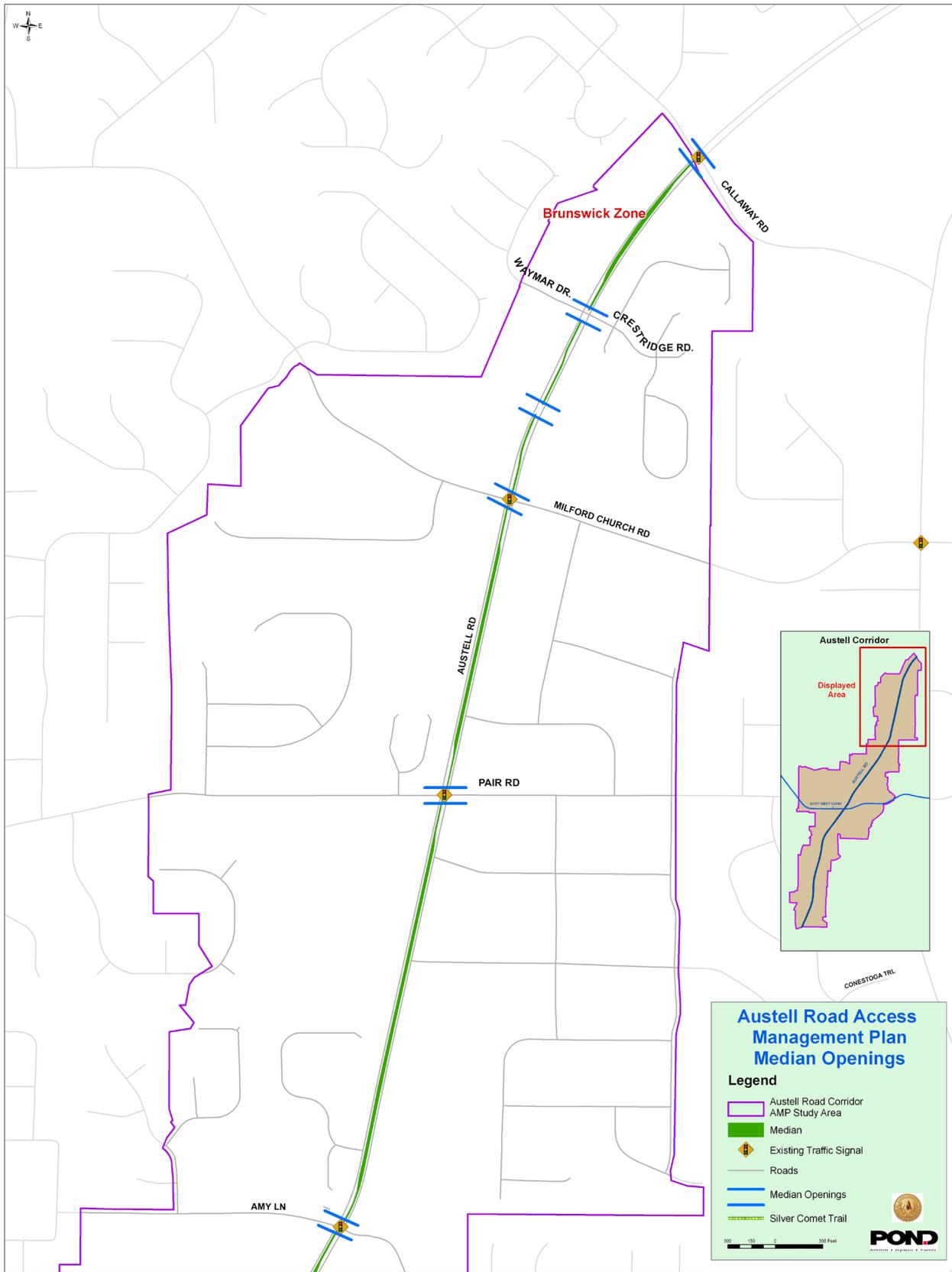


FIGURE 5-9 Median Openings, North Section

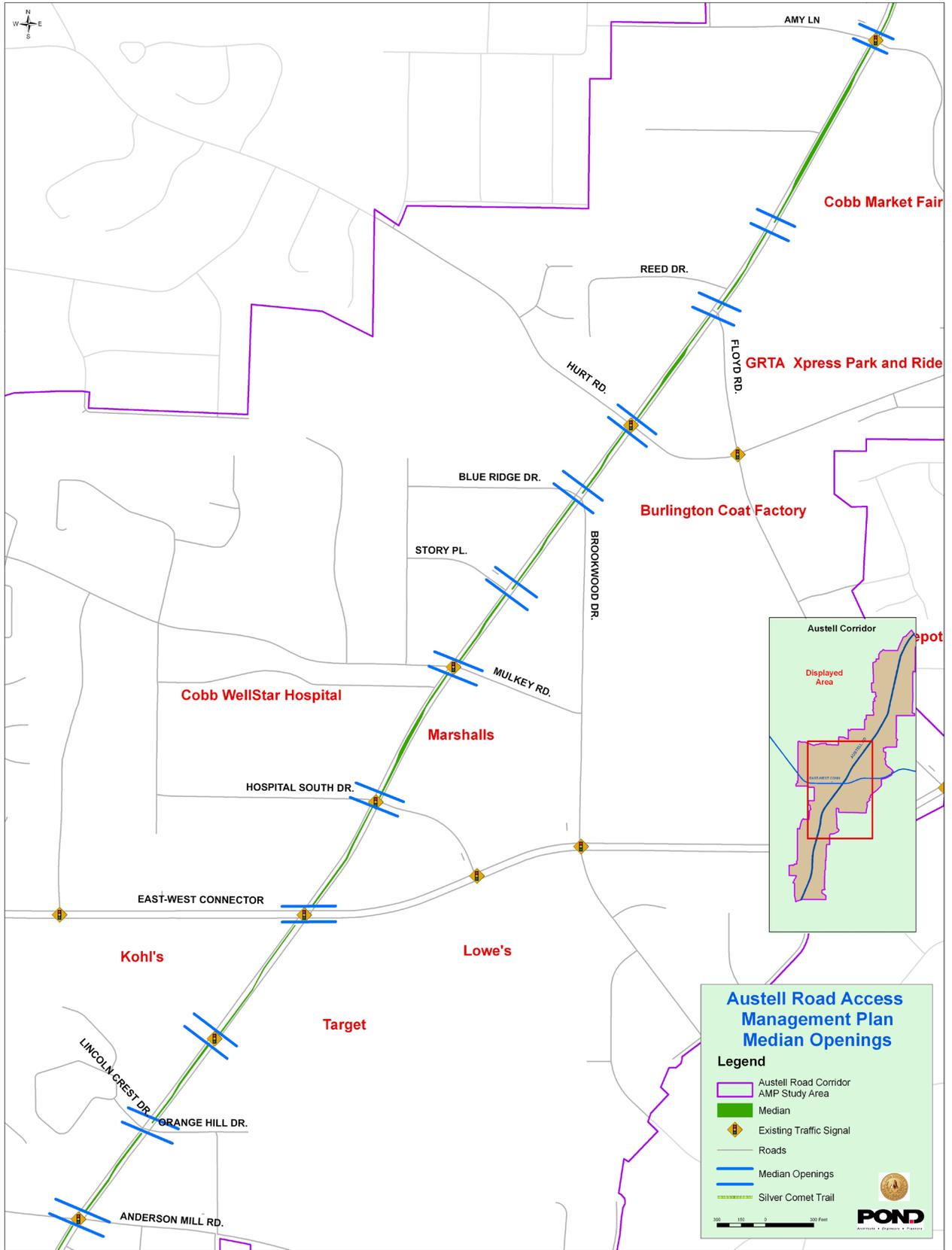


FIGURE 5-10 Median Openings, Central Section

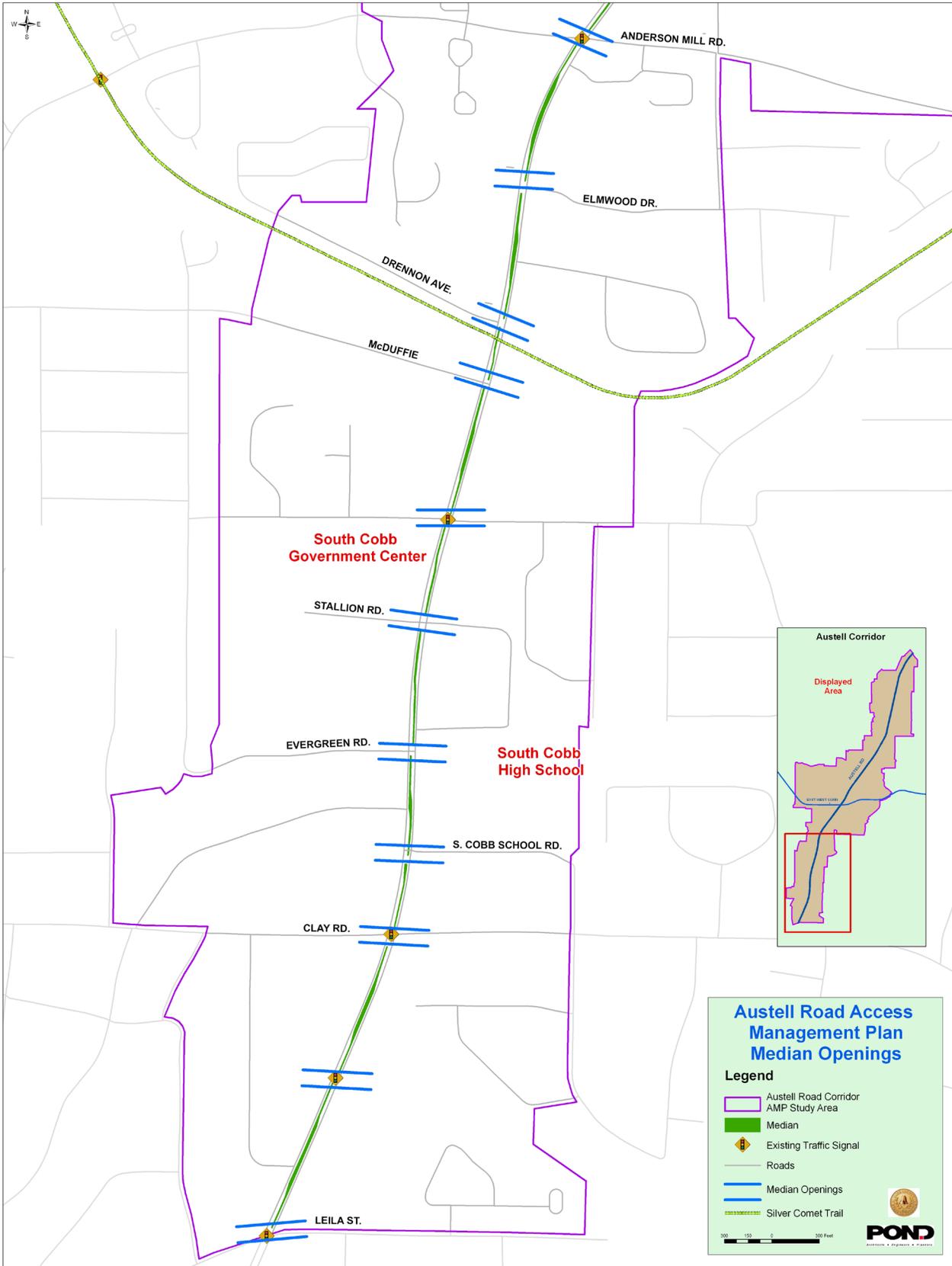


FIGURE 5-11 Median Openings, South Section

Sidewalk Inventory

A sidewalk inventory was conducted as a part of the field review of the study area. As previously described, the Austell Road Corridor LCI study provided basic information regarding sidewalks in the study area. Cobb County provided existing sidewalk data in a GIS shapefile that allowed the location of existing sidewalks to be mapped. The data on this map was field verified to determine if any revisions needed to be made. The sidewalk inventory focused on Austell Road as well as a number of other major roadways in the study area, including the following:

- Clay Road
- Seayes Road
- Anderson Mill Road
- East-West Connector
- Lipson Road
- Brookwood Road
- Floyd Road
- Mulkey Road
- Hurt Road
- Amy Lane
- Pair Road
- Milford Church Road
- Callaway Road

The GIS sidewalk data provided was generally accurate within the study area. Sidewalks exist on both sides of Austell Road north of the East-West Connector, although some sidewalks on the northern portion of this segment are narrow or in disrepair. Austell Road south of the East-West Connector has gaps in the sidewalk infrastructure where sidewalks are only located on one side of the roadway. The East-West Connector has sidewalks along a significant amount of the roadway, but much of the sidewalk infrastructure is where new development is located.

Some new sidewalks are present in the study area but were not included in the GIS sidewalk data. These were typically located at new developments. Figure 5-6 and Figure 5-7 show existing sidewalks in the study area. These maps include sidewalks that were already a part of the GIS data as well as those that were identified during the sidewalk inventory. Table 5-8 provides a detailed inventory of sidewalks by roadway segment in the study area.

TABLE 5-8 Study Area Sidewalk Inventory

Street Name	Segment		Side of Roadway	Existing Sidewalk?
	From	To		
Austell Road	South of Study Area Boundary	Clay Road	West	No
Austell Road	South of Study Area Boundary	Clay Road	East	Yes
Austell Road	Clay Road	Seayes Road	West	Yes
Austell Road	Clay Road	Seayes Road	East	Yes
Austell Road	Seayes Road	East-West Connector	West	Yes
Austell Road	Seayes Road	410 feet north of Seayes Road	East	No
Austell Road	410 feet north of Seayes Road	540 feet north of Seayes Road	East	Yes
Austell Road	540 feet north of Seayes Road	90 feet south of Anderson Mill Road	East	No
Austell Road	90 feet south of Anderson Mill Road	East-West Connector	East	Yes
Austell Road	East-West Connector	North of Study Area Boundary	West	Yes
Austell Road	East-West Connector	North of Study Area Boundary	East	Yes
Clay Road	West of Study Area Boundary	Austell Road	South	No
Clay Road	West of Study Area Boundary	Austell Road	North	Yes
Clay Road	Austell Road	160 feet west of Huntcrest Drive	South	No
Clay Road	160 feet west of Huntcrest Drive	70 feet east of Huntcrest Drive	South	Yes
Clay Road	70 feet east of Huntcrest Drive	East of Study Area Boundary	South	No
Clay Road	Austell Road	East of Study Area Boundary	North	Yes
Seayes Road	West of Study Area Boundary	Austell Road	South	No
Seayes Road	West of Study Area Boundary	185 feet west of Austell Road	North	No
Seayes Road	185 feet west of Austell Road	Austell Road	North	Yes
Seayes Road	Austell Road	East of Study Area Boundary	South	No
Seayes Road	Austell Road	East of Study Area Boundary	North	No
Anderson Mill Road	West of Study Area Boundary	230 feet west of Kousa Road	South	No
Anderson Mill Road	230 feet east of Kousa Road	210 feet west of Austell Road	South	No
Anderson Mill Road	West of Study Area Boundary	200 feet west of Kousa Road	North	No
Anderson Mill Road	200 feet west of Kousa Road	15 feet east of Kousa Road	North	Yes
Anderson Mill Road	15 feet east of Kousa Road	Austell Road	North	No
Anderson Mill Road	Austell Road	Chelou Drive	South	Yes
Anderson Mill Road	Chelou Drive	120 feet west of Silver Ridge Drive	South	No
Anderson Mill Road	120 feet west of Silver Ridge Drive	120 feet east of Silver Ridge Drive	South	Yes
Anderson Mill Road	120 feet east of Silver Ridge Drive	East of Study Area Boundary	South	No

Street Name	Segment		Side of Roadway	Existing Sidewalk?
	From	To		
Anderson Mill Road	Austell Road	385 feet east of White Way Drive	North	No
Anderson Mill Road	385 feet east of White Way Drive	East of Study Area Boundary	North	Yes
East-West Connector	West of Study Area Boundary	65 feet west of Mesa Valley Way	South	No
East-West Connector	65 feet west of Mesa Valley Way	Mesa Valley Way	South	Yes
East-West Connector	Mesa Valley Way	485 feet east of Mesa Valley Way	South	No
East-West Connector	485 feet east of Mesa Valley Way	30 feet east of Davis-Struempf Funeral Home Driveway	South	Yes
East-West Connector	30 feet east of Davis-Struempf Funeral Home Driveway	155 feet west of Kohl's Shopping Center Driveway	South	No
East-West Connector	155 feet west of Kohl's Shopping Center Driveway	Austell Road	South	Yes
East-West Connector	West of Study Area Boundary	750 feet west of Lipson Drive	North	No
East-West Connector	750 feet west of Lipson Drive	Austell Road	North	Yes
East-West Connector	Austell Road	Brookwood Drive	South	Yes
East-West Connector	Brookwood Drive	90 feet west of Floyd Road	South	No
East-West Connector	90 feet west of Floyd Road	East of Study Area Boundary	South	Yes
East-West Connector	Austell Road	Krystal Driveway	South	Yes
East-West Connector	Krystal Driveway	100 feet west of Marshalls/Staples Driveway	South	No
East-West Connector	100 feet west of Marshalls/Staples Driveway	East of Study Area Boundary	South	Yes
Lipson Drive	East-West Connector	Mulkey Road	West	No
Lipson Drive	East-West Connector	Mulkey Road	East	Yes
Brookwood Drive	South of Study Area Boundary	250 feet south of Austell Road	West	Yes
Brookwood Drive	250 feet south of Austell Road	Austell Road	West	No
Brookwood Drive	South of Study Area Boundary	East-West Connector	East	No
Brookwood Drive	East-West Connector	290 feet north of Heritage Hills Shopping Center driveway	East	Yes
Brookwood Drive	290 feet north of Heritage Hills Shopping Center driveway	Austell Road	East	No
Floyd Road	South of Study Area Boundary	350 feet north of East-West Connector	West	Yes
Floyd Road	350 feet north of East-West Connector	Austell Road	West	No
Floyd Road	South of Study Area Boundary	230 feet south of Hurt Road	East	Yes

Street Name	Segment		Side of Roadway	Existing Sidewalk?
	From	To		
Floyd Road	230 feet south of Hurt Road	Hurt Road	East	No
Floyd Road	Hurt Road	Austell Road	East	Yes
Mulkey Road	West of Study Area Boundary	Austell Road	South	No
Mulkey Road	West of Study Area Boundary	Mulkey Circle	North	No
Mulkey Road	Mulkey Circle	Austell Road	North	Yes
Mulkey Road	Austell Road	Brookwood Drive	South	Yes
Mulkey Road	Austell Road	315 feet east of Austell Road	North	No
Mulkey Road	315 feet east of Austell Road	Brookwood Drive	North	Yes
Hurt Road	West of Study Area Boundary	715 feet west of Austell Road	South	No
Hurt Road	715 feet west of Austell Road	190 feet west of Austell Road	South	Yes
Hurt Road	190 feet west of Austell Road	Austell Road	South	No
Hurt Road	West of Study Area Boundary	115 feet west of Heritage Ridge Lane	North	No
Hurt Road	115 feet west of Heritage Ridge Lane	165 feet east of Heritage Ridge Lane	North	Yes
Hurt Road	165 feet east of Heritage Ridge Lane	Austell Road	North	No
Hurt Road	Austell Road	500 feet east of Floyd Road	South	No
Hurt Road	500 feet east of Floyd Road	Winesap Drive	South	Yes
Hurt Road	Winesap Drive	East of Study Area Boundary	South	No
Hurt Road	Austell Road	East of Study Area Boundary	North	Yes
Amy Lane	West of Study Area Boundary	Austell Road	South	No
Amy Lane	West of Study Area Boundary	Austell Road	North	No
Pair Road	West of Study Area Boundary	Austell Road	South	No
Pair Road	West of Study Area Boundary	Austell Road	North	Yes
Pair Road	Austell Road	190 feet east of Austell Road	South	Yes
Pair Road	190 feet east of Austell Road	East of Study Area Boundary	South	No
Pair Road	Austell Road	230 feet east of Austell Road	North	No
Pair Road	230 feet east of Austell Road	East of Study Area Boundary	North	Yes
Milford Church Road	West of Study Area Boundary	250 feet west of Milford Forest Drive	South	Yes
Milford Church Road	250 feet west of Milford Forest Drive	Austell Road	South	No
Milford Church Road	West of Study Area Boundary	65 feet west of Austell Road	North	Yes
Milford Church Road	65 feet west of Austell Road	Austell Road	North	No
Milford Church Road	Austell Road	East of Study Area Boundary	South	No
Milford Church Road	Austell Road	1035 feet east of Austell Road	North	Yes
Milford Church Road	1035 feet east of Austell Road	East of Study Area Boundary	North	No
Callaway Road	West of Study Area Boundary	Austell Road	South	No
Callaway Road	West of Study Area Boundary	Austell Road	North	Yes
Callaway Road	Austell Road	East of Study Area Boundary	South	No
Callaway Road	Austell Road	East of Study Area Boundary	North	No

Slope Analysis

The slope in the study area was analyzed to see if there are any concerns related to the access management strategies. Slope is used to describe the steepness, incline, or gradient of a straight line. A higher slope value means the terrain is steeper while a lower slope value means the terrain is flatter. The slope in a road can be defined by the percentage of the slope. Usually a terrain will not have complications for entryways and interparcel access if the slope is less than 11% for commercial uses and 15% for residential uses. As you can see in Figure 5-12, the study area has in its majority a slope of 10% or less. There are some areas with higher values of slope. One of these areas is the Silver Comet Trail. However this slope makes sense since the trail crosses underneath Austell Road. The other areas are spread out along the corridor and do not have a large impact on the terrain of the corridor.

Driveway Number and Spacing

Good access management practice also involves providing access to land development, while preserving traffic flow along Austell Road and other, surrounding roadways. Poor spacing, design, and location of driveways lowers average travel speed, and improvements in access management can increase roadway capacity. Research has also shown that access management helps reduce the rate and severity of traffic accidents. Good definition and spacing of driveways also improves pedestrian and bicycle safety by reducing the potential for conflicts with turning vehicles.

From a land development perspective, appropriate land development access management requirements help discourage poor redevelopment and site design. The quality of site access along Austell Road is important to the success of any redevelopment effort. The Urban Land Institute Shopping Center Development Handbook warns that poorly designed entrances and exits not only present a traffic hazard, but also cause congestion that can create a poor image of a retail shopping center. Reducing the number and frequency of driveways also improves the appearance of major corridors. More land is freed for landscaping and the visual dominance of paved areas is reduced. Access management requires coordination of land use and transportation objectives.

Nationally recognized standards show that “an increase from 10 to 20 driveways per mile increases crash rates by roughly 30%. However, the specific relationship varies with differences in road geometry, operating speeds, and driveway and intersection traffic volumes”. The Austell Road corridor of about four (4) miles has approximately the following number of access points:

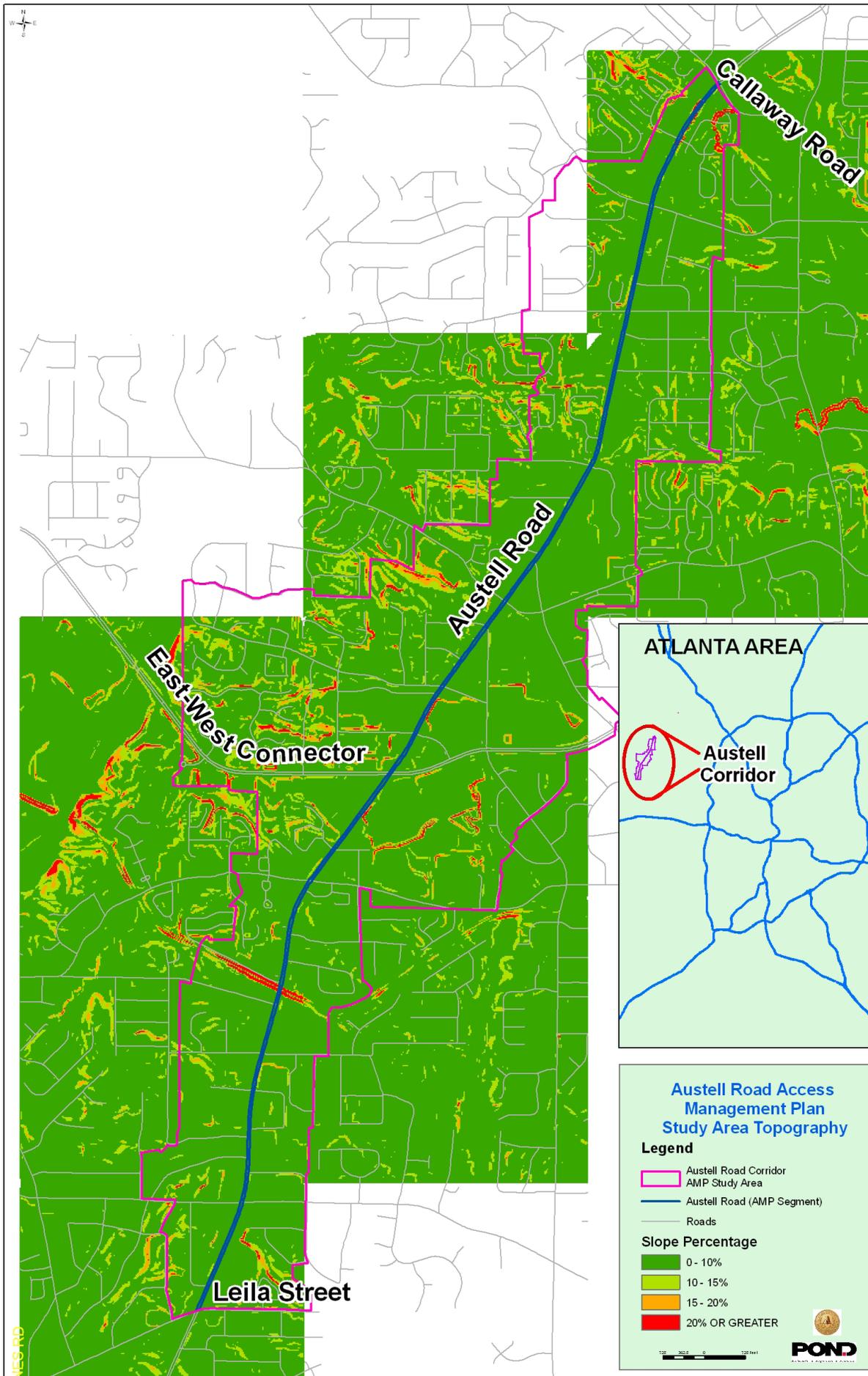


FIGURE 5-12 Topography of Study Area

TABLE 5-9 Corridor Access Points

Type of Access	Number of Access Points	Direction
Signalized intersection	14	Northbound and Southbound
Un-signalized intersection	4	Northbound and Southbound
T-intersection with Median break	2	Northbound
T-intersection with Median break	4	Southbound
T-intersection without Median break	7	Northbound
T-intersection without Median break	6	Southbound
U-Turn only	3	Northbound and Southbound
Driveways	78	Southbound
Driveways	87	Northbound

Additionally, the standard from the TRB manual states that the spacing on a minor arterial such as Austell road should be 330 ft. As shown in Table 5-10, the average spacing on some sections of the corridor do not comply with the standards. The sections are divided in north and south bounds. See Figures 5-13, 5-14 and 5-15 for locations of road sections with above-standards driveway spacing.

TABLE 5-10 Average Spacing Along Sections of the Corridor

Start Point	End Point	Approx. Length (ft.)	Number of Driveways Northbound	Average Driveway Distance (ft.) Northbound	Number of Driveways Southbound	Average Driveway Distance (ft.) Southbound
Milford Church Rd	Byers Dr	1,393	12	116.08	3	464.33
Byers Dr	Pair Rd	521	3	173.67	0	
Amelia Dr	Lanier Dr	674	2	337.00	5	134.80
Lanier Dr	Amy Ln	1,757	6	292.83	1	1757.00
Mimosa Dr	Reed Dr	1,125	4	281.25	2	562.50
Floyd Rd	Hurt Rd	882	6	147.00	7	126.00
Hurt Rd	Blue Ridge Dr	556	3	185.33	5	111.20
Blue Ridge Dr	Story Pl	738	4	184.50	7	105.43
Story Pl	Mulkey Rd	581	2	290.50	3	193.67
Anderson Mill Rd	Elmwood Dr	1,028	5	205.60	4	257.00
Elmwood Dr	Fairview Dr	478	5	95.60	3	159.33
Fairview Dr	Drennon Av	405	4	101.25	1	405.00
McDufie Rd	Seayes Rd	896	3	298.67	4	224.00
Stallion Pkwy	Evergreen Dr	825	3	275.00	4	206.25
South Cobb School Rd	Clay Rd	512	2	256.00	3	170.67
Clay Rd	Doby Ln	1,600	9	177.78	13	123.08
Doby Ln	Leila St	480	2	240.00	2	240.00

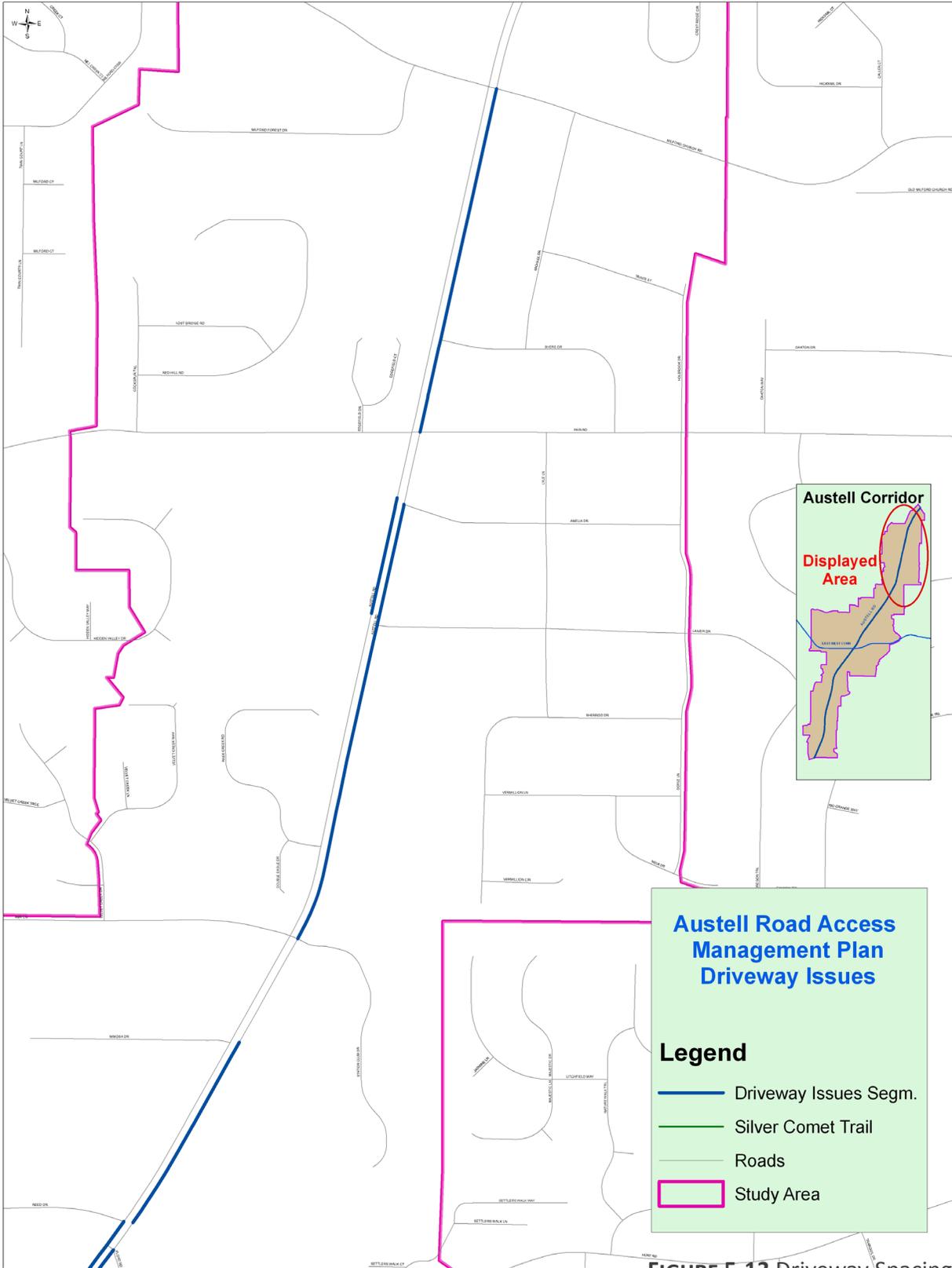


FIGURE 5-13 Driveway Spacing

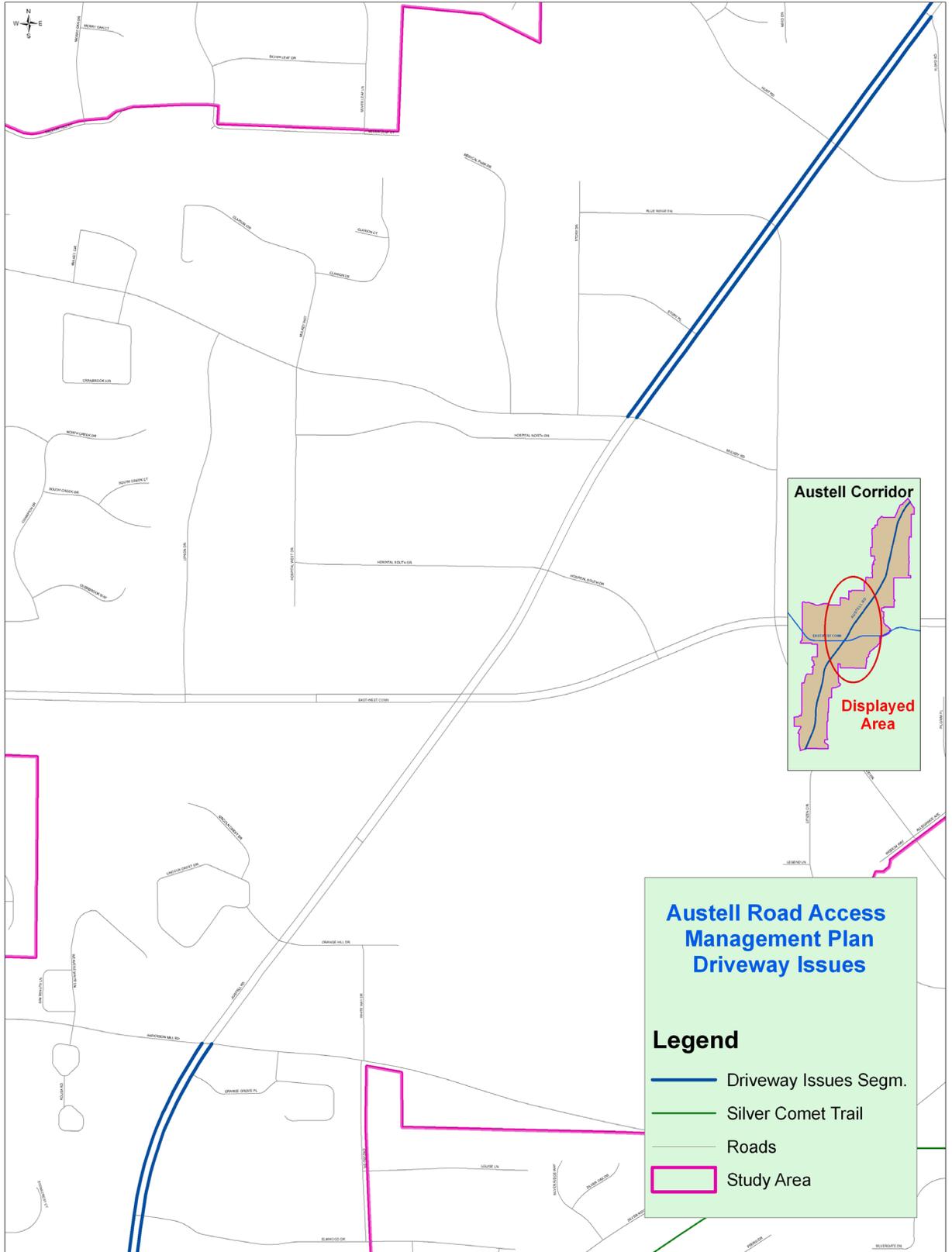


FIGURE 5-14 Driveway Spacing

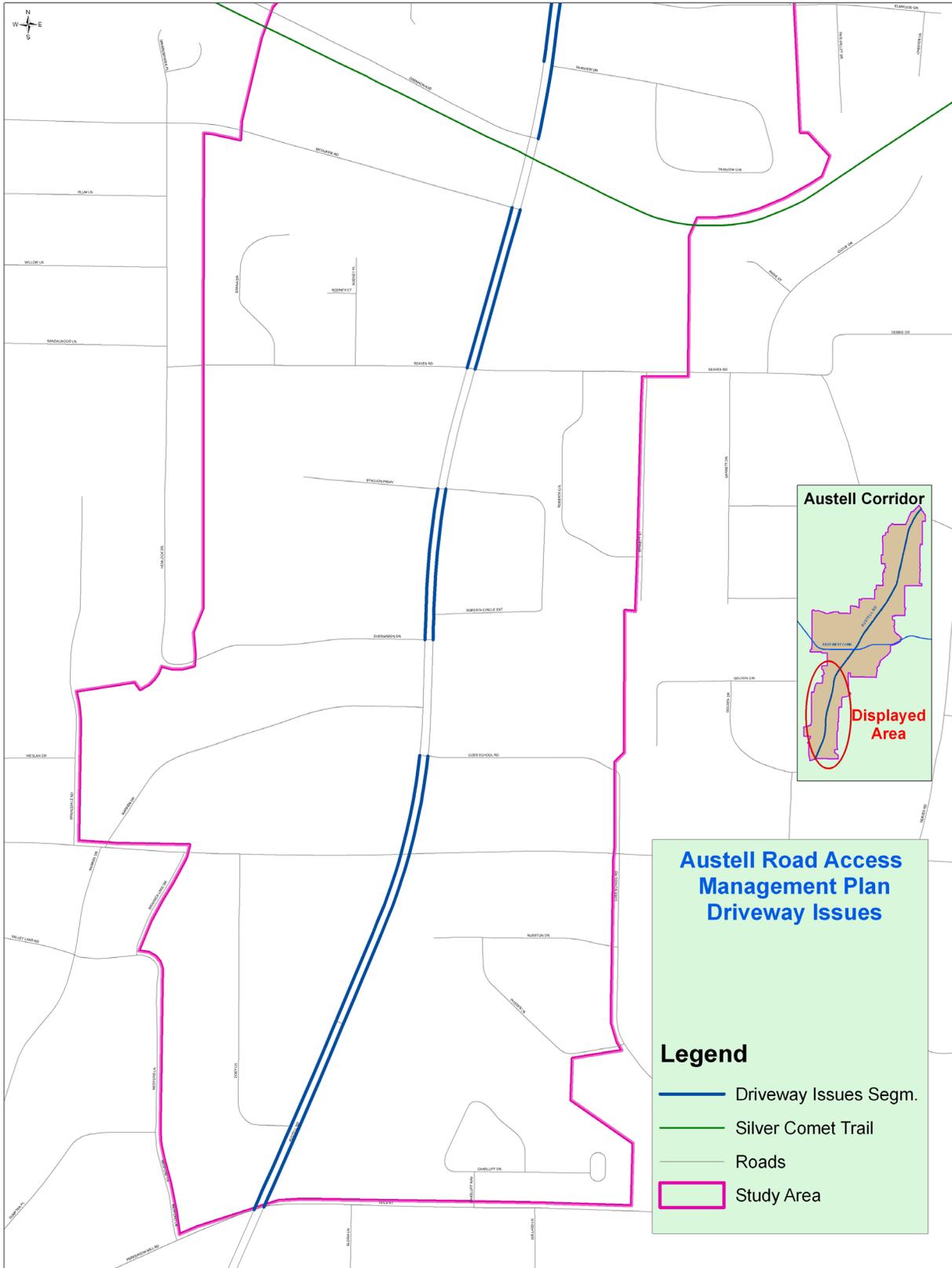


FIGURE 5-15 Driveway Spacing

Some photo examples of good and bad access management were taken along the corridor.

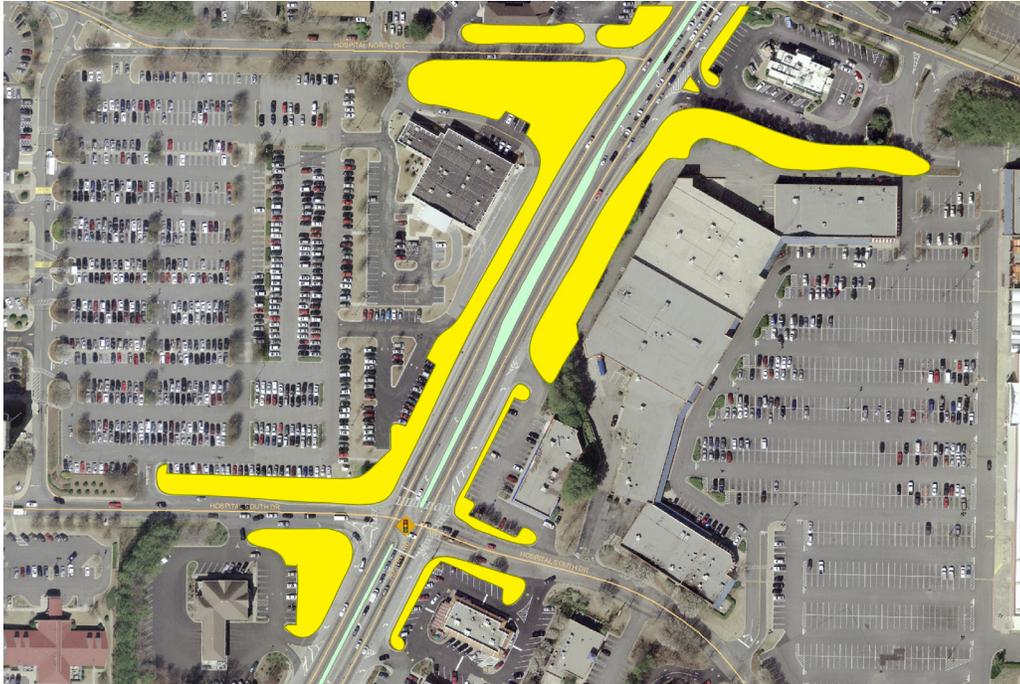


A segment of Austell Road where driveways are very close together.



Example of bad access management

The following is an example of good access management along the Austell Road corridor. In this area, few access points on the road exist, which makes traffic smoother and safer, and there are less conflicts between vehicles and pedestrians.



Example of good access management

Land Use

At this time, there are no zoning regulations governing access management. The Cobb County Community Development Department maintains a set of review standards to assess development projects. Some of the elements include adherence to design guidelines, master plan and comprehensive plan. The Cobb County Department of Transportation traditionally reviews projects submitted and provides comments regarding certain access management regulations. Specifically, Section 402 of the Development Standards Amendments adopted December 9, 2008 contains several standards regarding inter-parcel access, driveway location driveway spacing driveway standards. All driveways are to be designed and constructed with sidewalk transitions as appropriate and must comply with minimum Cobb County intersection/corner sight distance requirements. Furthermore, when property frontage is less than 200 feet, one driveway shall be allowed for approval. Additional entrances/exits for property having street frontage in excess of 200 feet may be considered by Cobb DOT upon a showing that inter-parcel access, as encouraged in section 402.03 of these standards is not feasible. Applicant must also demonstrate that such additional entrances/exits are needed and would not increase traffic congestion or otherwise reduce the safety and convenience of the traveling public.

Finally, inter-parcel access easements between adjacent, non residential properties that access county thoroughfares shall be encouraged. Controlling access and establishing inter-parcel access easements is desirable for providing safe and efficient movement of traffic, both vehicular and pedestrian, as well as encouraging efficient development plans that enable occupants and clients to fulfill their daily activities through minimal use of vehicles, and through increased use of alternative transportation modes such as public transit, walking and bicycling.

6 Access Management Process

Developing the Plan

The purpose of the planning study is to evaluate access characteristics and to propose access changes that improve the safety and operation of Austell Road. Such changes involve median design, auxiliary lanes, site access, land use refinements, additional sidewalks, improved pedestrian conditions, and enhancements to the supporting roadway network. Access management plans are typically implemented through a combination of regulations, interagency or public-private agreements, and roadway improvement projects.

The planning effort in this study includes the following steps:

- Corridor management analysis
- Developing the access management plan
- Evaluating alternatives
- Plan adoption and implementation.

Developing the access management plan included an assessment of the existing conditions of the road, public input through survey and public meetings, and information from different interviewees from ARC, Cobb DOT and stakeholders. The consultant team examined an array of access management alternatives based on an assessment of the corridor. The alternatives were evaluated subsequently to determine potential impacts. The alternatives identify existing and future access locations, type of access modification, and desirable changes to roadway design along the corridor. The process culminated in a set of preferred strategies with an emphasis on the central core of the study area. This is the sub-area where the consultant team was able to gather detailed information to make highly specific recommendations.

An example list of questions explored to help the analysis is as follows:

- What problems need to be resolved?
- What methods of access management can be used to resolve those problems?
- Are auxiliary lanes needed in certain locations?
- Are there problems with traffic signal location and traffic progression?
- Does an existing median need to be improved or should a non-

traversable median be incorporated into the roadway design?

- Is there a supporting street network?
- Are there opportunities for joint access or interparcel circulation?
- How can the supporting street and circulation system be modified or developed to improve corridor safety and operations?

This section of the report will present the analysis, possible alternatives, and recommended solution per each of the following topics:

- Crash Analysis
- Median Plan

A field review was conducted to observe the types of safety issues that exist in the study area. Some of the most noticeable were problems related to left turning traffic, particularly at unsignalized intersections. The following photo shows the intersection of Austell Road & Blue Ridge Drive/ Brookwood Drive. The white SUV is making a left turn from Blue Ridge Drive onto Austell Road northbound. However, the northbound through traffic forced the SUV to stop, blocking one of the southbound through lanes and the southbound left turn lane. This creates a significant safety problem with the potential for a crash between a southbound vehicle traveling at full speed and the stopped SUV.

Corridor Management Analysis - Crash Analysis



Austell Road &
Blue Ridge Drive /
Brookwood Drive

The Cobb County DOT provided 3 years of crash data from February 2006 to January 2009. A summary of this data by crash type is shown in Table 6-1.

Crash Type	Number of Crashes
Rear End	720
Right Angle	153
Sideswipe	149
Left Turn	117
Fixed Object	51
Other	37
Head On	2
Total Crashes	1229

As this table shows, more than half the crashes within the corridor during this 3-year time period were considered rear end crashes. These crashes may be related to traffic congestion and take place when a vehicle is stopped for a traffic signal or other delay and the vehicle behind it doesn't stop. However, turning traffic movements can also be a cause of rear end crashes as turning vehicles also slow or stop on Austell Road and create conflicts for moving traffic.

The existence of a median on Austell Road reduces the number of head on crashes and left turn crashes that otherwise might take place along the corridor. However, median openings at both signalized and unsignalized intersections allow conflicts where left turn crashes may take place.

To compare the number of crashes along Austell Road to other roadways, the crash rate per million vehicles miles (MVM) traveled was determined. This rate is based in part on the Average Annual Daily Traffic (AADT) volumes along a roadway. The AADT volumes along Austell Road were obtained from GDOT. These volumes were broken down into four segments within the study area. Additional data, including the number of crashes within each segment and the length of each segment, were also used to determine the crash rate per MVM traveled. This data is summarized in Table 6-2.

TABLE 6-2 Crash Rate per MVM Traveled

Austell Road Segment		AADT	Number of Crashes	Approximate Length (FT)	Crash Rate by Million Vehicle Miles (MVM)
Start Point	End Point				
Leila St	South of Clay Rd	31,860	36	2076	2.62
Clay Rd	Anderson Mill Rd	34,820	319	5885	7.51
Orange Hill Dr	South of Floyd Rd	41,760	522	6224	9.68
Floyd Rd	Callaway Rd	36,700	352	9224	5.01

GDOT classifies Austell Road as an urban minor arterial roadway. According to the Federal Highway Administration (FHWA), an urban minor arterial interconnects with and augments the urban principal arterial system and provide service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials. The crash rate in the State of Georgia for all urban minor arterials is 5.13 Crashes/MVM. As Table 6-2 shows, compared to the State of Georgia crash rate, the segment from Floyd Road to Callaway Road has about the same crash rate, the segment from Clay Road to Anderson Mill Road has a higher crash rate, and the segment from Orange Hill Road to south of Floyd Road has a significantly higher crash rate. The crash rate for the segment from Leila Street to south of Clay Road may be skewed lower than it should be due to the fact that this is a relatively small segment without any large intersections. While crash rates are not particularly problematic on this segment, the reality is that they may be higher than the rate shown here.

The crash rate for all roadways in Cobb County is 4.12 Crashes/MVM. However, this crash rate involves a large number of collectors and local roadways which typically have lower crash rates than arterials. Therefore, the State of Georgia crash rate for urban minor arterials is a better standard for comparing to Austell Road.

The maps on the following pages, Figure 6-1, Figure 6-2, and Figure 6-3, show the locations of crashes and crash types throughout the study area. It should be noted that crash locations are identified by the nearest intersection to the crash. However, this does not mean the crash necessarily took place at the intersection itself. The crash could take place at the intersection or it could also take place before or after the intersection. The cause of the crash could be intersection related or could be related to driveways, median breaks, or simply driver error. However, the maps do provide a good general idea of the segments of Austell Road that have significant amounts of crashes.

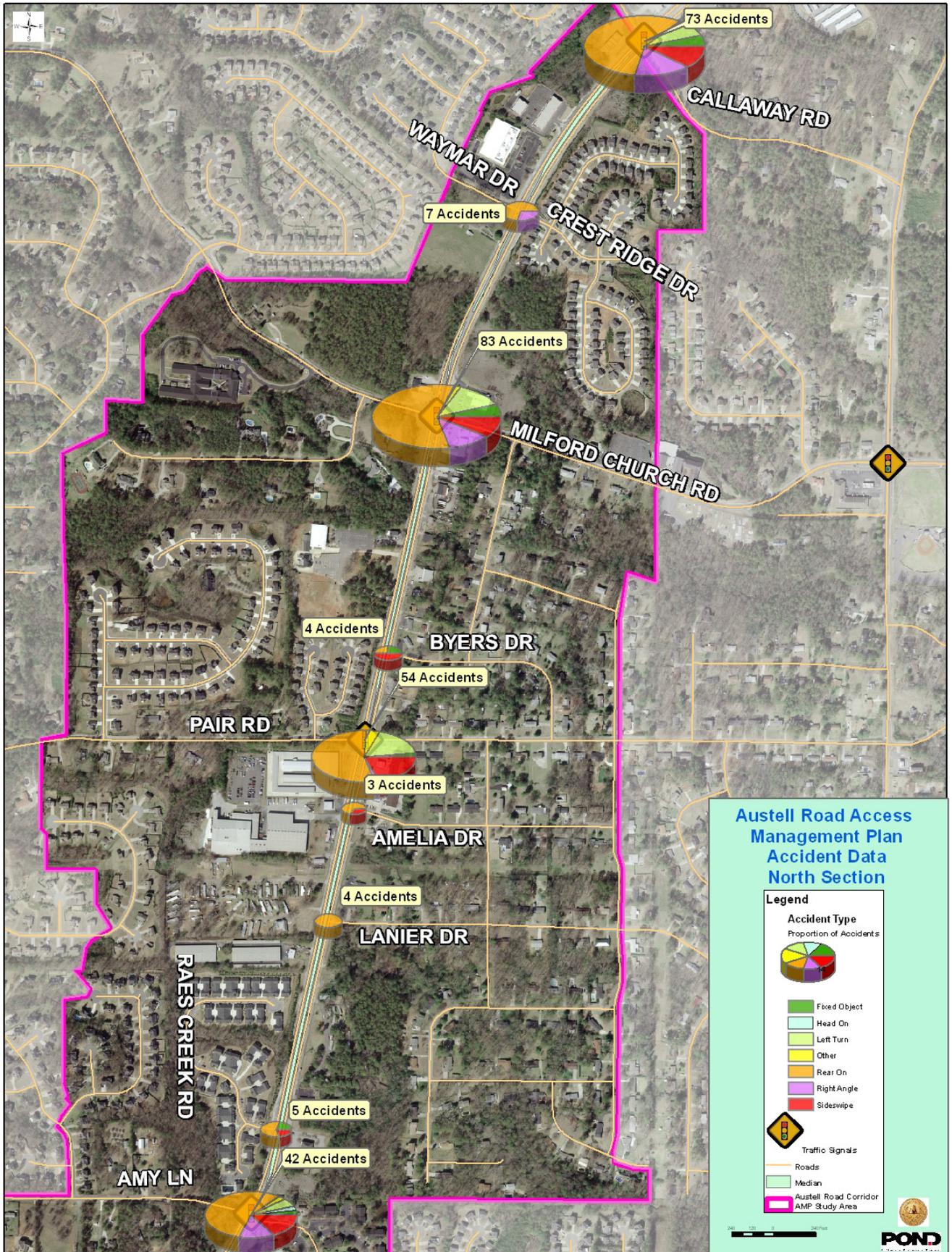


FIGURE 6-1 Accident Data, North Section

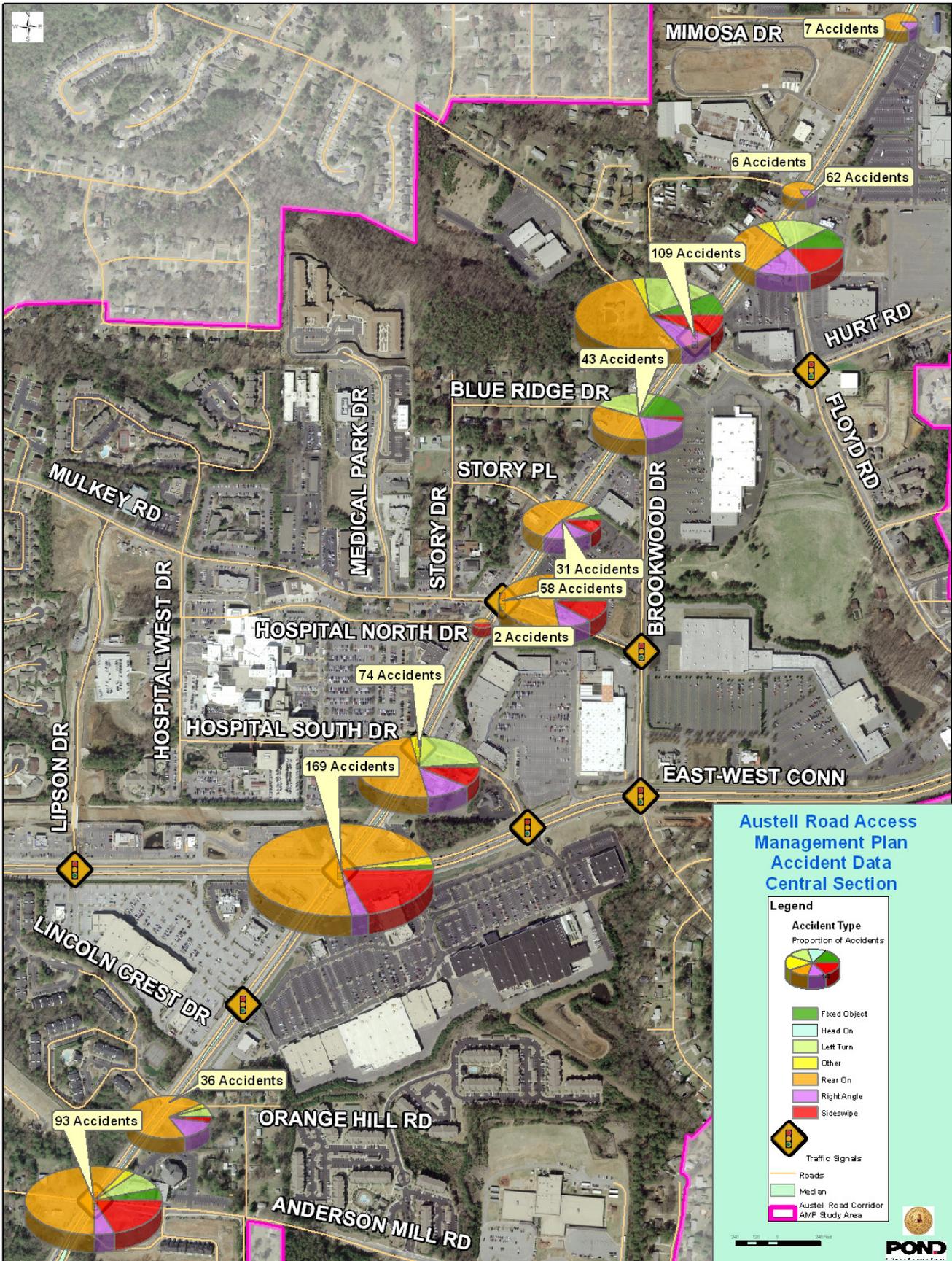


FIGURE 6-2 Accident Data, Central Section

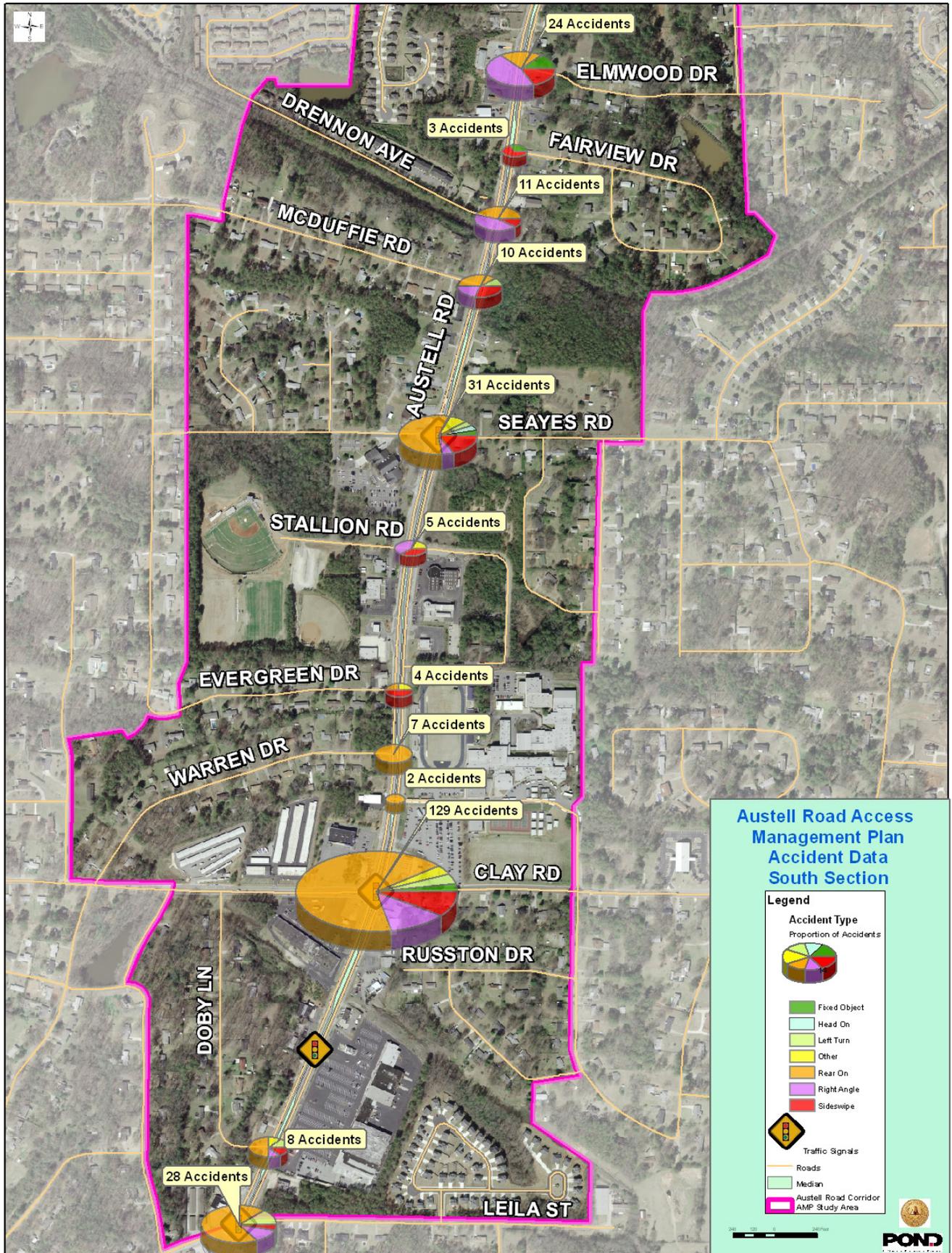


FIGURE 6-3 Accident Data, South Section

As the figures show, the largest numbers of crashes take place at or near the intersections with the most traffic congestion. The central section of the corridor, primarily from Anderson Mill Road to Amy Lane, experienced the highest number of crashes for the time period analyzed. Land use in this area consists primarily of commercial uses along Austell Road with residential uses further off the roadway. Land use in the north and south sections consists primarily of residential development with small amounts of commercial development. Some roadway segments within the central section have large amounts of driveways with short distances between them. All of these factors contribute to increasing the number of crashes in the central section of the corridor.

Median Break Plan

A total of 12 unsignalized median openings exist along the corridor in the study area. These unsignalized median openings are located within the corridor as shown in Table 6-3.

TABLE 6-3 Unsignalized Median Openings

Austell Road Segment		Segment Length (miles)	Number of Unsignalized Median Openings
From	To		
Leila Street	East-West Connector	1.95	7
East-West Connector	Amy Lane	1.23	4
Amy Lane	Callaway Road	1.37	2

Only two unsignalized median openings are located in the northern section of the corridor from Amy Lane to Callaway Road. Due to the already low number of existing unsignalized median openings in this section of the corridor, no changes are recommended to the median openings. The central section of the corridor (East-West Connector to Amy Lane) and the southern section of the corridor (Leila Street to East-West Connector) have more median openings and have median openings located closer together than the northern section.

As discussed in the crash analysis on Page 6-5, the central segment of the corridor has more crashes than the northern or southern sections of the corridor. The AADT volumes for this segment of the corridor are higher than the other segments, as shown in Table 6-2. Adjacent land uses in the central section of the corridor are primarily commercial, which tend to generate more traffic than residential land uses. Therefore, the unsignalized median openings in the central section of the corridor were identified as needing further analysis with a traffic study.

There are no unsignalized median openings in the central section of the corridor between Anderson Mill Road and Mulkey Road. Additionally, due in part to some recent development in this area, driveway spacing does not cause significant problems in this segment of the corridor. While traffic congestion along this segment of the roadway is problematic, it is caused largely by the high volumes of traffic using all 4 legs of the intersection of Austell Road and East-West Connector. As identified in Section 5, the Existing Conditions section of this report, there is already an operational improvement project planned for this intersection.

Since there are no unsignalized median openings between Anderson Mill Road and Mulkey Road and the intersection of Austell Road and East West Connector already has improvements planned, the traffic study did not focus on this area. Instead, the traffic study focused on the segment of Austell Road from Mulkey Road to Amy Lane. This segment includes four unsignalized median openings:

- Story Place
- Blue Ridge Drive/Brookwood Drive
- Floyd Road
- Cobb Market Fair Driveway

A hierarchy of options for addressing operations at each unsignalized median opening was created. The highest item in the hierarchy has the most positive impact on the flow of through traffic and safety. However, this item also has the most reduction in access. The next items have less of a positive impact on the flow of through traffic but provide greater access. The last item has no impact on the intersection. This hierarchy includes the following:

- Close the median opening
- Partially close/channelize the median opening
- Signalize the intersection (if signal warrant is met)
- Leave the intersection unchanged

Each of these hierarchy options has positive and negative consequences. Closing a median opening has a positive impact on through traffic on Austell Road as all left turn and U-turn movements are eliminated from the intersection. However, this change significantly reduces access to adjacent land uses. Residents and business owners may be opposed to such changes as closing a median opening increases the distance they must travel to access their property. Additionally, all left turn and u-turn traffic will be forced to take an alternative route. Closing a median opening therefore changes traffic patterns near the intersections and may have a negative impact on operations at nearby intersections.

For example, if left turn traffic volumes are too high then fully closing a median opening may not be feasible. At these intersections, partially closing

and channelizing the median opening was analyzed. Partially closing and channelizing a median opening prevents some left turn movements at an intersection while allowing others to continue. Figure 6-4 is the design plans for the planned Cobb DOT project at the intersections of Floyd Road and Hurt Road. The Floyd Road intersection is currently a full, unsignalized intersection. This project will partially close the intersection so that the southbound left turn movement from Austell Road to Floyd Road is the only left turn movement allowed at the intersection. Additionally, the median will channelize this opening so that no u-turn movements can be made. This design prevents any left turn movement and through movements from the cross street and all of the conflicts associated with these movements. The remaining left turn movement from Austell Road onto the cross street has fewer conflict points than the left turn movement from the cross street onto Austell Road.

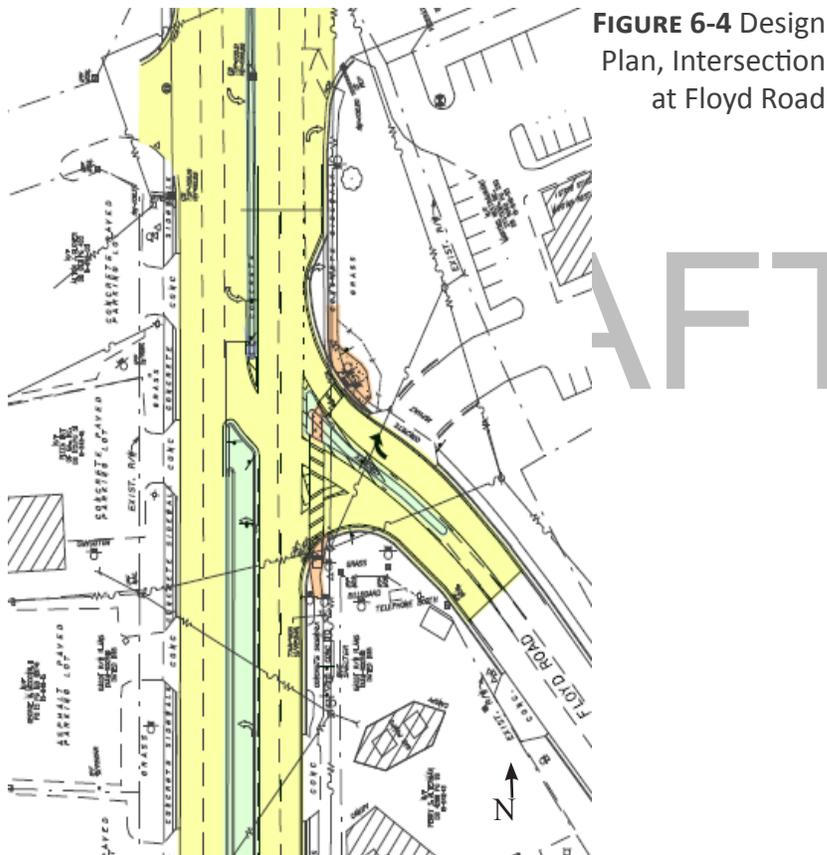


FIGURE 6-4 Design Plan, Intersection at Floyd Road

The design plans for Floyd Road allow left turns only from the mainline roadway (Austell Road) from one direction. However, the same basic design can be applied to allow left turns from the mainline roadway in both directions while preventing any left turn or through movements from the cross-street. An example of this design is shown in Figure 6-5. A key element of this design is the raised median section located between the two left turn lanes. This raised median section acts as a barrier to the left turn and through movement traffic from the cross street/driveways.



FIGURE 6-5 Channelized Median Example

Signalizing the intersection was the next option considered if turning movement traffic volumes were too high at an intersection for it to be closed or partially closed and channelized. Signal warrants must be met for any intersection to be signalized. When an intersection is signalized, access for all movements continues to be allowed. Access to adjacent land uses is actually improved as left turn movements to and from the adjacent property becomes safer on high volume roadways with the introduction of a traffic signal. This improved access increases the viability of adjacent property. Introducing a new traffic signal on a roadway results in increased delay for traffic on the roadway. All traffic, including through traffic, may be delayed by the traffic signal.

No change was recommended for an intersection if closing a median opening was deemed infeasible due to high traffic volumes and if the intersection did not meet the warrants for a new intersection. At a location such as this, any other recommended changes would have a negative impact on traffic operations at the intersection and/or at adjacent intersections.

AM and PM peak hour turning movement counts were conducted at seven (7) intersections within the study area. These include the following intersections:

- Mulkey Road – Signalized
- Story Place – Unsignalized
- Blue Ridge Drive/Brookwood Drive – Unsignalized
- Hurt Road – Signalized
- Floyd Road – Unsignalized
- Cobb Market Fair Driveway – Unsignalized
- Amy Lane – Signalized

The existing traffic count volumes are shown in Figure 6-6. The traffic count data was used to conduct a peak hour traffic analysis using Trafficware Synchro software. The raw count data, the results of the existing peak hour analysis, and

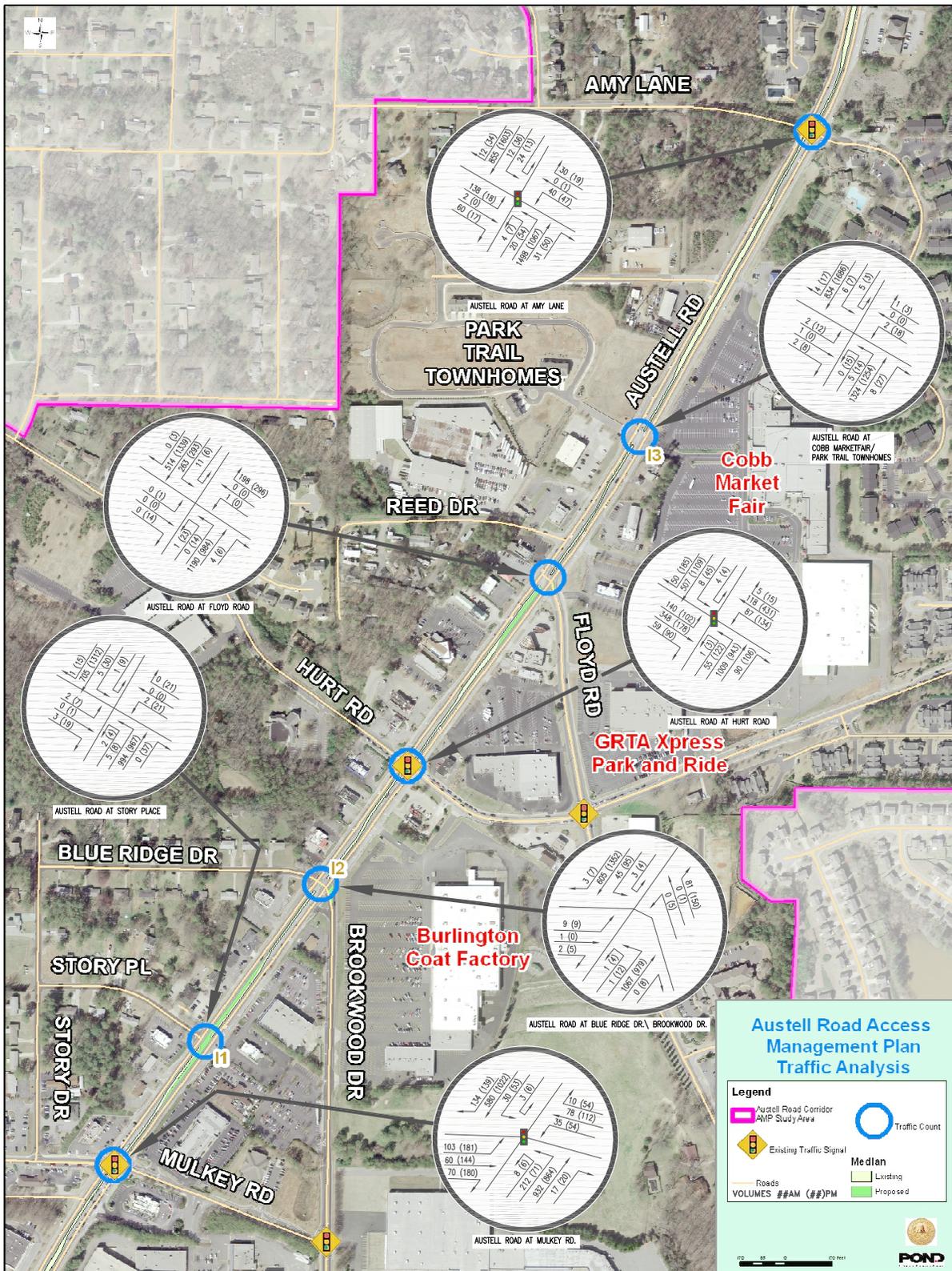


FIGURE 6-6 Existing Traffic Counts

an analysis of adjacent land uses and other nearby roadway connections were used to develop a preliminary set of recommendations at the four unsignalized intersections under analysis. These preliminary recommendations include the following:

- Story Place: Close existing full median opening
- Brookwood Drive/Blue Ridge Drive: Partially close/channelize the median opening
- Floyd Road: No changes recommended beyond previously planned Cobb DOT project
- Cobb Marketfair Shopping Center/Park Trail Townhome Development:
 - ♦ Short term – No changes
 - ♦ Long term – Signalize intersection (if warrants are met)

Closing the median opening at Story Place, as shown in Figure 6-7, is recommended to improve safety and traffic flow at this location along Austell Road. In the project list in Section 7, this intersection project is included as Project I1. This closure is possible due to the low left turn and U-turn volumes that currently exist at this intersection, shown in Figure 6-6. These volumes are in the single digits for most of the left-turn and U-turn movements at this intersection. As shown in Figure 6-8, impacted traffic can make a left-turn or U-turn at the Mulkey Road intersection, located approximately 500 feet to the south, and at the Blue Ridge Drive/Brookwood Drive intersection, located approximately 700 feet to the north. On the west side of Austell Road, traffic impacted by this median closure can access Story Drive followed by Mulkey Road. Mulkey Road then connects to Austell Road at a traffic signal. On the east side of Austell Road, rear and side access to parcels along the roadway allow impacted traffic to connect to Mulkey Road and Brookwood Drive, both of which provide access to Austell Road. Closing this median opening also makes right-of-way (ROW) available that can be used for a wide, landscaped median. The landscaped median will help to beautify the area, which in turn makes nearby land more viable for private investment.

A design similar to that shown in Figure 6-5 is proposed for the intersection with Blue Ridge Drive/Brookwood Drive. Figure 6-9 shows the proposed design of this partially closed/channelized median opening, which will prohibit all eastbound and westbound left turn and through movements. Northbound and southbound left turn movements will still be allowed.

As shown in Figure 6-6, left turn and U-turn volumes at this intersection are low. The only left turn or U-turn movement with significant traffic volumes is the southbound left turn movement from Austell Road onto Brookwood Drive. Once on Brookwood Drive, traffic can access multiple retail parcels as well as the East-West Connector. Partially closing/channelizing this median opening will allow the southbound left turn movement to continue and will make it safer due to the removal of other conflicts at this intersection.

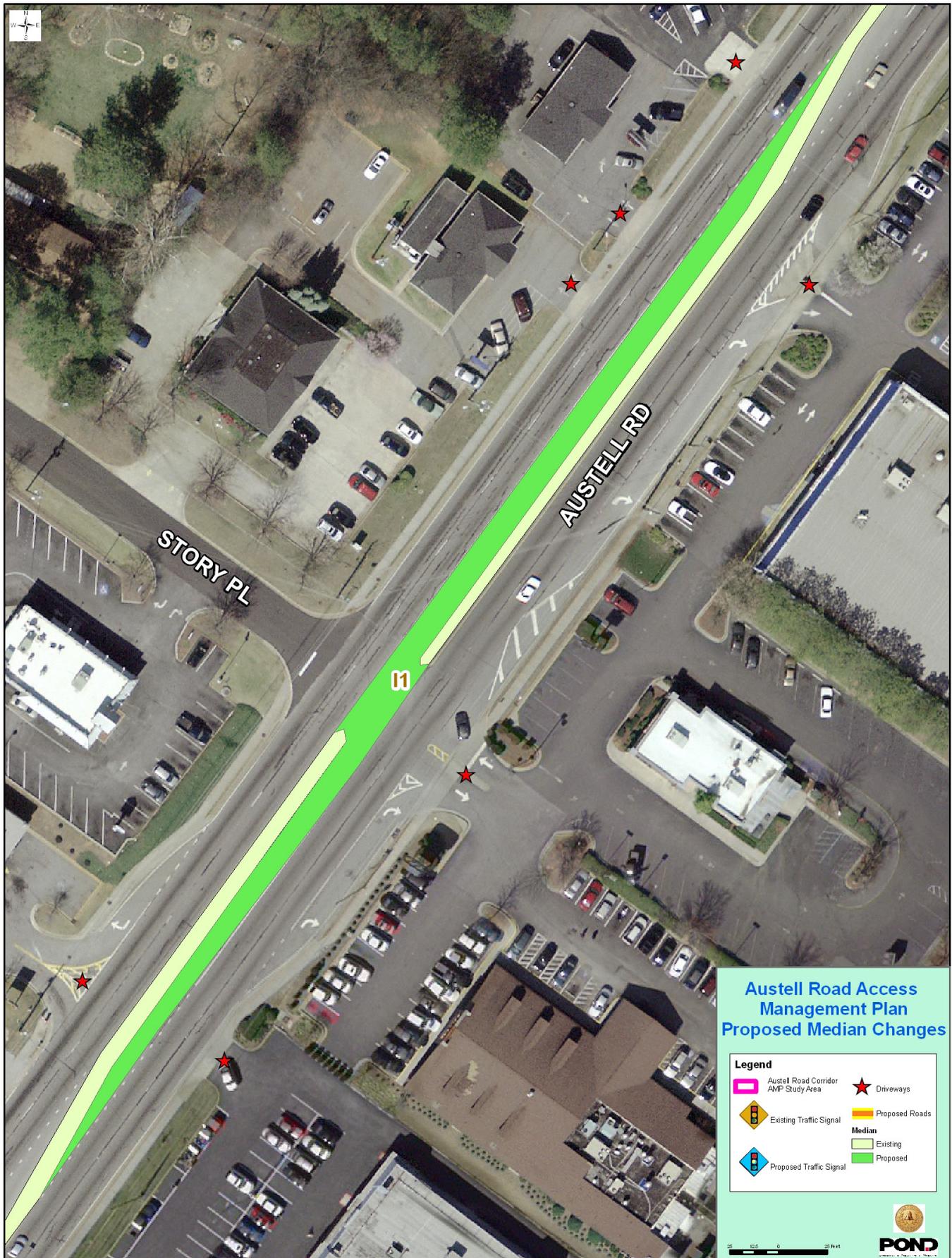


FIGURE 6-7 Proposed Median Changes



FIGURE 6-8 Proposed Median Changes

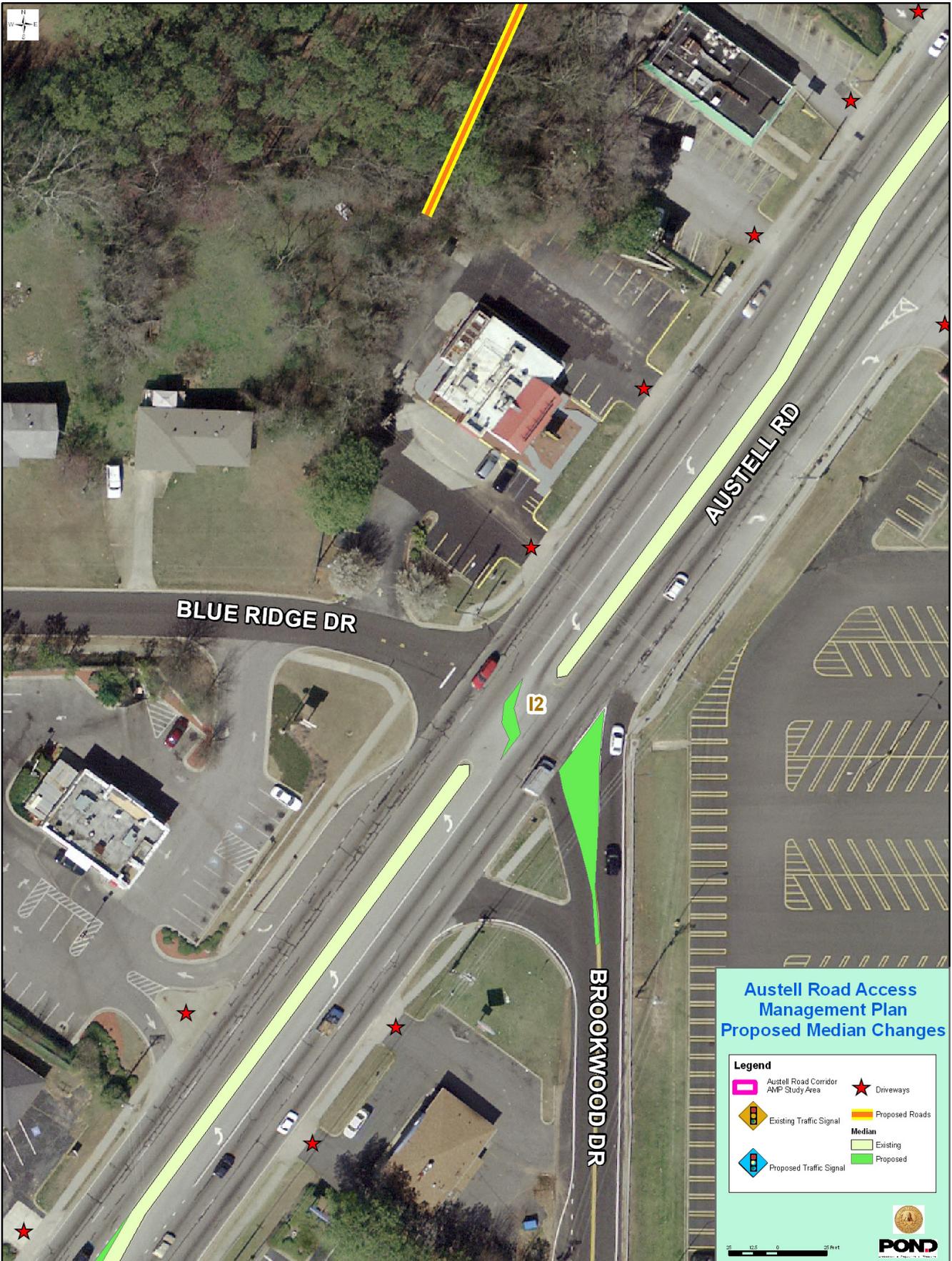


FIGURE 6-9 Proposed Median Changes

As with the Story Place intersection, impacted traffic on the west side of Austell Road can access Story Drive and Mulkey Road to connect to Austell Road. On the east side of Austell Road, rear and side access to adjacent parcels allows impacted traffic to connect to Mulkey Road and Hurt Road, both of which accesses Austell Road. In addition, the signalized intersection at Hurt Road is approximately 500 feet to the north of the Blue Ridge Drive/Brookwood Drive intersection.

The Austell Road Access Management Plan has also identified the need for a backage road behind the existing commercial parcels on the west side of Austell Road between Blue Ridge Drive and Hurt Road. The backage road will improve access to this area, helping to alleviate any negative impacts to access that the partial median closure will cause. Additional details about this backage road are provided later in this report.

At the intersection of Austell Road & Floyd Road, no changes are recommended beyond the previously designed Cobb DOT SPLOST project. The layout of this project is shown in Figure 6-10. As previously described, this project will partially close the intersection so that the southbound left turn movement from Austell Road to Floyd Road is the only left turn movement allowed at the intersection. This movement has significantly higher traffic volumes than any other left turn or u-turn movements at this intersection. Additionally, the median design will prevent any U-turns from being made and will prevent through movements on the eastbound and westbound approaches. Turning movement volumes are high enough that closing the median opening fully, rather than implementing a partial closing, would have a significant impact on traffic congestion at adjacent intersections. Closing the median opening fully would also impact nearby development.

Signalizing the intersection of Austell Road & Floyd Road is not feasible due to its proximity to adjacent intersections. The existing traffic signal at Hurt Road is approximately 775 feet south of Floyd Road. While this distance meets GDOT minimum signal distance requirements of 660 feet, it does not meet Cobb DOT's preference of 1000 feet between signalized intersections. Additionally, the proposed traffic signal at the intersection of Austell Road & the Cobb Marketfair Shopping Center/Park Trail Townhome Development is approximately 600 feet to the north. This distance would not allow both of these intersections to be signalized. Therefore, no additional changes are recommended at the intersection of Austell Road & Floyd Road.

Figure 6-11 shows that on the east side of Austell Road, rear and side access to adjacent parcels allows impacted traffic to connect to Hurt Road, which accesses Austell Road at a traffic signal. Additionally, the Austell Road Access Management Plan has identified a backage Road connecting Hurt Road to Reed Drive and to the Park Trail townhome development. This roadway would provide additional access to the development on the west side of Austell Road.

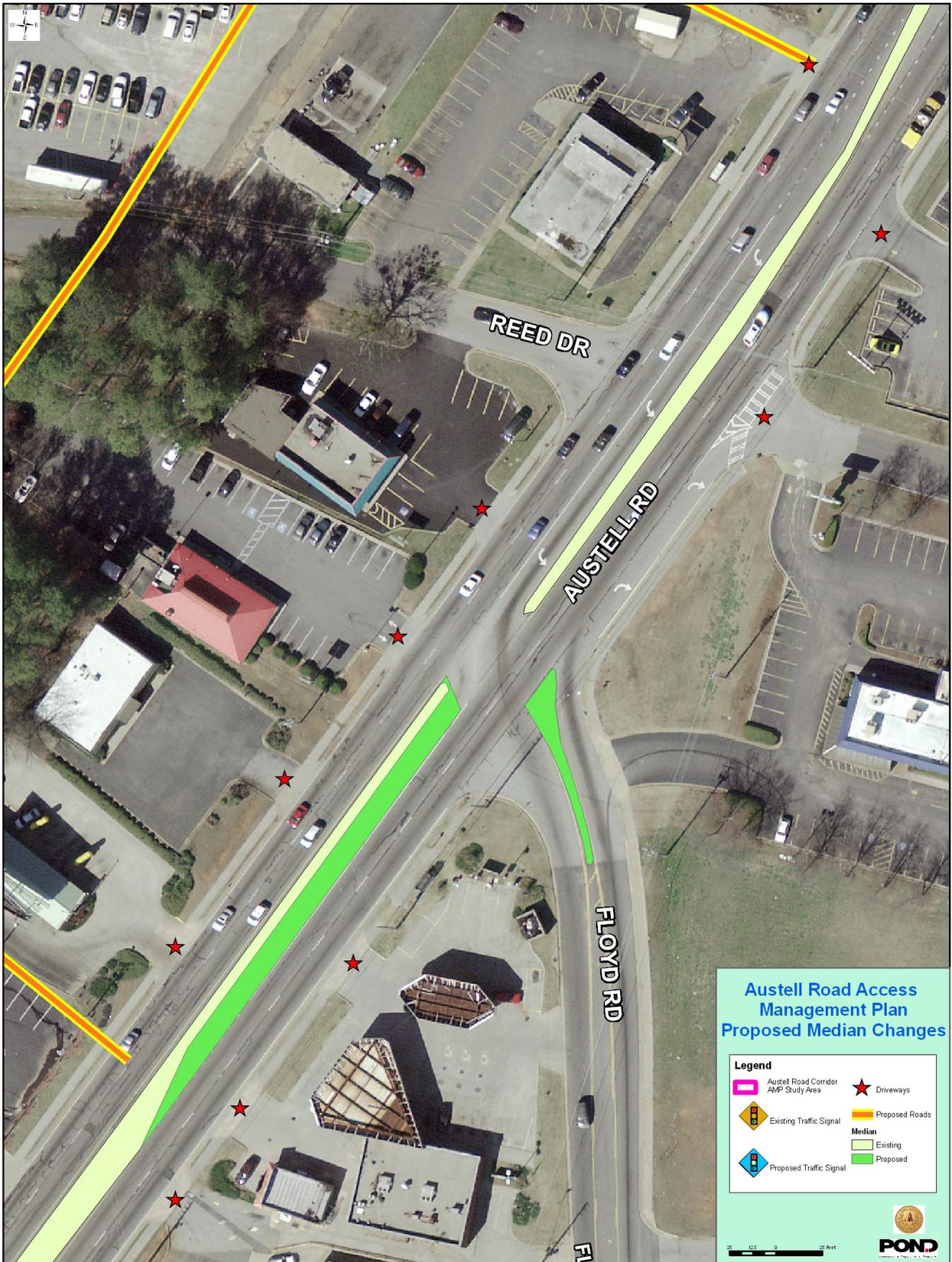


FIGURE 6-10 Proposed Median Changes

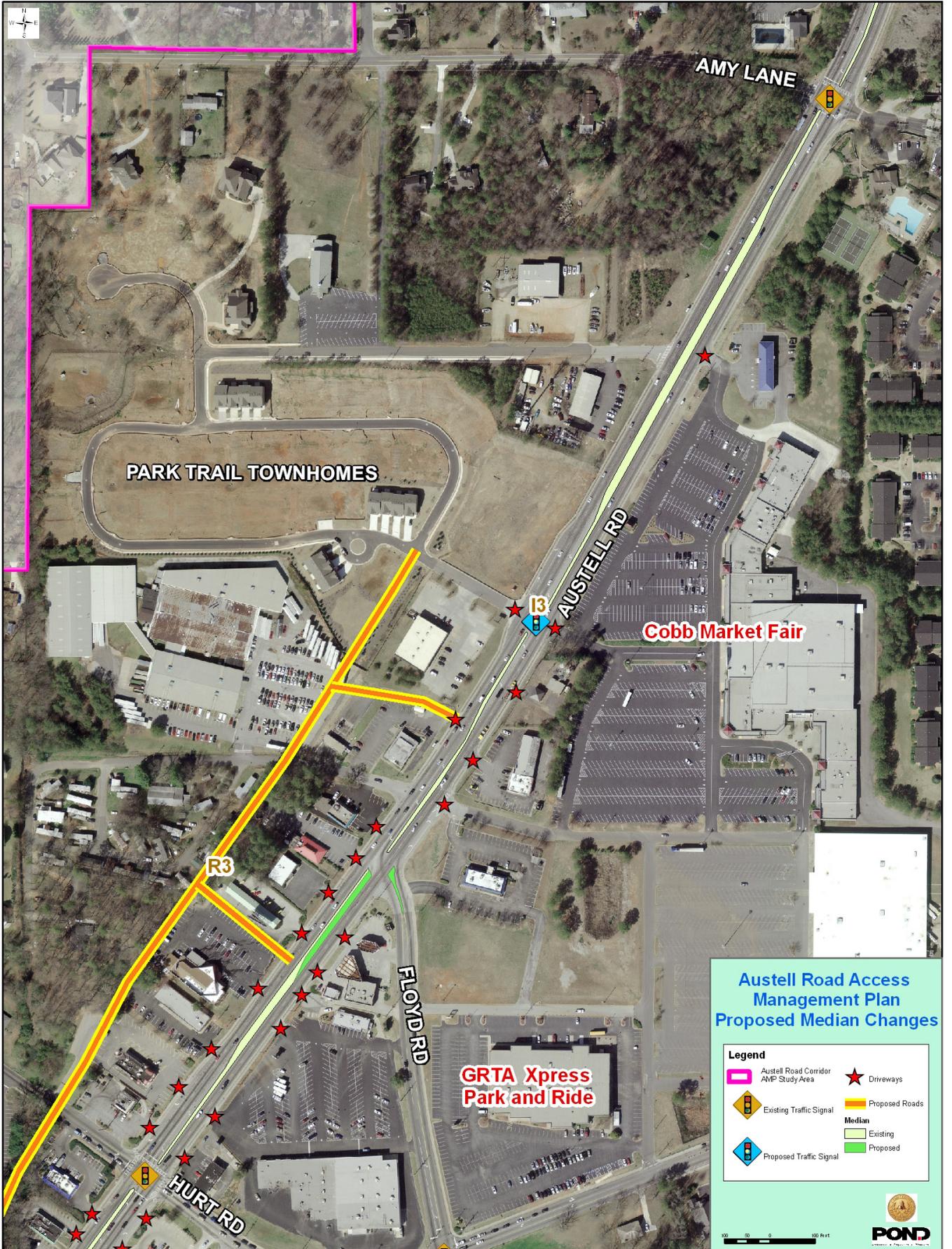


FIGURE 6-11 Proposed Median Changes

No changes are recommended at the Cobb Marketfair Shopping Center/Park Trail Townhome Development. As Figure 6-6 shows, left turn and U-turn volumes are low at this intersection. These low volumes would appear to make this location a candidate for closure or partial closure of the median opening. However, the nearest median opening to the north is the signalized intersection at Amy Lane, which is approximately 1,250 feet away. While Floyd Road is the nearest median opening to the south, this intersection will soon only allow southbound left turns and no other left turn or U-turn movements. The nearest full median opening to the south is at the signalized intersection at Hurt Road, which is approximately 1,450 feet away. The distance of these intersections from the Cobb Marketfair Shopping Center/Park Trail Townhome Development intersection may have a significant impact on traffic patterns if this median opening was closed.

While the left turn and U-turn movements at the Cobb Marketfair Shopping Center/Park Trail Townhome Development intersection are low, these volumes are expected to increase in the future. A significant portion of the Cobb Marketfair Shopping Center is currently empty. In addition, the site of a former Target store, now empty, is located immediately adjacent to the shopping center. The former Target store parking lot connects directly to the Cobb Marketfair Shopping Center parking lot. This empty retail space is not generating any traffic, which reduces the traffic volumes at the Cobb Marketfair Shopping Center/Park Trail Townhome Development intersection. However, these two shopping centers were both identified in the Austell Road LCI study as catalyst sites for redevelopment. If these sites redevelop, or if they simply become leased out, then traffic at the Cobb Marketfair Shopping Center/Park Trail Townhome Development intersection will increase.

On the west side of Austell Road at this intersection is the Park Trail townhome development. Only a portion of this development has been completed and few, if any, of the units are currently occupied. This undeveloped land and uninhabited townhome units are not generating traffic. However, this development is planned to have a total of 86 residential units. Once this development is completed and the units are purchased, then traffic generation at this site will likely increase significantly. Due to the fact that traffic generation from both the Cobb Marketfair Shopping Center and the Park Trail townhome development is expected to increase in the future, a median closure or partial closure/channelization would not be appropriate at this intersection. However, the existing traffic volumes at this intersection are not high enough to justify a traffic signal. Therefore, no changes are recommended at this intersection in the short term.

When the Cobb Marketfair Shopping Center redevelops or gets leased out and when the Park Trail townhome development is completed and all of the units are sold, new traffic generation may be enough to warrant a traffic

signal. Keeping the full median opening in place preserves access to these developments. The addition of a traffic signal, shown in Figure 6-12, improves access to these developments by making turns into and out of the developments easier and safer. As the retail sites have been identified as catalyst sites for redevelopment, improved site access will help make these sites more viable for potential redevelopment.

The nearest signalized intersections are Amy Lane, which is approximately 1,250 feet away, and Hurt Road, which is approximately 1,450 feet away. These distances meet GDOT and Cobb DOT requirements for traffic signal spacing. Since these requirements are met, a traffic signal is recommended when the adjacent land uses begin generating enough traffic to warrant a signal.

As previously mentioned, implementing changes to existing unsignalized intersections will impact adjacent intersections. Therefore, in addition to the existing conditions traffic analysis, three other traffic alternatives were analyzed for the AM and PM peak hours to determine how much impact implementing the recommendations above would have. These alternatives include the following:

- 2009 With Access Management Recommendations Implemented
- 2019 Without Access Management
- 2019 With Access Management Recommendations Implemented

All three alternatives assume the completion of the Cobb DOT SPLOST project that has already been designed for the intersections of Austell Road & Hurt Road and Austell Road & Floyd Road. A portion of the design for this intersection is shown in Figure 6-4. The complete design plans are included in the appendix of this report.

The “2009 With Access Management Recommendations Implemented” alternative assumes that the preliminary access management recommendations listed above will be implemented, with the exception of the new traffic signal at the intersection of Austell Road & the Cobb Marketfair Shopping Center/ Park Trail Townhome Development. Traffic patterns were adjusted based on the impact that implementation of these recommendations are expected to have.

The 2019 alternatives assumed additional background traffic growth between 2009 and 2019. The assumption was made that the Cobb Marketfair shopping center would be fully leased by 2019 and the Park Trail townhome development would be complete. Therefore, separate trip generation was conducted to account for new traffic generated by the Cobb Marketfair shopping center and the Park Trail townhome development. The “2019 Without Access Management” alternative is an analysis using 2019 traffic volumes and existing traffic patterns without implementation of any of the preliminary recommendations. The “2019 With Access Management Recommendations



FIGURE 6-12 Proposed Median Changes

Implemented” alternative uses 2019 traffic volumes and implements the preliminary recommendations listed above. The intersection of Austell Road & the Cobb Marketfair Shopping Center/Park Trail Townhome Development was also signalized in this analysis.

The purpose of analyzing these alternatives was to identify any significant traffic congestion problems the preliminary recommendations may create. A summary of the results of this alternatives analysis is shown in Table 6-4. (A technical memo is included in the appendix of this report to provide additional detailed data regarding the methodology of the traffic analysis.) As Table 6-4 shows, the only intersection experiencing a failing LOS in the “2019 With Access Management Recommendations Implemented” alternative is Austell Road & Hurt Road. This intersection operates at LOS E during the PM peak hour with and without the implementation of the preliminary recommendations. The impact of these recommendations on this intersection is minor.

At the intersection of Austell Road & Floyd Road, the southbound left turn movement operates at LOS F during the AM and PM peak hours in the 2019 analyses. No changes were recommended for this intersection beyond the previously planned Cobb DOT project. As discussed previously, turning movement volumes are high enough at this intersection that closing the median opening fully would have a significant impact on traffic congestion at adjacent intersections. However, signalizing the intersection is not feasible due to its proximity to adjacent intersections. Therefore, no additional changes are recommended at the intersection of Austell Road & Floyd Road.

One additional change is recommended at the intersection of Austell Road & Mulkey Road. At this intersection, the southbound u-turn volumes will increase due to the closure of the Story Place median opening. Traffic making this movement is likely traveling to the retail developments along the east side of Austell Road such as the Golden Corral restaurant and Pep Boys Auto Parts store. It is recommended that a wider shoulder be added on the northeast side of the intersection so that U-turns can be made more easily. This wider shoulder is particularly beneficial to large trucks and sport utility vehicles (SUVs) due to the wide turning radius that is common for vehicles of this type. A wider shoulder with this type of design is being added at the Austell Road & Hurt Road intersection, as shown in the design plans in Figure 6-13. This change to the shoulder width should be added when Project I1 is constructed.

TABLE 6-4 Traffic Analysis Results

INTERSECTION	2009 Without Access Management				2009 With Access Management				2019 Without Access Management				2019 With Access Management			
	AM PEAK	PM PEAK	LOS	v/c*	AM PEAK	PM PEAK	LOS	v/c*	AM PEAK	PM PEAK	LOS	v/c*	AM PEAK	PM PEAK	LOS	v/c*
	LOS	v/c*	LOS	v/c*	LOS	v/c*	LOS	v/c*	LOS	v/c*	LOS	v/c*	LOS	v/c*	LOS	v/c*
Austell Road & Amy Lane	C	0.67	A	0.58	B	0.67	A	0.58	C	1.18	B	1.18	C	0.85	C	0.83
Austell Road & Cobb Marketfair / Park Trail Townhomes																
Eastbound Approach	F	--	F	--	F	--	F	--	F	F	F	F	F	--	--	--
Westbound Approach	F	--	F	--	F	--	F	--	F	F	F	F	F	--	--	--
Northbound Left	A	--	C	--	A	--	C	--	B	D	D	B	--	--	--	--
Southbound Left	B	--	B	--	B	--	B	--	C	C	C	C	--	--	--	--
Austell Road & Floyd Road																
Eastbound Approach	A	--	F	--		--	F	--		--				--	--	--
Westbound Approach	B	--	C	--	C	--	C	--	C	C	C	C	C	--	C	--
Northbound Left	B	--	B	--		--	B	--		--				--	--	--
Southbound Left	C	--	C	--	C	--	C	--	F	F	F	F	F	--	F	--
Austell Road & Hurt Road	D	0.66	D	0.75	C	0.62	D	0.78	D	0.84	D	1.03	D	0.84	E	1.31
Austell Road & Blue Ridge Drive / Brookwood Drive																
Eastbound Approach	D	--	F	--	A	--	B	--	F	F	F	F	B	--	B	--
Westbound Left	B	--	F	--		--	F	--		--				--	--	--
Westbound Right	B	--	B	--	B	--	B	--	C	C	C	C	C	--	C	--
Northbound Left	A	--	B	--	A	--	B	--	A	D	D	A	A	--	D	--
Southbound Left	B	--	B	--	B	--	B	--	C	C	C	C	C	--	C	--
Austell Road & Story Place																
Eastbound Approach	C	--	D	--	B	--	B	--	D	F	F	F	B	--	B	--
Westbound Approach	D	--	D	--	A	--	B	--	F	F	F	A	A	--	B	--
Northbound Left	A	--	B	--		--	B	--		--				--	--	--
Southbound Left	B	--	B	--		--	B	--		--				--	--	--
Austell Road & Mulkey Road	B	0.43	C	0.59	B	0.44	C	0.66	C	0.62	E	0.95	C	0.64	D	0.89

*At unsignalized intersections a v/c ratio is not applicable.

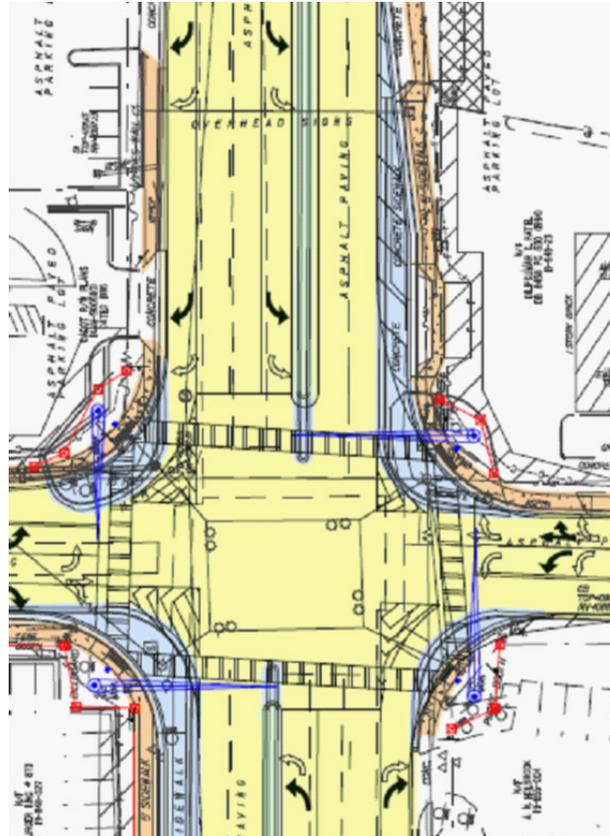


FIGURE 6-13 Design Plan,
Intersection at Hurt Road

Based on the results of the traffic analysis, it appears that the preliminary recommendations will not have a negative impact on traffic operations throughout the corridor if they are implemented. Therefore, the recommendations for the four unsignalized intersections that were analyzed include the following:

- I1, Story Place:
 - ♦ Close existing full median opening
- I2, Brookwood Drive/Blue Ridge Drive: Partially close/channelize the median opening
- Floyd Road: No changes recommended beyond previously planned Cobb DOT project
- I3, Cobb Marketfair Shopping Center/Park Trail Townhome Development:
 - ♦ Short term – No changes
 - ♦ Long term – Signalize intersection (if warrants are met).

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7 Recommendations

Recommendations for the Austell Road Access Management Plan consist of a number of different types of projects. These include the intersection projects that were identified and tested using traffic analysis discussed in Section 6. The recommendations also include potential new roadways, changes to the median, driveway closures, and pedestrian projects. These projects are listed in Table 7-1, while major projects are shown in Figure 7-1.

Alternative Access Roads

The prior Austell Road LCI study identified potential new roadway locations within the study area. The Access Management Plan further analyzed potential locations for new roadways that were identified in the Austell Road LCI Study. These roadways were generally left unchanged, although the alignment of one roadway was revised. Additionally, new roadway locations were identified based on existing traffic congestion in the area and proposed changes to existing access along the corridor.

Figure 7-2 shows new roadway projects R1 and R2. As the figure shows, Project R1 is a new roadway passing behind the Kohl's shopping center. This roadway connects Austell Road to the East-West Connector on the west side of Austell Road and is approximately 1,400 ft in length. A roadway with a similar alignment was proposed in the Austell Road LCI study. However, that roadway would have connected to Austell Road at Lincoln Crest Drive. That proposed alignment would have impacted a significant number of apartment units in the Madison at Forest Glen apartment complex. The impact to the apartment complex would make this alignment very expensive and likely infeasible.

The new alignment will use an existing access point for the Kohl's shopping center to connect to Austell Road. This access point currently allows only right-in/right-out movements. It is recommended that when this roadway is constructed a partial median break is created to allow for northbound traffic on Austell Road to make a left turn onto the new R1 roadway. This access point is approximately 350 feet from the signalized intersection that serves the Kohl's and Target shopping centers. Northbound traffic turning left onto the R1 roadway will benefit from the nearby traffic signal due to the platoons of traffic, and gaps between these platoons, that the signal will create. Therefore, this new partial median opening should not create traffic congestion problems.

Placeholder for Table 7-1

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Placeholder for Table 7-1, page 2

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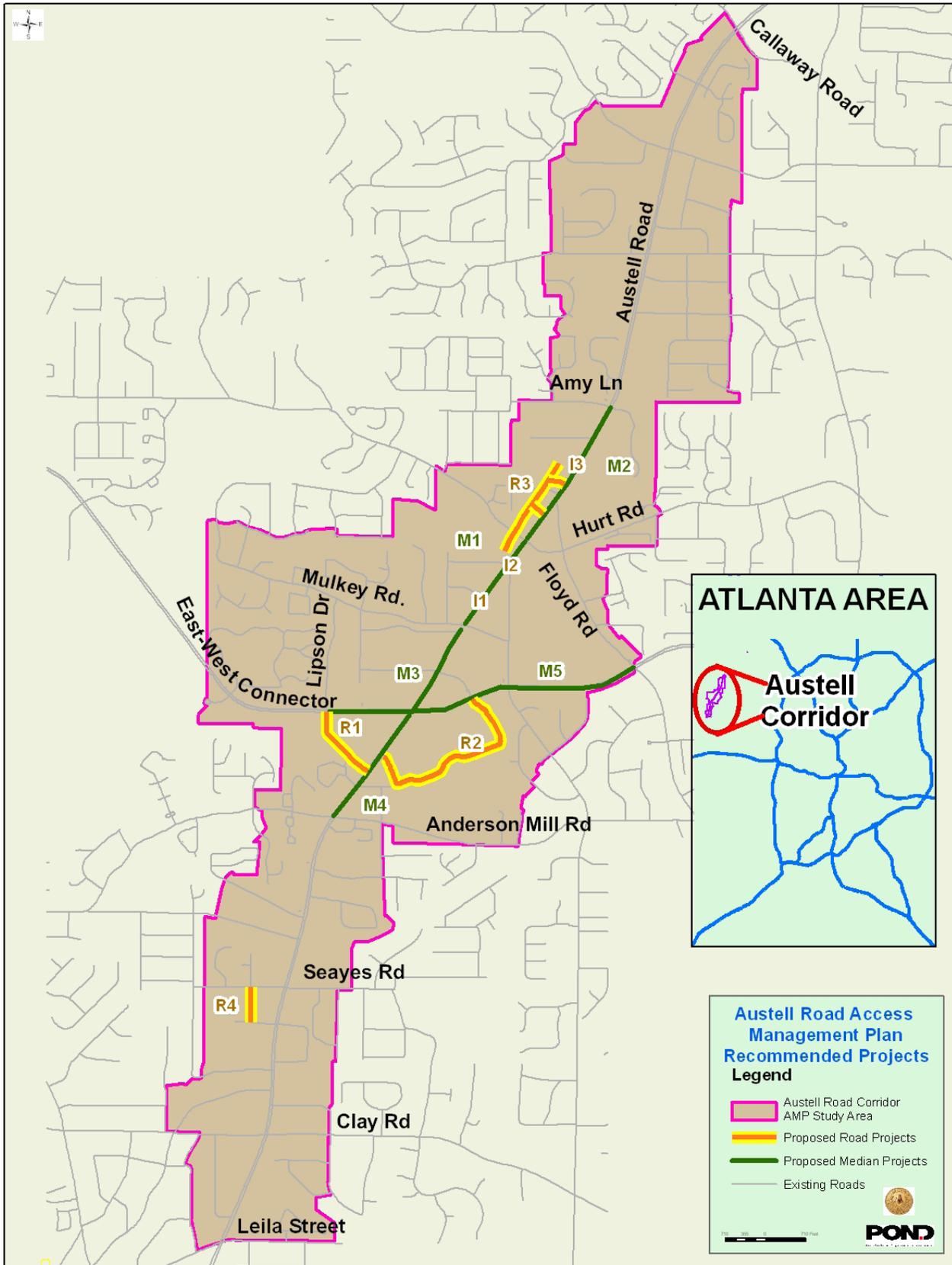


FIGURE 7-1 Recommended Projects

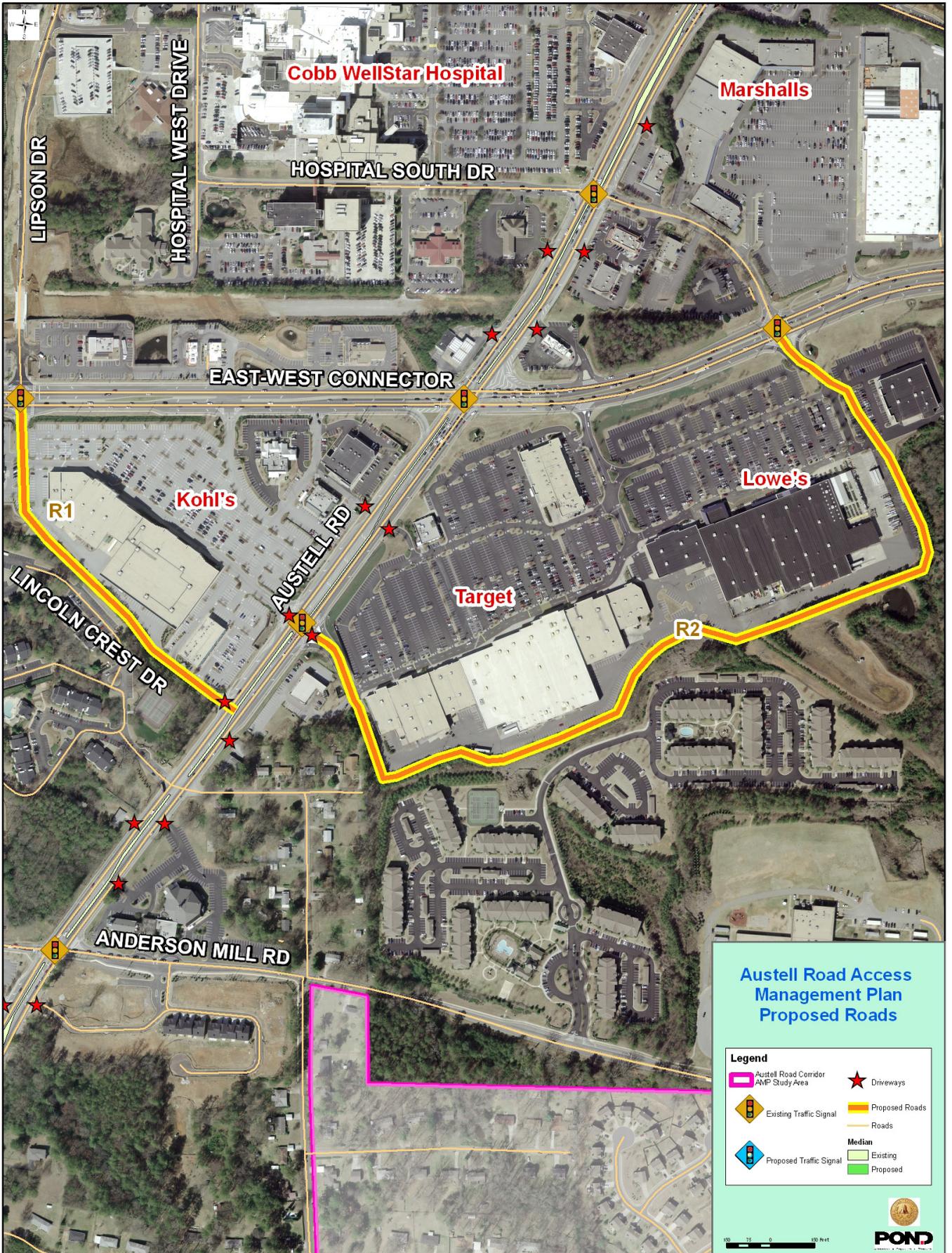


FIGURE 7-2 New Roadway Projects

Left turn traffic demand from the Project R1 roadway onto Austell Road would likely be very low. Traffic turning onto the Project R1 roadway from the East-West Connector would likely have a destination located to the south on Austell Road. Any traffic that needs to turn left onto Austell Road can do so at the signalized access point to the shopping center located approximately 350 feet further to the north.

The roadway will use partial right-of-way (ROW) from the existing landscape buffer located between the Kohl's shopping center and the apartment complex. Using this ROW will allow the roadway to be constructed without impacting the apartment complex or the loading area for the shopping center. Additionally, this proposed alignment will not impact any existing structures. This alignment makes the roadway significantly less expensive to construct, which in turn makes it a more feasible project.

Project R1 will help reduce traffic passing through the intersection of Austell Road and East-West Connector. This new roadway will primarily relieve the eastbound right turn movement and the northbound left turn movement at this intersection. Due to the design of this intersection, these movements take place at an acute angle. This angle, rather than a standard 90 degree angle, slows traffic as it moves through the intersection. Therefore, reducing traffic making these movements will reduce some of the slowest moving traffic passing through the intersection. Reducing the total amount of traffic passing through the intersection will allow the signal timing and phasing to be re-optimized, helping to improve traffic congestion on all approaches.

Some cut-through traffic already exists at this site. However, this traffic is traveling on private property within the shopping center and must contend with parking movements within the parking lot as well as trucks in the loading area for the shopping center. Making this alignment a separate, public roadway will make it a more viable route for traffic in the area. The new roadway will move traffic safely and with fewer conflicts. The proposed typical section for this new roadway is shown in Figure 7-3. As shown, the roadway will consist of two 11-ft travel lanes and a 5-foot sidewalk on one side of the roadway. The sidewalk will help improve pedestrian connectivity in the area in the same way that the roadway will improve automobile connectivity.

Project R2 is a new roadway passing behind the Target/Lowe's shopping center. This roadway connects Austell Road to the East West Connector on the east side of Austell Road. It is approximately 3,800 ft in length and has the same proposed typical section as shown in Figure 7-3. The alignment for this roadway will primarily use land that acts as a buffer between the shopping center and the Alta Mill apartments. Again, the loading area for the shopping center and the apartment buildings must be avoided to prevent significant impacts to these existing developments.

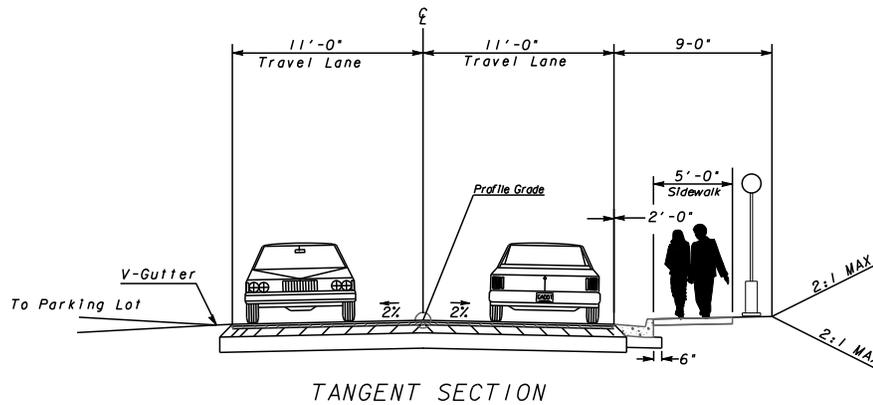


FIGURE 7-3 Tangent Section

Another location that must be avoided is Buttermilk Creek Pond, which is located on the southeast edge of the roadway. This pond may create wetland problems that make this roadway infeasible. Additional study is needed to determine whether these wetlands will impact the roadway's alignment.

A field review of the Target/Lowe's shopping center during the weekday PM peak hour showed that a significant amount of cut-through traffic is passing through the shopping center. The westbound left turn from the East-West Connector onto Austell Road experiences significant traffic congestion during the PM peak hour. The delay for this movement causes traffic to wait through more than one traffic signal cycle.

Due to this delay, some traffic makes a left turn into the shopping center from East-West Connector and continues to the shopping center's signalized intersection with Austell Road. This traffic travels through the outer section of the shopping center's parking lot perpendicular to the route that most vehicular and pedestrian traffic is traveling within the shopping center. Therefore, the cut-through traffic presents a potential safety problem within the shopping center parking lot. Creating a public roadway located on the back side of the shopping center would mitigate this safety problem. Traffic calming devices could be installed within the shopping center to slow traffic and encourage cut-through traffic to use the public roadway. Additionally, a public roadway might increase the amount of traffic making this movement, which in turn reduces the amount of traffic passing through the intersection of Austell Road & the East-West Connector.

Mulkey Road, Hospital S Drive, Brookwood Drive, the recently completed Lipson Drive, and projects R1 and R2 help to create a grid of streets around the intersection of Austell Road & the East-West Connector. Since this intersection is the most congested, and least safe, intersection in the study area, this grid of streets should help to reduce traffic congestion around the intersection. The reduction in traffic congestion should result in increased safety in the area. These roadways also provide alternatives to the major commuter routes for local traffic, allowing this traffic to avoid Austell Road and the East-

West Connector where possible.

Figure 7-4 shows Project R3, a new roadway located on the west side of Austell Road. The alignment for Project R3 runs parallel to Austell Road and connects Hurt Road, Reed Drive, and the Park Trail townhome development. This roadway is approximately 1,850 ft in length and has the same proposed typical section that is shown in Figure 7-3. Two additional segments connect this roadway to Austell Road. Each of these segments are approximately 275 feet in length.

Project R3 will also provide rear access to a number of small commercial parcels along Austell Road. The purpose of the project is to provide this access so that the number of existing access points along Austell Road can be reduced. If several existing driveways along Austell Road are removed or consolidated, then the new roadway will ensure that these parcels continue to have good access. Providing this additional access may also contribute to parcel consolidation and redevelopment. When that happens, the number of access points along this segment of Austell Road can potentially be reduced significantly.

The existing parcels along Austell Road are about 170 ft to 240 ft deep. The roadway proposed in Project R3 would need a minimum of 31 feet of ROW and would leave existing structures unharmed. The smallest lots have an irregular shape and therefore the construction of the roadway would only have a minor impact on the size of the parcels. The larger parcels would be impacted more by the construction of the new roadway. However, these parcels would still extend approximately 200 feet from Austell Road, which is adequate space for retail development. The proposed layout of a segment of Project R3 is shown in Figure 7-5. As the figure shows, the roadway's impact on the existing parcels is minimal.

Figure 7-6 shows Project R4, a connection located on the west side of Austell Road. Project R4 connects the parking lot of the South Cobb Government Center to Stallion Parkway and the South Cobb High School fields located along this roadway. This connection already exists. However, there is a locked gate that prevents vehicular travel between these locations. Cobb County school staff has expressed concern regarding safety, security, and the potential for vandalism/graffiti if this gate was opened to allow this connection.

There is a separate gate on Stallion Parkway between the high school athletic fields and Austell Road. In field visits to this site, the gate on Stallion Parkway has typically been open while the gate connecting to the South Cobb Government Center has never been open. It is recommended that at any time one gate is open then the other gate should also be opened. Both gates then could be closed for safety and security reasons whenever there were no activities taking place at the fields.



FIGURE 7-4 Project R3

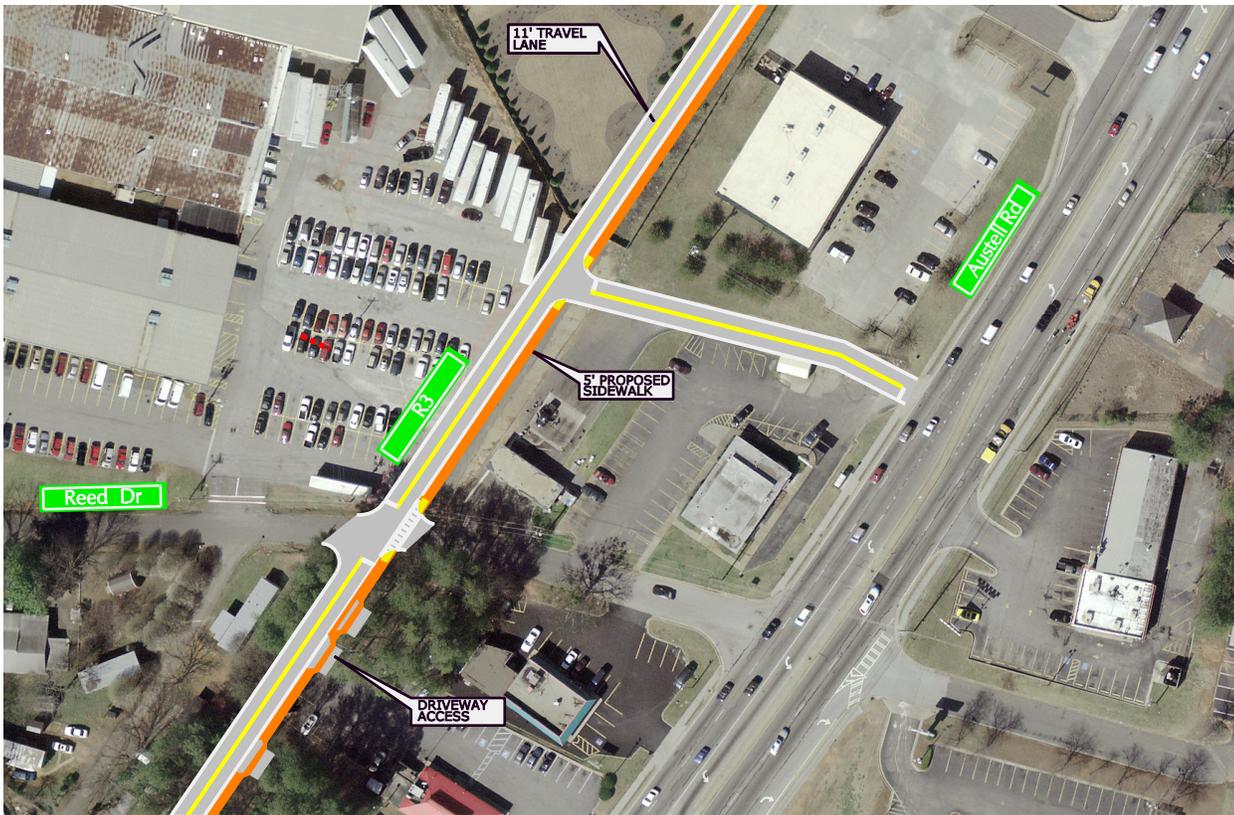


FIGURE 7-5 Proposed Layout, Segment of Project R3

The purpose of opening this gate is to better connect the fields to the surrounding neighborhood. This connection would be interparcel access between two government owned parcels. Opening the gate would create a new route for vehicular and pedestrian traffic that would allow access without using Austell Road. At times when the athletic facilities are not in use, both gates could be closed to prevent unnecessary access. However, it should be noted that while the gates keep out vehicular traffic, pedestrian access is still possible even with the gates closed if pedestrians choose to walk through the undeveloped wooded land adjacent to the fields.

During the existing conditions analysis, mid-block pedestrian crossings at unmarked locations, or jaywalking, was identified as a problem along the Austell Road corridor as well as on the East-West Connector. Along Austell Road it was identified as most prevalent in the central section of the corridor, generally between Anderson Mill Road and Amy Lane. The East-West Connector, within the study area, was also identified as a problem area. The central section of the corridor and the East-West Connector have primarily commercial development, making these areas frequent destinations for transit users. This problem was identified by members of the public and was also observed during field visits to the study area.

Transit Assessment

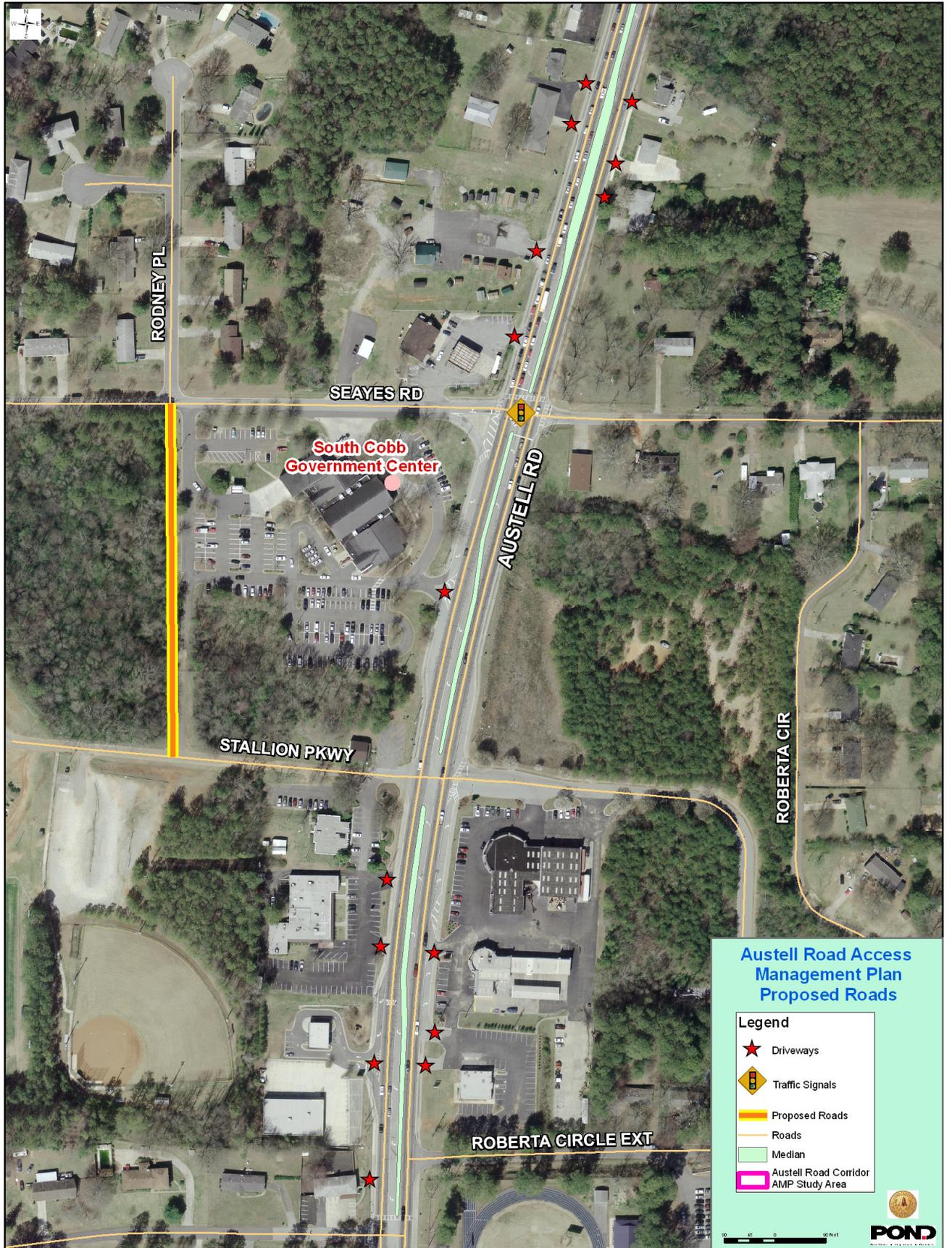


FIGURE 7-6 Project R4

Mid-block pedestrian crossings take place primarily near Cobb Community Transit (CCT) bus stops. Some transit riders cross roadways at a point most convenient to accessing a bus stop. These locations are not necessarily at signalized intersections. While these locations are convenient from a pedestrian's perspective, they are also dangerous for pedestrians as well as drivers. The mid-block crossings increase the number of conflict points between pedestrians and vehicles. Mid-block crashes between vehicles and pedestrians are a legitimate possibility due to the high traffic volumes and relatively high travel speeds (primarily during off-peak hours) along Austell Road and the East West Connector.

While crashes between vehicles and pedestrians are rare, mid-block crossings at unmarked locations cause traffic to slow or stop unexpectedly. This unexpected slowing or stopping may lead to crashes between vehicles, making the roadway less safe. Even when no vehicular crashes take place, unexpected slowing or stopping of this type will slow through traffic speeds, reducing traffic capacity along the roadway.

Remedies for this problem are limited. Relocating bus stops closer to traffic signals was considered as a possible solution to make crossing at signalized intersections a more favorable option for pedestrians. However, relocating bus stops can have a negative impact on bus operations and also requires funding.

In the central section of the corridor, as well as along the East West Connector near Austell Road, traffic signals are spaced relatively close together. There are seven (7) traffic signals from Anderson Mill Road to Amy Lane. This is a total distance of 8,785 feet, meaning there is an average distance of 1,464 feet between traffic signals. The furthest average distance a pedestrian would have to walk to a traffic signal, regardless of the location of a transit stop, is half that distance, or 732 feet. When the recommended traffic signal at the intersection with Cobb Marketplace and the Park Trail townhomes is implemented, the average distance between traffic signals is reduced to 1,255 feet. The furthest average distance a pedestrian would have to walk to a traffic signal would then be 628 feet. A typical pedestrian is willing to walk approximately $\frac{1}{4}$ mile, or 1,320 feet, to reach their destination. This traffic signal spacing means that walking to a traffic signal to cross the road is less than $\frac{1}{4}$ mile and does not put an excessive burden on pedestrians.

Figure 7-7 shows the existing bus stops within the study area as well as the distance from each bus stop to the closest signalized intersection. Between Anderson Mill Road and Amy Lane, the longest distance from a bus stop to a signalized intersection is 1,155 feet. This bus stop is located just north of Reed Drive. This distance is less than the $\frac{1}{4}$ mile typical walking distance described above. Additionally, if a new traffic signal is added at the intersection of Austell Road and the Cobb Marketfair/Park Trail townhomes intersection, the distance

between this bus stop and a signalized intersection will be approximately 350 feet. The furthest distance between a transit stop and a traffic signal on the East West Connector within the study area is 1,000 feet. Again, this distance is less than the $\frac{1}{4}$ mile typical walking distance described above. Still, many pedestrians will choose to walk the shortest path available, regardless of the distance to the nearest intersection. Therefore, relocating bus stops would likely not have a significant impact on this problem in the central section of the corridor or along the East West Connector near Austell Road.

In addition, bus pull-out bays were also considered for implementation within the study area. These would help improve the overall traffic flow along Austell Road and the East West Connector by allowing through traffic to continue to move when a bus stops on the roadway. The pull-out bays can have a negative impact to transit operations as heavy traffic volumes can make re-entering the roadway difficult and time consuming for buses. Traffic conflicts between buses and through traffic can create safety problems as well. “Yield to Bus Laws” have been enacted in some states to help reduce the conflicts that bus pull-out bays create. However, as discussed in the Transportation Research Board Transit Cooperative Research Program Synthesis 49, Yield to Bus – State of the Practice, the yield to bus laws require a number of steps. In addition to legal authority to require traffic to yield to buses, implementation typically requires improved signage and lighting, public outreach and education, and additional training for bus drivers. Further refinement of the access management plan or of Cobb Community Transit policies would be necessary to determine if implementation of bus pull-out bays and a yield to bus program would be beneficial.

Requiring transit riders to cross roadways at signalized intersections appears to be the preferred way to prevent conflicts between pedestrians and vehicular traffic. Further analysis was conducted on how to require pedestrians to walk to signalized intersections. This analysis focused primarily on the median design within the study area.

The next possible solution considered for the problem of mid-block crossings was to place barriers in the median of the roadway to prevent pedestrians from crossing. Concrete barriers, commonly referred to as Jersey barriers, are commonly used in the medians of interstate roadways and other highways and would effectively prevent pedestrians from crossing the roadway. However, these barriers are not aesthetically pleasing. Since private development is vital for this corridor, adding a barrier that has a negative aesthetic impact is not recommended. Additionally, since Jersey barriers are commonly used on high speed roadways, Jersey barriers might change driver perception of the roadway and result in increased travel speeds. Other barrier designs, such as an iron fence, were also suggested during a meeting. Again, while this design would be effective in preventing pedestrian mid-block crossing, it would not be aesthetically pleasing.

Median Treatment

The recommended median treatment is the installation of a curb in the median that is higher than a regular curb and has landscaping in the median. Figure 7-8 and Figure 7-9 show the proposed design of the median, while the adjacent photos show how an existing median of this type looks. This existing median is located along Peachtree Road in Atlanta, near Piedmont Road and SR 400. This design is more difficult for pedestrians to cross than the existing concrete median due to the higher curb and the landscape elements.



FIGURE 7-8 Proposed Design of Median

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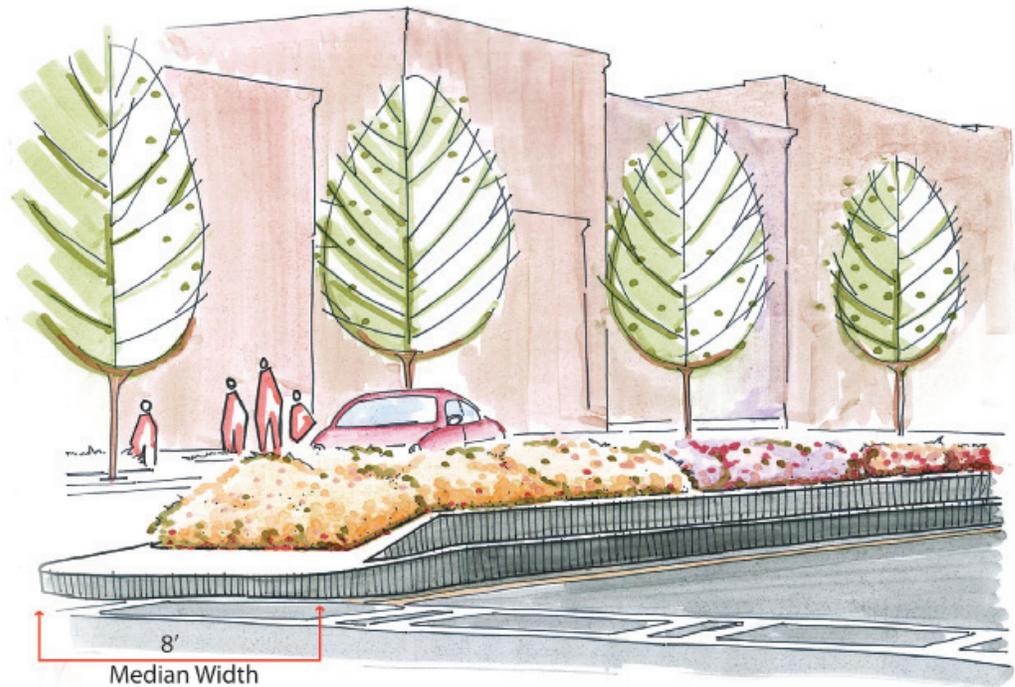


FIGURE 7-9 Proposed Median Width

Example photos of existing medians



The flowers shown in the adjacent photo are primarily located at median breaks in the existing median. Flowers in a median are typically more costly to maintain than other types of landscaping. The other photo shows examples of the types of trees and shrubs which can potentially be installed in a median of this type. This type of landscaping is less expensive to maintain. It also acts as more of a barrier than the flowers. Therefore, the trees and shrubs are recommended as the primary landscaping type for the recommended median. Flowers should be used in small areas, mainly at intersections.

Austell Road is a state route, meaning the installation of a median of this type requires approval by GDOT. Like Austell Road, Peachtree Road is a state route. This precedent makes implementation of this design more likely. The speed limit on Peachtree Road is 35 mph, while on Austell Road it is 45 mph. The higher speed limit on Austell Road makes a barrier of this type less safe for vehicular traffic. However, it should be noted that the implementation of this median on Peachtree Road require reducing travel lane widths to only 11 feet. On Austell Road the travel lanes can remain at the existing 12 feet width. This additional lane width increases the safety for vehicular traffic, helping to negate for the additional speed that traffic may be traveling.

In the central section of the corridor, close signal spacing typically prevents high vehicular speeds from being reached. During peak hours, traffic speed decreases significantly due to existing traffic congestion. While the Austell Road Access Management Plan makes a number of recommendations to improve traffic operations along the corridor, some level of traffic congestion is expected to continue in the future, keeping traffic speeds lower than they would be on an uncongested roadway.

This median design is recommended to initially be installed between Mulkey Road and Hurt Road, identified as Project M1 in Figure 7-1. This is the segment of Austell Road where changes to existing median openings are recommended. The recommended median design can be implemented at the same time the median opening recommendations are implemented. Simultaneous design and construction will reduce cost and help implement these projects faster. This segment of Austell Road, as well as the other prioritized segments recommended for this median design, includes the following:

- M1 – Austell Road from Mulkey Road to Hurt Road
- M2 – Austell Road from Hurt Road to Amy Lane
- M3 – Austell Road from East West Connector to Mulkey Road
- M4 – Austell Road from Anderson Mill Road to East-West Connector
- M5 – East-West Connector from Lipson Drive/Kohl's Shopping Center to Brookwood Drive

East-West Connector east of Brookwood Drive has an existing landscaped median. While this part of the East-West Connector may still benefit from the recommended median design, funding priorities should likely be focused on other projects throughout the study area rather than modifying an existing landscaped median.

A landscaped median exists along Austell Road north of Amy Lane. Again, due to the existing landscaped median, no modifications to the median are recommended for this segment of the corridor. In addition, this segment of the corridor consists primarily of residential development, which typically results in less transit ridership and less pedestrian activity. This area was not identified as having a significant amount of mid-block pedestrian crossings, nor were mid-block pedestrian crossings observed during field reviews of the study area.

The southern segment of the study area, from Leila Street to Anderson Mill Road, has a landscaped median for some small portions of the corridor. A concrete median exists along most of this segment of the corridor. Land use along this segment of the corridor consists primarily of residential development, meaning there are few destinations for pedestrians. Currently, travel speeds are higher and traffic congestion is less along this segment of the corridor. This makes implementing the recommended median design less safe, meaning it is less likely to get GDOT approval. Implementation along this segment of the corridor is recommended as a long-term project when conditions become more amenable.

Pedestrian Safety

An existing sidewalk inventory for the study area was created during the existing conditions analysis of this study. The segments of roadway within the study area that do not have sidewalks were prioritized using Cobb County's Sidewalk Project Selection Criteria. These criteria, developed for the Cobb County 2005 SPLOST, assign points to each potential sidewalk segment based on whether they meet the criteria. These criteria include the following:

- School Connectivity
- Transit Connectivity
- High Pedestrian Area
- DOT Goal Fulfillment
- Activity Center Connectivity
- Gap Closure

Additional criteria related to engineering, ROW, and cost/funding are a part of the Cobb County Sidewalk Project Selection Criteria. Analysis of these criteria is outside of the scope of this project. Therefore, the total number of points assigned to each sidewalk project within the study area can't be directly compared to sidewalk projects outside of the study area. All criteria should be analyzed and points awarded to each sidewalk project for this comparison to be made. However, applying some elements of the Cobb County Sidewalk Project Selection Criteria allows prioritization of sidewalk projects within the study area.

The prioritized list of sidewalk projects within the study area is shown in Table 7-2. As this table shows, the highest priority projects are located on Austell Road and East-West Connector. This is expected due to the fact that these roadways have a large number of destinations for pedestrians, have transit stops, and some segments are located near schools. Brookwood Drive and Callaway Road each have a roadway segment with a prioritization score as high as the Austell Road and East-West Connector scores. These roadway segments essentially have high scores for the same reasons as Austell Road and East-West Connector. Prioritization of other cross streets follows after these two roadways. Cost estimates for each sidewalk project are included in this table as well. These estimates assume a cost of \$95/linear foot for a 5-foot sidewalk.

**Placeholder for
Table 7-2**

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Driveway Closure

As stated earlier in this section, there is a project that will provide rear access to a number of small commercial parcels along Austell Road. The purpose of the project is to provide this access so that the number of existing access points along Austell Road can be reduced. If several existing driveways along Austell Road are removed or consolidated, then the new roadway will ensure that these parcels continue to have good access.

A key element of access management is the closure or relocation of driveways that are inappropriately dispersed.

Redundant driveways add points of conflict that make traffic patterns unpredictable, increase the risk of accidents, and contribute to traffic delays. If driveways are too narrow or have a small turning radius, vehicles will be unable to maneuver quickly and easily off of the road. If the turning radius and width are very wide, fast maneuvers on and off the site pose safety hazards for pedestrians, bicycles, and vehicles.

As indicated in the existing conditions section of the report, there are far too many access points within 330 feet upstream and downstream of each other. As an urban minor urban arterial roadway, this is generally undesirable, causing increased conflict points and decreased roadway capacity. Strategies for mitigating the safety aspects of this situation include closing the driveway (if other access to the adjacent property already exists) or relocating the driveway (if no other appropriate access is available). As a general policy, it is desirable to relocate access points from Austell Road (a major road) to a minor road, frontage road or backage road. In the case of the commercial core of the study area, the consultant team has suggested a backage road from south of Hurt Road to the Park Trail townhomes. This area contains one of the highest proportions of close driveways on the corridor.

Access restrictions could cause some owners of retail businesses to lose (or to think they will lose) customers. This is highly dependent on the type of business and the nature of the access restriction. Such impacts need to be carefully considered by highway agencies before implementing this strategy. It is advisable to involve stakeholders at the early stages of planning for these improvements.

Cobb County DOT should work with owners of adjacent properties to assure them that some restriction of access to their properties will improve safety and will not affect their ability (or, in the case of a retail business, their customers' ability) to reach their properties. Where practical, the closure of driveways should be implemented as part of redevelopment efforts.

Implementation of driveway closures and relocations can require three (3) months to three (3) years. While an extensive project development process usually is not required, discussions with affected property owners should be must

be carried by the County to reach agreement on access provisions. Essential aspects of such an agreement may include driveway permits, easements, and, perhaps, driveway-sharing agreements.

The strategy of closing or relocating driveways adjacent to intersections is considered effective and has been addressed in published literature, but there is no consensus on quantitative estimates of its effectiveness. The safety effectiveness of this strategy is highly site dependent and will vary with the driveway location relative to the intersection before and after the project, the traffic volume using the driveway, the traffic volume and speed on the relevant intersection approaches, and the type of development served by the driveway. Some of the states that have implemented access management policies include Iowa, Minnesota, and Florida. Costs are highly variable. These costs mostly involve acquiring access or constructing replacement access.

Inter-parcel Access

Finally, inter-parcel access easements between adjacent, non residential properties are encouraged by the county, but are not mandatory. As stated earlier, controlling access and establishing inter-parcel access easements is desirable for providing safe and efficient movement of traffic, both vehicular and pedestrian, as well as encouraging efficient development plans that enable occupants and clients to fulfill their daily activities through minimal use of vehicles, and through increased use of alternative transportation modes such as public transit, walking and bicycling.

As stated in the Existing Conditions section of the report, the slope of the Austell Road is less than 11 percent and does not hinder access topographically. Cobb County addresses access management relates issues under their zoning review and permitting functions. In this way, the County exercises its police powers to protect the safety, health, and welfare of the roadways in the County. To better address inter-parcel access, perhaps there can be a section in the zoning review to evaluate connectivity for projects developed along the Austell Road. This section could also include driveway spacing. In this way, before a project reaches the development stage, the County can determine the appropriateness of including such measures as part of the development effort/site plan requirements. Such a policy could include the following:

Internal access easements required. For any office or retail sales or services use, the property owner shall grant an access easement as described in this Section to each adjoining property that is zoned or used for an office or retail sales or services use. The purpose of the easement is to facilitate movement of customers from business to business without generating additional turning movements on the public street.

Access easement provisions:

- a. The easement shall permit automobile access from the adjoining property

to driveways and parking areas intended for customer or tenant use; but parking spaces may be restricted to use by the owner's customers and tenants only.

- b. The granting of such easement shall be effective upon the granting of a reciprocal easement by the adjoining property owner.
- c. Upon the availability of access to driveways and parking areas of the adjoining lot, the pavement or other surfacing of the owner's driveways and parking areas shall be extended to the point of access on the property line.

Relief

Where the proposed land use is such that adverse impact of the required easement on use of the property would outweigh the reduced impact on the public street provided by the reciprocal easements, the County's Chief Building Official may waive the requirement for access easements, in whole or in part, administratively.

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